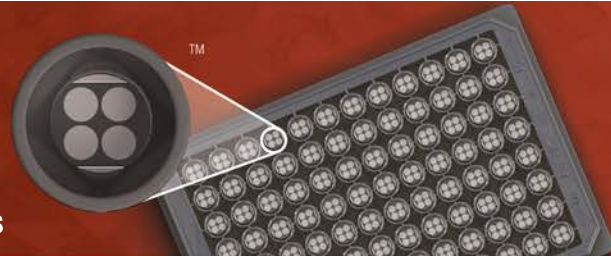


# MSD<sup>®</sup> Human IL-17B Kit

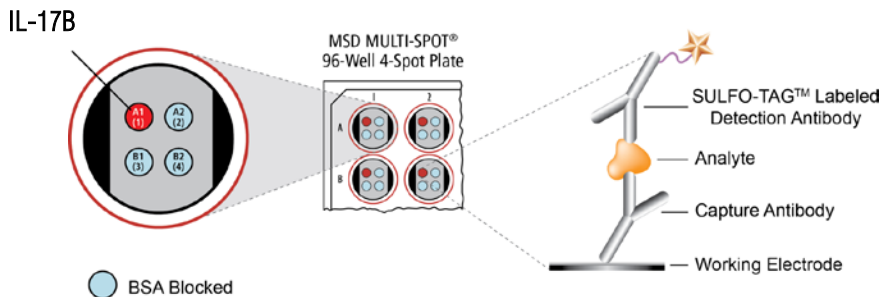
For quantitative determination in human serum, plasma, and tissue culture supernatants



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

## Catalog Numbers

Human IL-17B Kit	
Kit size	
1 plate	K151MLD-1
5 plates	K151MLD-2
25 plates	K151MLD-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- $\alpha$ , 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.<sup>1</sup>

IL-17B is expressed in normal pancreas, small intestine, testis, and stomach. In contrast to other family members, IL-17B stimulates significant induction of TNF- $\alpha$  and IL-1 $\beta$  in monocytes but limits production of IL-6, at least in vitro.<sup>2</sup> In addition, IL-17B is antiangiogenic as it can inhibit endothelial cell migration and tubule formation with little effect on endothelial cell growth. This is opposite to the role of IL-17A which promotes these processes.<sup>3</sup> Therefore, tissue-specific proinflammatory or inhibitory cytokine functions may be regulated by localized concentrations of different IL-17 family members based on their expression patterns and target cell populations.

The MSD Human IL-17B 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-17B
LLOD (pg/mL)	0.19

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

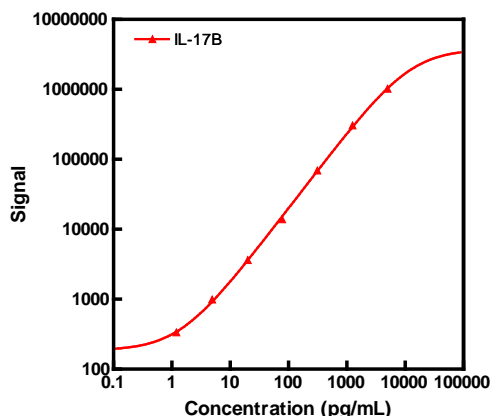
## Company Address

MESO SCALE DISCOVERY<sup>®</sup>  
division of  
Meso Scale Diagnostics, LLC.  
9238 Gaither Road  
Gaithersburg, MD 20877 USA

[www.mesoscale.com](http://www.mesoscale.com)<sup>®</sup>

## Typical Standard Curve

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



	IL-17B	
Conc. (pg/mL)	Average Signal	%CV
0	127	8.1
1.2	335	3.9
4.9	990	3.4
20	3621	4.2
78	13 932	3.8
313	69 113	4.8
1250	305 789	0.9
5000	1 020 229	2.1

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](http://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. Sanders AJ, Guo X, Mason MD, Jiang WG. IL-17B Can Impact on Endothelial Cellular Traits Linked to Tumour Angiogenesis. *J Oncol*. 2010:817375.

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