MSD® Human I-309 Kit

For quantitative determination in human serum and plasma

Working Electrode

Alzheimer's Disease BioProcess Cardiac Cell Signaling Clinical Immunology

Cytokines
Growth Factors
Hypoxia
Immunogenicity
Inflammation
Metabolic
Oncology

Toxicology

Vascular

Catalog Numbers

Human I-309 Kit		
Kit Size	Catalog #	
1 plate	K151NXD-1	
5 plates	K151NXD-2	
25 plates	K151NXD-4	

Ordering Information

MSD Customer Service Phone: 1-301-947-2085 Fax: 1-301-990-2776 Email: CustomerService@ mesoscale.com

Company Address

MESO SCALE DISCOVERY® A division of Meso Scale Diagnostics, LLC. 1601 Research Boulevard Rockville, MD 20850 USA

www.mesoscale.com®

For Research Use Only. Not for use in diagnostic procedures. 1. I-309
2. BSA blocked
3. BSA blocked
4. BSA blocked

Detection Antibody

Analyte

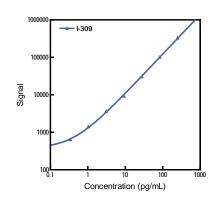
Capture Antibody

Chemokines are the largest cytokine family; they exert effects by binding to G-protein-coupled receptors. I-309/CCL1 is a human chemokine which is structurally related to other pro-inflammatory cytokines sharing three conserved C-terminal basic amino acids. I-309 is a selective ligand for the CCR8 receptor; receptor binding modulates recruitment of monocytes, natural killer cells, immature B cells, and dendritic cells. In addition to pro-inflammatory functions, I-309 modulates apoptosis and angiogenesis and protects murine thymic lymphoma cell lines against dexamethasone-induced apoptosis. In addition to pro-inflammatory functions, I-309 modulates apoptosis and angiogenesis and protects murine thymic lymphoma cell lines against dexamethasone-induced apoptosis.

The assay is available on 96-well, 4-spot plates. Representative data from the assay is presented below. Visit www.mesoscale.com for a complete listing of our products.

Assay Sensitivity

The following standard curves illustrate the dynamic range of the Human I-309 assay.



	I-309
Average LLOD (ng/mL)	0.431
LLOD Range (ng/mL)	0.408-0.461

The lower limit of detection (LLOD) is a calculated concentration based on a signal 2.5 standard deviations above the background (zero calibrator blank). The LLOD shown above was calculated based on 4 runs.

MSD Advantage

- Multiplexing: Multiple analytes can be measured in one well using typical sample volumes of 25 μL or less without compromising speed or performance
- Large dynamic range: Linear range of up to five logs enables the measurement of native levels of biomarkers in normal and diseased samples without multiple dilutions
- Minimal background: The stimulation mechanism (electricity) is decoupled from the response (light signal), minimizing matrix interference
- Simple protocols: Only labels bound near the electrode surface are excited, enabling assays with fewer washes
- Flexibility: Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- > High sensitivity and precision: Multiple rounds of label excitation and emission enhance light levels and improve sensitivity

For a complete list of products, please visit our website at www.mesoscale.com.





MSD Cytokine Assays

References

- 1. Miller MD, Krangel MS. The human cytokine I-309 is a monocyte chemoattractant. Proc Natl Acad Sci USA. 1992 Apr 1;89(7):2950-4.
- 2. Zingoni A, et al. The chemokine receptor CCR8 is preferentially expressed in Th2 but not Th1 cells. J Immunol. 1998 Jul 15;161(2):547-51.
- 3. Tiffany HL, et al. Identification of CCR8: a human monocyte and thymus receptor for the CC chemokine I-309. J Exp Med. 1997 Jul 7;186(1):165-70.
- 4. Roos RS, et al. Identification of CCR8, the receptor for the human CC chemokine I-309. J Biol Chem. 1997 Jul 11;272(28):17251-4.
- Goya I, et al. Identification of CCR8 as the specific receptor for the human beta-chemokine I-309 cloning and molecular characterization of murine CCR8 as the receptor for TCA-3. J Immunol. 1998 Feb 15;160(4):1975-81.
- Denis C, et al. C-Terminal Clipping of Chemokine CCL1/I-309 Enhances CCR8-Mediated Intracellular Calcium Release and Anti-Apoptotic Activity. PLoS One. 2012;7(3):e34199. Epub 2012 Mar 2.

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