

## **Scientific Research and Innovation Services**

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## **Assay Repertoire**

Clinical cytoking papels (LIKAS accredited)

			C	linical	cytokine panels (UKAS ac	credited)					
Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
<b>Cytokine Panel CY19</b> - Interleukin 1 beta (IL-1β),	CRD0238							IL-1b: 0.00 - 0.66			
Interleukin 6 (IL-6), Interleukin 8 (IL-8) & Tumour								IL-6: 0.00 - 3.26			
necrosis factor alpha (TNF- $\alpha$ ).								IL-8: 2.20 - 21.87			
								TNFa: 6.10 - 13.58			
Cytokine Panel CY20 - Interferon gamma (IFN-γ),	CRD0239							IFN-γ: 0.00 - 1.76		Batches of 29	1 week
Interleukin 10 (IL-10), Interleukin 17A (IL-17A) &						Centrifuge sample on site		IL-10: 0.96 - 3.20			
Interleukin 2 receptor alpha chain (IL-2RA).						and send to KCH with a		IL-17: 0.00 - 2.10			
					Allow samples to clot for 30 - 60 minutes at	cool pack within 2 hours	Protein	IL-2RA: 424.00 -			
		Blood	SST	500uL	room temperature or up to 8 hours at 4°C.	OR Senerate serum inte 2	Simple Ella	1844.00	pg/mL		
Cytokine Panel CY21 - Chemokine ligand 2/monocyte		(serum)			Centrifugation for 15 min at 1000×g.	Separate serum into 3		CCL2/MCP-1:			
chemoattractant protein 1 (CCL2/MCP-1), Granulocyte	1				Aliquot and store at -80°C.	aliquots, store frozen		63.98 - 514.36			
macrophage colony-stimuLating factor (GM-CSF),						at -20°C and courier frozen		GM-CSF:			1
Interleukin 15 (IL-15) & Vascular endothelial growth						on dry ice within 24 hours		0.00 - 6.32		Batches of 11	1 week
factor A (VEGF-A)								IL-15: 0.00 - 5.41		batches 01 11	
								VEGF-A:			
Cytokine Panel CY23 - Interleukin 5 (IL-5) &	CRD0242							0.00 - 450.64 IL-5: 0.00-3.55			
Interleukin 13 (IL-13)								IL-13: 0.00 – 80.1			2 weeks
						l -					
				K	esearch-only cytokine par	neis			-		
	CRD0243							IFN-γ: 0.00-1.76			
Interleukin 10 (IL-10), Interleukin 5 (IL-5), Interleukin 6								IL-10: 0.96 - 3.20			
(IL-6) & Tumour necrosis factor alpha (TNF-α).								IL-5: 0.00-3.55			
								IL-6: 0.00 - 3.26			
	0000000							TNFa: 6.10 - 13.58			
Cytokine Panel CY25 - Interleukin-1 receptor	CRD0296					Centrifuge sample on site		IL-1RA:			
antagonist (IL-1RA), Interleukin-1 beta (IL-1 $\beta$ ),						and send to KCH with a		225.00-682.00			
Interleukin 6 (IL-6) & GranuLocyte-macrophage colony-					Allow samples to clot for 30 - 60 minutes at	cool pack within 2 hours		IL-1b: 0.00 - 0.66 IL-6: 0.00 - 3.26			
stimuLating factor (GM-CSF)		Blood			room temperature or up to 8 hours at 4°C.	OR	Protein	GM-CSF:		-	
		(serum)	SST	500uL	Centrifugation for 15 min at 1000×g.	Separate serum into 3	Simple Ella	0.00 - 6.32	pg/mL	On request	N/A
CY26 Cytokine Panel - Interleukin-5 (IL-5), Interleukin-	CRD0303				Aliquot and store at -80°C.	aliquots, store frozen		IL-5: 0.00-3.55			
13 (IL-13), Interleukin-17 (IL-17), Interleukin-22 (IL-22),						at -20°C and courier frozen		IL-13: 0.00 – 80.10			
Interferon gamma (IFN-y), GranuLocyte-macrophage						on dry ice within 24 hours		IL-17: 0.00 - 2.10			
colony-stimuLating factor (GM-CSF) & Tumour								IL-22: 0.0-30.70			
necrosis factor alpha (TNF- $\alpha$ )								IFN-γ: 0.00-1.76			
· · · · · · · · · · · · · · · · · · ·								GM-CSF: 0.0 - 6.32			
								TNE2 6 10 - 13 58			
CY27 Cytokine Panel (IL-2, IL-7)	CRD0308							ТВС			

					Other research tests						
	NB: May requir	e validatio	n, not alway	s immediate	y available, this list is not exhaustive, please	contact us to enquire about any c	other test you re	quire			
Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TA
1,5-anhydroglucitol	12371006	Blood	SST or	500uL	Serum - allow samples to clot for 30	2-8°C for 7 days	Glycomark kit	Males: 10.7-32.0	ug/mL	On request	N/A
	55	(serum	EDTA		minutes at room temperature, centrifuge	-20°C for longer storage,		Females: 6.8-29.3			
		or	plasma		for 15 minutes at 1000 x g.	samples my be freeze thawed		All: 9.7-31.4			
		plasma)			Plasma - Centrifuge for 15 minutes	up to three times.					
					at 1000 x g within 30 minutes of collection.						
17-OH-Progesterone	N/A	Blood	SST or	500uL	The usual precautions for venipuncture	2-8°C for 7 days	Werfen DS2	Females:	ng/mL	On request	N/A
		(serum	EDTA		should be observed. It is important to	-20°C (Aliquots) for 3 months	(IBL kit)	FollicuLar phase -			
		or	plasma		preserve the chemical integrity of a blood	Keep away from heat or direct		0.3-1.0			
		plasma)			specimen from the moment it is collected	sunlight. Avoid repeated freeze-		Luteal phase -			
					until it is assayed. Do not use grossly	thaw cycles.		0.2-2.9			
					hemolytic, icteric or grossly lipemic			Post ACTH stim			
25-hydroxyvitamin D2	HAE0142										
25-hydroxyvitamin D3	HAE0143				See: https://www.synnovis.co.	uk/our-tests/25-oh-vitamin-d				On request	N/A
25-hydroxyvitamin D (D2+D3) - Total	HAE0261		CCT	500 1			N/ 6 DC2	C 201 112C	. /		
a1-acid glycoprotein	12371008	Blood	SST,	500uL	Serum - allow samples to clot for 30	Aliquot serum/plasma/urine	Werfen DS2	Serum: 301-1136	ug/mL	On request	N/A
	55	(serum	EDTA		minutes at room temperature, centrifuge	and store samples at $\leq$ -20 °C.	(Biotechne	Plasma: 322-1143	(serum/		
		or	plasma,		for 15 minutes at 1000 x g.	Avoid repeated freeze-thaw	kit)	Urine: 68-19100	plasma)		
		plasma)	heparin		Plasma - Centrifuge for 15 minutes	cycles.			ng/mL		
		urine	plasma		at 1000 x g within 30 minutes of collection.				(urine)		
Activin A	12371008	Blood	or urine SST or	300uL	Urine - Aseptically collect the first urine of Serum - Allow samples to clot for 30	Aliquot serum/plasma/urine	Werfen DS2	Serum: 142-753	pg/mL	On request	N/A
	52	(serum	EDTA	JUUL	minutes at room temperature before	and store samples at $\leq$ -20 °C.	(Biotechne	Plasma: 115-665	P6/1112	Onrequest	
		or	plasma		centrifugation for 15 minutes at 1000 x g.	Avoid repeated freeze-thaw	kit)	1103110.113 003			
		plasma)	piasina		Plasma - Centrifuge for 15 minutes at 1000		Kit)				
		plasma,			x g within 30 minutes of collection.	eyeres.					
Adiponectin	CRD0005	Blood	SST or	500uL	Serum - Allow samples to clot for 30	Aliquot serum/plasma and	Protein	Serum:	pg/mL	On request	N/A
		(serum	EDTA or		minutes at room temperature before	store samples at $\leq$ -20 °C. Avoid	Simple Ella	5344-14,425	10,		
		or	heparin		centrifugation for 15 minutes at 1000 x g.	repeated freeze-thaw cycles.	-	EDTA plasma: 3051-			
		plasma)	Plasma		Plasma - Centrifuge for 15 minutes at 1000			12,506			
		·			x g within 30 minutes of collection.			Heparin plasma:			
								2373-15.202			
Adrenomedullin	12371008	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	-20°C (≤1 month) or -80°C (≤3	Werfen DS2	-	pg/mL	On request	N/A
	53	(serum	EDTA or		room temperature or overnight at 4°C	months). Avoid repeated freeze	(Novus kit)				
		or	heparin		before centrifugation for 15 min at	thaw cycles. Hemolysed					
		plasma)	Plasma		1000×g at 2~8°C. Blood collection tubes	samples are not suitable					

Test Description	Epic test		Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Aflibercept	12371006	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	Storage: 2-8°C, Stability: 3d	Werfen DS2		ng/mL	On request	N/A
	59	(serum	EDTA or		room temperature or overnight at 4°C		(Eagle Bio kit)				
		or	heparin		before centrifugation for 15 min at						
		plasma)	plasma		1000×g at 2~8°C. Blood collection tubes						
					shouLd be disposable and be non						
					endotoxin.						
					Plasma: Collect plasma using EDTA or						
					heparin as an anticoaguLant. Centrifuge						
					samples for 15 min at 1000×g at 2~8°C						
					within 30 min of collection.						
					Do not use grossly hemolytic, icteric or						
					grossly lipemic specimens. Samples						
					appearing turbid should be						
					centrifuged hefore testing						
a-klotho	12371006	Blood	SST, EDTA	500uL	Test samples should be measured soon	Store frozen, avoid repeated	Werfen DS2		pg/mL	On request	N/A
	60	(serum	plasma or		after collection. Urine samples are less	freeze-thaw cycles.	(IBL kit)				
		or	urine		stable than serum, therfore freeze urine						
		plasma)			samples rapidly after collection and avoid						
		or urine			refreezing.						
alpha 2-macroglobuLin	12371008	Blood	SST or	500uL	Serum - allow samples to clot for 30	-20°C or -80°C. Avoid repeated			pg/mL	On request	N/A
	50	(serum	EDTA		minutes at room temperature, centrifuge	freeze-thaw cycles.	(Biotechne				
		or	plasma		for 15 minutes at 1000 x g.		kit)				
		plasma)			Plasma - Centrifuge for 15 minutes						
					at 1000 x g within 30 minutes of collection.						
Amylin	12371008	Blood	SST or	500uL	Serum - allow samples to clot for 30	-20°C (≤1 month)	Werfen DS2		pg/mL	On request	N/A
	56	(serum	EDTA	JUUL	minutes at room temperature, centrifuge	or -80°C (≤3 months)	(Novus kit)			Onrequest	
		``			for 15 minutes at 1000 x g.						
		or	plasma		Plasma - Centrifuge for 15 minutes						
		plasma)									
					at 1000 x g within 30 minutes of collection.						
Amyloid b protein	12371006	CSF	Universal	500uL	Use local CSF collection protocol	Freeze sample at ≤ -70 °C.	Werfen DS2	ND-711	pg/mL	On request	N/A
	61		container		·	within one hour of collection	(R&D Systems		1 0.	·	ŕ
							kit)				
Angiopoietin-2	CRD0139	Blood	SST,	500uL	Serum - allow samples to clot for 30	-20°C (≤1 month)	Protein	-	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	or -80°C (≤3 months)	Simple Ella				
		or	plasma or		for 15 minutes at 1000 x g.						
		plasma)	heparin		Plasma - Centrifuge for 15 minutes						
			plasma		at 1000 x g within 30 minutes of collection.						
			plasma		at 1000 x 5 within 50 minutes or concetion.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Angiotensin 1	12371006 62	Serum	SST	1000uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out the assay. Use nonendotoxin blood	Frozen (-80°C). Avoid repeated freeze-thaw cycles.	Sandwich ELISA	-	pg/mL	On request	N/A
Angiotensin 1-7	12371008 57	Blood (serum or plasma)	SST or EDTA plasma	500uL	Serum - allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	-20°C (stability not yet evaluated). Avoid repeated freeze-thaw cycles.	Werfen DS2 (Biotechne kit)	-	pg/mL	On request	N/A
Angiotensin 1-7 (AG17)	?	Serum	SST	300uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out the assay. Use nonendotoxin blood	4°C - stable for 7 days. Frozen (- 20°C) - stable for ≤1 month. Frozen (-80°C) - stable for ≤3 months. Avoid repeated freeze- thaw cycles.	ELISA	-	pg/mL	On request	N/A
Angiotensin 1-9	12371008 58	Blood (serum or plasma)	SST EDTA plasma	500uL	Serum - allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	-20°C (stability not yet evaluated). Avoid repeated freeze-thaw cycles.	Werfen DS2 (Biotechne kit)	-	pg/mL	On request	N/A
Angiotensin 1-9 (AG19)	?	Blood (serum)	SST	1000uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out the assay. Use nonendotoxin blood collection tubes.	Frozen (-80°C). Avoid repeated freeze-thaw cycles.	Competitive ELISA		pg/mL	On request	N/A
Angiotensin 2 (ANG2)	12371006 63	Blood (serum)	SST	1000uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out the assay. Use nonendotoxin blood	Frozen (-80°C). Avoid repeated freeze-thaw cycles.	Competitive ELISA	-	pg/mL	On request	N/A
Angiotensin converting enzyme 2	12371008 51	Blood (serum or plasma)	SST EDTA plasma	500uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out	Frozen (-80°C). Avoid repeated freeze-thaw cycles.	Werfen DS2 (Biotechne kit)	-	pg/mL	On request	N/A
Angiotensin I Converting Enzyme (ACE)	?	Blood (serum)	SST	300uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C. Centrifugation for 15 min at 1000×g at 2- 8°C. Collect the supernatant to carry out the assay. Use nonendotoxin blood	4°C - stable for 4 weeks. Frozen (-80°C) - stable for ≤3 months. Avoid repeated freeze-thaw cycles.	Immunoassay	-	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Angiotensin I Converting Enzyme 2 (ACE2)	?	Blood (serum)	SST	300uL	Allow samples to clot for 2 hours at room temperature or overnight at 4°C.	4°C - stable for 7 days. Frozen (- 20°C) - stable for ≤1 month.	Sandwich ELISA	-	pg/mL	On request	N/A
		( /			Centrifugation for 15 min at 1000×g at 2-	Frozen (-80°C) - stable for ≤3					
					8°C.	months.					
Anti Mullerian hormone	12371009	Blood	SST or	500uL	Serum - allow samples to clot for 1 hour or	4°C - stable for 7 days. Frozen (-	Werfen DS2	-	ng/mL	On request	N/A
	46	(serum	EDTA		overnight at 2-8°C , centrifuge for 20	20°C) - stable for ≤1 month.	(Biotechne				
		or	plasma		minutes at 1000 x g. Plasma - Centrifuge for	Frozen (-80°C) - stable for ≤3	kit)				
		plasma)			15 minutes at 1000 x g within 30 minutes of	months.					
					collection. Use nonendotoxin blood						
					collection tubes, haemolysed/lipaemic						
					samples not suitable.						
Apelin Total	12371008	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	4°C - stable for 7 days. Frozen (-	Werfen DS2	-	pg/mL	On request	N/A
	63	(serum	EDTA		room temperature or overnight at 2-8°C.	20°C) - stable for ≤1 month.	(Biotechne				
		or	plasma		Centrifugation for 15 min at 1000×g at 2-	Frozen (-80°C) - stable for ≤3	kit)				
		plasma)			8°C.	months.					
					Plasma - Centrifuge for 15 minutes						
					at 1000 x g within 30 minutes of collection.						
Apelin-13	12371008	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	4°C - stable for 7 days. Frozen (-	Werfen DS2	-	pg/mL	On request	N/A
	60	(serum	EDTA		room temperature or overnight at 2-8°C.	20°C) - stable for ≤1 month.	(Biotechne				
		or	plasma		Centrifugation for 15 min at 1000×g at 2-	Frozen (-80°C) - stable for ≤3	kit)				
		plasma)			<u>8°C.</u>	months.					
Apelin-17	12371008		SST or	500uL	Serum: Allow samples to clot for 2 hours at	4°C - stable for 7 days. Frozen (-	Werfen DS2	-	nmol/L	On request	N/A
	59	(serum	EDTA		room temperature or overnight at 2-8°C.	$20^{\circ}$ C) - stable for $\leq 1$ month.	(Biotechne				
		or	plasma		Centrifugation for 15 min at 1000×g at 2-	Frozen (-80°C) - stable for ≤3	kit)				
		plasma)			8°C.	months.					
					Plasma - Centrifuge for 15 minutes						
					at 1000 x g within 30 minutes of collection.						
Apelin-36	12371008	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	4°C - stable for 7 days. Frozen (-	Werfen DS2	-	U/ml	On request	N/A
	61	(serum	EDTA		room temperature or overnight at 2-8°C.	20°C) - stable for ≤1 month.	(Biotechne				
		or	plasma		Centrifugation for 15 min at 1000×g at 2-	Frozen (-80°C) - stable for ≤3	kit)				
		plasma)			8°C.	months.					
					Plasma - Centrifuge for 15 minutes						
Apolipoprotein A1	12371008	Blood	SST, EDTA	500uL	Serum - allow samples to clot for 30	Store samples at ≤ -20 °C. Avoid	Werfen DS2	Serum: 1.48-3.20	mg/mL	On request	N/A
	44	(serum	plasma,		minutes at room temperature before	repeated freeze-thaw cycles.	(Biotechne	EDTA plasma:			
		or	heparin		centrifugation for 15 minutes at 1000 x g.		kit)	1.40-2.87			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes			Heparin plasma:			
		or urine	urine		at 1000 x g within 30 minutes of collection.			1.19-2.97			

Apolipoprotein B	12371008	Blood	SST, EDTA	500uL	Serum - allow samples to clot for 30	Store samples at ≤ -20 °C. Avoid	Werfen DS2	Serum: 189-991	ug/mL	On request	N/A
	62	(serum	plasma or		minutes at room temperature before	repeated freeze-thaw cycles.	(Biotechne	EDTA plasma:			
		or	Heparin		centrifugation for 15 minutes at 1000 x g.		kit)	189-985			
		plasma)	Plasma		Plasma - Centrifuge for 15 minutes			Heparin plasma:			
					at 1000 x g within 30 minutes of collection.			195-1033			

Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TAT
Apolipoprotein E	12371006 65	Blood (serum or plasma)	SST, EDTA plasma, heparin plasma or CSF	500uL	Serum - allow samples to clot for 30 minutes at room temperature before centrifugation for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Serum/plasma: store at -20°C or below for up to 3 months. CSF: store at -80°C for up to 3 months.	Werfen DS2 (Novus kit)	-	pg/mL	On request	N/A
Beta Endorphin	12371006 68	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	CSF: Centrifuge samples at 3000 x g for 10 Serum: Allow samples to clot for 2 hours at room temperature or overnight at 4°C before centrifugation for 15 min at 1000×g at 2~8°C. Blood collection tubes should be non-endotoxin.	Avoid repeated freeze-thaw Analyse within 7 days when stored at 4°C, or aliquotte and store at -20°C (≤1 month) or -80°C (≤3 months). Avoid repeated freeze-thaw cycles	Werfen DS2 (Novus kit)	-	pg/mL	On request	N/A
Beta-Defensin 4	12371008 66	Blood (serum or plasma)	SST or EDTA plasma	500uL	Serum: Allow samples to clot for 30 minutes. Centrifuge at 1000 x g for 15 minutes. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	24 hours at 4°C For a longer periods store at - 20°C to -80°C.	Werfen DS2 (Biotechne kit)	-	pg/mL	On request	N/A
Beta-nerve growth factor	CRD0142	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum: Allow samples to conection. Serum: Allow samples to clot for 30 minutes at room temperature before centrifugation for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Protein Simple Ella	Serum: ND-4.08 EDTA plasma: ND-3.74 Heparin plasma: ND-3.94	pg/mL	On request	N/A
Bone-specific alkaline phosphatase	12371006 70	Blood (serum)	SST	500uL	Allow the blood to clot and separate the serum by centrifugation. Haemolysed samples unsuitable.	5 days at 2°C to 8°C 12 months at ≤ -40°C 36 months ≤ -80°C Do not subject samples to more than 3 freeze/thaw cycles.	Werfen DS2 (QUIDEL kit)	Female 25-44 yrs (premenopausal) 11.6 - 29.6 Females ≥45 yrs (postmenopausal) 14.2-42.7 Males ≥25 yrs 15.0-41.3	U/L	On request	N/A
Brain-derived neurotrophic factor	CRD0018	Blood (serum or plasma)	SST, platelet poor EDTA plasma or platelet poor	500uL	Serum: Allow samples to clot for 30 minutes at room temperature before centrifugation for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Assay immediately or aliquot and store at ≤ -20 °C. Avoid repeated freeze-thaw cycles.	Protein Simple Ella	Serum: 21,105-55,408 PP EDTA plasma: 44.3-4516 PP Heparin plasma: 352-3455	pg/mL	On request	N/A
Calcitonin gene related peptide	12371008 72	Blood (serum or plasma)	SST or EDTA plasma	500uL	Serum: Allow samples to clot for 30 minutes at room temperature before centrifugation for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Store samples at ≤ -20 °C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (Biotechne kit)		ng/mL	On request	N/A
Carbonic anhydrase II	12371008 68	Blood (serum or plasma)	SST or EDTA plasma	500uL	Serum: Allow samples to clot for 30 minutes at room temperature before centrifugation for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	≤-20 °C for up to three months. Avoid repeated freeze-thaw cycles.	Werfen DS2 (Novus kit)	-	pg/mL	On request	N/A

Carbonic anhydrase III	12371008	Blood	SST or	500uL	Serum: Allow samples to clot for 30	≤-20 °C for up to three months.	Werfen DS2	-	U/L	On request	N/A
	69	(serum	EDTA		minutes at room temperature before	Avoid repeated freeze-thaw	(Novus kit)				
		or	plasma		centrifugation for 15 minutes at 1000 x g.	cycles.					
		plasma)			Plasma: Centrifuge for 15 minutes at 1000 x						
					g within 30 minutes of collection.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Carbonic anhydrase IX	12371008	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	≤-20 °C for up to three months.	Werfen DS2	-	pg/mL	On request	N/A
	70	(serum	plasma,		minutes at room temperature before	Avoid repeated freeze-thaw	(Novus kit)				
		or	heparin		centrifugation for 15 minutes at 1000 x g.	cycles.					
		plasma)	plasma,		Plasma: Centrifuge for 15 minutes at 1000 x						
		or urine	citrate		g within 30 minutes of collection.						
			plasma or								
			urine								
Cardiotrophin 1	12371009		SST or	500uL	Plasma: Centrifuge samples at 3000 x g for		Werfen DS2	-	nmol/L	On request	N/A
	59	(serum	EDTA		10 minutes.	Avoid repeated freeze-thaw	(Novus kit)				
		or	plasma		Serum: After clot formation, centrifuge	cycles.					
		plasma)			samples at 3000 x g for 10 minutes.						
Cartilage Oligomeric Matrix Protein	CRD0020	Blood	SST serum,	500uL	Serum: Allow samples to clot for 30	Assay immediately or aliquot	Protein	Serum:	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature before	and store at ≤ -20 °C.	Simple Ella	72,611-328,847		·	
		or	plasma or		centrifugation for 15 minutes at 1000 x g.	Avoid repeated freeze-thaw		EDTA plasma:			
		plasma)	heparin		Plasma: Centrifuge for 15 minutes at 1000 x			108,529-331,703			
			plasma		g within 30 minutes of collection.	-,		Heparin plasma:			
Chemokine Ligand 17 (CCL17-TARC)	CRD0299	Blood	SST or	500uL	Primary sample collection tube should be	Store frozen at -80C. Transport	Protein	-	pg/mL	On request	N/A
		(serum	EDTA		centrifuged within 1 hour from	should be on dry ice to avoid	Simple Ella				
		or	plasma		venepuncture. Serum/plasma should be	specimen thaw.					
		plasma)			aliguoted into a minimum of 2 cryovials.	·					
Cholecystokinin	12371006	Blood	Plain serum	500uL	Serum: Allow samples to clot for 2 hours at	Assay immediately or aliquot	Werfen DS2	-	ng/mL	On request	N/A
	74	(serum	(no		room temperature or overnight at 4°C	and store at ≤ -20 °C.	(Novus kit)				
		or	additive)		before centrifugation for 15 min at	Avoid repeated freeze-thaw					
		plasma)	SST or		1000×g at 2~8°C. Blood collection tubes	cycles.					
			EDTA		should be non-endotoxin.						
Circulating immune complex	12371008	Blood	SST or	500uL	All specimens should be collected	2°-8°C for up to 7 days	Werfen DS2	<4.0	ug	On request	N/A
	73	(serum	EDTA		aseptically and prepared using standard	–20°C or below for longer	(Novus kit)		Eq/mL		
		or	plasma		techniques for clinical laboratory testing.	periods					
		plasma)			Do not heat-inactivate the specimens.						
Clusterin	CRD0149	Blood	SST serum,	500uL	Serum: Allow to clot for 30 minutes at	Store serum/plasma samples at	Protein	Serum: 178-235	ug/mL	On request	N/A
		(serum	EDTA		room temperature, centrifuge for 15	≤-20°C. Avoid repeated freeze-	Simple Ella	EDTA: 187-272			
		or	plasma,		minutes at 1000 x g.	thaw cycles.		Heparin: 147-238			
		plasma)	heparin		Plasma: Centrifuge for 15 minutes at 1000 x	Urine: store at ≤-80°C		Urine: 126-552			
		or urine	plasma or		g within 30 minutes of collection.						
Colony stimulating factor 2 GMCSF	CRD0188	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Normally	ng/mL	On request	N/A
		(serum	plasma or		minutes at room temperature centrifuge	repeated freeze-thaw cycles.	Simple Ella	undetectable.			
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Complement factor 3a-desArg	12371006	Blood	SST or EDTA	500uL	x g within 30 minutes of collection.	-	Werfen DS2	-	ng/mL	On request	N/A
Complement factor 3a-desArg	12371006 75	Blood (serum	SST or EDTA plasma	500uL	x g within 30 minutes of collection.		Werfen DS2 (Quidell kit)	-	ng/mL	On request	N/A
Complement factor 3a-desArg				500uL	x g within 30 minutes of collection.			-	ng/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Complement factor B b	12371006	Blood	SST, EDTA	500uL	-	-	Werfen DS2	-	ng/mL	On request	N/A
	76	(serum	plasma or				(Quidell kit)				
		or	urine								
		plasma)									
		or urine									
Complement Factor D/Adipsin	12371008	Blood	SST serum,	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 1729-3238	ng/mL	On request	N/A
	54	(serum	EDTA		minutes at room temperature centrifuge	repeated freeze-thaw cycles.	(Biotechne	EDTA: 1468-3657			
		or	plasma,		for 15 minutes at 1000 x g. store samples at		kit)	Heparin: 906-2545			
		plasma)	heparin		≤ -20 °C.			Urine: ND-7.32			
Corin	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 578-3138	pg/mL	On request	N/A
	75	(serum	plasma or		minutes at room temperature centrifuge	repeated freeze-thaw cycles.	(Biotechne	EDTA: 489-3032			
		or	heparin		for 15 minutes at 1000 x g.		kit)	Heparin: 568-3058			
		plasma)	Plasma		Plasma - Centrifuge for 15 minutes at 1000						
Corticotropin releasing factor	12371009	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	pg/mL	On request	N/A
	62	(serum	EDTA		room temperature centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
Cotinine	12371006	Blood	SST, urine	500uL	-	-	Werfen DS2	-	ng/mL	On request	N/A
	79	(serum),	or				(Novus kit)				
		urine or	saliva								
		saliva									
C-Peptide - Clinical Trials	12371010	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	30 days at -80°C. Avoid multiple	Siemens	0.9-7.1	ng/mL	On request	N/A
	88	(serum	heparin		room temperature centrifuge for 15	freeze thaw cycles.	ImmuLite				
		or	plasma		minutes at 1000 x g.						
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Cross-linked C-telopeptide of type I collagen	12371006	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 2 hours at		Werfen DS2	-	ng/mL	On request	N/A
	82	(serum	plasma or		room temperature or overnight at 4°C	≤1 month -20°C	(Novus kit)				
		or	heparin		before centrifugation for 15 min at	≤3 months -80°C					
		plasma)	plasma		1000×g at 2~8°C. Blood collection tubes	Avoid repeated freeze-thaw					
Cytokeratin-18	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-2049	pg/mL	On request	N/A
	77	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: ND-2159			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: ND-2810			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
Dehydroepiandrosterone	12371006	Blood	SST	500uL	Allow samples to clot for 30 minutes at	Stable for 4 days at 2-8°C and 3	Werfen DS2	Males: 0.52 – 5.18	ng/mL	On request	N/A
	83	(serum)			room temperature, centrifuge for 15	months at ≤-20°C. Do not use	(IBL	Females:			
					minutes at 1000 x g.	grossly hemolytic, icteric or	International	0.36 – 7.82			
						lipemic specimens. Samples	kit)				
						appearing turbid should be					
						centrifuged. Avoid repeated					
						freeze-thaw cycles.					

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Dehydroepiandrosterone Sulphate (DHEAS)	?	Blood	SST or EDTA	500uL	Allow samples to clot for 30 minutes at	Stable for 7 days at 2-8°C and 6	Werfen DS2	Women: 0.37 –	ug/mL	On request	N/A
		(serum	plasma		room temperature, centrifuge for 15	months at ≤-20°C. Do not use	(IBL	2.71			
		or			minutes at 1000 x g.	grossly hemolytic, icteric or	International	Men: 0.73 – 3.81			
Dickkopf related protein 1	CRD0153	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 2343-4999	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 327-1015			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 306-1035			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.					-	
Endoglin/CD105	CRD0154		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 4030-6207	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 3786-6004			
		or	heparin		for 15 minutes at 1000 x g.			Heparin:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			3601-5308			
Endothelin-1	CRD0157		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 0.92-1.58	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 0.9-1.4			
		or	heparin		for 15 minutes at 1000 x g. store samples at			Heparin: 0.78-1.48			
		plasma)	plasma		≤ -20 °C. Avoid repeated freeze-thaw						
					cycles.						
Eotaxin/CCL11	12371008		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 50-642	pg/mL	On request	N/A
	83	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(Biotechne	EDTA: 32-272			
		or	citrate		for 15 minutes at 1000 x g.		kit)	Citrate: 47-399			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Eotaxin-3/CCL26	12371008		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 4.75-61.6	pg/mL	On request	N/A
	83	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 3.7548.5			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 38.9-222			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
Entrance of frame.				F00 1	x g within 30 minutes of collection.						
Epidermal growth factor	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Randox	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Investigtor				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
	0000456			F00 1	x g within 30 minutes of collection.			6 460 4740			
Epithelial neutrophil activating peptide 78	CRD0156		SST,	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 469-4713	pg/mL	On request	N/A
(CXCL5/ENA-78)		(serum	platelet		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 13.8-97.8			
		or	poor EDTA		for 15 minutes at 1000 x g.			Heparin: 35.8-439			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000						
	000011	Dlaad	platelet	500uL	x g within 30 minutes of collection.		Drotoin	Conumer			NI/A
E-Selectin/CD62E	CRD0214		SST, EDTA	SOUUL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	6051-77637			
		or	heparin		for 15 minutes at 1000 x g.			EDTA: 11298-49085			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.			Heparin:			
								9787-48946			

Test Description	•	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Estrone	12371008		SST	300uL	Collect 4–5 mL of blood into an	Room temperature: <u>&lt;</u> 3 days	Werfen DS2	Female	pg/mL	On request	N/A
	85	(serum)			appropriately labelled tube and allow it to	2-8°C <u>&lt;</u> 7 days	(IBL kit)	Premenopausal:			
					clot. Centrifuge and carefully remove the	-20°C <u>&lt;</u> 1 month		27.1 - 230.6			
					serum layer.			Premenopausal:			
								1 – 10 days:			
								18.9-148.5			
								11 – 20 days:			
Fatty acid binding protein 2	CRD0161	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid		Serum: 509-1585	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 471-1638			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 479-1648			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Fetuin A	12371006	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 303-671	ng/mL	On request	N/A
	86	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	EDTA plasma:			
		or	heparin		for 15 minutes at 1000 x g.		kit)	274-631			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma:			
					x g within 30 minutes of collection.			285-617			
Faecal Lactoferrin	CRD0181	Stool	Stool	0.5g	-	Store samples at ≤-20°C. Avoid	BioVendor	-	-	On request	N/A
			universal			repeated freeze-thaw cycles.					
Fibroblast growth factor 19	CRD0034	Blood	SST	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 40.8-227	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA Plasma:			
		or	plasma		for 15 minutes at 1000 x g.			65.8-423			
		plasma)	Heparin		Plasma - Centrifuge for 15 minutes at 1000			Heparin Plasma:			
Fibroblast growth factor 21	CRD0035	Blood	SST	500µl	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: ND-914	pg/mL	On request	N/A
u de la construcción de la constru		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	EDTA plasma:			
		or	plasma		for 15 minutes at 1000 x g.		kit)	ND-1155			
		plasma)	Heparin		Plasma - Centrifuge for 15 minutes at 1000		-,	Heparin plasma: ND·			
			plasma		x g within 30 minutes of collection.			1012			
Fibroblast growth factor 23	CRD0036	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 48-131	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 70.6-210			<u> </u>
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 72.4-183	_		
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000				_		
			piasina		x g within 30 minutes of collection.				_		
					x g within 30 minutes of conection.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Fibronectin	12371006	Blood	Blood: SST,	500µl	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 0.083-0.539	ng/mL	On request	N/A
	90	(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	EDTA: 0.116-0.601			
		or	plasma,		for 15 minutes at 1000 x g.		kit)	Heparin:			
		plasma)	citrated		Plasma - Centrifuge for 15 minutes at 1000			0.048-0.527			
		or	plasma or		x g within 30 minutes of collection.			Citrate:			
Follistatin-related gene protein	12371006		Blood: SST,	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 3142-8554	pg/mL	On request	N/A
	91	(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	` '	EDTA plasma: 3329-			
		or	plasma		for 15 minutes at 1000 x g.		kit)	8808			
		plasma)	Urine:		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma:			
		Urine	sterile		x g within 30 minutes of collection.			3214-8953			
Galectin-3	CRD0039	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 3078-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	12,465			
		or	heparin		for 15 minutes at 1000 x g.			EDTA Plasma: 3185-			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			8201			
					x g within 30 minutes of collection.			Heparin plasma:			
Gastric Inhibitory Polypeptide (GIP)	12371006		SST, EDTA	500µL	Serum: Allow samples to clot for 2 hours at	2°-8°C for up to 7 days	Werfen DS2	-	pg/mL	On request	N/A
	93	(serum	plasma or		room temperature or overnight at 4°C	–20°C or below for longer	(Novus kit)				
		or	heparin		before centrifugation for 15 min at	periods					
		plasma)	plasma		1000×g at 2~8°C. Blood collection tubes						
					should be non-endotoxin.						
Pro-gastrin releasing peptide	CRD0041	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 17.9-41.0	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA Plasma:			
		or	heparin		for 15 minutes at 1000 x g.			16.2-40.2			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma:			
					x g within 30 minutes of collection.			16.3-40.2			
Gastrin releasing peptide	CRD0041	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
 					x g within 30 minutes of collection.					-	
Ghrelin	CRD0042		SST, EDTA	500µL	no more than 10 IU heparin per mL of		Werfen DS2	-	pg/mL	On request	N/A
		(serum	plasma or		blood		(Novus kit)				
		or	heparin								
		plasma)	plasma							-	
Ghrelin (acylated)	12371006		EDTA	500µL	Serum: Allow samples to clot for 2 hours at	2°-8°C for up to 7 days	Werfen DS2	-	pg/mL	On request	N/A
	96	(plasma)			room temperature or overnight at 4°C	–20°C or below for longer	(IBL				
			heparin		before centrifugation for 15 min at	periods	International				
			plasma		1000×g at 2~8°C. Blood collection tubes		kit)				
					should be non-endotoxin.						
Glucagon	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: ND-224	pg/mL	On request	N/A
	45	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(Biotechne	EDTA: ND-226			
		or	heparin		for 15 minutes at 1000 x g.		kit)	Heparin: ND-221			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						

Glucagon-like peptide-1 (GLP-1)	12371006	Blood	EDTA	500µL	Results may vary widely in samples from	Plasma samples should be	Werfen DS2	-	pmol/L	On request	N/A
	98	(plasma)	plasma or		fasting/non-fasting/glucose induced	stored at 2–8°C if tested within	(IBL				
			heparin		donors. Samples should not be taken from	3 hours of collection. For long	International				
			plasma		donors taking biotin, e.g. dietary	term storage store at	kit)				
					supplements at least 48 hours prior to	-70°C. Aliquot samples before					
					specimen collection. BD™ P700 Blood	freezing if necessary.					
					Collection and Preservation System must						
					be used for sample collection.						

Test Description		Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Glycerol	CRD0236	Blood	SST or	-	-	-	-	-	umol/L	On request	N/A
		(serum	EDTA								
		or	plasma								
		plasma)									
Glycogen phosphorylase BB/GPBB	12371008	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	pg/mL	On request	N/A
	91	(serum	citrate		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
Glycolytic pyruvate kinase isoenzyme type M2 dimer	?	Faeces	Sterile	Walnut	-	-	Werfen DS2	-	U/mL	On request	N/A
(M2PK)			universal	sized			(kit)				
			stool	formed							
			universal	stool							
Granulocyte colony stimulating factor	CRD0164	Blood	SST, EDTA	100uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-4.98	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: ND-4.60			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: ND-1.90			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		[·	'		x g within 30 minutes of collection.						
Growth differentiation factor 15	CRD0165	Blood	SST, EDTA	100uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 295-854	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 310-906	P8/		
		or	heparin		for 15 minutes at 1000 x g. store samples at		ompie zna	Heparin: 345-1024			
		plasma)	plasma or		<-20 °C.						
		or urine	urine		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Growth-regulated alpha protein (CXCL1/GRO alpha)	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	24 hours at 4°C	Werfen DS2	-	μg	On request	N/A
	92	(serum	plasma,	00002	minutes at room temperature, centrifuge	-20°C to -80°C for longer	(Novus kit)		Eq/mL		
		or	heparin		for 15 minutes at 1000 x g.	periods			29/112		
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000						
			citrate		x g within 30 minutes of collection.						
Heart muscle creatine kinase MB (CK-MB) (mass)		Blood	SST or	500uL	Allow samples to clot for 30 - 60 minutes at	2-8 °C for 1 day or 30 days at -	ImmuLite	Males:	ng/mL	On request	2 weeks
		(serum	heparinised	JUUUL	room temperature or up to 8 hours at 4°C.	20 °C.	2000	<6.74 ng/ml	116/111L	Onrequest	
		or	plasma		Centrifugation for 15 min at 1000×g.	20 C.	2000	Females:			
		plasma)			Aliguot and store at -20°C.			<4.02 ng/ml			
		piasilia)						<4.02 lig/iiii			
Hemopexin	12371008	Blood	SST,	500uL	Serum - Allow samples to clot for 30	-20°C or below for up to 3	Werfen DS2		pg/mL	On request	N/A
	94	(serum	citrate	JOUL	minutes at room temperature, centrifuge		(Novus kit)		(serum	onrequest	
		or	plasma or		for 15 minutes at 1000 x g.	thaw cycles			(seruin &		
		plasma)	urine		Plasma - Centrifuge for 15 minutes at 1000 x g.				∝ plasma)		
		plasma)	unne		x g within 30 minutes of collection.				ng/mL		
Hepatocyte growth factor (HGF)	CRD0168	Blood	SST,	500uL	Serum - Allow samples to clot for 30	-20°C or below for up to 3	Protein	Serum: 944-1668	pg/mL	On request	N/A
	CREOIOS	(serum	EDTA	0000L		months. Avoid repeated freeze-	Simple Ella	EDTA: 481-1004	-P5/112	onrequest	
		or	plasma or		for 15 minutes at 1000 x g.	thaw cycles		Heparin: 377-885			
		plasma)	heparin		Plasma - Centrifuge for 15 minutes at 1000 x g.						
		piasina)			, , , , , , , , , , , , , , , , , , ,						
			plasma		x g within 30 minutes of collection						

Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TAT
Hepcidin-25	CRD0048		SST, EDTA	500µL	Serum - Allow samples to clot for 30	-20°C or below for up to 3	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or	300µL	minutes at room temperature, centrifuge	months. Avoid repeated freeze-	Simple Ella	1554-34,763	P6/112	onrequest	
		or	heparin		for 15 minutes at 1000 x g.	thaw cycles		EDTA Plasma: 1775-			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	f		44,577			
		[] [] [] [] [] [] [] [] [] [] [] [] [] [			x g within 30 minutes of collection			Heparin Plasma:			
								1391-31,968			
High molecular weight adiponectin	CRD0049	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	-20°C or below for up to 3	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	months. Avoid repeated freeze-	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.	thaw cycles					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
iC3b fragment of C3 protein (C3B)	CRD0300	Blood	SST or EDTA	500µL	Serum - Allow samples to clot for 30	-20°C or below for up to 3	Protein	-	pg/mL	On request	N/A
		(serum	plasma		minutes at room temperature, centrifuge	months. Avoid repeated freeze-	Simple Ella				
		or			for 15 minutes at 1000 x g.	thaw cycles					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Insulin - clinical trials	12371010	Blood	SST or	300uL	Serum - Allow samples to clot for 30	Store at -80°C. Avoid repeated	Siemens	4.4 - 26.0	ulU/mL	On request	N/A
	87	(serum	heparin		minutes at room temperature, centrifuge	freeze-thaw cycles	ImmuLite				
		or	plasma		for 15 minutes at 1000 x g.						
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Insulin-like growth factor binding protein 1	CRD0114	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	-20°C or below. Avoid repeated	Protein	Serum:	pg/mL	On request	N/A
(IGFBP-1)		(serum	plasma or		minutes at room temperature, centrifuge	freeze-thaw cycles	Simple Ella	1153-33875			
		or	heparin		for 15 minutes at 1000 x g.			EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			971-36429			
					x g within 30 minutes of collection			Heparin:			
								943-31133			
IntercelluLar Adhesion MolecuLe 1	CRD0113	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Serum/plasma: -20°C or below.	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	Avoid repeated freeze-thaw	Simple Ella	169962-538956			
		or	heparin		for 15 minutes at 1000 x g.	cycles		EDTA:			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000	Cerebrospinal Fluid: Freeze		160056-473867			
		or CSF	universal		x g within 30 minutes of collection	sample within one hour of		Heparin:			
			container			collection to avoid aggregation.		186416-368415			
						Store samples at ≤ -70 °C.		CSF: 2382-9921			
		Dlood		F00.01	Corum Allow complex to det for 20	20°C or holow. Avoid remeted	Drotoin		n a / m		NI/A
Interferon-alpha	CRD0055		SST, EDTA	500µL	Serum - Allow samples to clot for 30	-20°C or below. Avoid repeated		Serum: ND-4.68	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	freeze-thaw cycles	Simple Ella	EDTA Plasma: ND-			
		Or placma)	heparin		for 15 minutes at 1000 x g.			5.54			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin Plasma: ND-			
Interferon-beta	CRD0056	Blood	SST, EDTA	500µL	x g within 30 minutes of collection Serum - Allow samples to clot for 30	-20°C or below. Avoid repeated	Protein	6.04	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	freeze-thaw cycles	Simple Ella		P6/IIIL	onrequest	
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
			plasma		x g within 30 minutes of collection						
					x g within 50 minutes of conection						

Interferon-gamma		Blood	EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	423.52 - 1843.81	pg/mL	On request	N/A
		(plasma),	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		CSF,	universal		for 15 minutes at 1000 x g.						
		occuLar	container,		Plasma - Centrifuge for 15 minutes at 1000						
		fluid or	svringe or		x g within 30 minutes of collection						
Interferon inducible protein-10	CRD0054	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	-20°C or below. Avoid repeated	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	freeze-thaw cycles	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 1 alpha	12371007	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
	10	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						

Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TAT
Interleukin 1 beta	2	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	0.00 - 0.66	pg/mL	On request	N/A
		(serum	plasma or	JUULE	minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	0.00 0.00	P6/112	onrequest	
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		μαστιά	plasma		x g within 30 minutes of collection						
Interleukin 1 beta H.Sens.	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
	41	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella		1 0.		
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		P /			x g within 30 minutes of collection						
Interleukin 1 receptor antagonist	CRD0058	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 225-682	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 138-348			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 137-682			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		. ,			x g within 30 minutes of collection						
IL-1 receptor 4 ST2	CRD0051	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
·		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		. ,			x g within 30 minutes of collection						
IL-2 Receptor a (sIL-2Ra)	CRD0052	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	424.00-1,844.00	pg/mL	On request	N/A
· · · /		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	, ,	1 0.		
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		P /			x g within 30 minutes of collection						
Interleukin 10	CRD0059	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	0.96 - 3.20	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella		1 0.		
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		<b>P</b> ,			x g within 30 minutes of collection						
Interleukin 11	CRD0172	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-362	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: ND-329			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: ND-324			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			·			
					x g within 30 minutes of collection						
Interleukin 12	CRD0115	Blood	SST or EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-1.96	pg/mL	On request	N/A
		(serum	plasma		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 1.28-1.76			
		or			for 15 minutes at 1000 x g.						
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
interleukin 12 P40	CRD0179	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						

Interleukin 12 P70	12371007	Blood	SST or EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-1.96	pg/mL	On request	N/A
	13	(serum	plasma		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 1.28-1.76			
		or			for 15 minutes at 1000 x g.						
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Interleukin 13	CRD0061		SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-80.1	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA Plasma:			
		or	heparin		for 15 minutes at 1000 x g.			ND-83.3			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin Plasma: ND-			
					x g within 30 minutes of collection			68.4			
Interleukin 15	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	0.0 - 5.4	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
	0000470			500 1	x g within 30 minutes of collection						
interleukin 16	CRD0173	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
Interleukin 17	CRD0062	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
	0550400				x g within 30 minutes of collection						
Interleukin 18	CRD0123	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
Interleukin-23 (IL23)	CRD0306	Blood	SST, EDTA	500uL	x g within 30 minutes of collection Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
interieukiii-25 (il25)	CRDUSUO	(serum	plasma or	SUUUL	minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella			Onrequest	N/A
		`	heparin		for 15 minutes at 1000 x g.	repeated freeze-thaw cycles.	Simple Ella				
		or plasma)			Plasma - Centrifuge for 15 minutes at 1000 x g.						
		piasiliaj	plasma		x g within 30 minutes of collection						
Interleukin 1-Receptor 1	CRD0170	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	5397-36527	1-6/		,
		or	heparin		for 15 minutes at 1000 x g.		ompie zna	EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			5201-36891			
		piasina,	piasina		x g within 30 minutes of collection			Heparin:			
								4883-37865			
Interleukin 1-Receptor 2	CRD0171	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
interieuxin 1 Neceptor 2	01001/1	(serum	plasma or	300012	minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella		P6/112	onrequest	
		or	heparin		for 15 minutes at 1000 x g.	repeated inceze than eyeles.					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
			prasma		x g within 30 minutes of collection						
Interleukin 2	CRD0063	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	_	pg/mL	On request	N/A
	enbooos	(serum	plasma or	500012	minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella		P6/111		
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
			piasina		x g within 30 minutes of collection						
					A g within 50 minutes of collection						

Interleukin 22	CRD0174	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-30.7	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: ND-20.3			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: ND-20.3			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Interleukin 23	CRD0306	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein		pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 3	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein		pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 33	CRD0175	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 4	CRD0064	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	ND	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.		·				
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
Interleukin 5	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	0.087 – 0.657	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 6	CRD0065	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	0.00 - 3.26	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 6 (Siemens)	12371009	Blood	SST	250uL	Allow samples to clot for 30 minutes at	1 day at 2–8°C or	Siemens	ND - 5.9	pg/mL	On request	N/A
	01	(serum)			room temperature, centrifuge for 15	6 months at –20°C.	ImmuLite		_		
					minutes at 1000 x g.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Interleukin 6 high sensitivity	CRD0066	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: 0.495-3.92	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	EDTA plasma: 0.351·			
		or	heparin		for 15 minutes at 1000 x g.		kit)	3.48			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma:			
		or urine			x g within 30 minutes of collection			0.414-3.97			
-								Urine: ND-3.48			
Interleukin 6R-a	CRD0177	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	34742-68077			
		or	heparin		for 15 minutes at 1000 x g.			EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			33037-63147			
					x g within 30 minutes of collection			Heparin:			
								26517-55504			
Interleukin 7	CRD0067		SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 6.81-22.4	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA Plasma: 0.660-			
		or	heparin		for 15 minutes at 1000 x g.			4.73			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin Plasma:			
		or saliva			x g within 30 minutes of collection			1.89-5.87			
Interleukin 8	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 6.7-16.2	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 3.06-5.06			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 4.64-10.7			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Interleukin 9	CRD0067	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store at –20°C to avoid loss of	Werfen DS2	ND	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	bioactive human IL-9. If	(Novus kit)				
		or	citrate		for 15 minutes at 1000 x g.	samples are to be run within 24					
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000	hours, they may be stored at					
			heparin		x g within 30 minutes of collection	2–8°C					
Interleukin-18	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
	48	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Kidney Injury Molecule 1	CRD0180	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 20.8-106	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 23.6-105			
		or	heparin		for 15 minutes at 1000 x g.	<u></u>		Heparin: 25.8-88.0			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000			Urine: 328-1928			
		or urine	univeral		x g within 30 minutes of collection.						
		or urine	univeral		x g within 30 minutes of conection.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Leptin	CRD0068		SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	8914-67,394			
		or	heparin		for 15 minutes at 1000 x g.			EDTA Plasma: 7897-			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			70,208			
				500.1	x g within 30 minutes of collection.	5 ( 0000)		Heparin Plasma:			
Leptin receptor	CRD0182		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Frozen (-80°C) - stable for 18	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	months. Samples can be freeze	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.	thawed up to 5 times.					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
the control of	40074007			F00 1	x g within 30 minutes of collection			CO 400			21/2
Lipoprotein a	12371007		SST or	500µL	Serum - Allow samples to clot , centrifuge	Store samples at ≤-20°C -	Werfen DS2	60-180	µg/ml	On request	N/A
	22	(serum	citrate		for 10 minutes at 3000 x g	strable for three months. Avoid	(Novus kit)				
		or	plasma		Plasma - Centrifuge for 10 minutes at 3000	repeated freeze-thaw cycles.					
		plasma)			×g						
L-Selectin/CD62L	12371009	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2		pg/mL	On request	N/A
L-Selectif/CD62L	40	(serum	plasma or	SUUUL	minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(Biotechne	-	pg/m	Onrequest	IN/A
	40	or	heparin		for 15 minutes at 1000 x g.	repeated neeze-thaw cycles.	kit)				
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000		KIL)				
			μιαστιτά		x g within 30 minutes of collection						
М2РК	CRD0070	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Frozen (-80°C) - stable for 18	Protein	-	pg/mL	On request	N/A
		(serum	plasma or	JUUUL	minutes at room temperature, centrifuge	months. Samples can be freeze	Simple Ella		P6/111	onrequest	,
		or	heparin		for 15 minutes at 1000 x g.	thawed up to 5 times.					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
			prasiria		x g within 30 minutes of collection						
Macrophage Inflammatory protein 1a		Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella		1.0,		, ,
		or	heparin		for 15 minutes at 1000 x g.	· · ·					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Macrophage Inflammatory protein 1b		Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 295-854	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 310-906			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 345-1024			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Urine: 623-21960			
		or urine			x g within 30 minutes of collection.						
					Urine: Aseptically collect the first urine of						
					the day (mid stream), voided directly into a						
					sterile container. Centrifuge						
					to remove particulate matter						
Macrophage inflammatory protein 2	CRD0187		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 39.9-149	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 11.4-58.4			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 9.4-57.9			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Macrophage migration inhibitory factor	CRD0185	Blood (serum or plasma)	SST, platelet poor EDTA plasma or platelet poor heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Protein Simple Ella	Serum: 16536-34567 EDTA: 19580-41305 Heparin: 9379-29723	pg/mL	On request	N/A
Matrix metalloproteinase 7	CRD0194	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Protein Simple Ella	Serum: 1094-6619 EDTA: 1403-5119 Heparin:	pg/mL	On request	N/A
Matrix metalloproteinase 9	CRD0071	Blood (serum or plasma)	SST, platelet poor EDTA plasma or platelet poor heparin plasma	500µL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Protein Simple Ella	Serum: 167,760-469,934 PP EDTA Plasma: 34,588-136,743 PP heparin Plasma: 21,154-67,670	pg/mL	On request	N/A
Matrix metalloproteinase-1	12371009 16	Blood (serum or plasma)	SST or heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 0.912-9.340 Heparin: 0.179-1.000	ng/mL	On request	N/A
Matrix metalloproteinase-2	12371009 17	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 139-356 EDTA: 141-278 Heparin: 155-342	ng/mL	On request	N/A
Matrix metalloproteinase-3	CRD0193	Blood (serum or plasma)	SST or heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 2.10-64.4 Heparin: 1.88-45.9	ng/mL	On request	N/A
Melatonin	12371007 25	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500μL	Do not use grossly hemolytic, icteric or grossly lipemic specimens. Samples appearing turbid should be centrifuged before testing.	Stable for 24h at 2-8°C, 3 months at <u>&lt;</u> -20°C and 12 months <u>&lt;</u> 70°C	Werfen DS2 (IBL International kit)	03:00 AM: 18.5-180 08:00 AM: 3.8-80.4	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Monocyte chemotactic protein 3	CRD0184		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: ND-5.97	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: ND-0.77			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: ND-3.12			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Monocyte chemotactic protein-1	CRD0073	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 163-485	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA plasma:			
		or	heparin		for 15 minutes at 1000 x g.			106-429			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma:			
			urine or CSF		x g within 30 minutes of collection			157-459			
Monokine induced by gamma interferon (CXCL9/MIG)	CRD0186	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 144-464	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 164-564			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 236-700			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Myelin basic protein	12371009	Blood	SST or	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	-	pg/mL	On request	N/A
	08	(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems				
		or	plasma		for 15 minutes at 1000 x g.		kit)				
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Myeloperoxidase	CRD0075	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 144-464	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 164-564			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 236-700			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Myostatin	12371007	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum:	pg/mL	On request	N/A
	29	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	1264-8588			
		or	heparin		for 15 minutes at 1000 x g.		kit)	EDTA:1220-7300			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin:			
					x g within 30 minutes of collection			1200-7640			
N-acetyl glucosaminidase	12371007	Blood	Blood: SST,	500µL	Serum: Allow samples to clot for 2 hours at	2°-8°C for up to 7 days	Werfen DS2	-	ng/mL	On request	N/A
	30	(serum	EDTA		room temperature or overnight at 4°C	–20°C or below for longer	(Novus kit)				
		or	plasma,		before centrifugation for 15 min at	periods					
		plasma)	heparin		1000×g at 2~8°C. Blood collection tubes						
		or urine	plasma		should be non-endotoxin.						
			Urine:		Plasma: Centrifuge samples for 15 min at						
			Sterile		1000×g at 2~8°C within 30 min of						
			container		collection. Hemolysed samples are not						
					suitable						
Neopterin	12371008	Blood	SST,	-	-	-	Manual	-	pg/mL	On request	N/A
	42	(serum	EDTA								
		or	plasma or								
		plasma)	urine.								
		or urine									

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Neurofilament Light	CRD0248	(serum	SST or EDTA plasma	500ul	Venous Primary sample collection tube should be centrifuged within 1 hour from venepuncture.		Protein Simple Ella		pg/mL	On request	N/A
		or plasma)									
Neuropeptide Y	12371009	Blood	SST or	-	-	-	Werfen DS2	-	ng/mL	On request	N/A
	20	(serum	EDTA				(R&D Systems				
		or	plasma				kit)				
		plasma)									
Nitric oxide	12371007		Blood: SST,	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid		Serum: 13-97	umol/L	On request	N/A
	33	(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems				
		or	plasma or		for 15 minutes at 1000 x g.		kit)	10-92			
		plasma),	heparin		Plasma - Centrifuge for 15 minutes at 1000			Heparin plasma: 10-			
		urine or	plasma		x g within 30 minutes of collection			90			
		CSF	Urine/CSF:					Citrate plasma:			
			Sterile					11-81			
			container					Urine: 369-2684			
Neutrophil Gelatinase-Associated Lipocalin (NGAL)	CRD0304	Blood (serum or plasma), urine or CSF	Blood: SST, EDTA plasma or heparin plasma Urine/CSF: Sterile container	500µL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Bioporto kit	Lith-Hep (F): 0-104 Lith-Hep (M): 26-120 EDTA (F): 0-122 EDTA (M): 0-154 Sterile Universal (F): 0-176 Sterile Universal (M): 0-105 Lith-Hep (F): 0-104 Lith-Hep (M): 26-120 EDTA (Fe): 0-122 EDTA (M): 0-154 Sterile Universal (F): 0-176	ng/mL	On request	N/A
NGAL / Lipocalin-2	CRD0079		SST or	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Bioporto kit	Sterile Universal (M):	ng/mL	On request	N/A
		(serum or plasma)	EDTA plasma		minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	repeated freeze-thaw cycles.					

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Non-esterified fatty acid	12371007				Send-away test, see: http://www.viapath.co.u	k/our-tests/non-esterified-fatty-acions and the set of	<u>ds-nefa-0</u>			On request	N/A
	34										
Occludin	12371009		SST or	500uL	Serum - Allow samples to clot for 2 hours at	· ·	Werfen DS2		ng/mL	On request	N/A
	60	(serum	EDTA		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection	cycles					
Osteocalcin - Siemens	CRD0305	Blood	SST or	500uL	Serum - Allow samples to clot for 30	Osteocalcin is unstable. Keep	Siemens		ng/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	blood at 2-8°C immediately	Imnmulite				
		or	plasma		for 15 minutes at 1000 x g.	after collection and during					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	processing. Serum should be					
					x g within 30 minutes of collection	processed and frozen at					
						≤–20°C within 4 hours of					
						collection. If collection and					
						processing is performed at					
						ambient temperature, serum					
						must be processed and tested					
						or frozen (≤ −20°C) within 2					
						hours of collection. Serum					
						should be frozen at ≤ −70°C for					
						storage > 1 month					
Osteocalcin	12371009		SST or	500uL	Serum - Allow samples to clot for 30	Osteocalcin is unstable. Keep	Werfen DS2		ng/mL	On request	N/A
	21	(serum	EDTA		minutes at room temperature, centrifuge	blood at 2-8°C immediately	(QUIDEL kit)				
		or	plasma		for 15 minutes at 1000 x g.	after collection and during					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	processing. Serum should be					
					x g within 30 minutes of collection	processed and frozen at					
						≤–20°C within 4 hours of					
						collection. If collection and					
						processing is performed at					
						ambient temperature, serum					
						must be processed and tested					
						or frozen (≤ −20°C) within 2					
						hours of collection. Serum					
						should be frozen at $\leq -70^{\circ}$ C for					
						storage > 1 month					

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Osteopontin	CRD0197	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Serum/plasma: Store samples	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma,		minutes at room temperature, centrifuge	at ≤-20°C. Avoid repeated	Simple Ella	24200-63800			
		or	heparin		for 15 minutes at 1000 x g.	freeze-thaw cycles.		EDTA:			
		plasma),	plasma,		Plasma - Centrifuge for 15 minutes at 1000	Urine: Aseptically collect the		57200-94100			
		urine or	urine or CSF		x g within 30 minutes of collection	first urine of the day (mid		Heparin:			
Oxidative LDL	12371008	Blood	SST or	500uL	Serum - Allow samples to clot for 30	Samples can be stored at –80°C	Werfen DS2	-	pg/mL	On request	N/A
	47	(serum	EDTA		minutes at room temperature, centrifuge	for at least 6 months. Avoid	(Mercodia kit)				
		or	plasma		for 15 minutes at 1000 x g.	repeated freezing and thawing.					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Oxytocin	12371009	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	· · · · · · · · · · · · · · · · · · ·	Werfen DS2	-	ng/mL	On request	N/A
	23	(serum	EDTA		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection	cycles					
P53 protein	12371008	Blood	SST	500uL	Serum - Allow samples to clot for 2 hours at	Store samples at ≤-20°C. Avoid	Werfen DS2	ND	pg/mL	On request	N/A
	43	(serum)			room temperature, centrifuge for 15	repeated freeze-thaw cycles.	(IBL kit)				
					minutes at 1000 x g.						
					Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Pancreatic polypeptide	12371009	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	pg/mL	On request	N/A
	27	(serum	EDTA		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection	cycles					
Pentraxin-3 (TSG-14)	CRD0204	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 747-2846	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 272-2219			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 396-2062			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Peptide YY	12371007	Blood	SST serum	500µL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	pg/mL	On request	N/A
	36	(serum	EDTA		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)	Heparin		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
			plasma		x g within 30 minutes of collection	cycles					

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Periostin	CRD0084	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	11,944-28,847			
		or	heparin		for 15 minutes at 1000 x g.			EDTA Plasma:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			10,675-28,419			
					x g within 30 minutes of collection			Heparin plasma:			
								10,567-28,935			
Placental growth factor	CRD0201	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 295-854	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 310-906			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 345-1024			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Urine: 623-21960			
		or urine			x g within 30 minutes of collection.						
					e: Aseptically collect the first urine of the						
					day (mid stream), voided directly into a						
					sterile container. Centrifuge						
					to remove particulate matter.						
Platelet-derived GF BB	CRD0199	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	-	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Podocin	12371009	Blood	SST or	500uL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Manual /	-	pg/mL	On request	N/A
	25	(serum	EDTA		room temperature, centrifuge for 15	≤1 month -20°C	Werfen				
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
		· · ·			x g within 30 minutes of collection	cycles					
Pregnancy-specific beta-1-glycoprotein 1	12371009	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	ND	ng/mL	On request	N/A
	28	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems				
		or	heparin		for 15 minutes at 1000 x g.		kit)				
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000		ŕ				
Procollagen I C-Terminal Propeptide	12371007	· · · · · · · · · · · · · · · · · · ·	SST, EDTA	500µL	Serum - Allow samples to clot for 2 hours at		Werfen DS2	-	pg/mL	On request	N/A
	38	(serum	plasma or		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)		1.0,		
		or	heparin		minutes at 1000 x g.	≤3 months -80°C	<b>, , , ,</b>				
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection	cycles					
Procollagen type III N-terminal propeptide	12371007	Blood	SST, EDTA	500µL	Serum - Allow samples to clot for 2 hours at	· · · · · · · · · · · · · · · · · · ·	Werfen DS2		pg/mL	On request	N/A
	40	(serum	plasma or		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)		-P6/III2		
		or	heparin		minutes at 1000 x g.	≤3 months -80°C					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
			plasma		x g within 30 minutes of collection						
					x g within 30 minutes of collection	cycles					

Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TAT
P-Selectin	12371009 41	Blood (serum or plasma)	SST, EDTA plasma, heparin plasma or citrate	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 43.5-119 EDTA: 18.3-57.4 Heparin: 18.6-50.6 Citrate: ND-37.9	ng/mL	On request	N/A
Randox Cytokine Array (Custom X): Interleukin-2 (IL- 2), Interleukin-4 (IL-4), Interleukin-6 (IL-6), Interleukin- 8 (IL-8), Interleukin-10 (IL-10), Vascular Endothelial Growth Factor (VEGF), Interferon Gamma (IG), Tumour Necrosis Factor Alpha (TNFa), Interleukin 1 Alpha (IL-1-a), Interleukin 1 Beta (IL-1B), Monocyte Chemotactic Protein-1 (MCP-1), Epidermal Growth Factor (EGF), Interleukin 1 Receptor Antagonist (IL-1 RA)	CRD0246	Blood (serum or plasma)	plasma SST or EDTA plasma	500ul	Carry out sample preparation in accordance with collection tube manufacturer's instructions. Ideally samples should be non- haemolysed and non-lipaemic.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Randox Evidence Investigator	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	pg/mL	On request	N/A
Randox Cytokine Array (High Sensitivity): Interleukin- 2 (IL-2), Interleukin-4 (IL-4), Interleukin-6 (IL-6), Interleukin-8 (IL-8), Interleukin-10 (IL-10), Vascular Endothelial Growth Factor (VEGF), Interferon Gamma (IG), Tumour Necrosis Factor Alpha (TNFa), Interleukin 1 Alpha (IL-1-a), Interleukin 1 Beta (IL-1B), Monocyte Chemotactic Protein-1 (MCP-1), Epidermal Growth Factor (EGF)		Blood (serum or plasma)	SST or EDTA plasma	500ul	Carry out sample preparation in accordance with collection tube manufacturer's instructions. Ideally samples should be non- haemolysed and non-lipaemic.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Randox Evidence Investigator	<u>- 77 78 - 178 81</u> - -	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Randox Cytokine Array 1 (Normal Sensitivity):	CRD0244	Blood	SST or EDTA	500ul	Carry out sample preparation in accordance	Store samples at ≤-20°C. Avoid	Randox	Serum &plasma	pg/mL	On request	N/A
Interleukin-2 (IL-2), Interleukin-4 (IL-4), Interleukin-6		(serum	plasma		with collection tube manufacturer's	repeated freeze-thaw cycles.	Evidence	IL-2: 0.00 - 2.42			
(IL-6), Interleukin-8 (IL-8), Interleukin-10 (IL-10),		or			instructions. Ideally samples should be non-		Investigator	0.69 - 2.22			
Vascular Endothelial Growth Factor (VEGF), Interferon		plasma)			haemolysed and non-lipaemic.			IL-4: 0.88 - 2.63			
Gamma (IG), Tumour Necrosis Factor Alpha (TNFa),								0.82 - 2.98			
Interleukin 1 Alpha (IL-1-a), Interleukin 1 Beta (IL-1B),								IL-6: 0.00 - 2.13			
Monocyte Chemotactic Protein-1 (MCP-1), Epidermal								0.00 - 2.21			
Growth Factor (EGF)								IL-8: 0.95 - 14.11			
								0.05 - 6.70			
								IL-10: 0.04 - 1.05			
								0.14 - 1.08			
								VEGF: 0.00 - 211.65			
								0.00 - 56.17			
								IFN-γ: 0.00 - 1.24			
								0.03 - 0.58			
								TNF-α: 2.28 - 7.81			
								1.47 - 5.93			
								IL-1α: 0.00 - 0.27			
								0.02 - 0.27			
								IL-1β: 0.00 - 2.34			
								0.00 - 2.65			
								MCP-1: 44.62 -			
								395.52	_		
								12.98 - 136.18			
								EGF: 54.06 - 196.88			

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Randox Cytokine Array V: Interleukin-3 (IL-3),	CRD0247	Blood	SST or EDTA	500ul	Carry out sample preparation in accordance	Store samples at ≤-20°C. Avoid	Randox	Serum & plasma	pg/mL	On request	N/A
Interleukin-7 (IL-7), Interleukin-12 P70 (IL-12 P70),		(serum	plasma		with collection tube manufacturer's	repeated freeze-thaw cycles.	Evidence	IL-3: <9.544			
Interleukin-13 (IL-13), Interleukin-23 (IL-23)		or			instructions. Ideally samples should be non-		Investigator	<8.41			
		plasma)			haemolysed and non-lipaemic.			IL-7: 3.35 - 33.82			
								1.82 - 16.04			
								IL-12: <3.19			
								<3.24			
								IL-13: <1.68			
								<1.98			
								IL-23: <0.0098			
								ng/ml			
								<0.01 ng/ml			
Rantes	CRD0206	Blood	SST,	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	platelet		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	18678-119117			
		or	poor EDTA		for 15 minutes at 1000 x g.			EDTA: 203-1899			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000			Heparin: 752-9720			
			platelet		x g within 30 minutes of collection						
Receptor for advanced glycation end product (RAGE)	CRD0205	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 538-2096	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 818-1777			
		or	heparin		for 15 minutes at 1000 x g.			Heparin: 668-1764			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection						
Regenerating islet-derived-3-alpha (REG3)	CRD0207	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	3136-22856			
		or	heparin		for 15 minutes at 1000 x g.			EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			3455-24482			
					x g within 30 minutes of collection.			Heparin:			
								3522-25352			
Resistin	CRD0088	Blood	SST serum	500µL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	4511-10,534			
		or	plasma		for 15 minutes at 1000 x g.			EDTA plasma: 4473-			
		plasma)	Heparin		Plasma - Centrifuge for 15 minutes at 1000			10,822			
			plasma		x g within 30 minutes of collection.			Heparin plasma:			
								4733-11,185			

Retinol binding protein (RBP)	?	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum:	ng/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	12700-48600			
		or	heparin		for 15 minutes at 1000 x g.		kit)	EDTA:			
		plasma),	plasma		Plasma - Centrifuge for 15 minutes at 1000			11900-48300			
		saliva or			x g within 30 minutes of collection.			Heparin:			
		urine			Saliva - Collect saliva using a collection			12200-43000			
					device such as a Salivette or equivalent.			Urine:16.4-252			
					Saliva collector must not have any protein			Saliva: 3.11-29.6			
					binding or filtering capabilities.						
					Urine - Aseptically collect the first urine of						
					the day (mid-stream), voided directly into a						
					sterile container.						

Test Description	Epic test		Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
Salivary 17OH-progesterone	22371007 49	type Saliva	tube Saliva	volume 500uL	(pre-analysis) Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial.	(pre-analysis) Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	ranges Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary Amylase	CRD0090	Saliva	Salivette	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	U/mL	On request	N/A
Salivary androstenedione	12371009 35	Saliva	Saliva	500uL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A

Salivary Cortisol	12371006	Saliva	Salivette	500µL	Avoid sample collection within 60 minutes	Refrigerate sample within 30	Werfen DS2	Guide referece	ug/dL	On request	N/A
	78				after eating a major meal or within 12	minutes, and freeze at or below	(Salimetrics	ranges available			
					hours after consuming alcohol. Avoid acidic	-20ºC within 4 hours	kit)	from manufacturer,			
					or high sugar foods, to minimise rinse	of collection. (Samples may be		laboratory to			
					mouth thoroughly with water 10 minutes	stored at -20°C for up to 6		establish its own			
					before sample is collected. Collect whole	months.)		range.			
					saliva by unstimulated passive drool.						
					Donors tilt the head forward, allowing the						
					saliva to pool on the floor of the mouth,						
					then pass the saliva through the SalivaBio						
					Collection Aid (SCA) into a polypropylene						
					vial.						

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Salivary Cotinine	12371007 44	Saliva	Salivette	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	ng/mL	On request	N/A
Salivary C-reactive protein (CRP)	?	Saliva	Saliva	500uL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary dehydroepiandrosterone sulphate (DHEAS)	?	Saliva	Saliva	500uL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Salivary DHEA	12371007 45	Saliva	Salivette	500µL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary estriol	12371009 43	Saliva	Saliva	300uL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Premenopausal adult females AM: 0 - 16.4 Premenopausal adult females PM: 0 - 4.8 Guide from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary estrone	12371009 42	Saliva	Saliva	500uL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Salivary IgA	12371007 46	Saliva	Salivette	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20ºC within 4 hours of collection. (Samples may be stored at -20ºC for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	μg/mL	On request	N/A
Salivary melatonin	12371007 47	Saliva	Salivette	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary oestradiol	12371007 48	Saliva	Salivette	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)	Werfen DS2 (Salimetrics kit)	Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A

Test Description	Epic test code	Sample type	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference ranges	Units	Frequency	Guide TAT
Salivary progesterone	12371007 49		Polypropylene vial	500μL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20°C within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)		Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Salivary testosterone	12371007 50	Saliva	Salivette	500µL	Avoid sample collection within 60 minutes after eating a major meal or within 12 hours after consuming alcohol. Avoid acidic or high sugar foods, to minimise rinse mouth thoroughly with water 10 minutes before sample is collected. Collect whole saliva by unstimulated passive drool. Donors tilt the head forward, allowing the saliva to pool on the floor of the mouth, then pass the saliva through the SalivaBio Collection Aid (SCA) into a polypropylene vial. Samples visibly contaminated with blood should be recollected.	Refrigerate sample within 30 minutes, and freeze at or below -20ºC within 4 hours of collection. (Samples may be stored at -20°C for up to 6 months.)		Guide referece ranges available from manufacturer, laboratory to establish its own range.	pg/mL	On request	N/A
Sclerostin	12371009 45	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum - Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles. Grossly haemolysed samples should not be used.	Werfen DS2 (R&D Systems kit)	Serum: 67-300 EDTA: 200-712 Heparin: 222-805	pg/mL	On request	N/A

Serotonin	12371007 51		Blood: SST, platelet rich EDTA or heparin plasma Urine: 24h sterile collection		Patients should avoid seratonin rich foods, certain medications may stimulate seratonin levels in blood. Collect samples as per local protcol, grossly haemolysed, lipaemic or icteric samples must not be used. A platelet extract can be prepared.	6h at 2-8°C and 3 months $\leq$ -	(IBL International kit)	plasma: 1.8-7.5	0.	On request	N/A	
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Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Serpin A6/cortisol binding globulin	12371008	Blood	SST or EDTA	500uL	Serum - Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2		pg/mL	On request	N/A
	71	(serum	plasma		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or			minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
Soluble receptor activator of nuclear factor-kappa B	CRD0099	Blood	SST or EDTA	500uL	Serum - Allow samples to clot for 2 hours at	Store samples at ≤-20°C. Avoid	-		pg/mL	On request	N/A
ligand		(serum	plasma		room temperature, centrifuge for 15	repeated freeze-thaw cycles.					
		or			minutes at 1000 x g.						
		plasma)			Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Somatostatin	12371009	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 2 hours at	8 days at 2-8°C	Werfen DS2	-	pg/mL	On request	N/A
	44	(serum	plasma or		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	heparin		minutes at 1000 x g.	≤3 months -80°C					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
					-						
ST2 (IL-1 R4)	12371008	Blood	SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
	46	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	5397-36527			
		or	heparin		for 15 minutes at 1000 x g.			EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			5201-36891			
					x g within 30 minutes of collection.			Heparin:			
								4883-37865			
Stem cell factor	12371009		SST, EDTA	500uL	Serum - Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum (male):	pg/mL	On request	N/A
	36	(serum	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	2205-11149			
		or	heparin		for 15 minutes at 1000 x g.	Grossly lipaemic samples	kit)	Serum (female):			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000	should not be used.		3877-77273			
			citrate		x g within 30 minutes of collection.			Values in			
Stromal cell-derived factor 1a (CXCL12/SDF-1 $\alpha$ )	CRD0213	Blood	Platelet	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	EDTA:	pg/mL	On request	N/A
		(plasma)	poor EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	1763-2781			
			plasma or		for 15 minutes at 1000 x g.	Grossly haemolysed samples		Heparin:			
			platelet		Plasma - Centrifuge for 15 minutes at 1000	should not be used.		1691-2593			
			poor		x g within 30 minutes of collection.						
			heparin								
			plasma								

Test Description	Epic test code	•	Sample tube	Minimum volume	Processing requirements (pre-analysis)	Storage requirements (pre-analysis)	Method	Reference	Units	Frequency	Guide TAT
T.Inhib. Metalloproteinases-2 (TIMP-2)	CRD0227	type Blood (serum or plasma), saliva or	Serum, EDTA plasma, heparin plasma.	500uL	Serum: Allow samples to clot for 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Serum/plasma: Store samples at <-20°C. Avoid repeated freeze-thaw cycles. Grossly icteric or haemolysed samples should not be used.	Protein Simple Ella	ranges Serum: 33300-87100 EDTA: 35100-80500 Heparin:	pg/mL	On request	N/A
T.inhib. metalloproteinases-3 (TIMP-3)	12371009 53	Blood (serum or plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum: Allow samples to clot for about 4 hours at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles. Grossly haemolysed samples	Werfen DS2 (Novus kit)	-	pg/mL	On request	N/A
T.inhib. metalloproteinases-4 (TIMP-4)	12371009 54	Blood (serum or plasma) or human milk	SST, EDTA plasma or heparin plasma	500uL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection. Human Milk: Centrifuge for 15 minutes at 1000 x g at 2-8 °C. Collect the aqueous fraction and centrifuge twice more.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 460-2661 EDTA: 516-2476 Heparin: 664-2328 Milk: 25700-111000	pg/mL	On request	N/A
Thrombomodulin/BDCA-3	12371009 49	Blood (serum or plasma) or urine	SST, EDTA plasma, heparin plasma, citrate plasma or urine	500uL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection. Urine: Aseptically collect the first urine of the day (mid-stream), voided directly into a sterile container. Centrifuge to remove particulate matter.	Store samples at ≤-20°C. Avoid repeated freeze-thaw cycles.	Werfen DS2 (R&D Systems kit)	Serum: 2866-5318 EDTA: 2815-5407 Heparin: 2805-5479 Citrate: 2353-4541 Urine: 3540-29100	pg/mL	On request	N/A

Test Description	Epic test	•	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Thrombopoeitin	12371009 51	Blood (serum platelet poor plasma)	SST, EDTA plasma or heparin plasma	500uL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Platelet-poor Plasma - Collect plasma on ice. Centrifuge at 2-8 °C for 15 minutes at 1000 x g within 30 minutes of collection. An additional centrifugation step of the plasma at 10,000 x g for 10 minutes at 2-8 °C is recommended for complete platelet removal.		Werfen DS2 (R&D Systems kit)	Serum: ND-228 EDTA: ND-196 Heparin: ND-168	pg/mL	On request	N/A
Thrombospondin-1	CRD0225	Blood (serum or plasma)	Serum, platelet- poor EDTA plasma or platelet- poor heparin plasma	500uL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Platelet-poor Plasma - Collect plasma on ice. Centrifuge at 2-8 °C for 15 minutes at 1000 x g within 30 minutes of collection. An additional centrifugation step of the plasma at 10,000 x g for 10 minutes at 2-8 °C is recommended for complete platelet removal.		Protein Simple Ella		pg/mL	On request	N/A
Thromboxane	12371009 47	Blood (serum or plasma) or urine	SST, EDTA plasma, heparin plasma or urine	500uL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Plasma: Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection. Urine: Aseptically collect the first urine of the day (mid-stream), voided directly into a sterile container. Centrifuge to remove particulate matter.		Werfen DS2 (R&D Systems kit)	Serum: 1.1-11.3 EDTA: ND-10.1 Heparin: ND-9.26 Urine: 3.5-72.5	ng/mL	On request	N/A
Tissue inhibitor of metalloproteinases-1	CRD0102	Blood (serum or plasma) or CSF	SST, EDTA plasma or heparin plasma	500µL	Serum: Allow samples to clot for about 30 minutes at room temperature, centrifuge for 15 minutes at 1000 x g. Platelet-poor Plasma - Collect plasma on ice. Centrifuge at 2-8 °C for 15 minutes at 1000 x g within 30 minutes of collection. An additional centrifugation step of the plasma at 10,000 x g for 10 minutes at 2-8 °C is recommended for complete platelet removal.		Protein Simple Ella	Serum: 40509-145619 EDTA plasma: 36037-168192 Heparin plasma: 38827-71776 CSF: 44071-673106	pg/mL	On request	N/A

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Tissue necrosing factor a	CRD0103	Blood	SST, EDTA	500μL	Serum: Allow samples to clot for about 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 4.05-8.34	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA plasma:			
		or	heparin		for 15 minutes at 1000 x g.			2.45-6.16			
		plasma)	plasma		Platelet-poor Plasma - Collect plasma on			Heparin plasma:			
		or			ice. Centrifuge at 2-8 °C for 15 minutes at			2.87-7.99			
		broncho			1000 x g within 30 minutes of collection. An						
		alveolar			additional centrifugation step of the plasma						
		fluid			at 10,000 x g for 10 minutes at 2-8 °C is						
					recommended for complete platelet						
					removal.						
TNF alpha high sensitivity	CRD0104	Blood	SST, EDTA	500µL	Serum: Allow samples to clot for about 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 7.78-12.2	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA plasma:			
		or	heparin		for 15 minutes at 1000 x g.			4.94-9.68			
		plasma)	plasma		Platelet-poor Plasma - Collect plasma on			Heparin plasma:			
					ice. Centrifuge at 2-8 °C for 15 minutes at			5.06-9.62			
TNF receptor 1	CRD0105	Blood	Serum,	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 1065-2890	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 808-2790			
		or	plasma,		for 15 minutes at 1000 x g.	Grossly haemolysed or icteric		Heparin: 879-3040			
		plasma)	heparin		Plasma - Centrifuge for 15 minutes at 1000	samples should not be used.		CSF: 742-1416			
			plasma or		x g within 30 minutes of collection.						
			CSF		, e						
TNF receptor 2 (TNF RII/TNFRSF1B)	CRD0230	Blood	Serum,	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 1743-4198	pg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 1320-4758			
		or	plasma or		for 15 minutes at 1000 x g.	Grossly haemolysed or icteric		Heparin:			
		plasma)	heparin		Plasma - Centrifuge for 15 minutes at 1000	samples should not be used.		1263-2995			
			plasma		x g within 30 minutes of collection.						
Transforming growth factor alpha	12371009	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: ND-32	pg/mL	On request	N/A
	48	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	Plasma: ND			
		or	heparin		for 15 minutes at 1000 x g.		kit)				
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
					Ŭ						
Transforming growth factor B-1	CRD0106	Blood	SST,	500µL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	platelet		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	30120-61578			
		or	poor EDTA		for 15 minutes at 1000 x g.			PP EDTA:			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000			1046-31915			
			platelet		x g within 30 minutes of collection.			PP heparin			
			poor					1217-13398			
			heparin								
			nlasma								

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Transforming growth factor B-2	12371007	Blood	SST, EDTA	500µL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Werfen DS2	Serum: ND-873	pg/mL	On request	N/A
	60	(serum	plasma,		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	(R&D Systems	EDTA: ND-442			
		or	heparin		for 15 minutes at 1000 x g.		kit)	Citrate: ND-320			
		plasma)	plasma or		Plasma - Centrifuge for 15 minutes at 1000			Heparin: ND-454			
			citrate		x g within 30 minutes of collection.						
Trappin-2/elafin	CRD0155	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	5971-18525			
		or	heparin		for 15 minutes at 1000 x g.			EDTA: 6374-17637			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			Heparin:			
					x g within 30 minutes of collection.			6571-16072			
Tumor necrosis factor alpha (TNF-a)	CRD0108	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	6.10-13.58	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		for 15 minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
					x g within 30 minutes of collection.						
Uromodulin	CRD0231	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	ng/mL	On request	N/A
		(serum	plasma or		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	heparin		minutes at 1000 x g.	≤3 months -80°C					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
Urinary Dickkopf-related protein 3 (uDKK3)	CRD0309	Blood	SST, EDTA	500uL			Immundiagno	-	ng/mL	On request	N/A
		(serum	plasma or		Preferably, the central fraction of the	Must be transported on dry ice.	stik				
		or	heparin		morning urine is collected in a suitable						
		plasma)	plasma		container with a tight-fitting cap.						
Vascular cell adhesion molecule-1	CRD0109	Blood	SST, EDTA	500µL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	315808-973354			
		or	heparin		for 15 minutes at 1000 x g.			EDTA:			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000			321648-879975			
		or CSF			x g within 30 minutes of collection.			Heparin:			
								361463-768399			
								CSF:			
								21508-74820			

Test Description	Epic test	Sample	Sample	Minimum	Processing requirements	Storage requirements	Method	Reference	Units	Frequency	Guide TAT
	code	type	tube	volume	(pre-analysis)	(pre-analysis)		ranges			
Vascular endothelial growth factor	CRD0110		SST, EDTA	500uL	Serum: Allow samples to clot for 2 hours at	Store samples at ≤-20°C. Avoid	Protein	0.00-450.64	pg/mL	On request	N/A
		(serum	plasma or		room temperature, centrifuge for 15	repeated freeze-thaw cycles.	Simple Ella				
		or	heparin		minutes at 1000 x g.						
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
Vascular endothelial GF C	CRD0232	Blood		500uL	x g within 30 minutes of collection.		Drotoin		n <i>a (</i> m)	On request	N/A
vascular endothelial GF C	CRD0232		SST, EDTA	500uL	Serum: Allow samples to clot for 2 hours at	-	Protein Simple Ella	-	pg/mL	On request	N/A
		(serum	plasma or		room temperature, centrifuge for 15		Simple Ella				
		Or	heparin		minutes at 1000 x g. Plasma - Centrifuge for 15 minutes at 1000						
		plasma)	plasma		x g within 30 minutes of collection.						
VEGF Receptor 1/FLT-1	CRD0162	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 84.4-165	pg/mL	On request	N/A
		(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 73.8-199		Onrequest	
		or	heparin		for 15 minutes at 1000 x g.	Grossly heamolysed or icteric	Simple Lila	Heparin: 65.0-140			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000						
		piasinaj	piasilia		x g within 30 minutes of collection.	samples not suitable.					
VEGF receptor 2	CRD0233	Blood	SST, EDTA	500uL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum:	pg/mL	On request	N/A
	CRECESS	(serum	plasma or		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	8968-12737	P6/112	onrequest	
		or	heparin		for 15 minutes at 1000 x g.	Grossly heamolysed or icteric		EDTA: 8355-13394			
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	samples not suitable.		Heparin:			
		plasma	plasina		x g within 30 minutes of collection.	sumples not suitable.		8246-12767			
								0210 12/07			
VEGF receptor 3	CRD0163	Blood	SST or	500uL	Serum: Allow samples to clot for 2 hours at	6 days at 2-8°C	Werfen DS2	Serum: 33-167	ng/mL	On request	N/A
		(serum	citrate		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)	Citrate: 31-200	-		
		or	plasma		minutes at 1000 x g.	≤3 months -80°C					
		plasma)			Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
					-						
Visfatin	CRD0111	Blood	SST, EDTA	500µL	Serum: Allow samples to clot for 2 hours at	7 days at 2-8°C	Werfen DS2	-	ng/mL	On request	N/A
		(serum	plasma or		room temperature, centrifuge for 15	≤1 month -20°C	(Novus kit)				
		or	heparin		minutes at 1000 x g.	≤3 months -80°C					
		plasma)	plasma		Plasma - Centrifuge for 15 minutes at 1000	Avoid repeated freeze-thaw					
					x g within 30 minutes of collection.	cycles					
	0000440			500 1							
Vitamin D binding protein	CRD0112	Blood	Blood: SST,	500μL	Serum: Allow samples to clot for 30	Store samples at ≤-20°C. Avoid	Protein	Serum: 92.9-225	µg/mL	On request	N/A
		(serum	EDTA		minutes at room temperature, centrifuge	repeated freeze-thaw cycles.	Simple Ella	EDTA: 95.0-243			
		or	plasma or		for 15 minutes at 1000 x g.	Grossly heamolysed or icteric		Heparin:			
		plasma)	heparin		Plasma - Centrifuge for 15 minutes at 1000	samples not suitable.		88.4-293			
		or urine	plasma		x g within 30 minutes of collection.			Urine:			
			Urine:					1040-75244			
			Sterile								
			universal								