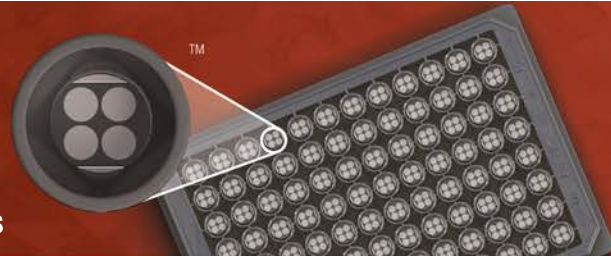
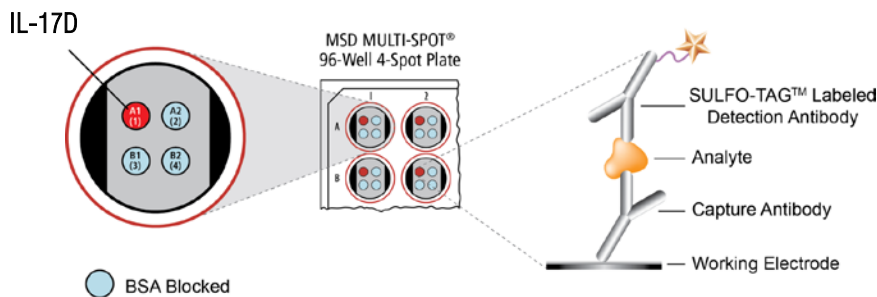


MSD[®] Human IL-17D Kit

For quantitative determination in human serum, plasma, and tissue culture supernatants



Alzheimer's Disease
BioProcess
Cardiac
Cell Signaling
Clinical Immunology
Cytokines
Growth Factors
Hypoxia
Immunogenicity
Inflammation
Metabolic
Oncology
Toxicology
Vascular



Catalog Numbers

Human IL-17D Kit	
Kit size	
1 plate	K151MMD-1
5 plates	K151MMD-2
25 plates	K151MMD-4

The **Interleukin-17 (IL-17)** cytokines are emerging as key regulators of initiation and maintenance of the proinflammatory immune response. The family consists of six related molecules: IL-17A, IL-17B, IL-17C, **IL-17D**, IL-17E, and IL-17F. These molecules have a molecular mass of 20–30 kDa and share 20–50% homology to IL-17A. In general, IL-17 induces several pro-inflammatory molecules, such as IL-6, IL-8, GM-CSF, IL-1, TNF- α , and MCP-1, from different cell types including fibroblasts, endothelial cells, epithelial cells, and tissue-specific macrophages. Thus, it makes sense that these cytokines are linked to inflammatory diseases including rheumatoid arthritis, asthma, lupus, allograft rejection, and tumorigenicity. However, differences in expression patterns and production levels appear to give specificity of action and role to each of the family members.¹

In contrast to other IL-17 members, IL-17D is preferentially expressed in skeletal muscle, brain, adipose tissue, heart, lung, and pancreas.² IL-17D likely plays a role in local immune responses at the site of structural damage, such as that observed in trauma, myocardial infarction, or stroke. It is also possible that IL-17D is important to growth or repair of those tissues after damage. IL-17D may amplify the local primary immune response to rapidly produce a localized infiltration of T-cells to clear damaged cells, while suppressing myeloid progenitor cell production and promoting repair.³

The MSD Human IL-17D assay is available on 96-well 4-spot plates. This datasheet outlines the performance of the assay.

Ordering information

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

Assay Sensitivity

	IL-17D
LLOD (pg/mL)	0.097

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

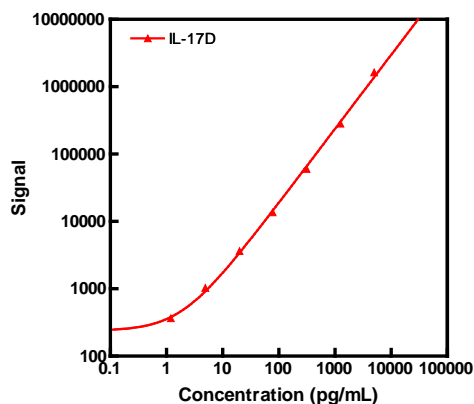
Company Address

MESO SCALE DISCOVERY[®]
division of
Meso Scale Diagnostics, LLC.
9238 Gaither Road
Gaithersburg, MD 20877 USA

www.mesoscale.com[®]

Typical Standard Curve

The following standard curve is an example of the wide dynamic range of the Human IL-17D assay.



	IL-17D	
Conc. (pg/mL)	Average Signal	%CV
0	160	3.1
1.2	350	14.4
4.9	899	0.2
20	3223	1.3
78	12 133	3.0
313	52 089	1.6
1250	225 065	1.3
5000	1 007 511	1.3

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

MSD Cytokine Assays

MSD Advantage

- **Multiplexing:** Multiple analytes can be measured in one well 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 signal (light)
- **Simple protocols:** Only labels near the electrode surface are detected, enabling no-wash assays
- **Flexibility:** Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- **High sensitivity and precision:** Multiple excitation cycles of each label enhance light levels and improve sensitivity

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

References

1. Pappu R, Ramirez-Carrozzi V, Sambandam A. The interleukin-17 cytokine family: critical players in host defence and inflammatory diseases. *Immunology*. 2011 Sep;134(1):8-16.
2. Li H, Chen J, Huang A, Stinson J, Heldens S, Foster J, Dowd P, Gurney AL, Wood WI. Cloning and characterization of IL-17B and IL-17C, two new members of the IL-17 cytokine family. *Proc Natl Acad Sci U S A*. 2000 Jan 18;97(2):773-8.
3. Starnes T, Broxmeyer HE, Robertson MJ, Hromas R. Cutting edge: IL-17D, a novel member of the IL-17 family, stimulates cytokine production and inhibits hemopoiesis. *J Immunol*. 2002 Jul 15;169(2):642-6.

MESO SCALE DISCOVERY, MESO SCALE DIAGNOSTICS, WWW.MESOSCALE.COM, MSD, MSD (DESIGN), DISCOVERY WORKBENCH, QUICKPLEX, MULTI-ARRAY, MULTI-SPOT, SULFO-TAG, SECTOR, SECTOR HTS, SECTOR PR, 4-SPOT (DESIGN) and SPOT THE DIFFERENCE are trademarks and/or service marks of Meso Scale Diagnostics, LLC.
© 2012 Meso Scale Diagnostics, LLC. All rights reserved.

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

