Quanterix™
The Science of Precision Health

Simoa® HD-1/HD-X Analyzer
Ultrasensitive Biomarker Assay Menu

Singleplex Advantage Assays - Human

Analyte	LoD (pg/mL)	LoQ (pg/mL)	Dynamic Range (pg/mL)	Median Endogenous (pg/mL)	Sample Volume[†]	Sample Type[††]	Catalog Number
Aβ40	0.522	1.23	0-800	65.97	32.5 µL	C, E	101672
Aβ42	0.044	0.137	0-400	4.7	32.5 µL	C, E	101664
C-Peptide	0.013	0.021	0-400	1559	32.5 µL	E, S	100199
Eotaxin/CCL-11	0.1	0.18	0-960	75.6	32.5 µL	E, S	101212
G-CSF	0.095	0.095	0-400	7.12	32.5 µL	E, S	101235
GM-CSF	0.0019	0.0103	0-120	0.0865	32.5 µL	E, S	102329
IFNα	0.0025	0.0047	0-150	0.0036	100 µL	S	100860
IFNγ	0.0155	0.098	0-100	0.522	65 µL	E, S	103337
IL-1β	0.016	0.083	0–240	0.058	100 µL	E, S	101605
IL-2	0.011	0.041	0-120	0.086	49.5 µL	E, S	101635
IL-4	0.0046	0.039	0-200	0.024	65 µL	E, S	100196
IL-5	0.004	0.0165	0-12	0.22	91 µL	E, S	102860
IL-6	0.0055	0.01	0-120	1.73	32.5 µL	E, S	101622
IL-7	0.009	0.103	0-600	28.0	32.5 µL	E, S	103277
IL-8	0.056	0.0921	0-1,200	5.31	32.5 µL	E, S	100198
IL-10	0.0038	0.021	0-120	0.94	32.5 µL	E, S	101643
IL-12p70	0.0048	0.017	0-40	1.95	32.5 µL	E, S	100988
IL-13	0.002	0.005	0-30	0.039	65 µL	E, S	102732
IL-15	0.003	0.0062	0-40	3.23	32.5 µL	E, S	100794
IL-17A	0.0042	0.021	0-120	0.124	32.5 µL	E, S	101599
IP-10	0.052	0.177	0-800	105	32.5 µL	E, S	101132
MCP-1	N/A	0.153	0-800	85.3	32.5 µL	E, S	101154
NF-light™	0.038	0.174	0-2,000	5.33	45.5 µL	C, E, S	102258
HIV p24	0.0027	0.01	N/A	N/A	154 µL	E, S	102215
PSA	0.015	0.024	0-400	1.81	32.5 µL	E, S	101478
Tau	0.019	0.061	0-360	1.65	45.5 µL	C, E, S	101552
SARS-CoV-2 Spike IgG (HD-X Only)	15.0	8,200	0-280,000,000	32,000 (pre-pand) 3,360,000 (PCR Pos)	5 µL	E, S	103769
SARS-CoV-2 N Protein Antigen (HD-X Only)	0.099	0.313	0-800	2,338 (PCR Pos)	32.5 µL	NP Swab	103806
SNAP-25	0.880	2.56	0-1,000	59.6	32.5 µL	C	103575
pTau-181	0.724	2.640	0-85	32.0	32.5 µL	C	103377
pTau-181 V2	0.028	0.085	0-412	0.856	32.5 µL	C, E, S	103714
pTau-231	0.621	1.83	0-1,200	20.8	45.5 µL	C	102292
TDP-43	2.48	8.23	0-8,000	130	32.5 µL	C, E, S	103293
TNF-α	0.016	0.034	0-400	1.94	32.5 µL	E, S	101580
TRAIL	0.0083	0.0177	0-400	23.1	32.5 µL	E, S	100906

[†] Volumes shown are for at bench dilutions. On-instrument dilutions require higher sample volumes | [††] C = CSF, E = EDTA plasma, S = serum

Multiplex Advantage Assays - Human

Assay	Analytes	LoD (pg/mL)	LoQ (pg/mL)	Dynamic Range (pg/mL)	Median Endogenous (pg/mL)	Sample Volume[†]	Sample Type[††]	Catalog Number
Neurology 2-Plex B	GFAP	0.475	4.15	0-40,000	36.9	32.5 µL 5 µL (CSF)	C, E, S	103520
	Nf-L	0.065	0.20	0-2000	3.63			
Neurology 3-Plex A	Aβ40	0.196	0.675	0-800	209	45.5 µL 5 µL (CSF)	C, E	101995
	Aβ42	0.045	0.142	0-400	11.1			
	Tau	0.019	0.063	0-400	1.43			
Neurology 4-Plex A	GFAP	0.221	0.467	0-4,000	89.7	45.5 µL 5 µL (CSF)	C, E, S	102153
	Nf-L	0.104	0.241	0-2000	10.6			
	Tau	0.024	0.053	0-400	2.21			
	UCH-L1	1.74	5.45	0-40,000	12.21			
Neurology 4-Plex B	GFAP	1.18	9.38	0-40,000	50.0	32.5 µL 5 µL (CSF)	C, E, S	103345
	Nf-L	0.096	0.500	0-2,000	5.91			
	Tau	0.037	0.125	0-400	0.95			
	UCH-L1	2.43	9.38	0-40,000	6.81			
Neurology 4-Plex E	Aβ40	0.384	1.02	0-280	89.4	32.5 µL 5 µL (CSF)	C, E	103670
	Aβ42	0.136	0.378	0-100	5.69			
	GFAP	0.441	2.89	0-20,000	52.2			
	Nf-L	0.090	0.400	0-2,000	10.0			

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Simoa Discovery assay kits are provided as complete kits packaged with reagents for processing up to 192 samples. Includes calibrator concentrate, calibrator diluent, bead stock, bead diluent, detector stock, detector diluent, SBG concentrate, SBG diluent, RGP, and sample diluent. Representative performance is determined in biological matrices and includes:

- Dynamic range
- Sensitivity
- Calibration curve fitting
- Intra-run, inter-plate, and inter-lot precision and accuracy

- Robustness and stability of calibrators, antibodies, and controls
- Analysis of normal samples for the specified species to determine the normal range of biomarker concentration detected with the assay
- Specificity, spike recovery, and dilution linearity

Discovery Assays – Human

Analyte	LoD (pg/mL)	LoQ (pg/mL)	Dynamic Range (pg/mL)	Median Endogenous (pg/mL)	Sample Volume[†]	Sample Type[††]	Catalog Number
α-Synuclein	0.955	4.12	0-10,000	4,145	18.2 µL	C, E, S	102233
BDNF	0.011	0.034	0-64,000	11,306	5 µL	C, E, S	102039
CA-125	0.003 U/mL	0.010 U/mL	0-200 U/mL	1.62 U/mL	13 µL	E, S	102136
Cathepsin S	0.7	1.95	0-200	6,566	5 µL	E, S	102064
CEA	0.486	2.33	0-85 ng/mL	1511.5	5 µL	E, S	102556
c-MET	0.036	0.244	0-800	58,012	5 µL	E, L, S	102073
CRP	0.048	0.686	0-48	19	5 µL	E, S	102583
CXCL13	0.048	0.07	0-800	22.63	32.5 µL	E, S	102635
GFAP	0.211	0.686	0-4,000	88	45.5 µL	C, E, S	102336
HE4 / WFDC2	0.135	0.977	0-4,000	104	32.5 µL	E, S	103059
IL-1α	0.004	0.01	0-60	0.0293	65 µL	E, S	101968
IL-3	0.226	0.686	0-2000	0.279	45.5 µL	E, S	102462
IL-17C	0.065	0.206	0-1,200	1.66	32.5 µL	E, S	102570
IL-18	0.004	0.012	0-2250	200.1	5 µL	C, E, S	102700
IL-22 (Total)	0.0054	0.0103	0-120	7.16	32.5 µL	E, S	103071
IL-28A	0.022	0.069	0-200	0.303	65 µL	E, S	101419
IL-36β	0.01	0.206	0-600	0.426	32.5 µL	E, S	101808
Leptin	2.46	4.94	0-60,000	6,083	5 µL	E, S	101855
LIF	0.015	0.086	0-520	0.412	32.5 µL	E, S	102394
MCP-3	0.124	0.309	0-450	0.445	75 µL	E, S	102382
MMP-9	0.581	4.88	0-5,000 ng/ml	555	5 µL	C, E, S	102491
pNF-heavy	0.663	2.88	0-8,400	30.82	32.5 µL	C, E, S	102669
NSE	1.296	9.88	0-120	7,845	5 µL	C, E, S	102475
PD-1	0.247	0.879	0-7200	73	32.5 µL	E, S	102929
PD-L1	0.055	0.617	0-4,300	33.79	6.5 µL	E, S	102648
PlGF	0.064	0.3	0-960	3.82	37.5 µL	E, S	102318
TGFα	0.031	0.207	0-900	3.34	65 µL	E, S	101863
TGFβ	0.137	0.514	0-24,000	34,836	8.5 µL	E, S	101984
UCH-L1	1.05	3.43	0-20,000	9.51	45.5 µL	C, E, S	102343
VEGF	0.041	0.137	0-800	3.49	32.5 µL	E, S	102794

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Discovery Assays – Mouse

Analyte	LoD (pg/mL)	LoQ (pg/mL)	Dynamic Range (pg/mL)	Median Endogenous (pg/mL)	Sample Volume[†]	Sample Type[††]	Catalog Number
IL-1α	0.0085	0.060	0-700	1.063	13 µL	E, S	102504
IL-1β	0.004	0.021	0-120	0.201	32.5 µL	E, S	102517
IL-6	0.035	0.120	0-700	16.0	32.5 µL	E, S	102109
IL-17A	0.088	0.206	0-2,400	33.76	17 µL	E, S	101824
IL-17F	0.102	0.412	0-2,400	11.01	32.5 µL	E, S	101839
IL-22	0.095	0.206	0-1,200	273.3	32.5 µL	E, S	101919
IL-23	0.033	0.137	0-800	4.89	32.5 µL	E, S	101847
TNF-α	0.132	1.230	0-7,200	22.6	32.5 µL	E, S	102100
Tau	0.615	0.823	0-2,400	26.7	32.5 µL	C, E, S	102209

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