



MESO SCALE DISCOVERY®

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Featured Product



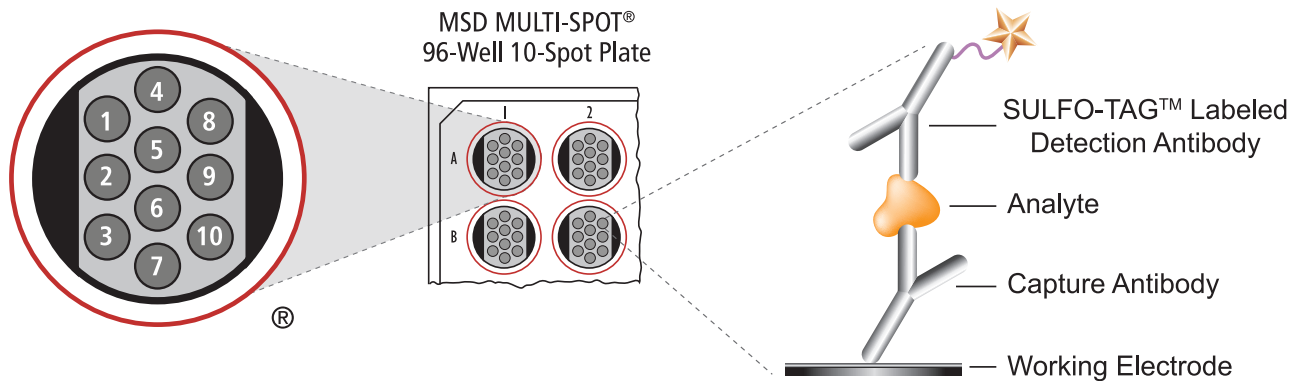
NEW Brain-Derived Tau Assays

NEW Mouse Proinflammatory Panels

The MSD Advantage

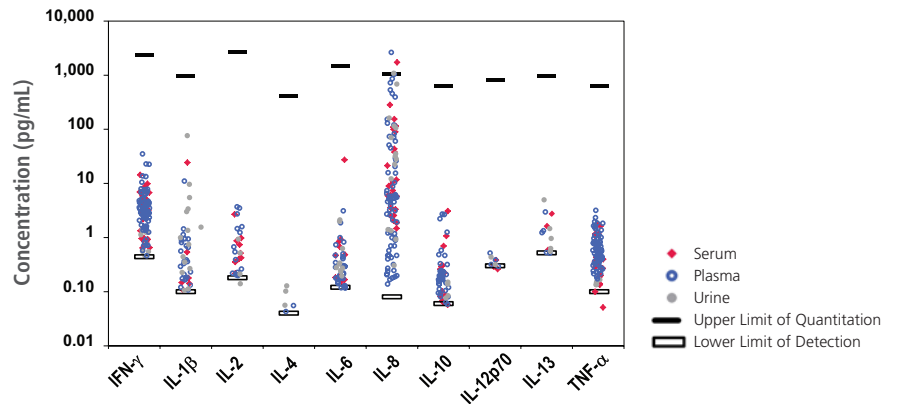
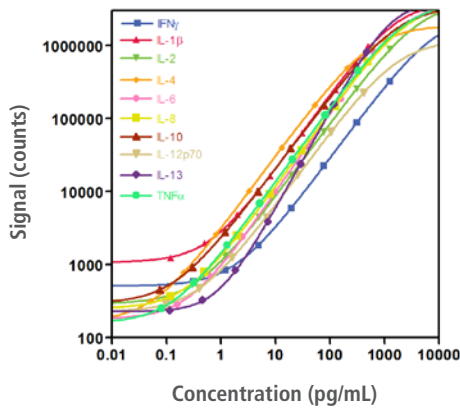
MSD® biomarker assays provide measurements for multiple or individual targets within a single, small-volume sample by leveraging MULTI-ARRAY® technology – a unique combination of electrochemiluminescence (ECL) detection and patterned arrays that minimizes background signals to offer exceptional sensitivity, dynamic range, and convenience. Background signals are minimal because the stimulation mechanism (electricity) is decoupled from the signal (light). In combination with MULTI-SPOT® plates, this technology enables precise measurement of multiple analytes in a single sample requiring less time and effort than other assay platforms. The diverse menu of assay types is well-suited to a broad range of applications, allowing researchers to:

- Measure multiple targets in a single sample using MSD's MULTI-SPOT plates
- Measure high- and low-abundance targets in the same sample with no extra dilution steps
- Read plates in as few as 90 seconds
- Design assays flexibly to match specific research needs



MULTI-SPOT technology enables multiplexing up to ten analytes per well and supports different assay formats including sandwich immunoassays.

MSD Assays Offer a Broad Linear Range and High Degree of Matrix Tolerance



S-PLEX TrueSensitivity[®], Simple Execution

In addition to being able to measure attomolar concentrations, TrueSensitivity requires high specificity. S-PLEX assays are engineered for high specificity, ensuring that the signals you detect accurately reflect your target analytes without interference from cross-reactivity or background noise. This combination of sensitivity and specificity provides the confidence and precision necessary for advancing critical discoveries in drug development and mechanistic research.

S-PLEX assays are available in singleplex or multiplex panels, allowing you to conserve sample volumes while detecting analytes as low as femtogram/mL.

S-PLEX Assays

Human			Human			NHP		
Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)	Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)	Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)
BD-Tau (pT181)	209	2,900 – 1,260,000	IL-9	8.6	39 – 68,000	BD-Tau (pT181)	209	2,900 – 1,260,000
BD-Tau (pT217)	454	9,400 – 2,240,000	IL-10	1.4	9.8 – 12,000	BD-Tau (pT217)	454	9,400 – 2,240,000
BD-Tau (total)	39.3	941 – 548,000	IL-12p70	2.3	6.2 – 18,000	BD-Tau (total)	39.3	941 – 548,000
CTLA-4	32	120 – 410,000	IL-13	9.1	24 – 53,000	CTLA-4	32	130 – 170,000
Eotaxin-3	59	141 – 266,000	IL-17A	13	120 – 140,000	G-CSF	44	120 – 410,000
GFAP	150	320 – 850,000	IL-2	8.2	37 – 54,000	GFAP	150	320 – 850,000
G-CSF	44	460 – 990,000	IL-22	2.2	7.6 – 24,000	IL-1β	19	98 – 70,000
GM-CSF	1.9	4.4 – 21,000	IL-29/IFN-λ1	10.4	10.4 – 124,000	IL-2	7.3	21 – 30,000
IFN-α2a	4.9	29 – 52,000	Neurofilament L	1,700	8,480 – 1,400,000	IL-5	2.02	5.9 – 19,000
IFN-β	17	64 – 81,000	Tau (pT181)	77	130 – 170,000	IL-6	1.1	1.3 – 4,400
IFN-γ	5.3	16 – 15,000	Tau (pT217)	880	5,900 – 2,400,000	Neurofilament L	1,700	8,480 – 1,400,000
IFN-ω	1.83	27.5 – 39,000	Tau (pT231)	3,100	15,000 – 15,000,000	Tau (pT181)	77	130 – 170,000
IL-1β	19	98 – 70,000	Tau (total)	37	120 – 160,000	Tau (pT217)	880	5,900 – 2,400,000
IL-2	7.3	21 – 30,000	TNF-α	6.8	12 – 42,000	Tau (pT231)	3,100	15,000 – 15,000,000
IL-3	4.6	21 – 17,000	TNF-β	3.3	11 – 16,000	Tau (total)	37	120 – 160,000
IL-4	0.54	4.9 – 3,300	TSLP	9.1	34 – 49,000	TNF-β	3.3	11 – 16,000
IL-5	2.02	5.9 – 19,000	SARS-CoV-2 N	62	172 – 650,000			
IL-6	1.1	1.3 – 4,400	SARS-CoV-2 Spike	95	350 – 260,000			

Rat and Mouse			Mouse			Mouse		
Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)	Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)	Analyte	LLOD (fg/mL)	LLOQ - ULOQ (fg/mL)
GFAP	150	320 – 850,000	IFN-γ	1.84	5.80 – 15,400	IL-10	19.9	69.3 – 185,000
Neurofilament L	1,700	8,480 – 1,400,000	IL-1β	7.19	18.7 – 49,900	IL-12p70	197	429 – 2,290,000
Tau (total)	37	120 – 160,000	IL-2	17.0	34.6 – 185,000	KC/GRO	6.19	21.2 – 56,500
			IL-4	1.77	6.70 – 35,700	TNF-α	8.22	32.5 – 86,700
			IL-5	6.52	19.4 – 103,000			
			IL-6	19.6	53.1 – 283,000			

S-PLEX Multiplex Panels

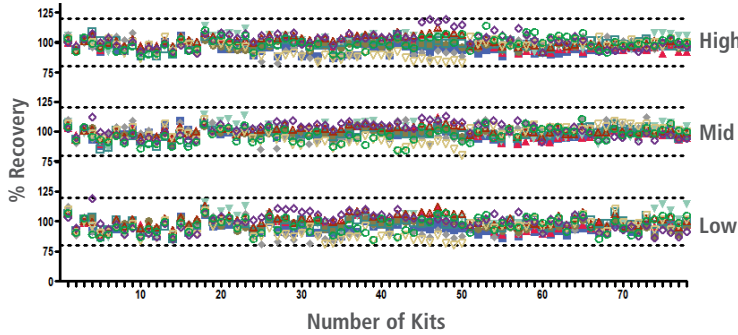
Multiplex Panels are also available in custom combinations of analytes

Name	Cat. No.	Analytes
Proinflammatory Panel 1 Human Kit	K15396S	IFN-γ, IL-1β, IL-2, IL-4, IL-6, IL-10, IL-12p70, IL-17A, TNF-α
Proinflammatory Panel 1 Mouse Kit	K15744S	IFN-γ, IL-1β, IL-2, IL-4, IL-5, IL-6, KC/GRO, IL-10, TNF-α
Proinflammatory Panel 2 Mouse Kit	K15745S	IL-1β, IL-2, IL-4, IL-5, IL-10
Proinflammatory Panel 3 Mouse Kit	K15746S	IFN-γ, IL-6, KC/GRO, TNF-α
Neurology Panel 1 Human, Mouse, Rat Kit	K15639S	GFAP, Neurofilament L, Tau (total)
Neurology Panel 1 NHP Kit	K15640S	GFAP, Neurofilament L, Tau (total)

V-PLEX[®] Validated Immunoassays for Unsurpassed Performance and Quality

V-PLEX assays are validated across multiple lots, offering exceptional dynamic range (4-5 logs), accurate results, and lot-to-lot consistency. V-PLEX assays are designed to maximize consistency in results and confidence in data. Kits are available as individual analyte kits, preconfigured multiplex panels, and custom combinations of multiplexed assays.

V-PLEX Assays Demonstrate a High Degree of Lot-to-Lot Reproducibility



Control samples, spanning the quantifiable range of the assay, are used to confirm absolute quantification across runs and lots. The % recovery data for the V-PLEX Proinflammatory Panel 1 (human) for 78 kit lots of the High, Mid, and Low control samples are plotted to the left.

V-PLEX Multiplex Panels

Species	Name	Cat. No.	Analytes
Human	Proinflammatory Panel 1	K15049G	IFN- γ , IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-12p70, IL-13, TNF- α
	Chemokine Panel 1 Gen. B	K15705G	Eotaxin, Eotaxin-3, IP-10, MCP-1, MCP-4, MDC, MIP-1 α , MIP-1 β , TARC
	Cytolytic Panel 1	K15741D	GM-CSF, Granzyme B, IFN- γ , IL-2, IL-6, Perforin, TNF- α
	Immune Response Panel 1	K15742D	GM-CSF, IFN- γ , IL-1 β , IL-2, IL-6, IL-12p70, IL-10, IL-8, IL-17A, TNF- α
	Angiogenesis Panel 1	K15190G	FGF (basic), Flt-1, PIGF, Tie-2, VEGF-A*, VEGF-C, VEGF-D
	Vascular Injury Panel 2	K15198G	CRP, ICAM-1, SAA, VCAM-1
	A β Peptide Panel 1 (6E10)	K15200G	A β 38 (6E10), A β 40 (6E10), A β 42 (6E10)
	A β Peptide Panel 1 (4G8)**	K15199G	A β 38 (4G8), A β 40 (4G8), A β 42 (4G8)
	Metabolic Panel 1	K15325G	C-Peptide, GIP (active), GLP-1 (active), Glucagon, Insulin, Leptin, PP
	Viral Panel 3 Kit	K15347G	IFN- γ , IL-1 β , IL-4, IL-5, IL-6, IL-8, IL-10, IL-12p70, TNF- α
NHP***	Chemokine Panel 1 Gen B	K15712D	Eotaxin, Eotaxin-3, IP-10, MCP-1, MCP-4, MDC, MIP-1 α , MIP-1 β , TARC
	Proinflammatory Panel 1	K15056G	IFN- γ , IL-1 β , IL-2, IL-6, IL-8, IL-10
	Metabolic Panel 1	K15332G	C-Peptide, GIP (active), GLP-1 (active), Glucagon, Insulin, PP
	Viral Panel 3 Kit	K15350G	IFN- γ , IL-1 β , IL-5, IL-6, IL-8, IL-10
Mouse	Proinflammatory Panel 1	K15048G	IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-6, IL-10, IL-12p70, KC/GRO, TNF- α
	Cytokine Panel 1	K15245G	IL-9, IL-15, IL-17A/F, IL-27p28/IL-30, IL-33, IP-10, MIP-1 α , MIP-2, MCP-1
	Metabolic Panel 1	K15333G	GLP-1 (active), Glucagon
Rat	Metabolic Panel 1	K15334G	GIP (active), GLP-1 (active), Glucagon
	Proinflammatory Panel 2	K15059G	IFN- γ , IL-1 β , IL-4, IL-5, IL-6, IL-10, IL-13, KC/GRO, TNF- α
Canine	Metabolic Panel 1	K15335G	GIP (active), GLP-1 (active), Glucagon, Insulin

*This version of VEGF-A is unique to the Angiogenesis Panel; LLOQ = 5.00 pg/mL and ULOQ = 1,510 pg/mL.

**This product is suitable for human, mouse, and rat samples.

***NHP assays recognize analytes from *Cynomolgus* and *Rhesus* monkeys.

Build your Custom Assay Combinations with the V-PLEX Assay Designer

The V-PLEX product line provides validated assays in customizable formats. Configure a V-PLEX panel assay that meets your exact research needs. Explore your options at www.mesoscale.com/V-PLEX.

V-PLEX Assays

V-PLEX assays are available as validated individual assays or as part of a validated multiplex panel.

Human

Analyte	LLOD (pg/mL)	LLOQ-ULOQ (pg/mL)
Aβ38 (6E10)	16.7	60 – 8,480
Aβ40 (6E10)	9.97	50 – 7,000
Aβ42 (6E10)	0.368	3.13 – 1,270
Aβ38 (4G8)	22.2	60 – 7,500
Aβ40 (4G8)	5.41	20 – 6,000
Aβ42 (4G8)	0.516	2.5 – 1,270
Aβ42	0.33	3.0 – 8,000
C-Peptide	4.72	19 – 3,150
CRP	1.33	27.6 – 49,600
Eotaxin	3.26	12.3 – 1,120
Eotaxin-3	1.77	10.2 – 3,750
FGF (basic)	0.09	2.6 – 1,780
Flt-1/VEGFR-1	0.90	10 – 6,410
GIP (active)	0.233	3.18 – 390
GM-CSF	0.15	0.676 – 910
Granzyme B	0.17	0.657 – 1,300
ICAM-1	1.94	15.0 – 32,700
IFN-γ	0.19	0.748 – 1,100
IL-1α	0.09	2.85 – 278
IL-1β	0.10	0.351 – 481
IL-1RA	1.12	9.19 – 650
IL-2	0.38	1.76 – 1,820
IL-3	2.37	12.6 – 1,950
IL-4	0.02	0.218 – 158
IL-5	0.14	4.41 – 562
IL-6	0.10	0.436 – 780
IL-7	0.12	0.851 – 563
IL-8	0.12	0.716 – 585
IL-9	0.311	2.23 – 975
IL-10	0.14	0.354 – 650
IL-12/IL-23p40	0.33	1.32 – 2,250
IL-12p70	0.27	0.479 – 1,100
IL-13	0.24	4.21 – 353
IL-15	0.15	0.774 – 525
IL-16	2.83	19.1 – 1,870
IL-17A	1.82	4.68 – 7,800
IL-17A (Gen. B)	0.413	5.86 – 1,950
IL-17A/F	0.930	7.57 – 3,900
IL-17B	0.185	1.12 – 1,040
IL-17C	0.682	3.84 – 1,620
IL-17D	3.87	11.2 – 5,200
IL-21	0.193	6.12 – 650
IL-22	0.27	2.78 – 325
IL-23	0.274	4.60 – 3,250
IL-27	4.2	38.7 – 13,000
IL-31	0.446	4.22 – 650
Insulin	0.006	0.07 – 19.5 (μIU/mL)
IP-10	0.37	1.37 – 500
Leptin	5.78	37.7 – 7,150
MCP-1	0.090	1.09 – 375
MCP-4	0.18	1.49 – 472
MDC	1.22	88.3 – 7,500
MIP-1α	3.02	13.8 – 743
MIP-1β	0.17	1.88 – 750

Human

Analyte	LLOD (pg/mL)	LLOQ-ULOQ (pg/mL)
MIP-3α	0.05	0.75 – 325
Perforin	10.6	53.8 – 84,500
PIGF	0.21	1.5 – 800
PP	0.043	0.41 – 325
SAA	10.9	54.1 – 138,000
TARC	0.22	3.32 – 1,120
Tie-2	31.3	396 – 63,400
TNF-α	0.25	0.898 – 1,360
TNF-β	0.08	0.465 – 458
TSLP	0.063	0.460 – 325
VCAM-1	6.00	37.6 – 32,000
VEGF-A	0.40	5.0 – 1,510
VEGF-C	10.5	146 – 17,500
VEGF-D	4.36	67.1 – 18,800

Non-Human Primate (NHP)*

Analyte	LLOD (pg/mL)	LLOQ - ULOQ (pg/mL)
C-Peptide	4.72	19 – 3,150
Eotaxin-3	1.77	10.2 – 3,750
GIP (active)	0.233	3.18 – 390
GM-CSF	0.16	0.842 – 750
IFN-γ	0.37	1.76 – 938
IL-1β	0.05	0.646 – 375
IL-2	0.09	0.890 – 938
IL-5	0.14	4.41 – 562
IL-6	0.06	0.633 – 488
IL-7	0.12	0.546 – 563
IL-8	0.07	0.591 – 375
IL-8 (HA)**	95.6	713 – 43,400
IL-10	0.04	0.298 – 233
IL-12/IL-23p40	0.33	1.32 – 2,250
IL-15	0.15	0.774 – 525
IL-16	2.83	19.1 – 1,870
IL-17A	0.31	3.19 – 3,650
Insulin	0.006	0.07 – 19.5 (μIU/mL)
IP-10	0.37	1.37 – 500
MCP-1	0.09	1.09 – 375
MCP-4	0.17	1.49 – 472
MDC	1.22	88.3 – 7,500
MIP-1α	3.02	13.8 – 743
MIP-1β	0.17	1.02 – 750
PP	0.043	0.41 – 325
TARC	0.22	3.32 – 1,120
TNF-β	0.08	0.465 – 458
VEGF-A	0.40	5.0 – 1,510

*NHP assays recognize analytes from *Cynomolgus* and *Rhesus* monkeys.

**High-abundance (This assay quantitates high levels of IL-8).

The LLOD represents the lower limit of detection of the assay.

Canine

Analyte	LLOD (pg/mL)	LLOQ - ULOQ (pg/mL)
Insulin	0.006	0.07 – 19.5 (μIU/mL)
GIP (active)	0.233	3.18 – 390

Rat

Analyte	LLOD (pg/mL)	LLOQ - ULOQ (pg/mL)
Aβ38 (4G8)	22.2	60 – 7,500
Aβ40 (4G8)	5.41	20 – 6,000
Aβ42 (4G8)	0.516	2.5 – 1,270
IFN-γ	0.65	39.7 – 3,750
GIP (active)	0.233	3.18 – 390
IL-1β	6.92	102 – 8,100
IL-4	0.69	8.0 – 723
IL-5	14.1	82 – 3,000
IL-6	13.8	96.9 – 8,550
IL-10	16.4	163 – 15,670
IL-13	1.97	12.5 – 1,080
KC/GRO	1.04	21.7 – 728
TNF-α	0.72	9.1 – 793

Mouse

Analyte	LLOD (pg/mL)	LLOQ - ULOQ (pg/mL)
Aβ38 (4G8)	22.2	60 – 7,500
Aβ40 (4G8)	5.41	20 – 6,000
Aβ42 (4G8)	0.516	2.5 – 1,270
IFN-γ	0.04	0.39 – 570
IL-1β	0.11	0.72 – 1,030
IL-2	0.22	1.03 – 1,570
IL-4	0.11	0.818 – 1,060
IL-5	0.06	0.302 – 590
IL-6	0.61	7.61 – 3,140
IL-9	3.84	21.9 – 2,600
IL-10	0.94	7.26 – 2,030
IL-12p70	9.95	179 – 20,600
IL-15	16	43.2 – 26,000
IL-17A/F	0.23	1.39 – 1,620
IL-27p28/IL-30	1.39	5.91 – 6,500
IL-33	0.36	1.85 – 1,950
IP-10	0.32	2.15 – 650
KC/GRO	0.24	3.29 – 1,230
MCP-1	0.672	4.42 – 325
MIP-1α	0.081	0.380 – 390
MIP-2	0.053	0.580 – 423
TNF-α	0.13	0.97 – 403

Human/NHP/Mouse/Rat/Canine***

Analyte	LLOD (pM)	LLOQ - ULOQ (pM)
Glucagon	0.015	0.33 – 52
GLP-1 Active	0.02	0.30 – 120
GLP-1 Total	0.017	0.18 – 120

***These assays are provided in singleplex format.

V-PLEX Serology Panels for COVID-19, Mpox, and Respiratory Viral Disease Research

V-PLEX Serology panels detect antibodies to antigens from SARS-CoV-2, SARS-CoV-2 variants, SARS-1, MERS, circulating coronaviruses, mpox, vaccinia, and other respiratory pathogens. The menu also includes kits to measure antibodies that block binding of ACE2 to the Spike and RBD antigens of the SARS-CoV-2 virus (including variants), a high-throughput alternative to traditional neutralization assays. Representative panels are shown below.

Species	V-PLEX Serology (IgG, IgM, IgA) Neutralization (ACE2) Panels	Analytes
Human or Mouse	V-PLEX SARS-CoV-2 Panel 1 Kit	SARS-CoV-1 Spike, SARS-CoV-2 N, SARS-CoV-2 S1 NTD, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
	V-PLEX SARS-CoV-2 Panel 2 Kit	SARS-CoV-2 N, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
	V-PLEX SARS-CoV-2 Panel 37 Kit (Omicron Panel)	SARS-CoV-2 N, SARS-CoV-2 Spike, SARS-CoV-2 Spike (BA.2.86), SARS-CoV-2 Spike (BA.5), SARS-CoV-2 Spike (EG.5.1), SARS-CoV-2 Spike (FL.1.5.1), SARS-CoV-2 Spike (XBB.1.5), SARS-CoV-2 Spike (XBB.1.16), SARS-CoV-2 Spike (XBB.1.16.6), SARS-CoV-2 Spike (XBB.2.3)
	V-PLEX SARS-CoV-2 Panel 38	SARS-CoV-2 N, SARS-CoV-2 Spike, SARS-CoV-2 Spike (BA.2.86), SARS-CoV-2 Spike (BA.5), SARS-CoV-2 Spike (EG.5.1), SARS-CoV-2 Spike (FL.1.5.1), SARS-CoV-2 Spike (XBB.1.5), SARS-CoV-2 Spike (JN.1), SARS-CoV-2 Spike (JD.1.1), SARS-CoV-2 Spike (HV.1)
	V-PLEX SARS-CoV-2 Panel 39	SARS-CoV-2 N, SARS-CoV-2 Spike, SARS-CoV-2 Spike (B.1.617.2), SARS-CoV-2 Spike (BA.2.86), SARS-CoV-2 Spike (BA.5), SARS-CoV-2 Spike (JN.1 (v2)), SARS-CoV-2 Spike (KP.2), SARS-CoV-2 Spike (KP.3), SARS-CoV-2 Spike (LB.1), SARS-CoV-2 Spike (XBB.1.5 (v2))
	V-PLEX SARS-CoV-2 Key Variant Spike Panel 1 Kit (Omicron Panel)	SARS-CoV-2 Spike, SARS-CoV-2 Spike (B.1.1.7), SARS-CoV-2 Spike (B.1.1.529; BA.1; BA.1.15), SARS-CoV-2 Spike (B.1.351), SARS-CoV-2 Spike (BA.2), SARS-CoV-2 Spike (BA.2.12.1), SARS-CoV-2 Spike (BA.2.75), SARS-CoV-2 Spike (BA.5), SARS-CoV-2 Spike (B.1.617.2; AY.4) Alt Seq 2 Note: Alternative S-GENE mutations for Spike of B.1.617.2 are listed as "Alt Seq #"
	V-PLEX COVID-19 Coronavirus Panel 2 Kit	HCoV-229E Spike, HCoV-HKU1 Spike, HCoV-OC43 Spike, HCoV-NL63 Spike, SARS-CoV-1 Spike, SARS-CoV-2 N, SARS-CoV-2 S1 NTD, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
	V-PLEX COVID-19 Coronavirus Panel 3 Kit	HCoV-229E Spike, HCoV-HKU1 Spike, HCoV-OC43 Spike, HCoV-NL63 Spike, SARS-CoV-1 Spike, SARS-CoV-2 N, MERS-CoV Spike, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
	V-PLEX Respiratory Panel 1 Kit	Flu A/Hong Kong H3, Flu A/Michigan H1, Flu A/Shanghai H7, Flu B/Brisbane HA, Flu B/Phuket HA, RSV Pre-Fusion F
	V-PLEX Respiratory Panel 4 Kit (IgG only)	Flu A/Darwin/2021 H3, Flu A/Shanghai/2013 H7, Flu A/Wisconsin/2019 H1, Flu B/Austria/2021 HA, Flu B/Phuket/2013 HA, RSV Pre-Fusion F, SARS-CoV-2 N, SARS-CoV-2 Spike, SARS-CoV-2 Spike (XBB.1.5)
	V-PLEX Respiratory Panel 5 Kit (IgG only)	EV-A71 VLP, hMPV F, EV-D68 VLP, hRV-C VPO, hPIV(1-4) F, RSV Pre-Fusion F, SARS-CoV-2 Spike (BA.5), Flu A/B (mix) HA
	V-PLEX Respiratory Panel 6 Kit (IgG only)	Flu A/Wisconsin/2019 H1, Flu A/Darwin/2021 H3, Flu B/Austria/2021 HA, hPIV1 F, hPIV2, hPIV3 F, hPIV4 F
	V-PLEX Respiratory Panel 7 Kit (IgG and IgA only)	Flu A/Ghana/39/2021 H5, Flu A/Massachusetts/18/2022 H3, Flu A/Wisconsin/67/2022 H1, Flu B/Austria/2021 HA, RSV Pre-Fusion F, SARS-CoV-2 N, SARS-CoV-2 Spike, SARS-CoV-2 Spike (KP.2), SARS-CoV-2 Spike (XBB.1.5 (v2))
	V-PLEX COVID19 Respiratory Panel 3 Kit	Flu A/Hong Kong H3, Flu A/Michigan H1, Flu A/Shanghai H7, Flu B/Brisbane HA, Flu B/Phuket HA, HCoV-229E Spike, HCoV-HKU1 Spike, HCoV-NL63 Spike, HCoV-OC43 Spike, MERS-CoV Spike, RSV Pre-Fusion F, SARS-CoV-1 Spike, SARS-CoV-2 N, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
	V-PLEX SARS-CoV-2 384 Panel 1 Kit	SARS-CoV-2 N, SARS-CoV-2 S1 RBD, SARS-CoV-2 Spike
V-PLEX Orthopoxvirus Panel 1 Kit	MPXV A29L, MPXV A35R, MPXV B6R, MPXV E8L, MPXV M1R, VACV A27L, VACV A33R, VACV B5R, VACV D8L, VACV L1R Note: MPXV = mpox virus and VACV = vaccinia virus	
V-PLEX Vaccine Serology Panel 1 Kit	B. pertussis Toxin, Measles HA, Polio 3 VP1, Mumps HN, VZV-gE, Rubella E1, Diphtheria Toxoid, Tetanus Toxoid, Rotavirus G4 VP6, B. pertussis FHA 30	

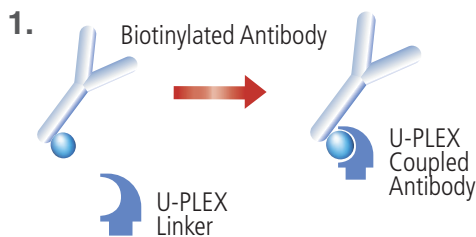
U-PLEX[®] Flexible, high performance assays

U-PLEX offers the flexibility to build custom multiplex assays quickly and easily. Choose from three convenient formats:

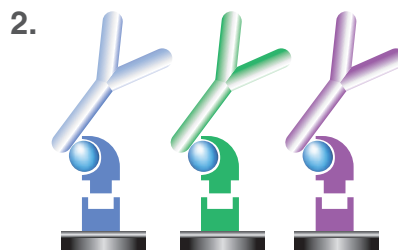
1. Mix-and-match singleplex U-PLEX assays to form your own custom multiplex. U-PLEX assays can also be combined with your own antibody pairs for the ultimate in flexibility.
2. Pre-configured U-PLEX combination panels contain popular analytes and make ordering convenient.
3. **NEW!** Preblended panels contain pre-coupled capture antibodies, resulting in faster time to result, simpler workflows, less pipetting, and fewer steps.

As Simple as 1, 2, 3

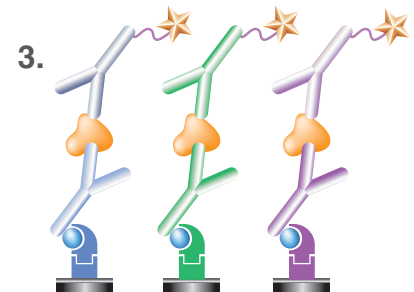
With U-PLEX, it's as simple as couple, coat, complete:



COUPLE any biotinylated antibody to the U-PLEX linker.



COAT the U-PLEX plate with U-PLEX coupled capture antibodies.



COMPLETE your U-PLEX assay with SULFO-TAG™ labeled detection antibodies.

Customize Your Panel Using the U-PLEX Assay Designer

View our complete portfolio, and customize your U-PLEX Assay with the Assay Designer at www.mesoscale.com/U-PLEX. Check out U-PLEX Assay Development Packs for more options.

Species	Name	Cat. No.	
		96-well	384-well
Human	Biomarker Group 1	K15067M	K25067M
Human	Biomarker Group 2	K151ADM	K251ADM
Human	Biomarker Group 3	K151AGM	K251AGM
Human	Immuno-Oncology Group 1	K151AEM	K251AEM
Human	Metabolic Group 1	K151ACM	K251ACM
Mouse	Biomarker Group 1	K15069M	K25069M
Mouse	Biomarker Group 2	K152ADM	K252ADM
Mouse	Metabolic Group 1	K152ACM	K252ACM
NHP	Biomarker Group 1	K15068M	K25068M
NHP	Biomarker Group 2	K156ADM	K256ADM
Rat	Metabolic Group 1	K153ACM	K253ACM

NEW U-PLEX Preblended Panels

U-PLEX preblended panels provide ready-to-use capture and detection antibodies, prepared as blends, resulting in fewer vials to handle and store. Preblended kits reduce the number of pipetting steps and hands-on time, resulting in an even simpler and faster protocol.

Name	Cat. No.	Analytes
Inflammation Panel 1	K15747K	IFN- γ , IL-1 β , IL-2, IL-6, IL-8, IL-10, IP-10, IL-17A, MCP-1, TNF- α
Immune Signaling Panel 1	K15748K	GM-CSF, IFN- α 2a, IFN- β , IL-1RA, IL-2R α , IL-7, IL-12p70, IL-18, IL-29/IFN- λ 1, TSLP
Chemokine Panel 1	K15749K	Eotaxin, Eotaxin-3, GRO- α , IL-23, I-TAC, MDC, MIP-1 α , MIP-1 β , MIP-3 α , TARC
T-cell differentiation Panel 1	K15750K	IL-1 α , IL-4, IL-5, IL-12/IL-23p40, IL-13, IL-15, IL-17A/F, IL-21, IL-22, VEGF-A
High dilution Panel 1	K15751K	BCMA/TNFRSF17, HAVCR2/TIM-3, MMP-2, MMP-9 (total), RANTES, S100A12, Tie-2, TNF-RI, TNF-RII, YKL-40

U-PLEX Assays

Human		
Analyte	UniProt ID	LLOD-ULOD pg/mL
A2M	P41273	13.2 – 32,000
Adiponectin	Q15848	1.46 – 5,000
APRIL/TNFSF13	O75888	7.47 – 45,000
ApoA1	P02647	4.93 – 25,000
ApoC3	P02656	1.06 – 10,000
BAFF	Q9Y275	0.05 – 500
BAFF-R/ TNFRSF13C	Q96RJ3	1.4 – 14,000
BCMA/ TNFRSF17	Q02223	0.13 – 600
BDNF*	P23560	0.72 – 2,000
β-NGF*	P01138	0.05 – 498
C-Peptide*	P01308	14 – 7,610
CA1	P00915	1.01 – 6,000
CD20	P11836	5.7 – 80,000
CD27	M63928	0.41 – 3,400
CD276/B7-H3	Q5ZPR3	4.0 – 40,000
CD28	P107474	14 – 144,000
CD40L (soluble)	P29965	0.23 – 1,800
Clusterin	P10909	57.7 – 500,000
Complement C9	P02748	10.3 – 70,000
Complement factor D	P00746	0.31 – 3,000
CRP	P02741	0.92 – 2,170
CTACK	Q9Y4X3	1.8 – 4,200
CTLA-4	P16140	0.12 – 1,500
Cystatin C	P01034	23.9 – 20,000
DPPIV	P27487	0.85 – 7,000
E-Selectin	P16581	45 – 200,000
ENA-78	P42830	0.53 – 3,900
Eotaxin	P51671	3.2 – 4,800
Eotaxin-2	O00175	3.1 – 6,000
Eotaxin-3	Q9Y258	7.3 – 21,400
EPO	P01588	1.8 – 20,000
Factor VII	P08709	0.60 – 6,000
FGF (basic)	P09038	2.1 – 1,200
FGF-21	Q9NSA1	2.8 – 8,230
FGF-23	Q9GZV9	0.75 – 3,000
FLT3L	P49771	0.49 – 6,000
Fractalkine	P78423	100 – 181,000
FSH	P01225	9.0 – 75,000**
G-CSF	P09919	1.6 – 20,400
Galectin-9	O00182	0.41 – 5,500
Ghrelin (active)	Q9UBU3	13 – 7,160
Ghrelin (total)	Q9UBU3	1.7 – 2,710
GIP (active)	P09681	1.3 – 1,920
GIP (inactive)	P09681	27 – 12,500
GIP (total)	P09681	3.7 – 12,500
GITR/TNFRSF18	Q9Y5U5	0.18 – 1,300
GITRL/TNFSF18	Q9UNG2	0.09 – 1,000
GLP-1 (active)	P01275	0.01 – 57***
GLP-1 (inactive)	P01275	1.5 – 576***
GLP-1 (total)	P01275	0.59 – 576***
Glucagon*	P01275	0.13 – 156***
GM-CSF	P04141	0.12 – 9,400
gp130 (soluble)	P40189	5.8 – 188,000
Granzyme A	P12544	0.49 – 3,700
Granzyme B	P10144	0.10 – 750
GRO-α	P09341	0.25 – 2,500

Human		
Analyte	UniProt ID	LLOD-ULOD pg/mL
HAVCR2/TIM-3	Q8TDQ0	2.1 – 9,500
HVEM/ TNFRSF14	Q92956	0.53 – 5,000
I-309	P22362	6.8 – 3,000
ICAM-1	P05362	0.11 – 1,930
ICOS	Q9Y6W8	1.78 – 9,000
ICOS-L/B7-H2	O75144	0.98 – 12,000
IFN-α2a	P01563	4.0 – 42,400
IFN-β	P01574	3.1 – 100,000
IFN-γ	P01579	1.7 – 17,000
IL-1α	P01583	0.98 – 5,100
IL-1β	P01584	0.15 – 3,800
IL-1RA	P18510	1.7 – 5,000
IL-2	P60568	0.70 – 1,900
IL-2Rα	P01589	10 – 55,000
IL-3	P08700	11 – 16,000
IL-4	P05112	0.08 – 2,100
IL-5	P05113	0.24 – 4,000
IL-6	P05231	0.33 – 2,000
IL-7	P13232	1.5 – 7,000
IL-8	P10145	0.15 – 2,200
IL-9	P15248	0.14 – 1,500
IL-10	P22301	0.14 – 3,700
IL-12/IL-23p40	P29460	2.8 – 21,000
IL-12p70	P29459, P29460	0.69 – 5,300
IL-13	P35225	3.1 – 1,900
IL-15	P40933	0.82 – 3,000
IL-16	Q14005	6.6 – 21,500
IL-17A	Q16552	2.6 – 23,400
IL-17A/F	Q16552, Q96PD4	1.8 – 18,400
IL-17B	QPUHF5	0.79 – 4,000
IL-17C	Q9P0M4	2.2 – 20,000
IL-17D	Q8TAD2	4.8 – 40,000
IL-17E/IL-25	Q9H293	0.58 – 9,200
IL-17F	Q96PD4	160 – 112,000
IL-18	Q14116	2.5 – 42,000
IL-21	Q9HBE4	1.2 – 12,600
IL-22	Q9GZX6	0.13 – 3,400
IL-23	Q9NPF7, P29460	1.4 – 21,600
IL-27	Q8NEV9, Q14213	9.6 – 50,600
IL-29/IFN-λ1	Q8IU54	1.2 – 11,800
IL-31	Q6EBC2	7.3 – 11,100
IL-33	Q95760	0.59 – 10,300
Insulin*	P01308	0.32 – 736**
IP-10	P02778	0.49 – 6,000
I-TAC	P18510	1.5 – 5,100
LAG3	P18627	6.8 – 36,000
Leptin*	P41159	14 – 47,500
LH*	P01229	1.6 – 27,700**
LIGHT/TNFSF14	O43557	0.58 – 5,000
MCP-1	P13500	0.74 – 6,600
MCP-2	P80075	0.11 – 2,000
MCP-3	P80098	0.79 – 5,000
MCP-4	-	7.5 – 3,800
M-CSF	Q99616	0.29 – 2,000

Human		
Analyte	UniProt ID	LLOD-ULOD pg/mL
MDC	P09603	8.4 – 20,100
MIF	O00626	4.3 – 27,000
MIG	P14174	0.73 – 4,000
MIP-1α	Q07325	7.7 – 4,200
MIP-1β	P10147	1.5 – 1,600
MIP-3α	P13236	1.8 – 20,800
MIP-3β	P78556	0.67 – 2,000
MIP-5	Q99731	0.34 – 30,000
MMP-1	Q16663	1.35 – 15,000
MMP-2	P09238	10.4 – 25,000
MMP-7	P09237	1.83 – 9,000
MMP-9 (total)	P22894	0.88 – 15,000
NGAL/LCN2	P80188	0.78 – 4,000
Nectin-4	P14780	1.61 – 10,000
OX40/TNFRSF4	P43489	0.26 – 1,800
P-Selectin	P16109	10.5 – 40,000
PD1 (epitope 1)	P43489	0.25 – 2,500
PD1 (epitope 2)	Q15116	0.11 – 2,200
PD-L1 (epitope 1)	P01127	0.09 – 1,100
PD-L1 (epitope 2)	Q9NZQ7	0.55 – 1,500
PD-L2	Q9BQ51	3.9 – 41,000
Pentraxin 3	Q9NZQ7	11.7 – 40,000
Perforin	P26022	1.92 – 20,000
PIGF	P14222	0.19 – 1,200
PP	P01298	0.19 – 1,830
Proinsulin*	P01308	0.05 – 130***
proMMP-9	P14780	1.42 – 15,000
PYY (total)	P10082	2.7 – 2,260
RAGE (soluble)	Q9UQ07	0.26 – 2,000
RANKL/TNFSF11	O14788	1.8 – 4,000
RANTES	P13501	0.41 – 1,500
RBP4	P02753	3.78 – 4,000
S100A12	P80511	0.1 – 750
SAA	P0DJ18	1.60 – 16,200
SDF-1α	P48061	280 – 103,000
Serpina1	P01009	5.52 – 22,000
SHBG	P04278	3.52 – 25,000
sTfr-1	P02786	0.29 – 3,000
TARC	Q92583	0.51 – 2,200
TGF-β1	P01137	9.1 – 37,000
TGF-β2	P61812	2.5 – 38,900
TGF-β3	P10600	1.4 – 38,600
Tie-2	Q02763	2.9 – 29,000
TIGIT	Q495A1	0.36 – 3,500
TLR1	Q15399	4.4 – 37,000
TNF-α	P01375	0.54 – 3,700
TNF-β	P01374	0.47 – 4,300
TNF-RI	P19438	0.15 – 1,000
TNF-RII	P20333	1.6 – 7,000
TPO	P40225	19 – 40,400
TRAIL	P50591	0.66 – 10,000
TSLP	Q969D9	0.20 – 10,100
VCAM-1	P19320	7.78 – 20,500
VEGF-A	P15692	2.0 – 4,900
VEGF-D	O43915	0.30 – 1,500
VEGF-1/Flt-1	P17948	2.69 – 15,000
vWF	P04275	67.4 – 1,000,000
YKL-40	P36222	0.39 – 5,000

* Assays are anchored to NIBSC/WHO International Standards.

** LLOD-ULOD unit of measure is μU/mL.

*** LLOD-ULOD unit of measure is pM.

NHP

Analyte	UniProt ID	LLOD-ULOD pg/mL
CTACK	Q8HYP2	1.8 – 4,200
ENA-78	H2QPN8	0.36 – 3,900
Eotaxin	Q8MIT7	0.30 – 4,800
Eotaxin-2	F6TX08	3.1 – 6,000
Eotaxin-3	F6S7Q8	7.3 – 21,400
FLT3L	F6ZGW9	0.49 – 6,000
Fractalkine	Q8HXZ1	100 – 181,000
G-CSF	F7H1Q6	1.5 – 20,400
GM-CSF	Q9GL44	0.12 – 9,400
GRO-α	Q8HXZ4	0.25 – 2,500
I-309	Q8HYQ4	6.8 – 3,000
IFN-α2a	B6CK11	1.7 – 40,800
IFN-γ	P63310	1.7 – 17,000
IL-1α	P48089	0.60 – 5,100
IL-1β	P48090	0.15 – 3,800
IL-1RA	Q866R8	1.7 – 5,000
IL-2	P68291	0.70 – 1,900
IL-4	Q6U8C1	0.06 – 2,100
IL-5	P48093	0.24 – 4,000
IL-6	P51494	0.33 – 2,000
IL-7	Q95J83	1.5 – 7,000
IL-8	P67813	0.15 – 2,200
IL-9	G7MUE3	0.14 – 1,500
IL-10	P51496	0.14 – 3,700
IL-12/IL-23p40	P48095	2.8 – 21,000
IL-12p70	F6UYA2, P48095	0.54 – 5,300
IL-13	Q864V6	1.2 – 1,900
IL-15	P48092	0.82 – 3,000
IL-16	O62675	6.6 – 21,500
IL-17A	F6T3G5	2.3 – 23,400
IL-17A/F	F6T3G5, F7HK33	1.8 – 18,400
IL-17B	F7F514	0.79 – 4,000
IL-17C	F7D4L0	2.2 – 20,000
IL-17D	H9F619	4.8 – 40,000
IL-17F	F7HK33	160 – 112,000
IL-18	Q9BG15	2.5 – 42,000
IL-22	F6YBU5	0.13 – 3,400
IL-23	F7HQ15, P48095	1.4 – 21,600
IP-10	Q8MIZ1	0.49 – 6,000
I-TAC	Q8MIZ0	1.5 – 2,000
MCP-1	P61275	0.74 – 6,600
MCP-2	F6Y1K4	0.11 – 2,000
MCP-4	-	7.5 – 3,800
M-CSF	F7HKZ9	0.29 – 2,000
MDC	G7NPU2	8.4 – 20,100
MIF	Q6DN04	4.3 – 27,000
MIP-1α	Q8HYQ3	7.7 – 4,200
MIP-1β	Q8HYQ2	1.5 – 1,600
MIP-3α	F6ZJH5	0.27 – 20,800
MIP-3β	F7HQD5	0.67 – 2,000
MIP-5	F7HGY4	0.34 – 30,000
SDF-1α	Q8HYPO	18 – 103,000
TARC	Q8HYPP	0.51 – 2,200
TGF-β1	F7HCV5	9.1 – 37,000
TGF-β2	F6ZJX4	2.5 – 38,900
TGF-β3	F7HDK4	1.4 – 38,600

NHP

Analyte	UniProt ID	LLOD-ULOD pg/mL
TNF-α	P48094	0.54 – 3,700
TNF-β	Q5TM20	0.47 – 4,300
TPO	F6QCN5	19 – 40,400
TRAIL	F6S9W7	0.66 – 10,000
VEGF-A	Q9BDP7	2.0 – 4,900
YKL-40	F7EL64	0.39 – 5,000

Mouse

Analyte	UniProt ID	LLOD-ULOD pg/mL
6CKine/CCL21	P84444	1.5 – 4,000
BAFF	Q9WU72	0.51 – 4,000
BCA-1/BLC	O55038	21 – 32,000
BDNF*	P21237	0.72 – 2,000
C-Peptide	P01325	220 – 125,000
CD40	P27512	2.6 – 8,000
Eotaxin	P48298	4.6 – 15,000
EPO	P07321	4.5 – 12,500
FGF-21	Q9JJN1	2.8 – 8,230
Ghrelin (active)	Q9EQX0	13 – 7,160
Ghrelin (total)	Q9EQX0	1.7 – 2,710
GLP-1 (active)	P55092	0.14 – 57.0***
GLP-1 (inactive)	P55093	1.5 – 576***
GLP-1 (total)	P55094	0.59 – 576***
Glucagon*	P55095	0.13 – 156***
GM-CSF	P01587	0.16 – 1,000
IFN-a	P01572	140 – 100,000
IFN-b	P01575	5.2 – 6,000
IFN-γ	P01580	0.16 – 2,900
IL-1β	P10749	3.1 – 13,000
IL-2	P04351	1.1 – 10,900
IL-4	P07750	0.56 – 10,000
IL-5	P04401	0.63 – 2,800
IL-6	P08505	4.8 – 16,000
IL-9	P15247	1.4 – 8,900
IL-10	P18893	3.8 – 22,800
IL-12/IL-23p40	P43432	1.4 – 20,400
IL-12p70	P43432, P43431	48 – 89,000
IL-13	P20109	2.7 – 22,800
IL-15	P48346	24 – 131,000
IL-16	54824	3.6 – 6,300
IL-17A	Q62386	0.30 – 2,100
IL-17A/F	Q62386, Q7TNI7	0.61 – 10,600
IL-17C	Q8K4C5	2.3 – 45,600
IL-17E/IL-25	Q8HVC9	1.6 – 18,900
IL-17F	Q7TNI7	24 – 52,600
IL-21	Q9ES17	6.5 – 40,600
IL-22	Q9JJY9	1.2 – 1,800
IL-23	Q9EQ14, P43432	4.9 – 20,400
IL-27p28/IL-30	Q8K316, O35228	8.7 – 73,300
IL-31	Q6EAL8	45 – 66,300
IL-33	Q8BVZ5	2.2 – 36,000
Insulin	P01325	3.0 – 5,500**
IP-10	P17515	0.51 – 4,900
KC/GRO	P12850	4.8 – 16,000
Leptin	P41160	11 – 50,000
MCP-1	P10148	1.4 – 1,400
MCP-5/CCL12	Q62401	0.14 – 1,500
MDC	O88430	13 – 10,000
MIP-1α	P10855	0.21 – 2,100

Mouse

Analyte	UniProt ID	LLOD-ULOD pg/mL
MIP-1β	P14097	13 – 30,800
MIP-2	P10889	0.30 – 2,000
MIP-3α	O89093	0.10 – 2,500
MMP-9 (total)	P41245	49 – 80,000
NGAL/LCN2	P11672	24 – 50,000
PYY (total)	Q9EPS2	1.1 – 4,000
RANTES	P30882	0.72 – 2,000
SDF-1α	P40224	8.1 – 50,000
TARC	F6R5P4	0.32 – 1,200
TGF-β1	P04202	37 – 37,000
TGF-β2	P27090	2.5 – 38,900
TGF-β3	P17125	2.5 – 38,600
TNF-α	P06804	1.3 – 6,200
TNF-RI	P25118	0.46 – 2,000
VEGF-A	Q00731	0.77 – 12,100

Rat

Analyte	UniProt ID	LLOD-ULOD pg/mL
BDNF*	P23363	0.72 – 2,000
C-Peptide	P01322	220 – 125,000
FGF-21	Q8V180	2.8 – 8,230
Ghrelin (active)	Q9QYH7	13 – 7,160
Ghrelin (total)	Q9QYH7	1.7 – 2,710
GLP-1 (active)	P09880	0.14 – 57.0***
GLP-1 (inactive)	P09881	1.5 – 576***
GLP-1 (total)	P09882	0.59 – 576***
Glucagon*	P09883	0.13 – 156***
Insulin	P01322	3.0 – 5,500**
Leptin	P50596	11 – 50,000
PYY (total)	P10631	1.1 – 4,000

* Assays are anchored to NIBSC/WHO International Standards.
 ** LLOD-ULOD unit of measure is μIU/mL.
 *** LLOD-ULOD unit of measure is pM.

U-PLEX Human Biomarker Panels

Name	Cat. No.	Analytes
Biomarker Group 3 21-PLEX	K15391K	A2M, Adiponectin, ApoA1, ApoC3, CA1, Clusterin, Complement C9, Complement factor D, CRP, Cystatin C, DPPIV, Factor VII, ICAM-1, NGAL/LCN2, RBP4, SAA, Serpin A1, SHBG, sTfR-1, VCAM-1, vWF
CAR-T Cell Safety Combo 1	K15711K	GM-CSF, IFN- γ , IL-1 β , IL-6, IL-10, MCP-1, TNF- α
Chemokine Combo 1	K15047K	Eotaxin, Eotaxin-2, Eotaxin-3, IL-8, IP-10, MCP-1, MCP-2, MCP-3, MCP-4, MDC, MIP-1 α , MIP-1 β , TARC
Chemokine Combo 2	K15046K	CTACK, ENA-78, Fractalkine, GRO- α , I-309, I-TAC, MIF, MIP-3 α , MIP-3 β , MIP-5, SDF-1 α
Cytokine Combo 1	K15045K	GM-CSF, IL-1 α , IL-5, IL-7, IL-12/IL-23p40, IL-15, IL-16, IL-17A, TNF- β , VEGF-A
Inflammation Combo 1	K15387K	Complement C9, Complement factor D, CRP, ICAM 1, NGAL/LCN2, SAA, VCAM-1
Interferon Combo	K15094K	IFN- α , IFN- β , IFN- γ , IL-29/IFN- λ 1
Kidney Injury Combo 1	K15389K	A2M, Clusterin, Cystatin C, NGAL/LCN2, RBP4, Serpin A1
Macrophage M1 Combo 1	K15336K	IL-1 β , IL-6, IL-12p70, IL-18, IL-23, IP-10, MCP-1, MIP-1 α , TNF- α
Macrophage M2 Combo 1	K15337K	Eotaxin-2, IL-4, IL-10, IL-13, M-CSF, MDC, TARC
Proinflammatory Combo 1	K15049K	IFN- γ , IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-12p70, IL-13, TNF- α
Proinflammatory Combo 2	K15066K	GM-CSF, IFN- γ , IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-12p70
Proinflammatory Combo 3	K15052K	IFN- γ , IL-1 β , IL-6, TNF- α
Proinflammatory Combo 4	K15053K	IL-1 β , IL-6, IL-8, TNF- α
T-Cell Combo	K15093K	GM-CSF, IFN- γ , IL-2, IL-4, IL-9, IL-10, IL-13, IL-17A, IL-17E/IL-25, IL-17F, IL-21, IL-22, MIP-3 α , TNF- α
TGF- β Combo	K15241K	TGF- β 1, TGF- β 2, TGF- β 3
TH1/TH2 Combo 1	K15010K	IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-8, IL-10, IL-12p70, IL-13, TNF- α
TH17 Combo 1	K15075K	IL-17A, IL-17E/IL-25, IL-17F, IL-21, IL-22, IL-23, IL-27, IL-31, IL-33
TH17 Combo 2	K15076K	IFN- γ , IL-1 β , IL-6, IL-10, IL-17A, IL-17E/IL-25, IL-17F, IL-21, IL-22, TNF- α
Vascular Injury Combo 1	K15390K	CRP, Factor VII, ICAM-1, SAA, VCAM-1
Viral Combo 1	K15343K	G-CSF, GM-CSF, IFN- α 2a, IFN- β , IFN- γ , IL-1 β , IL-1RA, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12p70, IP-10, MCP-1, MIP-1 α , TNF- α , VEGF-A

U-PLEX Human Immuno-Oncology Panels

Name	Cat. No.	Analytes
Angiogenesis Combo 1	K15339K	FGF (basic), PlGF, Tie-2, VEGF-A, VEGF-D
CAR-T Cell Combo 1	K15338K	GM-CSF, Granzyme A, Granzyme B, IFN- γ , IL-2, TNF- α
CAR-T Cell Combo 2	K15600K	GM-CSF, Granzyme A, Granzyme B, IFN- γ , IL-2, Perforin, TNF- α
CAR-T Cell Efficacy Combo 1	K15709K	Granzyme B, IFN- γ IL-2, IL-6, IL-12p70, IP-10, Perforin, TNF- α
CAR-T Cell Exhaustion Combo 1	K15710K	CD28, CTLA-4, IFN- γ LAG3, PD-L1 (epitope 1), TIGIT, TNF- α
CAR-T Cell Persistence Combo 1	K15708K	CD40L (soluble), Granzyme B, IFN- γ , IL-7, IL-15, IL-18, LAG3, PD-L1 (epitope 1), TNF- α
Effector Cell Checkpoint Combo 1	K15341K	CD27, CD28, CD40L (soluble), CTLA-4, GITR/TNFRSF18, HAVCR2/TIM-3, LAG3, OX40/TNFRSF4, PD1 (epitope 1), TIGIT
Long COVID Combo 1	K15622K	IFN- β , IFN- γ , IL-6, Pentraxin 3
Metastasis Combo 1	K15602K	E-Selectin, MMP-1, MMP-2, MMP-7, MMP-9 (total), P-Selectin, VEGFR-1/Flt-1
Oncolysis Combo 1	K15603K	CTLA-4, IFN- α 2a, IFN- β , IL-1 β , IL-2R α , IL-6, IL-8, IP-10, LAG3, MIP-1 α , PD1 (epitope 1), TIGIT
Target Cell Checkpoint Combo 1	K15340K	CD276/B7-H3, GITRL/TNFSF18, PD-L1 (epitope 1), PD-L2

U-PLEX Human Metabolic Panels

Name	Cat. No.	Analytes
Adipokine Combo 1	K15276K	BDNF, β -NGF, IL-1 β , IL-6, IL-8, IL-10, Insulin, Leptin, MCP-1, TNF- α
Diabetes Combo 1	K15274K	C-Peptide, GIP (total), GLP-1 (total), Glucagon, Insulin, Leptin, PYY (total)
Diabetes Combo 2	K15275K	C-Peptide, GIP (total), GLP-1 (active), Glucagon, Insulin, Leptin, PYY (total)
Metabolic Combo 1	K15281K	BAFF, BDNF, β -NGF, C-Peptide, FGF-21, FGF-23, FSH, Ghrelin (active), Ghrelin (total), GIP (active), GIP (inactive), GIP (total), GLP-1 (active), GLP-1 (inactive), GLP-1 (total), Glucagon, Insulin, Leptin, LH, PP, Proinsulin, PYY (total)
Metabolic Combo 2	K15388K	Adiponectin, ApoA1, ApoC3, Clusterin, CRP, DPPIV, NGAL/LCN2, RBP4, SHBG, sTfR-1
Microbiome Combo 1	K15441K	Ghrelin (total), GLP-1 (total), Glucagon, Insulin, Leptin, PP, PYY (total)
Obesity Combo 1	K15277K	BDNF, FGF-21, Ghrelin (total), Glucagon, Leptin
Obesity Combo 2	K15278K	C-Peptide, FGF-23, Ghrelin (total), GLP-1 (total), Insulin, Leptin, PYY (total)

U-PLEX NHP Biomarker Panels

Name	Cat. No.	Analytes
Chemokine Combo 1	K15055K	Eotaxin, Eotaxin-3, IL-8, IP-10, MCP-1, MCP-4, MDC, MIP-1 α , MIP-1 β , TARC
Cytokine Combo 1	K15057K	GM-CSF, IL-1 α , IL-5, IL-7, IL-12/IL-23p40, IL-15, IL-16, IL-17A, TNF- β , VEGF-A
Proinflammatory Combo 1	K15070K	IFN- γ , IL-1 β , IL-2, IL-4, IL-6, IL-8, IL-10, IL-12p70, TNF- α
T-Cell Combo	K15095K	GM-CSF, IFN- γ , IL-2, IL-4, IL-9, IL-10, IL-13, IL-17A, IL-17F, IL-22, MIP-3 α , TNF- α
TGF- β Combo	K15243K	TGF- β 1, TGF- β 2, TGF- β 3
TH1/TH2 Combo	K15080K	IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-8, IL-10, IL-12p70, TNF- α
TH17 Combo 1	K15079K	IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-6, IL-10, IL-17A, TNF- α
Viral Combo 1	K15344K	G-CSF, GM-CSF, IFN- α 2a, IFN- γ , IL-1RA, IL-1 β , IL-4, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12p70, IP-10, MCP-1, MIP-1 α , TNF- α , VEGF-A

U-PLEX Mouse Biomarker Panels

Name	Cat. No.	Analytes
Chemokine Combo 1	K15321K	IP-10, KC/GRO, MCP-1, MIP-1 α , MIP-1 β , MIP-2, MIP-3 α , MDC
Chemokine Combo 2	K15319K	6CKine/CCL21, BCA-1/BLC, MCP-5/CCL12, RANTES, SDF-1 α , TARC
Interferon Combo	K15320K	IFN- α , IFN- β , IFN- γ
Macrophage M1 Combo 1	K15408K	IL-1 β , IL-6, IL-12p70, IL-15, IL-23, IP-10, MCP-1, MIP-1 α , TNF- α
Macrophage M2 Combo 1	K15409K	IL-4, IL-10, IL-13, MDC, TARC
T-Cell Combo	K15098K	GM-CSF, IFN- γ , IL-2, IL-4, IL-9, IL-10, IL-13, IL-17A, IL-17E/IL-25, IL-17F, IL-21, IL-22, MIP-3 α , TNF- α
TGF- β Combo	K15242K	TGF- β 1, TGF- β 2, TGF- β 3
TH1/TH2 Combo 1	K15072K	IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-10, IL-12p70, IL-13, KC/GRO, TNF- α
TH17 Combo 1	K15077K	IL-17A, IL-17C, IL-17E/IL-25, IL-17F, IL-21, IL-22, IL-23, IL-31, IL-33
TH17 Combo 2	K15078K	IFN- γ , IL-1 β , IL-6, IL-17A, IL-17C, IL-17E/IL-25, IL-17F, IL-21, IL-22, TNF- α

U-PLEX Mouse Metabolic Panels

Name	Cat. No.	Analytes
Adipokine Combo 1	K15299K	BDNF, IL-1 β , IL-6, IL-10, Insulin, Leptin, MCP-1, TNF- α
Diabetes Combo 1	K15298K	C-Peptide, GLP-1 (total), Glucagon, Insulin, Leptin, PYY (total)
Gut Hormone Combo 1	K15307K	Ghrelin (active), GLP-1 (active), Glucagon, Insulin, Leptin, PYY (total)
Metabolic Combo 1	K15297K	BAFF, BDNF, C-Peptide, FGF-21, Ghrelin (active), Ghrelin (total), GLP-1 (active), GLP-1 (inactive), GLP-1 (total), Glucagon, Insulin, Leptin, PYY (total)
Metabolic Hormones Combo 1	K15306K	C-Peptide, Ghrelin (active), GLP-1 (active), Glucagon, IL-6, Insulin, Leptin, MCP-1, PYY (total), TNF- α
Obesity Combo 1	K15300K	BDNF, FGF-21, Ghrelin (total), Glucagon, Leptin
Obesity Combo 2	K15301K	C-Peptide, Ghrelin (total), GLP-1 (total), Insulin, Leptin, PYY (total)

U-PLEX Rat Metabolic Panels

Name	Cat. No.	Analytes
Metabolic Combo 1	K15308K	BDNF, C-Peptide, FGF-21, Ghrelin (active), Ghrelin (total), GLP-1 (active), GLP-1 (inactive), GLP-1 (total), Glucagon, Insulin, Leptin, PYY (total)
Diabetes Combo 1	K15309K	C-Peptide, GLP-1 (total), Glucagon, Insulin, Leptin, PYY (total)
Metabolic Hormones Combo 1	K15316K	C-Peptide, Ghrelin (active), GLP-1 (active), Glucagon, Insulin, Leptin, PYY (total)
Obesity Combo 1	K15310K	BDNF, FGF-21, Ghrelin (total), Glucagon, Leptin
Obesity Combo 2	K15311K	C-Peptide, Ghrelin (total), GLP-1 (total), Insulin, Leptin, PYY (total)



T-PLEX kits are based on our antibody-coated plate format across a variety of secreted biomarkers and intracellular signaling proteins (total and phosphorylated). T-PLEX kits offer:

- 96-well and 384-well formats
- Measurement of complex sample matrices, including serum, plasma, CSF, urine, and cell lysates
- Workflows that are approximately 3 hours
- Conservation of sample volume, with typically less than 25 μ L

Cytokine/Inflammation Panels

Species	Name	Analytes
Canine	Proinflammatory Panel 3	IL-2, IL-6, IL-8, TNF- α
Rat	Inflammation Panel 1	NGAL, TSP-1, TIMP-1, MCP-1
Human	MMP 3-Plex Kit	MMP-1, MMP-3, MMP-9

Isotyping Panels

Species	Name	Analytes
Human, NHP	Isotyping Panel 1	IgA, IgG, IgM
Mouse	Isotyping Panel 1	IgA, IgG1, IgG2a, IgG2b, IgG3, IgM

Toxicology/Injury Panels

Species	Name	Analytes
Rat	Inflammation Panel 1	NGAL, TSP-1, TIMP-1, MCP-1
Rat	Muscle Injury Panel 2	TIMP-1, CK
Mouse	Muscle Injury Panel 3	cTnl, FABP3, Myl3, sTnl
Rat	Kidney Injury Panel 1	Albumin, TIM-1, N-GAL, Osteopontin
Human	Kidney Injury Panel 3	Calbindin, Clusterin, KIM-1, Osteoactivin, TFF3, VEGF-A

Intracellular Signaling Panels

Species	Name	Analytes
Human	Insulin Signaling Panel (Phosphoprotein)	pIR, pIGF-1R, pIRS-1
Human, Mouse, Rat	Phospho-STAT Panel	pSTAT3, pSTAT4, pSTAT5a,b

Activated/Total Panels

Species	Analytes
Human, Mouse, Rat	Akt pS473/Total
Human	Caspase-3 (Cl. p20/p17)/Total
Human, Mouse, Rat	ERK1/2 (pT202/pY204)/(pT185/pY187)/Total
Human, Mouse, Rat	p38 (pT180/pY182)/Total
Human, Mouse, Rat	STAT5a,b pY694/Total

Neurodegeneration Panels

Species	Analytes
Human	sAPP α , sAPP β
Human, Mouse	Tau (pT231)/Total Tau

Metabolic Panels

Species	Analytes
Mouse	Leptin, Insulin

Secreted Analytes

Analyte	Species	Analyte	Species	Analyte	Species
sAPP α	H	IL-1 β	M	Myeloperoxidase (MPO)	H
sAPP β	H	IL-2	C	NT-proANP	R
B2M	R	IL-6	C	NT-proBNP	R
BNP	R	IL-8	C	Osteopontin	R
cAMP	H, M, R	Insulin	R	Tau	H, M
Clusterin	R	KIM-1/TIM-1/HAVCR	R	Tau (pT231)	H, M
GM-CSF	H, M, R	MCP-1 (CCL2)	R	TIMP-1	H
IFN- β	H	MMP-1	H	TNF- α	C
IgA	H, N	MMP-3	H	sTroponin I (sTnl)	R
IgG	H, N	MMP-9	H	Troponin ITC Complex	R
IgM	H, N				

C=Canine, H=Human, M=Mouse, N=NHP, R=Rat

Intracellular Analytes

Analyte	Species	Analyte	Species
4E-BP1 (pT37/46)	H, M	IRS-1 (S312)	H
Akt (pT308)	H, M	p38 (pT180/pY182)	H, M, R
Caspase-3	H	PRAS40 (pT246)	H, M, R
CHOP	H, M, R	PSD-95	H, M, R
EGFR	H	S6RP	H, M, N, R
ERK-1/2	H, M, R	STAT3	H, M, R
ERK-1/2(pT202/pY204)(pT185/pY187)	H, M, R	STAT3 (pY705)	H, M, R
FRS2 (pY196)	H, M	STAT4	H, M, R
FRS2 (pY436)	H, M	STAT4 (pY693)	H, M, R
GAPDH	H, N	STAT5a/b	H, M, R
HIF-1 α	H, M, R	STAT5a/b (pY694)	H, M, R
Histone H3 (pS10)	H, M, R	Wnt3a	H, M, R

H=Human, M=Mouse, N=NHP, R=Rat



Matched Antibody Sets and Assays for a Wide Menu of Biomarkers

R-PLEX kits come with a matched antibody pair, calibrator, plates, recommended diluents, and read buffer. Additionally, R-PLEX antibody sets are available as a fast, easy way to design high-performance multiplex immunoassays using the U-PLEX platform.

Human

Analyte	UniProt ID	common applications
α-GST	multiple	kidney injury
4-1BB/TNFRSF9	Q07011	immunology, immuno-oncology
4-1BBL/TNFSF9	P41273	immunology/inflammation
5'-Nucleotidase	P21589	liver injury
6CKine/CCL21	O00585	cytokines & chemokines
Aβ (total)	P05067	neurodegeneration
Aβ38 (4G8)	P05067	neurodegeneration
Aβ38 (6E10)	P05067	neurodegeneration
Aβ40 (4G8)	P05067	neurodegeneration
Aβ40 (6E10)	P05067	neurodegeneration
Aβ42 (4G8)	P05067	neurodegeneration
Aβ42 (6E10)	P05067	neurodegeneration
ACE	P12821	cardiac biomarkers
ACE2	59272	cardiovascular disorders
ACHe	P22303	neurobiology, neurodegeneration
ADAM9	Q13443	oncology & cancer
ADAM17	P78536	oncology & cancer, immunology/inflammation
ADAM-TS4	O75173	bone disorders
ADAM-TS 13	Q76LX8	reproductive biology
ADP-ribosyl cyclase	P28907	oncology & cancer
AFP	P02771	reproductive biology
AGP	P02763	aging, inflammation, metabolism
Aiolos	Q9UKT9	intracellular signaling, cardiac biomarkers
Albumin	P02768	infectious disease, toxicology
Alpha-amylase 1	P04745	metabolism
Alpha Defensin 1	P59665	immunology/inflammation
AMICA1	Q86YT9	immunology/inflammation
Amphiregulin	P15514	cytokines & chemokines
Ang-1	Q15389	angiogenesis, cancer, cardiovascular disorders
Ang-2	O15123	cardiovascular disorders
Ang-4	Q9Y264	angiogenesis & vascular, cardiac biomarkers
Ang-like 3	Q9Y5C1	angiogenesis & vascular, cardiac biomarkers
Ang-like 4	Q9BY76	angiogenesis & vascular, cardiac biomarkers
Ang-like 6	Q8NI99	angiogenesis & vascular, cardiac biomarkers
Angiogenin	P03950	angiogenesis & vascular, cardiac biomarkers
Annexin A1	P04083	inflammation
Annexin A5	P08758	immunology/inflammation
Antileukoprotease	P03973	immunology/inflammation
ALCAM/CD166	Q13740	oncology & cancer
ALK	Q9UM73	oncology & cancer
ApoA1	P02647	atherosclerosis, metabolism/obesity
ApoC3	P02656	atherosclerosis, metabolism/obesity
ApoE	P02649	metabolism
APP (total)	P05067	alzheimer's disease, neurobiology, neurodegeneration
APRIL/TNFSF13	O75888	immuno-oncology, immunology/inflammation
Arginase-1	P05089	liver injury
Autotaxin	Q13822	oncology & cancer, cardiac injury, toxicology
AXL/UFO	P30530	oncology & cancer
B2M	P61769	immunology
B7-H2/ICOS-L	O75144	immunology, immuno-oncology

Human

Analyte	UniProt ID	common applications
Basigin	P35613	oncology & cancer
BCA-1/BLC	O43927	immuno-oncology, inflammation
Bcl-2	P10415	intracellular signaling
Bcl-X/Bcl2-L-1	Q07817	intracellular signaling
Betacellulin	P35070	oncology & cancer
Bikunin	P02760	oncology & cancer
BIM/Bcl2-L-11	O43521	intracellular signaling
BMP-2	P12643	bone disorders
BMP-4	P12644	bone disorders
BMP-5	P22003	bone disorders
BMP-6	P22004	bone disorders
BMP-7	P18075	bone disorders
BMP-9/GDF-2	Q9UK05	bone disorders
BMP-10	O95393	vascular, growth factors
BMP-11/GDF-11	O95390	cardiac injury, toxicology
BTLA	Q7Z6A9	immunology/inflammation, immuno-oncology
C1q receptor	Q9NPY3	intracellular signaling
CA1	P00915	hypoxia, metabolism
CA9	Q16790	kidney injury, oncology & cancer
CA15-3	P15941	cancer
CA125	Q8WXI7	cancer
Calbindin	P05937	metabolism, neurobiology
Calprotectin	P05109	immunity, inflammation
Caspase-1	P29466	cytokines & chemokines, immunology/inflammation
Cathepsin B (total)	P07858	immuno-oncology
Cathepsin D	P07339	oncology & cancer
Cathepsin L2	O60911	oncology & cancer
Cathepsin S (total)	P25774	immunology/inflammation, oncology & cancer, immunogenicity
CCN1	O00622	oncology & cancer
CD5	P06127	immunology, oncology
CD5L	O43866	cytokines & chemokines
CD8α	P01732	immunology/inflammation
CD9 (EV)	P21926	cancer, immunology
CD14	P08571	immunogenicity
CD21/CR2	P20023	oncology & cancer
CD22	P20273	immunology/inflammation, immuno-oncology
CD30/TNFRSF8	P28908	oncology & cancer
CD31/PECAM-1	P16284	angiogenesis, cell adhesion
CD40/TNFRSF5	P25942	immuno-oncology
CD44	P16070	oncology & cancer
CD47	Q08722	immunology/inflammation, oncology & cancer, cardiac injury, toxicology
CD63 (EV)	P08962	cancer, immunology
CD80/B7-1	P33681	immuno-oncology, inflammation
CD81 (EV)	P60033	cancer, immunology
CD163	Q86VB7	liver injury, oncology & cancer
CD276/B7-H3	Q5ZPR3	inflammation, immuno-oncology
CD177	Q8N6Q3	immunology/inflammation
CD200	P41217	immunology/inflammation, oncology & cancer
CEACAM-1	P13688	immuno-oncology
CEACAM-5	P06731	cancer
CEACAM-7/CGM2	Q14002	immuno-oncology
Chemerin	Q99969	cytokines & chemokines
Cholestyrolin	P06307	metabolic
Cholinesterase	P06276	neurobiology, neurodegeneration

Human

Analyte	UniProt ID	common applications
Chromogranin-A	P10645	metabolic
ciAP1	Q13490	cancer, cardiovascular disorders, oncology
ciAP2	Q13489	cancer, cardiovascular disorders, oncology
CK Beta 8-1/CCL23	P55773	cytokines & chemokines
CKKB	P12277	immunology, neurodegeneration
Clusterin	P10909	apoptosis, cell signaling, toxicology
CMG-2	P58335	intracellular signaling, angiogenesis & vascular, oncology & cancer
CNTF	P26441	neurobiology, neurodegeneration
COMP/TSP-5	P49747	bone disorders
Complement C3	P01024	immunology/inflammation
Complement C3a	P01024	immunology/inflammation
Complement C5a	P01031	cardiac biomarkers, immunology/inflammation
Complement C9	P02748	immunology/inflammation
Complement factor D	P00746	metabolism
Contactin-2/TAG-1	Q02246	alzheimer's disease
Corin/ATC	Q9Y5Q5	cardiovascular disorders
COX-2/PTGS2	P35354	immunology/inflammation
CRP	P02741	autoimmune disorders, inflammation
CRAM/CD355	O95727	oncology & cancer
Cystatin B	P04080	intracellular signaling
Cystatin C	P01034	toxicology
Cytokeratin-8	P05787	cancer, cell signaling
Cytokeratin-19	P08727	biomarker immunoassays
Decorin	P07585	oncology & cancer, bone disorders, neurobiology, neurodegeneration
Delta-like 1	O00548	intracellular signaling
Delta-like 4	Q9NR61	angiogenesis & vascular, immunology/inflammation
DKK-1	O94907	bone disorders, immunology/inflammation
DKK-3	Q9UBP4	oncology & cancer
DKK-4	Q9UBT3	reproductive biology
DPPIV	P27487	metabolism
E-Cadherin	P12830	cancer
EGF	P01133	cardiovascular disorders, toxicology
EGFR	P00533	immunology/inflammation, oncology & cancer
Elastase-2	P08246	immunology/inflammation
Endoglin	P17813	angiogenesis, cancer, cardiovascular disorders
Endostatin	P39060	angiogenesis & vascular
Endothelin-1	P05305	cardiac biomarkers, vascular immunoassays
Enolase 2	P09104	neurobiology
eNOS	P29474	cardiac biomarkers
Ep-CAM	P16422	immuno-oncology
ER-α	P03372	phosphoproteins, intercellular signaling
ErbB2	P04626	immuno-oncology
ErbB3/HER3	P21860	oncology & cancer
ERK1/2 (total)	P27361	phosphoproteins, intercellular signaling
E-Selectin	P16581	cell adhesion, cell signaling
FABP2/I-FABP	P12104	metabolic
FABP3/H-FABP	P05413	cardiovascular disorders, toxicology
FABP4/A-FABP	P15090	metabolic
Factor VII	P08709	vascular immunoassays, cardiac biomarkers
FAP-α/SEPR	Q12884	angiogenesis, apoptosis, cell adhesion

Human

Analyte	UniProt ID	common applications
Fas (soluble)	P25445	apoptosis
FasL	P48023	apoptosis, immunology
Fc-epsilon RII	P06734	intracellular signaling
Ferritin	P02794, P02792	immunology/inflammation, metabolic
FGF (acidic)	P05230	angiogenesis & vascular, oncology & cancer
FGF-7	P21781	oncology & cancer
FGF-19	O95750	metabolic
FGF-BP1	Q14512	immunology/inflammation
Fibronectin	Q9Y2H6	bone disorders
Folate R alpha	P15328	immuno-oncology
Follistatin	P19883	immunology/inflammation, muscle injury
Furin	P09958	oncology & cancer
GAD2/GAD-65	Q05329	metabolic, immunology/inflammation
Galectin-1	P09382	biomarker immunoassays
Galectin-3	P17931	cardiovascular disorders, oncology
GAS-6/AXL-L	Q14393	oncology & cancer
GASP-1	Q8TEU8	growth factors, oncology & cancer
GCPII/PSMA	Q04609	oncology & cancer
GDF-8	O14793	growth factors
GDF-15	Q99988	cell signaling
Gelsolin	P06396	cell signaling
GFAP	P14136	neurobiology
Glicentin	P01275	metabolism
Granulysin	P22749	immunology/inflammation
GRP	P07492	oncology & cancer
GRO-β/CXCL2	P19875	cytokines & chemokines
Growth Hormone	P01241	metabolic
Haptoglobin	P00738	cardiovascular disorders, immunity
HAVCR1/KIM-1	Q96D42	infectious disease, toxicology
HB-EGF	Q99075	oncology & cancer
HCC-4/CCL16	O15467	cytokines & chemokines
hCG alpha	P01215	reproductive biology
HE4/WFDC2	Q14508	immuno-oncology
Heme Oxygenase 1	P09601	vascular immunoassays
Hemoglobin alpha	P69905	angiogenesis, cardiovascular disorders
Hemojuvelin	Q6ZVN8	metabolism
Hemopexin	P02790	angiogenesis, cardiovascular disorders
Hepcidin	P81172	growth factors
Hepsin	P05981	oncology & cancer
HGF	P14210	cardiovascular disorders, oncology
HGF activator	Q04756	growth factors, immunology/inflammation
HSP27/HspB1	P04792	muscle injury, toxicology
HSP70	PODMV8	cell signaling
HVEM/TNFRSF14	Q92956	oncology & cancer
Hyaluronidase-1	Q12794	oncology & cancer, immunology/inflammation
IA-2/R-PTP-N	Q16849	phosphoproteins, intercellular signaling, oncology & cancer
ICAM-1	P05362	immunology
ICAM-3	P32942	adhesion, immunology
ICOS	Q9Y6W8	immunology, immuno-oncology
ICOS-L/B7-H2	Q68D85	cytokines & chemokines, oncology & cancer
IDS	P22304	bone disorders, metabolic
IFN-ε	Q86WN2	cytokines, immuno-oncology

Human

Analyte	UniProt ID	common applications
IgE	NA	immunology/inflammation
IGF-1	P05019	metabolism
IGF-1R	P08069	oncology & cancer, metabolic
IGF-2R/IGF-M6P-R	P11717	oncology & cancer, metabolic
IGFBP-1	P08833	metabolic
IGFBP-2	P18065	metabolic
IGFBP-3	P17936	metabolic
IGFBP-4	P22692	metabolism, growth factors
IGFBP-8	P29279	angiogenesis & vascular
Ikaros	Q13422	intracellular signaling
IL1RL1/ST2	Q01638	cardiovascular disorders
IL-1R2	P27930	toxicology
IL-2R γ	P31785	cytokines, immunology/inflammation
IL-6R	P08887	immunity, immunology
IL-11	P20809	cytokines
IL-17RB	Q9NRM6	cytokines & chemokines
IL-18BP	O95998	cytokines, immunology/inflammation
IL-19	Q9UHD0	cytokines, oncology & cancer
IL-22R α 2	Q96915	cytokines & chemokines
IL-23R	Q13007	immuno-oncology, immunology/inflammation
IL-24	Q13007	immuno-oncology, immunology/inflammation
IL-28A/IFN- λ 2	Q8IZIO	immunology/inflammation
IL-28B/IFN- λ 3	Q8IZI9	liver injury, oncology & cancer
IL-32	P24001	cytokines & chemokines
IL-34	Q6ZMJ4	immunology/inflammation, metabolic
IL-36 γ	Q9NZH8	cytokines & chemokines
IL-36RA	Q9UBH0	immunology/inflammation
IL-37	Q9NZH6	cytokines & chemokines
Influenza A NP	B6A6U5	virology
Influenza B NP	Q596H1	virology
IR (soluble)	P06213	metabolism
IRS-1	P35568	metabolism
ITIH4	Q14624	immunology/inflammation, reproductive biology, oncology & cancer
Jagged-1	P78504	oncology & cancer, intracellular signaling
Kallikrein 3/PSA	P07288	reproductive biology
Ki-67	P46013	neurobiology, neurodegeneration
Klotho	Q9UEF7	kidney injury
Lactotransferrin	P02788	immunology
LBP	P18428	immunogenicity
LDL Receptor	P01130	cardiac biomarkers
Legumain	Q99538	neurobiology, neurodegeneration
LIF	P15018	cytokines & chemokines
LIGHT/TNFSF14	O43557	immunology/inflammation
LOX-1/OLR1	P78380	cardiac injury, toxicology
LRRK2	Q55007	neurobiology, neurodegeneration
LRRK2 (pS935)	Q55007	neurobiology, neurodegeneration
Lymphotoxin	P47992	cytokines & chemokines
LYVE-1	Q9Y5Y7	oncology & cancer
MAcCAM-1	Q13477	cytokines & chemokines
MCAM/CD146	P43121	immuno-oncology
Mcl-1/BAK Complex	Q07820/ Q16611	intracellular signaling
Mcl-1/Bcl2-L3	Q07820	intracellular signaling
Mcl-1/BIM Complex	Q07820/ Q43521	intracellular signaling
MerTK	Q12866	oncology & cancer, immunogenicity
Mesothelin	Q13421	cancer
Met (soluble)	P08581	cancer, cell signaling
MIC-A	Q29983	immunology/inflammation, metabolic
MIC-B	Q29980	oncology & cancer, immunology/inflammation
Midkine	P21741	oncology & cancer
MIG	P49682	immunity, immunology

Human

Analyte	UniProt ID	common applications
MIP-4	P55774	cell signaling, immunity, inflammation
MMP-1	P03956	cancer, inflammation
MMP-2	P08253	immunology/inflammation
MMP-3 (total)	P08254	angiogenesis, cancer, cardiovascular disorders
MMP-7	P09237	angiogenesis, cancer, cardiovascular disorders
MMP-8	P22894	immunology/inflammation
MMP-9 (active)	P14780	angiogenesis, cancer, cardiovascular disorders
MMP-9 (total)	P14780	cancer, inflammation
MMP-10 (total)	P09238	oncology & cancer, cardiac injury, toxicology
MMP-12	P39900	oncology & cancer
MMP-13	P45452	oncology & cancer
MMP-14	P50281	oncology & cancer
MMP-1/CCl23	P55773	cytokines & chemokines
MPO	P05164	cardiovascular disorders, inflammation
MSP	P26927	oncology & cancer
MyD88	Q99836	oncology & cancer
Myoglobin	P02144	kidney injury
Myosin BP (cardiac)	Q14896	cardiac biomarkers
NAP-2/CXCL7	P02775	cytokines & chemokines
N-Cadherin	P19022	cardiac biomarkers
NCAM-1	P13591	neurobiology, neurodegeneration
Nectin-4	Q96NY8	cancer, infectious disease
Nephrin	O60500	kidney injury
Nephrilysin	P08473	alzheimer's disease
Nesfatin-1	P80303	metabolic
Neurofilament H	P12036	neurobiology, neurodegeneration
Neurofilament L	P07196	neurobiology, neurodegeneration
Neuropilin-1	Q14786	neurobiology, neurodegeneration
Neurotrophin-3	P20783	neurobiology, neurodegeneration
Neurotrophin-4	P34130	immunology/inflammation, neurobiology, neurodegeneration
Neuronal pentraxin-1	Q15818	alzheimer's disease
NGAL/LCN2	P80188	immunology/inflammation, toxicology
NT-ProBNP	P16860	cardiovascular disorders, toxicology
NPY	P49146	neurobiology, neurodegeneration
Oncostatin-M	P13725	oncology & cancer
Osteoactivin	Q14956	bone disorders, cancer
Osteocalcin	P02818	bone disorders
Osteonectin	P09486	bone disorders
Osteopontin	P10451	bone disorders, cancer, inflammation
Osteoprotegerin	O00300	bone disorders
OX40L	P23510	immunology/inflammation, immunogenicity
OXM/Glicentin	P01275	metabolic
p38 (pT180/pY182)	Q15759	phosphoproteins, intercellular signaling
p38 (total)	Q15759	phosphoproteins, intercellular signaling
PAF-AH	Q13093	cardiac biomarkers
P-Cadherin	P22223	cell adhesion, cell signaling
PC9/PCSK9	Q8NBP7	cardiac biomarkers
PDGF-A	P04085	growth factors
PDGF-B	P01127	growth factors
PDGF-A/B	P04085 P01127	cardiac biomarkers
PDGF-C	Q9NRA1	cardiac biomarkers
PDGFR- β (total)	P09619	cardiovascular, neurobiology, neurodegeneration
PR/PGR	P06401	reproductive biology
Pentraxin 2	P02743	kidney injury, neurobiology/neurodegen.
Pentraxin 3	P26022	immunity, infection, inflammation
Perforin	P14222	immuno-oncology
Periostin/OSF-2	Q15063	inflammation, oncology
PF-4/CXCL4	P02776	cytokines & chemokines

Human

Analyte	UniProt ID	common applications
PRAS40 (total)	Q96B36	phosphoproteins, intercellular signaling
PRDX-1	Q06830	oxidative stress, redox homeostasis
PRDX6	P30041	oxidative stress, redox homeostasis
Presenilin-1 NTF	P49768	neurobiology, neurodegeneration
Procalcitonin	P01258	immunology/inflammation
proCollagen alpha-1	P02452	bone disorders
proCollagen II	P02458	bone disorders
Progranulin	P28799	oncology & cancer
Prolactin	P01236	fertility
proMMP-9	P14780	cardiovascular disorders, immuno-oncology
proMMP-10	P09238	oncology & cancer, cardiac injury, toxicology
proMMP-13	P45452	immuno-oncology
Protein C Receptor	Q9UNN8	cardiac biomarkers, cardiovascular
P-Selectin	P16109	cardiovascular disorders, cell adhesion
PS- β -G1	P11464	neurobiology/neurodegen.
PSGL-1	Q14242	cell adhesion
PSP-D	P35247	neurobiology, neurodegeneration
PTEN (total)	P60484	phosphoproteins, intercellular signaling
PYY (active)	P10082	metabolism
RAGE (soluble)	Q15109	immunology/inflammation
RANTES	P13501	immunology/inflammation
RBPA	P04916	cardiovascular disorders, metabolism
Reg-3-alpha	Q06141	metabolic
Relaxin-2	P04090	reproductive biology
Renin	P00797	cardiac biomarkers
Resistin	Q9HD89	metabolism/obesity
RGM-A	Q96B86	neuroinflammation, neurobiology/neurodegen.
S100A8/MRP8	P05109	immunity, inflammation
S100A12	P80511	immunity, inflammation
S100B	P04271	neurobiology, neurodegeneration
SAA	PODJ18	inflammation, cardiovascular
SARS-CoV-2 N	PODTC9	immunology/inflammation
SARS-CoV-2 Spike	PODTC2	immunology/inflammation
SCF	P21583	cell signaling, immunology
SCFR/Kit	P10721	cardiovascular disorders, oncology
Sclerostin	Q9BQB4	bone disorders, kidney injury
SerpinA4	P29622	other markers
Serpin A12/ Vaspin	Q8IW75	metabolism/obesity
Serpin E1 (active)	P05121	cardiovascular disorders
Serpin E1 (inactive)	P05121	cardiovascular disorders
Serpin E1 (total)	P05121	cardiovascular disorders
Serpin F1/PEDF	P36955	angiogenesis & vascular, bone disorders
Serpin F2	P08697	angiogenesis, cardiovascular disorders
SHBG	P04278	reproductive biology
SHP substrate 1	P78324	oncology & cancer, immunology/inflammation
Siglec-6	Q43699	reproductive biology
Siglec-7/CD328	Q9Y286	oncology & cancer
SOD2	P04179	phosphoproteins, intercellular signaling
SPINK-1	P00995	metabolic, oncology & cancer
Spk1	Q9NYA1	vascular immunoassays
SR-PSOX/CXCL16	Q9H2A7	immunology/inflammation, oncology & cancer
Survivin/BIRC5	O15392	oncology & cancer
Syndecan-1	P18827	metabolic, oncology & cancer
Syndecan-4	P31431	cardiac injury, oncology & cancer, toxicology
TACI/TNFRSF13	O14836	immuno-oncology
Tau (total)	P10636	neurobiology, neurodegeneration
TDP-43	Q13148	neurobiology, neurodegeneration
TECH/CCl25	O15444	cytokines & chemokines

Human

Analyte	UniProt ID	common applications
Tenascin C	P24821	cancer, wound healing
TFE2	Q03403	metabolic
TFE3	Q07654	inflammation, wound healing
TFPI	P10646	oncology & cancer, toxicology
TGF- α	P01135	immuno-oncology
TGF- β RII	P37173	immuno-oncology
TGF- β RIII	Q03167	oncology & cancer, immunology/inflammation
TGM-2	P21980	metabolic, immunology/inflammation
Thrombospondin	P07204	cardiovascular disorders, hemostasis
Thyroglobulin	P01266	oncology & cancer
TIMP-1	P01033	angiogenesis, cancer, cardiovascular disorders
TIMP-3	P25625	oncology & cancer
TIMP-4	Q99727	oncology & cancer, cardiac injury, toxicology
TLR2	O60603	oncology & cancer
TNFAIP6/TSG-6	P98066	inflammation
TNFR-RI	P19438	apoptosis, immunity, inflammation
TNFR-RII	P20333	apoptosis, immunity, inflammation
TNFRSF10C	O14798	cancer, cell signaling
tPA	P00750	angiogenesis & vascular
Trk-A (total)	P04629	oncology & cancer
Troponin I (cardiac)	P19429	cardiovascular disorders, toxicology
Troponin T (cardiac)	P45379	cardiovascular disorders, toxicology
TSP-1	P07996	inflammatory, oncology & cancer
TSP-2	P35442	cardiac injury, toxicology
TWEAK/TNFSF12	O43508	cytokines, immuno-oncology
TYRO-3	Q06418	oncology & cancer, neurobiology, neurodegeneration
ULBP-2	Q9BZM5	immunology/inflammation
U-PAR	Q03405	cancer, oncology
Uromodulin	P07911	inflammation, toxicology
VCAM-1	P19320	angiogenesis
VE-Cadherin	P33151	cardiovascular
VEGFR-2/KDR	P35968	angiogenesis
VEGFR-3/Flt-4	P35916	angiogenesis
VILIP-1	P62760	cell signaling
Visfatin	P43490	immunology/inflammation, metabolic
VISTA/B7-H5	Q9H7M9	oncology & cancer
Vit D Binding Protein	P02774	metabolism
VTCN1/B7-H4	Q7Z7D3	immuno-oncology, immunology/inflammation
vWF	P04275	cardiovascular disorders, coagulation
ZnT8	Q8IWU4	metabolic, immunology/inflammation

Mouse

Analyte	UniProt ID	Common Applications
Aβ38 (4G8)	P05067	neurodegeneration
Aβ40 (4G8)	P05067	neurodegeneration
Aβ42 (4G8)	P05067	neurodegeneration
Adiponectin	Q60994	metabolism
Amphiregulin	P31955	oncology & cancer, immunology/inflammation
AXL/UFO	Q00993	oncology & cancer
C1q receptor	O89103	cytokines & chemokines
CCL6	P27784	oncology & cancer, toxicology
CCL28	Q9JIL2	cytokines & chemokines, immunology/inflammation
CCN3	Q64299	oncology & cancer
CD14	P10810	cytokines & chemokines
CD163	Q2VLH6	toxicology
Clusterin	Q06890	apoptosis, cell signalling, toxicology
Complement C5a	P06684	oncology & cancer, immunology/inflammation
CRP	P14847	immunology/inflammation, immunogenicity
CTLA-4	P09793	immuno-oncology
CXCL15	Q9WVL7	chemokines
Cystatin C	P21460	toxicology
Decorin	P28654	oncology & cancer, bone disorders
DPPIV	P28843	oncology & cancer, immunology/inflammation
EGF	P01132	oncology & cancer
Elastase-2	Q3UP87	immunology/inflammation
Endoglin	Q63961	vascular, cardiovascular, immuno-oncology
Eotaxin-2	Q9JKC0	immunology/inflammation
Epiregulin	Q61521	oncology & cancer
E-selectin	Q00690	immunology/inflammation, oncology & cancer
FasL	P48023	immunology/inflammation, oncology & cancer
Fractalkine	O35188	cytokines & chemokines
FLT3L	P49772	growth factors, immunology/inflammation, cardiovascular
Galectin-1	P16045	oncology & cancer
Galectin-3	P16110	cardiac injury, oncology & cancer, toxicology
GAS-6/AXL-L	Q61592	oncology & cancer, immunology/inflammation
G-CSF	P09920	cytokines & chemokines, immunology/inflammation
GDF-15	Q9Z0J7	oncology & cancer
Granzyme B	Q3TZH4	immuno-oncology
HAVCR1/KIM-1	Q5QNS5	oncology & cancer
HGF	Q08048	oncology & cancer
ICAM-1	P13597	immunology/inflammation
IGF-1	P05017	growth factors, cardiovascular
IGFBP-5	Q07079	metabolic
IL-1RA	P25085	cytokines & chemokines, immunology/inflammation
IL-1α	P01582	cytokines & chemokines, immunology/inflammation
IL-2Rα	P01590	cytokines & chemokines, immunology/inflammation
IL-6Rα	P22272	immunology/inflammation, oncology & cancer

NHP

Analyte	UniProt ID	Common Applications
Alpha-amylase 2A	P04746	metabolism
CD177	A0A1D-5QCX9	immunology/inflammation

Mouse

Analyte	UniProt ID	Common Applications
IL-7	P10168	cytokines & chemokines, immunology/inflammation
IL-11	P47873	cytokines & chemokines, oncology & cancer
IL-15Rα	Q60819	cytokines & chemokines, immunology/inflammation
IL-18	P70380	immunology/inflammation, oncology & cancer
IL-20	Q9JKV9	cytokines & chemokines, immunology/inflammation
IL-24	Q92554	immuno-oncology, immunology/inflammation
IL-34	Q8R1R4	metabolic, immunology/inflammation, cytokines
I-TAC	Q9JHH5	immunology/inflammation
LIX/CXCL5	Q6P56	immunology/inflammation, oncology & cancer
Lymphotactin	P47993	cytokines & chemokines
M-CSF	P07141	cytokines & chemokines, immunology/inflammation
Meteorin-like	Q8VE43	cytokines & chemokines, immunology/inflammation
MIF	P34884	immunology/inflammation
MIG	P18340	cytokines & chemokines
MIP-1γ/CCL9	P51670	immunology/inflammation
MMP-3 (total)	P28862	angiogenesis & vascular, oncology & cancer
Oncostatin-M	P53347	immunology/inflammation, oncology & cancer
Osteoprotegerin	O08712	bone disorders
PD1	Q02242	immuno-oncology
PDGF-B	P31240	intracellular signaling
PD-L1	Q9EP73	immuno-oncology
Pentraxin 3	P48759	immunology/inflammation
Periostin/OSF-2	Q62009	oncology & cancer
PF-4/Cxcl4	Q9Z126	cytokines & chemokines
Prolactin	P06879	immunology/inflammation
PSP-D	P50404	oncology & cancer
RAGE (soluble)	Q62151	immunology/inflammation, neurobiology, neurodegeneration, oncology & cancer
RANKL/TNFSF11	O35235	cytokines & chemokines, oncology & cancer
RBP4	Q00724	cardiovascular disorders, metabolism
Resistin	Q99P87	inflammation, metabolism
S100A8/MRP8	P27005	immunology/inflammation, oncology & cancer
SAA	multiple	inflammation, cardiovascular
SR-PSOX/CXCL16	Q8BSU2	immunology/inflammation, oncology & cancer
Tau (total)	P10637	neurodegeneration
TIMP-1	P12032	angiogenesis, cancer, cardiovascular
TNF-RII	P25119	apoptosis, immunity, inflammation
TRAIL	P50592	oncology & cancer
TREM-1	Q9JKE2	cytokines & chemokines
TSLP	Q9JIE6	immunology/inflammation
VCAM-1	P29533	immunology/inflammation
VEGF-D	P97946	vascular, oncology & cancer
VEGFR-1/Flt-1	P35969	angiogenesis
YM1	O35744	immunology/inflammation

Rabbit

Analyte	UniProt ID	Common Applications
IP-10	G1TBA6	cytokines
IL-1β	P14628	cytokines

Rat

Analyte	UniProt ID	Common Applications
A2M	P06238	cardiovascular disorders, toxicology
Aβ38 (4G8)	P05067	neurodegeneration
Aβ40 (4G8)	P05067	neurodegeneration
Aβ42 (4G8)	P05067	neurodegeneration
Adiponectin	Q8K3R4	inflammation, metabolism/obesity
AGP	P02764	immunology, inflammation
Albumin	P02770	kidney injury
Cystatin C	P14841	toxicology
β-NGF	P25427	neurobiology, neurodegeneration
EPO	P29676	autoimmune disorders, toxicology
Fractalkine	O55145	neurobiology, neurodegeneration, immunology/inflammation
GM-CSF	P48750	immunity, inflammation, oncology
GRO-β/CXCL2		immunology/inflammation, oncology & cancer
HAVCR1/KIM-1	O54947	infectious disease, toxicology
IFN-γ	P01581	inflammation, neurodegeneration, toxicology
IL-1α	P16598	inflammation, neurodegeneration
IL-1β	Q63264	inflammation, neurodegeneration
IL-2	P17108	infectious disease, inflammation
IL-4	P20096	immunology, inflammation
IL-5	Q08125	immunology, inflammation
IL-6	P20607	cardiovascular disorders, inflammation
IL-10	P29456	infectious disease, inflammation
IL-13	P42203	infectious disease, inflammation
IL-17A	Q61453	immunology/inflammation
IL-18	P97636	immunology/inflammation
KC/GRO	P14095	cardiovascular disorders, inflammation
MCP-1	P14844	cardiovascular disorders, neurodegeneration
MIP-3α	P97884	immunology, inflammation
NGAL/LCN2	P30152	oncology, toxicology
Osteopontin	P08721	bone disorders, cancer, inflammation
Resistin	Q99P87	metabolic
TIMP-1	P30120	oncology
TNF-α	P16599	inflammation
TNF-RII	P16599	immunology, inflammation
TREM-1	D4ABU7	cytokines & chemokines
VEGF-A	P16612	cardiovascular disorders

Access More R-PLEX Resources

Visit www.mesoscale.com/R-PLEX to view resources that will assist in building an assay using R-PLEX Antibody Sets, including product inserts, datasheets, and R-PLEX assay/antibody diluent combinations.

Assay Development Tools

MSD offers a variety of tools to support your assay development projects.

MSD GOLD: Quality and Reliability

MSD GOLD™ products provide a rapid and convenient method for the development of new assays and the transfer of existing ELISAs to the MSD platform. Consisting of streptavidin- and avidin-coated plates, read buffers, and SULFO-TAG linkers, MSD GOLD plates and reagents are ideal for biomarker discovery, vaccine studies, serology, personalized medicine, and screening applications.

Benefits

- Excellent lot-to-lot reproducibility means they are well-suited for long-term studies
- Highly precise results with low non-specific binding
- Easy to follow protocols for quick assay development

MSD GOLD Plates and Accessories

Plates	Cat. No.
MSD GOLD 96-well Streptavidin SECTOR™ Plates	L15SA
MSD GOLD 96-well Small Spot Streptavidin SECTOR Plates	L45SA
Labeling Reagent (available in 150 nmol and 2 μmol sizes)	Cat. No.
SULFO-TAG NHS-Ester	R91AO
Conjugation Packs (available in ≤200 μg and ≤1 mg sizes)	Cat. No.
MSD GOLD SULFO-TAG Conjugation Pack (5 reactions)	R31AA
Read Buffers	Cat. No.
MSD GOLD Read Buffer A	R92TG
MSD GOLD Read Buffer B	R60AM

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Ready-to-use MSD GOLD Read Buffer B: multi-lot reproducibility data demonstrate that this new read buffer reduces variability and ensures reproducibility of ECL signals across experiments.

U-PLEX Development Packs

U-PLEX Development Packs allow you to develop multiplex assays that include the analytes you want, including those not in our catalog.

Name	Cat. No. (96-well format)	Cat. No. (384-well format)
Development Pack, 2-Assay	K15227N	K25227N
Development Pack, 3-Assay	K15228N	K25228N
Development Pack, 4-Assay	K15229N	K25229N
Development Pack, 5-Assay	K15230N	-
Development Pack, 6-Assay	K15231N	-
Development Pack, 7-Assay	K15232N	-
Development Pack, 8-Assay	K15233N	-
Development Pack, 9-Assay	K15234N	-
Development Pack, 10-Assay	K15235N	-

Benefits

- Design and build your personalized multiplex quickly and easily
- Use your own antibodies, choose from preconfigured U-PLEX assays, or choose from MSD antibody sets
- Easy workflow and simple protocol similar to ELISA

MSD Assay Services and Bioanalytical Laboratory

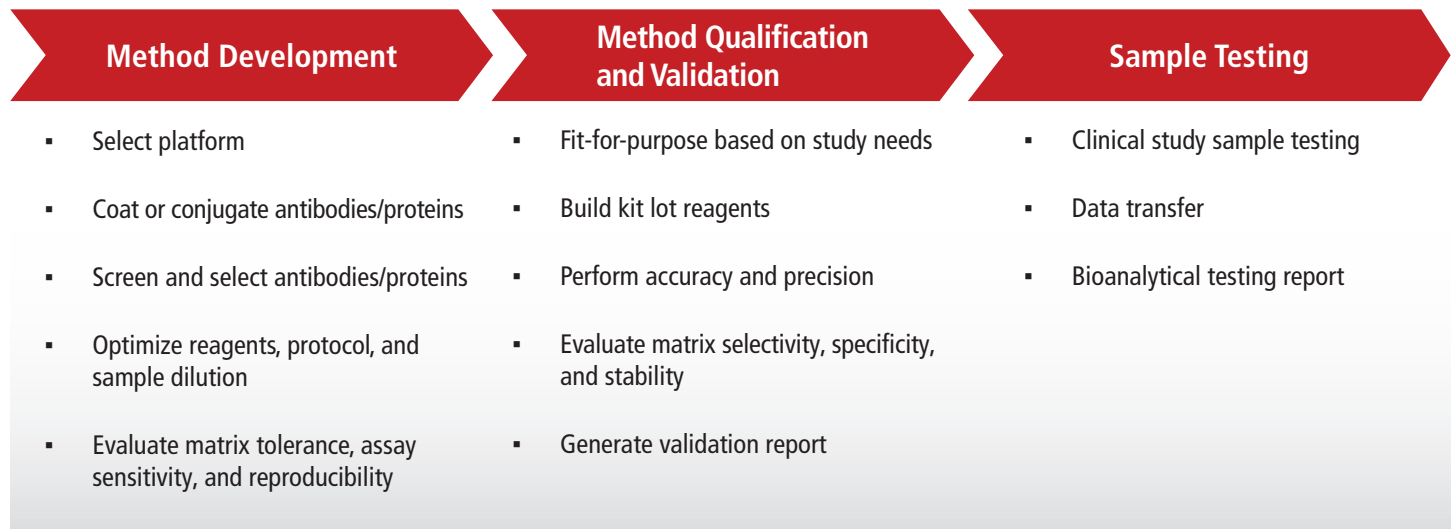
In pre-clinical and clinical research, there is an ever-increasing need for high-quality tests to guide decision making. MSD's Assay Services and Bioanalytical Laboratory offer a seamless process from assay development to sample testing for your application. We have successfully collaborated with top biotech and pharmaceutical clients to develop assays ranging from immunoassays for secreted proteins and phosphoproteins to assays that measure protein-protein interactions, serology, and immunogenicity. Depending on your need, assays may be developed for basic research purposes or designed to include additional qualification and validation.

Assay Services

- Employ structured processes to develop high-quality assays
- Provide unique early access to new MSD technologies where needed
- Choose assay development services depending on your specific needs

Bioanalytical Laboratory (BAL)

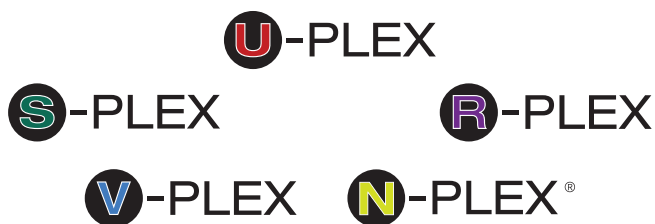
- Seamless and efficient transfer from MSD Assay Services
- Sample testing for exploratory endpoints through GLP/ GCLP testing
- Access to newly developed MSD assays for testing before commercial release



Assay Services Highlights

Assay Development Services

Let MSD's experienced scientists develop high-quality multiplex assays for your application.



Bioanalytical Laboratory Highlights



Quality

Established QMS that complies with the applicable principles of GLP and GCLP



Speed

Projects can be initiated very quickly due to our large internal scientific team



Customized

Assays developed in standard (e.g., V-PLEX, S-PLEX) and novel (e.g., N-PLEX®) formats that are not readily available via CROs



Expertise

Experienced in custom assay development for Biomarker/ Anti-drug Antibody/ Pharmacokinetic (BM/ADA/PK) and Serology assays that can seamlessly transfer into the BAL for sample testing

Index of Analytes by Product Line

V: V-PLEX
S: S-PLEX
U: U-PLEX
R: R-PLEX
T: T-PLEX

Analytes	V	S	U	R	T	Analytes	V	S	U	R	T	Analytes	V	S	U	R	T	Analytes	V	S	U	R	T	
α-GST					•	CA1				•	•	DKK-1					•	GLP-1 (active)	•	•	•	•		
α-Synuclein			•	•		CA125				•	•	DKK-3					•	GLP-1 (inactive)			•	•		
β-NGF			•	•		CA15-3				•	•	DKK-4					•	GLP-1 (total)	•	•	•	•		
4-1BB/TNFRSF9				•		CA50				•	•	DPPIV					•	Glucagon	•	•	•	•		
4-1BBL/TNFSF9				•		CA9				•	•	E-Cadherin					•	GM-CSF	•	•	•	•		
4E-BP1 (pT37/46)					•	Calbindin				•	•	EGF					•	gp130 (soluble)			•	•		
6CKine/CCL21			•	•		Calprotectin				•	•	EGFR					•	Granulysin			•	•		
A2M			•	•	•	cAMP				•	•	Elastas					•	Granzyme A			•	•		
Aβ (total)				•		Caspase-1				•	•	Elastase-2					•	Granzyme B			•	•		
Aβ38 (4G8)	•			•		Caspase-3				•	•	ENA-78				•		GRO-α			•	•		
Aβ38 (6E10)	•			•		Cathepsin B (total)				•	•	Endoglin					•	GRO-β/CXCL2			•	•		
Aβ40 (4G8)	•			•		Cathepsin S (total)				•	•	Endogline-2					•	Growth Hormone			•	•		
Aβ40 (6E10)	•			•		Cathepsin-D				•	•	Endostatin					•	GRP			•	•		
Aβ42 (4G8)	•			•		CCL23				•	•	Endothelin-1					•	Haptoglobin			•	•		
Aβ42 (6E10)	•			•		CCN1				•	•	Enolase 2					•	HAVCR1/KIM-1			•	•		
ACE				•		CD14				•	•	eNOS					•	HAVCR2/TIM-3			•	•		
ADAM17				•		CD163				•	•	Eotaxin	•			•		HB-EGF			•	•		
ADAM9				•		CD177				•	•	Eotaxin-2				•	•	HCC-4/CCL16			•	•		
ADAM-TS 4				•		CD20			•	•	Eotaxin-3	•	•	•			HE4/WFDC2			•	•			
ADAM-TS 13				•		CD200				•	•	Ep-CAM				•		Hepsin			•	•		
Adiponectin			•			CD21/CR2				•	•	Epiregulin				•		Heme Oxygenase 1			•	•		
ADP-ribosyl cyclase				•		CD22				•	•	EPO				•	•	Hemoglobin alpha			•	•		
AFP				•		CD27			•	•	ER-α					•		Hemopexin			•	•		
AGP				•	•	CD276/B7-H3			•	•	ErbB2					•		Hepcidin			•	•		
Aiolos				•		CD28			•	•	ERK-1/2 (total)					•	•	HGF			•	•		
Akt (pT308)				•		CD30/TNFRSF8				•	•	ERK-1/2 (pT202/pY204) (pT185/pY187)					•	HGF activator			•	•		
Akt (total)				•		CD31/PECAM-1				•	•	E-Selectin					•	HIF-1α			•	•		
Albumin				•	•	CD40			•	•	FABP2/I-FABP					•		Histone H3 (pS10)			•	•		
Alpha Defensin 1				•		CD40/TNFRSF5				•	•	FABP3/H-FABP				•		HSP27/HspB1			•	•		
Alpha-amylase 1				•		CD40L (soluble)			•	•	FABP4/A-FABP				•			HSP70			•	•		
Alpha-amylase 2A				•		CD47				•	•	FABP4/A-FABP				•		HVEM/TNFRSF14			•	•		
AMICA1				•		CD5				•	•	Factor VII				•	•	Hyaluronidase-1			•	•		
Amphiregulin				•		CD5L				•	•	Fas				•	•	I-309			•	•		
Ang-1				•		CD63 (EV)				•	•	FAP-α/SEPR				•		IA-2/R-PTP-N			•	•		
Ang-2				•		CD80/B7-1				•	•	Fas (soluble)				•		ICAM-1	•	•	•	•		
Ang-4				•		CD81 (EV)				•	•	FasL				•		ICAM-3			•	•		
Angiogenin				•		CD8α				•	•	Fc-epsilon RII				•		ICOS			•	•		
Ang-like 3				•		CD9 (EV)				•	•	Ferritin				•		ICOS-L/B7-H2			•	•		
Ang-like 4				•		CEACAM-1				•	•	FGF (acidic)				•		IDS			•	•		
Ang-like 6				•		CEACAM-5				•	•	FGF (basic)	•			•	•	IFN-α			•	•		
Annexin A1				•		CEACAM-7/CGM2				•	•	FGF-19				•		IFN-α2a			•	•		
Antileukoproteinase				•		Chemerin				•	•	FGF-21				•		IFN-β			•	•		
ApoA1				•	•	Cholestokinin				•	•	FGF-23				•		IFN-γ	•	•	•	•		
ApoC3				•	•	CHOP				•	•	FGF-7				•		IFN-ε			•	•		
ApoE				•		Chromogranin-A				•	•	FGF-BP1				•		IqA			•	•		
APP (total)				•		clAP1				•	•	Fibronectin				•		IqE			•	•		
APRIL/TNFSF13				•		clAP2				•	•	Flt-1/VEGFR-1	•			•		IGF-1			•	•		
Arginase-1				•		CK				•	•	FLT3L				•	•	IGF-1R			•	•		
Autotaxin				•		CK Beta 8-1/CCL23				•	•	Folate R alpha				•		IGF-2R/CI-M6P-R			•	•		
AXL/UFO				•		CKBB				•	•	Follistatin				•		IGFBP-1			•	•		
B2M				•	•	Clusterin			•	•	•	Fractalkine				•	•	IGFBP-2			•	•		
B7-H2/ICOS-L				•		CMG-2				•	•	FRS2 (pY196)					•		IGFBP-3			•	•	
BAFF				•		CNTF				•	•	FRS2 (pY436)				•		IGFBP-4			•	•		
BAFF-R/TNFRSF13C				•		COMP/TSP-5				•	•	FSH				•		IGFBP-5			•	•		
Basigin				•		Complement C3				•	•	Galectin-1				•		IGFBP-6			•	•		
BCA-1/BLC				•		Complement C3a				•	•	Galectin-3				•		IGFBP-8			•	•		
Bcl-2				•		Complement C5a				•	•	GAD2/GAD-65				•		IqG			•	•		
Bcl-X/Bcl2-L1				•		Complement C9				•	•	GAPDH				•		IqM			•	•		
BCMA/TNFRSF17				•		Complement factor D				•	•	GAS-6/AXL-L				•		Ikaros			•	•		
BDNF				•		Contactin-2/TAG-1				•	•	GASP-1				•		IL-1α	•	•	•	•		
Betacellulin				•		Corin/ATC				•	•	GCPII/PSMA				•		IL-1β	•	•	•	•		
Bikunin				•		C-Peptide				•	•	G-CSF				•	•	IL-2	•	•	•	•		
BIM/Bcl2-L11				•		CRP			•	•	•	GDF-15				•		IL-2Rα			•	•		
BMP-10				•		CRTAM/CD355				•	•	GDF-8				•		IL-2Rγ			•	•		
BMP-11/GDF-11				•		CTACK				•	•	Gelsolin				•		IL-3	•	•	•	•		
BMP-2				•		CTLA-4			•	•	•	GFAP				•		IL-4	•	•	•	•		
BMP-4				•		CXCL15				•	•	Ghrelin (active)				•		IL-5	•	•	•	•		
BMP-5				•		Cystatin B				•	•	Ghrelin (total)				•		IL-6	•	•	•	•		
BMP-6				•		Cystatin C				•	•	GIP (active)				•		IL-6Rα			•	•		
BMP-7				•		Cytokeratin-19				•	•	GIP (inactive)				•		IL-7	•	•	•	•		
BMP-9/GDF-2				•		Cytokeratin-8				•	•	GIP (total)				•		IL-8	•	•	•	•		
BNP				•	•	Decorin				•	•	GITR/TNFRSF18				•		IL-9	•	•	•	•		
BTLA				•		Delta-like 1				•	•	GITRL/TNFSF18				•		IL-10	•	•	•	•		
C1q receptor				•		Delta-like 4				•	•	Glicentin				•					•	•		

Analytes	V	S	U	R	T	Analytes	V	S	U	R	T	Analytes	V	S	U	R	T	Analytes	V	S	U	R	T
IL-11						MCP-4						PDGF-C						STAT4 (pY693)					
IL-12/IL-23p40						MCP-5/CCL12						PD-L1						STAT5a/b					
IL-12p70						M-CSF						PD-L1 (epitope 1)						STAT5a/b (pY694)					
IL-13						MDC						PD-L2						sTfR-1					
IL-15						MerTK						Pentraxin 2						sTroponin I (sTnI)					
IL-15R α						Mesothelin						Pentraxin 3						Syndecan-1					
IL-16						Met (soluble)						Perforin						Syndecan-4					
IL-17A						Meteorin-like						Periostin/OSF-2						TACI/TNFRSF13					
IL-17A/F						MIC-A						PF-4/CXCL4						TARC					
IL-17B						MIC-B						PIGF						Tau					
IL-17C						MIF						PP						Tau (pT181)					
IL-17D						MIG						PRAS40 (total)						Tau (pT231)					
IL-17E/IL-25						MIP-1 α						PRAS40 (pT246)						Tau (pT217)					
IL-17F						MIP-1 β						PRDX-1						Tau (total)					
IL-17RB						MIP-1 γ /CCL9						PRDX6						TDP-43					
IL-18						MIP-2						Presenilin-1 NTF						TECH/CCL25					
IL-18BP						MIP-3 α						proCollagen alpha-1						Tenascin C					
IL-19						MIP-3 β						proCollagen II						TFF2					
IL-20						MIP-4						Progranulin						TFF3					
IL-1R2						MIP-5						Proinsulin						TFPI					
IL-1RA						MMP-1						Prolactin						TfR-1 (soluble)					
IL1RL1/ST2						MMP-2						proMMP-10						TGF- α					
IL-21						MMP-3						proMMP-13						TGF- β RII					
IL-22						MMP-3 (total)						proMMP-9						TGF- β RIII					
IL-22R α 2						MMP-7						Protein C Receptor						TGF-b1					
IL-23						MMP-8						PS- β -G1						TGF-b2					
IL-23R						MMP-9						PSD-95						TGF-b3					
IL-24						MMP-9 (active)						PTEN (total)						TGM-2					
IL-27						MMP-9 (total)						P-Selectin						Thrombomodulin					
IL-27p28/IL-30						MMP-10 (total)						PSGL-1						Tie-2					
IL-28A/IFN- λ 2						MMP-14						PSP-D						TIGIT					
IL-28B/IFN- λ 3						MPIF-1/CCL23						PYY (active)						TIMP-1					
IL-29/IFN- λ 1						MPO						PYY (total)						TIMP-3					
IL-31						MSP						RAGE (soluble)						TLR1					
IL-33						MyD88						RANKL/TNFSF11						TNF- α					
IL-34						Myl3						RANTES						TNFAIP6/TSG-6					
IL-36 γ						Myoglobin						RBP4						TNF- β					
IL-36RA						Myosin BP (cardiac)						Reg-3-alpha						TNF-RI					
Influenza A NP						NAP-2/CXCL7						Relaxin-2						TNF-RII					
Influenza B NP						N-Cadherin						Renin						TNFRSF10C					
Insulin						NCAM-1						Resistin						tPA					
IP-10						Nectin-4						RGM-A						TPO					
IR (soluble)						Nephrin						S100A12						TRAIL					
IRS-1						Nepriiysin						S100A8/MRP8						TREM-1					
IRS-1 (S312)						Nesfatin-1						S100B						Trk-A (total)					
I-TAC						Neurofilament H						S6RP						Troponin I (cardiac)					
ITIH4						Neurofilament L						SAA						Troponin ITC					
Jagged-1						Neuronal pentraxin-1						sAPP α						Complex					
Kallikrein 3/PSA						Neuropilin-1						sAPP β						Troponin T (cardiac)					
KC/GRO						Neurotrophin-3						SARS-CoV-2 N						TSLP					
Ki-67						Neurotrophin-4						SARS-CoV-2 Spike						TSP-1					
Klotho						NGAL/LCN2						SCF						TSP-2					
Lactotransferrin						NPY						SCFR/Kit						TWEAK/TNFSF12					
LAG3						NT-proANP						Sclerostin						TYRO-3					
LBP						NT-ProBNP						SDF-1 α						UCH-L1					
LDL Receptor						Oncostatin-M						Serpin A1						ULBP-2					
Legumain						Osteoactivin						Serpin A12/ Vaspin						U-PAR					
Leptin						Osteocalcin						Serpin E1 (active)						Uromodulin					
LH						Osteonectin						Serpin E1 (inactive)						VCAM-1					
LIGHT/TNFSF14						Osteopontin						Serpin E1 (total)						VEGF-A					
LIX/CXCL5						Osteoprotegerin						Serpin F1/PEDF						VEGF-C					
LOX-1/OLR1						OX40/TNFRSF4						Serpin F2						VEGF-D					
LRRK2						OX40L						SerpinA4						VEGFR-2/KDR					
LRRK2 (pS935)						OXM/Glicentin						SHBG						VEGFR-3/Flt-4					
Lymphotactin						p38 (pT180/pY182)						SHP substrate 1						VILIP-1					
LYVE-1						PAF-AH						Siglec-6						Visfatin					
MAAdCAM-1						PC9/PCSK9						Siglec-7/CD328						VISTA/B7-H5					
MCAM/CD146						P-Cadherin						SOD2						Vit D Binding Protein					
Mcl-1/BAK Complex						PD1						SPINK-1						VTCN1/B7-H4					
Mcl-1/Bcl2-L-3						PD1 (epitope 1)						Spk1						vWF					
Mcl-1/BIM Complex						PD1 (epitope 2)						SR-PSOX/CXCL16						Wnt3 α					
MCP-1						PDGF-A						STAT3						YKL-40					
MCP-2						PDGF-A/B						STAT3 (pY705)						YM1					
MCP-3						PDGF-B						STAT4						ZnT8					

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The 6E10, 4G8, 12F4 antibodies used in MSD A β assays, the thrombomodulin antibody used in MSD Thrombomodulin assay, and the detection antibody used in some of the MSD Tau assays are supplied by BioLegend (previously Covance Research Products).

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