

Biomarker Assay List

April 2019

Analytes	Matrix	Assay Range	Sample Volume	Anticoagulant	Storage Temp (° C)	Platform
4β-Hydroxcholesterol	Human Plasma	5 - 500 ng/mL	0.2 mL	K ₂ EDTA	-20	LC-MS/MS
Active B-12	Human Serum/Plasma	0-128 pmol/L	173 μL	N/A	-20	MEIA
Aldosterone	Human Plasma	10 - 10000 pg/mL	0.2 mL	K ₂ EDTA	-70	LC-MS/MS
Auristatin F HPA	Rat Plasma	0.05/0.05ng/ml to 50/50ng/ml	40 ul	Lithium Heparin	-70	LC/MS/MS
Auristatin F and Auristatin F HPA	Human Plasma	50-5000 ng/mL	200 ul	Lithium Heparin	-70	LC/MS/MS
Adiponectin	Human Serum	5 - 250 ng/mL	0.05 mL	N/A	-70	ELISA
Adiponectin	Human Plasma	5 - 250 ng/mL	0.05 mL	Heparin	-70	ELISA
Adiponectin	Human Serum	780 - 100000 ng/mL	0.04 mL	N/A	-20	ELISA
Anti-Iia	Human Plasma	0.02-0.6IU/mL	0.02mL	Heparin	-70	Enzymatic
Anti-Xa	Human Plasma	0.05-1.0 IU/mL	0.02mL	Heparin	-70	Enzymatic
Aβ-40	Human Plasma	5 - 10,000 pg/mL	0.05 mL	EDTA	-70	ECL
Aβ-40	Human CSF	16 - 10,000 pg/mL	0.05 mL	N/A	-70	ECL
Aβ42	Human CSF	3.0-2,000 pg/mL	0.025mL	N/A	-70	ECL
α-GST	Human Plasma	60 - 2,000 pg/mL	0.03 mL	K ₂ EDTA	-70	ELISA
Brain Derived Neurotropic Factor (Free)	Human Plasma	1.51 pg/mL to 14400 pg/mL	5 uL	N/A	both -20 and -70	ELISA
C2C	Rat Plasma	10 - 500 ng/mL	0.05 mL	N/A	-70	ELISA
C3a (Complement 3a)	Human Plasma	123 - 2,238 ng/mL	0.01 mL	EDTA	-70	ELISA
C4 (Complement 4)	Human Plasma	0.03 - 2 ng/mL	0.01 mL	EDTA	-70	ELISA
C5a (Complement 5a)	Human Plasma	0.104 – 0.987 ng/mL (as samples are diluted 20-fold, this corresponds with 2.08 – 19.7 ng/mL in plasma)	0.02 mL	EDTA	-70	ELISA
N2- (1-Carboxyethyl)-2'Deoxy-Guanosine (CEDG)	Human Urine	0.5 - 250 ng/mL	0.01 mL	N/A	-20/-70	LC-MS/MS
Cholesterol	Human Plasma	25 - 2500 ug/mL	0.005 mL	K ₂ EDTA	-20	LC-MS/MS
Cholic Acid	Human Plasma	2 - 2000 ng/mL	0.01 mL	K ₂ EDTA	-20	LC-MS/MS
Clozapine	Human Plasma	1 - 1000 ng/mL	0.005 mL	N/A	-20	LC-MS/MS
Chromogranin A	Human Serum	5 - 120 ng/mL	0.06 mL	N/A	-20	ELISA
Corticosterone	Mouse Plasma	1.0 - 145 ng/mL	0.03 mL	Heparin	-20	ELISA
Corticosterone	Rat Plasma	1.1 - 164 ng/mL	0.03 mL	EDTA	-20	ELISA
Cortisol	Dog Plasma	0.5 - 60.0 μg/dL	0.05 mL	EDTA	-20	ELISA
Cortisol	Human Plasma	0.5 - 60.0 μg/gL	0.05 mL	Citrate	-20	ELISA
Cortisol	Human Serum	1 - 500 ng/mL	0.05 mL	N/A	-20	LC-MS/MS
Cortisol/6β-hydroxycortisol	Human Urine	1/5 - 200/1000 ng/mL	0.1 mL	N/A	-20	LC-MS/MS
C-peptide	Human Serum	115 - 4250 pmol/L	0.05 mL	N/A	-20	ELISA
Creatinine	Human Urine	0.1 - 2 mM	0.02 mL	N/A	-20	ELISA
CRP	Human Plasma	0.18 - 16.2 mg/dL	0.1 mL	EDTA or Heparin	-20	ELISA
Cyp1A2	Human Cell/Tissue	N/A	N/A	N/A	-70	RT-PCR
Cyp2B6	Human Cell/Tissue	N/A	N/A	N/A	-70	RT-PCR
Cyp3A4	Human Cell/Tissue	N/A	N/A	N/A	-70	RT-PCR
Cytidine	Monkey Plasma	1 - 500 ng/mL	0.01 mL	K ₂ EDTA	-20/-70	LC-MS/MS
Cystatin C	Human Plasma	2 - 100 ng/mL	0.01 mL	Heparin	-20	ELISA

						Enzyme assay
DPPIV	Human Plasma	3.1 - 31.0 U/L	0.01 mL	EDTA	-70	Fluorescence detection
EPO	Monkey Plasma	0 - 400 mIU/mL	0.35 mL	Heparin	-20	ELISA
Ergosterol	Human Plasma	2 - 96 ng/mL	0.5 mL	K ₂ EDTA	-20	LC-MS/MS
E-selectin	Human Plasma	0.6 - 3,000 ng/mL	0.1 mL	Heparin	-70	ELISA
E-selectin	Human Serum	0.6 - 3,000 ng/mL	0.1 mL	N/A	-70	ELISA
Estradiol (E2)	Human Serum	20 - 2000 pg/mL	0.5 mL	N/A	-20	ELISA
Estrone/Equiline	Human Plasma	5/2 - 750/300 pg/mL	0.25 mL	K ₂ EDTA	-20	LC-MS/MS
Estrone sulfate/ Equiline sulfate	Human Plasma	50/50 - 15000/15000 pg/mL	0.15 mL	K ₂ EDTA	-20	LC-MS/MS
Ethisterone	Human Serum	0.5 - 100 ng/mL	0.2 mL	N/A	-20	LC-MS/MS
Ethyl Estradiol/Norgestimate/17-Desacetyl Norgestimate	Human Plasma	2/5/5 - 1000/2500/2500 pg/mL	0.5 mL	Lithium Heparine	-70	LC-MS/MS
Exendin 9-39	Human Plasma	5-1000 ng/mL	50 ul	K ₂ EDTA	-70/-20	LC-MS/MS
Factor H	Rat Plasma	15 - 6,000 ng/mL	0.04 mL	EDTA	-70	ELISA
Factor Xa	Human Plasma	% activity	0.0125 mL	EDTA	-70	Activity Assay
Free fatty acids	Human Serum	0.05 - 1.0 mmol/L	0.02 mL	N/A	-20	Enzyme assay
FSH (follicle stimulating hormone)	Human Plasma	0.1 - 170 mIU/mL	0.15 mL	EDTA	-20	ELISA
G-CSF	Rat plasma	39.1 - 2500 pg/mL	0.2 mL	EDTA and Heparin	-20	ELISA
GLP-1	Human Plasma	2 - 100 pM	0.1 mL	N/A	-70	ELISA
Glucagon	Human Plasma	30 - 2000 pg/mL	0.1 mL	N/A	-70	ELISA
Glucose	Human Urine	6.25 - 250 µg/mL	0.5 mL	N/A	-20	Enzyme assay
Human IgG Total)	Human Serum	15.6-500 ng/mL	0.02 mL	N/A	-20	ELISA
Human β -Defensin 2 (HBD2)	Human Serum	62.5 - 2000 pg/mL	100 µL	N/A	-70	ELISA
Human IgG1	Human Serum	1.7 – 2.3 µg/mL	0.02 mL	N/A	-20	ELISA
Human IgG2	Human Serum	0.5 – 1.3 µg/mL	0.02 mL	N/A	-20	ELISA
Human IgG3	Human Serum	10.13 – 0.3 µg/mL	0.02 mL	N/A	-20	ELISA
Human IgG4	Human Serum	0.1 – 0.2 µg/mL	0.02 mL	N/A	-20	ELISA
Human 90K/Mac-2BP	Human Serum	12.5-200 ng/mL	0.02 mL	N/A	-20	ELISA
HMGB-1	Human Serum	2.5 - 80 ng/mL	0.02 mL	N/A	-70	ELISA
IGFBP-3	Human Serum	0.75 - 50 ng/mL	0.1 mL	N/A	-70	ELISA
IFN- α	Mouse Serum	1 - 500 pg/mL	0.1 mL	N/A	-70	ELISA
IFN- α	Human Serum	45 - 1000 pg/mL	0.125 mL	N/A	-20	ELISA
IFN- α (Ultra Sensitive)	Human Serum	0.2 - 145.8 pg/mL	0.130 mL	N/A	-70	Simoa
IFN- ω (Ultra Sensitive)	Human Serum	0.5 - 364.5 pg/mL	0.100 mL	N/A	-70	Simoa
IGF-1	Rabbit Serum	0.2 - 6.0 ng/mL	0.02 mL	N/A	-70	ELISA
IGF-1	Rat Serum	30 - 2000 pg/mL	0.05 mL	N/A	-70	ELISA
Interleukin-1 β (IL-1 β)	Human Plasma	4 - 250 pg/mL	0.1 mL	Heparin	-20	ELISA
IL-1 β , High Sensitivity	Human Serum	0.125 - 8 pg/mL	0.15 mL	N/A	-20	ELISA
IL-1RA	Human Serum	31.2 to 2,000 pg/mL	0.1 mL	N/A	-20	ELISA
Interleukin-4 (IL-4)	Human Serum	9.77 - 2500 pg/mL	0.1 mL	N.Ap.	-20	ECL
Interleukin-6 (IL-6)	Human Plasma or Serum	0.16 - 10 pg/mL	0.2 mL	Citrate or EDTA or Heparin	-20	ELISA
IL-6 High Sensitivity	Human Serum	0.16 - 10 pg/mL	0.1 mL	N/A	-20	ELISA
Interleukin-6 soluble receptor (IL-6 sR)	Human Serum	0.0313 - 2.00 ng/mL	0.1 mL	N/A	-20	ELISA
Interleukin-8 (IL-8)	Human Plasma	31.25 - 1,000 pg/mL	0.05 mL	EDTA	-20	ELISA
Interleukin-10 (IL-10)	Human Serum	11.5 -1346 pg/mL	0.2 mL	N/A	-70	ELISA
Interleukin-12 (IL-12)	Human Serum	17.0 - 1959 pg/mL	0.2 mL	N/A	-70	ELISA
Interleukin-15 (IL-15)	Human Serum	3.9 - 250 pg/mL	0.1 mL	N/A	-20	ELISA
Interleukin-17A (IL-17A)	Human Serum	0.23438 - 120 pg/mL	0.075 mL	N/A	-70	Simoa
Inhibin-B	Human Serum	10 - 1000 pg/mL	0.1 mL	N/A	-20	ELISA
Leptin	Human Plasma	15 - 1000 pg/mL	0.05 mL	EDTA	-20	ELISA

Leukotriene B4	Human Plasma	0.2 - 200 ng/mL/ 20-20000 pg/mL	0.1/0.5 mL	Heparin/ EDTA	-20	LC-MS/MS
Leukotriene E4	Human Urine	0.015 - 7.5 ng/mL	1 mL	N/A	-20	LC-MS/MS
Kynurenine	Human Plasma	0.1 - 1.5 ug/mL	0.05 mL	K ₂ EDTA	-20/-70	LC-MS/MS
MCP-1	Human Serum	0.61 - 2,500 pg/mL	0.05 mL	N/A	-20	ECL
Nephrin	Human Urine	0.2 - 10 ng/mL	0.1 mL	N/A	-20	ELISA
NPY	Human Serum or Plasma	5-1000pg/mL	0.05 mL	EDTA	-20	ELISA
Octanoic Acid	Human Plasma	50 - 50000 ng/mL	0.01 mL	K ₂ EDTA	-20	LC-MS/MS
Oxytocin	Human Plasma	1.5 pg/mL (LLOQ)	0.1mL	EDTA	-20	ELISA
Podocin	Human Urine	0.3-10 ng/mL	0.1 mL	N/A	-20	ELISA
Prolactin	Human/Monkey Plasma	1.50 - 100 ng/mL	50 µL	K ₂ EDTA	-70	ELISA
Prolactin	Human Plasma	0.781 ng/mL to 100 ng/mL	100 uL	K2-EDTA	-70	ELISA
PSA	Human Serum	0.43 - 172 ng/mL	0.11 mL	N/A	-20	ELISA
RANKL	Human Serum	2.5 - 5000 pg/mL	0.060 mL	N/A	-70	Simoa
RANTES	Human Plasma (Platelet Poor)	30 - 2,000 pg/mL	0.2 mL	EDTA	-70	ELISA
Salmon Calcitonin	Human Serum	9 - 400 pg/mL	0.2 mL	N/A	-20	ELISA
Serotonin	Human Blood	1 - 5000 ng/mL	0.05 mL	K2EDTA	-20	LC-MS/MS
Sphingosine	Human Urine	1 - 1000 ng/mL	0.01 mL	N/A	-20	LC-MS/MS
Testosterone	Mouse Serum	0.2 - 16 ng/mL	0.6 mL	N/A	-20	ELISA
TNF-α	Human Plasma	16 - 1,000 pg/mL	0.2 mL	Citrate or EDTA or Heparin	-20	ELISA
TNF-α Ultra Sensitivity	Human Serum	0.5 - 32 pg/mL	0.2 mL	N/A	-70	Simoa
Total Tau	Human CSF	30-8,000 pg/mL	0.025mL	N/A	-70	ECL
Troponin I	Human Serum/Plasma	2-75 ng/mL	0.2 mL	EDTA or Heparin	-20	ELISA
Troponin T	Human Serum	0.02-25 ng/mL				ECL
Tryptophan	Human Plasma	1 - 50 ug/mL	0.05 mL	K ₂ EDTA	-20/-70	LC-MS/MS
VEGF	Human Serum	20 - 1,000 pg/mL	0.1 mL	N/A	-20	ELISA
Analytes	Matrix	Assay Range	Sample Volume	Anticoagulant	Storage Temp (° C)	Platform
GM-CSF, IL-1β, IFN-γ, IL-2, IL-6, IL-12p70, TNFα, IL-8, IL-10	Human Serum	2.44 - 2500 pg/mL for GM-CSF 2.44 - 2500 pg/mL for IL-1β 2.44 - 2500 pg/mL for IFN-γ 2.44 - 2500 pg/mL for IL-2 2.44 - 2500 pg/mL for IL-6 2.44 - 2500 pg/mL for IL-8 2.44 - 2500 pg/mL for IL-10 2.44 - 2500 pg/mL for TNF-α 9.77 - 2500 pg/mL for IL-12 p70 39.1 - 2500 pg/mL for IFN-γ	0.05 mL	N/A	-20	ECL
IFN-γ, IL-1β, IL-6, TNF-α	Human Plasma	4 - 2,500 pg/mL for IFN-γ, 0.13 - 2,500 pg/mL for IL-β, 0.15 - 2,500 pg/mL for IL-6, 0.28 - 2,500 pg/mL for TNF-α	0.05 mL	EDTA	-70	ECL(4Plex)
IFN-γ, IL-1b, IL-6, IL-10, IL-12p70, KC/GRO/CINC, TNF-a	Mouse Plasma or serum	0.5 -2,500 pg/mL for IFN-γ, 0.75-2,500 pg/mL for IL-1b, 4.5- 2,500 pg/mL IL-6, 12-2,500 pg/mL for IL-10, 35 -2, 500 pg/mL IL-12p70, 3.3 -2,500 pg/mL for KC/GRO, 2-2500 pg/mL for TNF-a	0.025mL	EDTA	-70	ECL
IFN-g, IL-1b, IL-4, IL-5, IL-13, KC/GRO/CINC, TNF-a	Rat Plasma or serum	9 -10,00 pg/mL for IFN-γ, 25-100,00 pg/mL for IL-1b, 1.6- 10.000 pg/mL IL-4, 25-10,000 pg/mL for IL-5, 35 -2, 500 pg/mL IL-12p70, 8.5 -KC/GRO, 54-10,000 for TNF-a	0.025mL	EDTA	-70	ECL