



Neuroinflammation Panel 1 (human) Kits

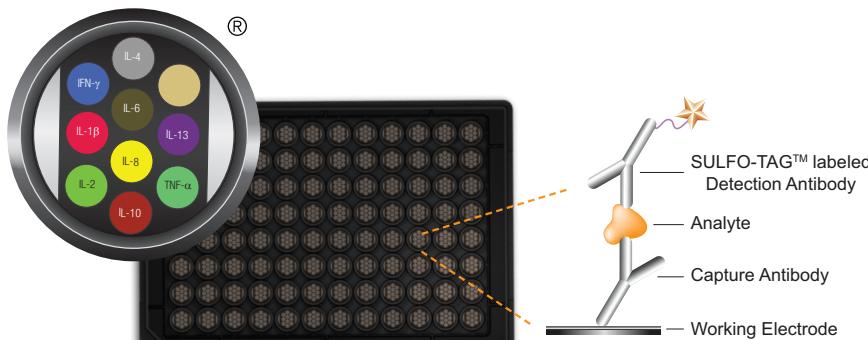
For use with cerebral spinal fluid (CSF), serum, plasma, urine, and cell culture supernatants

V-PLEX® from MESO SCALE DISCOVERY®

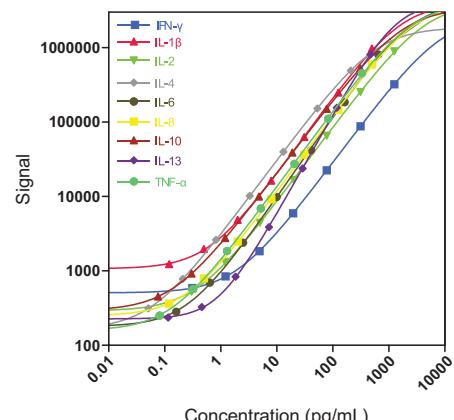
Validated Cytokine Assays for Unsurpassed Performance and Quality

- Validated across multiple lots
- Tested with diverse clinical sample matrices
- Requires minimal CSF sample volume

Proprietary immunoassay technology



Wide dynamic range



V-PLEX® Neuroinflammation Panel 1 (human)

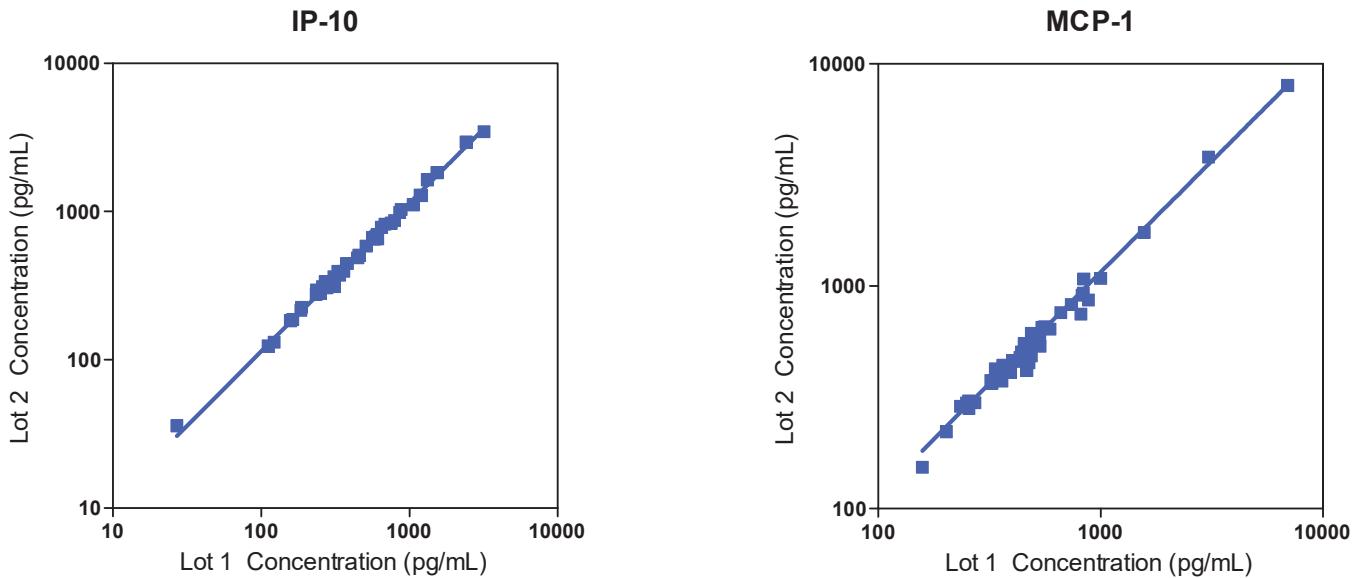
<input type="checkbox"/> IFN- γ	<input type="checkbox"/> IL-1 α	<input type="checkbox"/> Eotaxin	<input type="checkbox"/> VEGF-C	<input type="checkbox"/> SAA
<input type="checkbox"/> IL-1 β	<input type="checkbox"/> IL-5	<input type="checkbox"/> MIP-1 β	<input type="checkbox"/> VEGF-D	<input type="checkbox"/> CRP
<input type="checkbox"/> IL-2	<input type="checkbox"/> IL-7	<input type="checkbox"/> Eotaxin-3	<input type="checkbox"/> Tie-2	<input type="checkbox"/> VCAM-1
<input type="checkbox"/> IL-4	<input type="checkbox"/> IL-12/IL23p40	<input type="checkbox"/> TARC	<input type="checkbox"/> Flt-1	<input type="checkbox"/> ICAM-1
<input type="checkbox"/> IL-6	<input type="checkbox"/> IL-15	<input type="checkbox"/> IP-10	<input type="checkbox"/> PIGF	
<input type="checkbox"/> IL-8	<input type="checkbox"/> IL-16	<input type="checkbox"/> MIP-1 α	<input type="checkbox"/> bFGF	
<input type="checkbox"/> IL-10	<input type="checkbox"/> IL-17A	<input type="checkbox"/> MCP-1		
<input type="checkbox"/> IL-13	<input type="checkbox"/> TNF- β	<input type="checkbox"/> MDC		
<input type="checkbox"/> TNF- α	<input type="checkbox"/> VEGF	<input type="checkbox"/> MCP-4		

For Research Use Only. Not for use in diagnostic procedures.

Lot-to-Lot Reproducibility

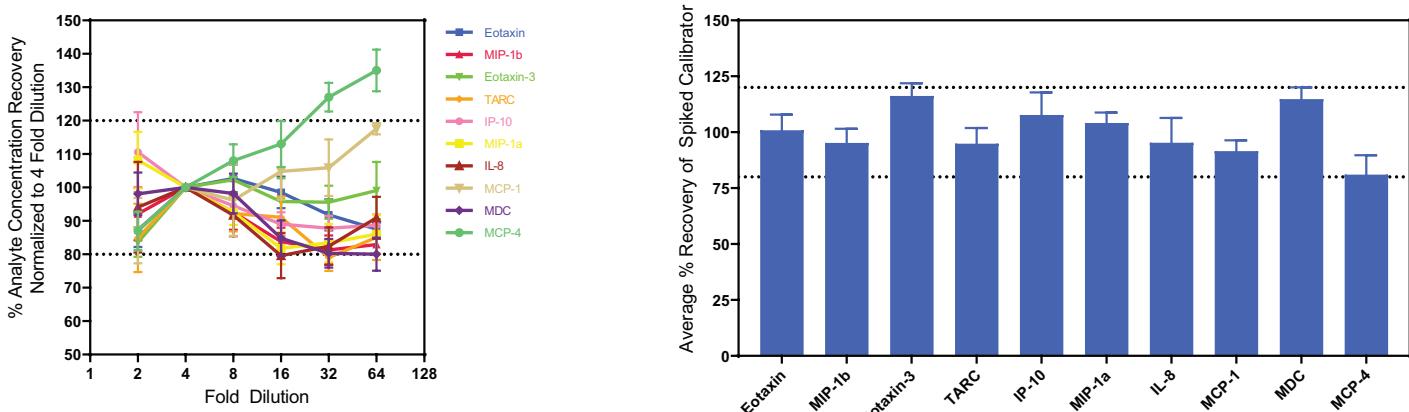
V-PLEX products are developed under design control and are fully validated in multiple matrices according to fit-for-purpose principles.¹ V-PLEX assays provide unsurpassed performance and consistency within and between lots.

Shown below are representative data for IP-10 and MCP-1 measured from samples using 2 kit lots.



Dilution Linearity and Matrix Recovery

Dilution linearity and spike recovery tests were performed on multiple lots. Representative data from one kit lot and from selected analytes are shown below.

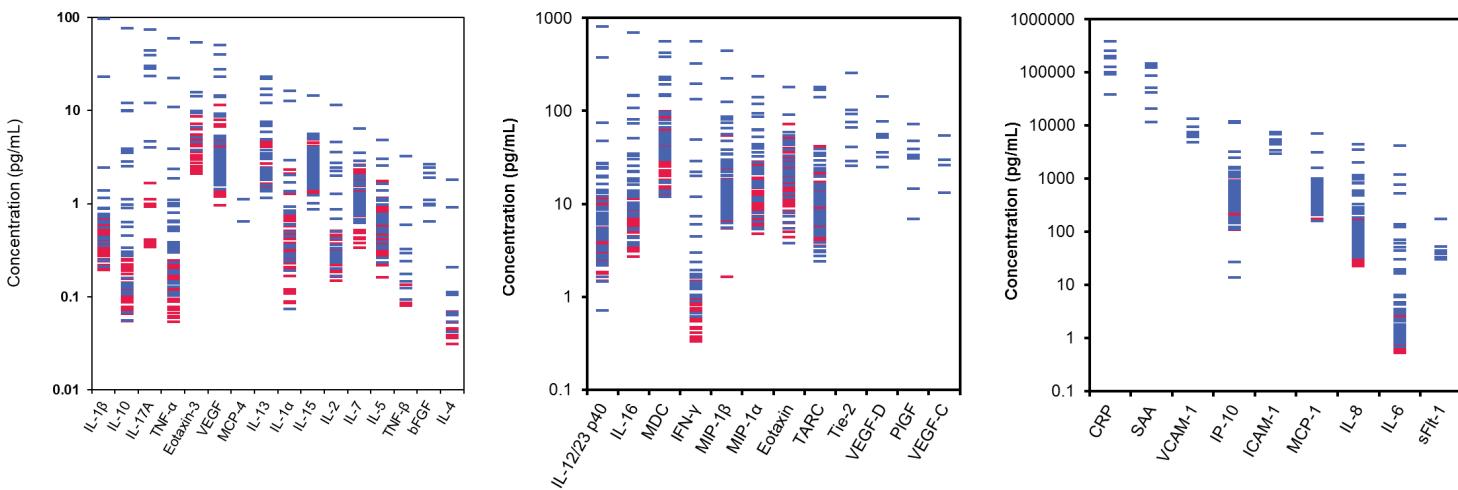


1. Lee JW, et al. Fit-for-purpose method development and validation for successful biomarker measurement. Pharm Res. 2006;23:312-28.

Neuroinflammation: a Key Player in Neurological Disorders

A large body of evidence implicates neuroinflammation as an important component of many neurological diseases. Preclinical and clinical data suggest that inflammation may be a valid drug target for intervention in Alzheimer's disease (AD) and other neurological diseases. Our panel of 37 biomarkers was used to analyze a large number of human CSF samples from patients with AD, Parkinson's disease, and other neurological disorders as well as healthy volunteers.

Shown below – Wide dynamic range enables quantitation of both normal (control) and diseased CSF samples.



Analyte	N	Median (pg/mL)	Range (pg/mL)	% Detected
CRP	21	30,864	1,166–1,036,505	95
Eotaxin	121	19.0	3.74–179	64
Eotaxin-3	121	4.35	2.10–53.9	26
bFGF	8	1.50	0.64–2.64	100
Flt-1	8	104	50.8–1,275	100
ICAM-1	21	4,300	1,692–46,400	100
IFN-γ	121	0.99	0.33–554	50
IL-1α	121	0.37	0.07–16.3	61
IL-1β	121	0.40	0.20–97.2	44
IL-2	121	0.30	0.15–11.6	44
IL-4	121	0.06	0.03–1.80	15
IL-5	121	0.51	0.16–4.80	66
IL-6	121	1.39	0.52–4,105	74
IL-7	121	1.08	0.33–6.42	88
IL-8	121	56.1	22.3–4,418	98
IL-10	121	0.15	0.05–76.9	55
IL-12/IL-23p40	121	4.39	0.70–795	93
IL-13	121	2.68	1.16–23.1	40
IL-15	121	2.55	0.87–14.5	98

Analyte	N	Median (pg/mL)	Range (pg/mL)	% Detected
IL-16	121	7.89	2.68–687	67
IL-17A	121	1.68	0.34–74.4	16
IP-10	121	385	13.7–11,616	93
MCP-1	121	440	158–6927	98
MCP-4	5	0.87	0.64–1.11	40
MDC	121	38.3	11.9–557	78
MIP-1α	121	13.6	4.73–235	70
MIP-1β	121	12.7	1.64–439	98
PIGF	8	99.7	73.2–118	100
SAA	21	11,386	854–167,422	90
TARC	121	10.1	2.40–177	97
Tie-2	8	108	90.0–151	100
TNF-α	121	0.18	0.05–59.5	60
TNF-β	121	0.16	0.08–3.25	12
VCAM-1	21	10,337	4,774–79,482	100
VEGF	121	2.74	0.96–51.0	82
VEGF-C	8	63.1	48.7–115	75
VEGF-D	8	54.5	31.0–151	100



Neuroinflammation Panel	Assays	Catalog Numbers
V-PLEX Plus Neuroinflammation Panel 1 (human) Kit	IFN-γ, IL-1β, IL-2, IL-4, IL-6, IL-8, IL-10, IL-13, TNF-α, IL-1α, IL-5, IL-7, IL-12/23p40, IL-15, IL-16, IL-17A, TNF-β, VEGF, Eotaxin, MIP-1β, Eotaxin-3, TARC, IP-10, MIP-1α, MCP-1, MDC, MCP-4, VEGF-C, VEGF-D, Tie-2, Flt-1, PIGF, bFGF, SAA, CRP, VCAM-1, ICAM-1	K15210G

Related Products

Neurodegeneration Panels	Assays	Catalog Numbers
Aβ Peptide Panel 1 (6E10)	Aβ38 (6E10), Aβ40 (6E10), Aβ42 (6E10)	K15200G
Aβ Peptide Panel 1 (4G8)	Aβ38 (4G8), Aβ40 (4G8), Aβ42 (4G8)	K15199G

V-PLEX kits include:

- Blended calibrator
- Individual detection antibodies
- Diluents
- Comprehensive product insert
- Certificate of analysis

V-PLEX Plus kits include:

- Blended calibrator
- Individual detection antibodies
- Diluents
- Comprehensive product insert
- Certificate of analysis
- Controls
- Wash buffer
- Plate seals

Custom combinations of the assays above may be ordered online at www.mesoscale.com/V-PLEX.

Phone: 1-240-314-2795 . Fax: 1-301-990-2776

Email: customerservice@mesoscale.com

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