

**IL-19**  
**Catalog # PVGS1146****Specification**

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**IL-19 - Product Information**

Primary Accession [Q9UHD0](#)  
**Species**  
Human

**Sequence**  
Leu25-Ala177 (Phe175Ser)

**Purity**  
> 95% as analyzed by SDS-PAGE  
> 95% as analyzed by HPLC

**Endotoxin Level**  
< 1 EU/ µg of protein by LAL method

**Biological Activity**  
Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation assay using human IL-20Rα and human IL-20Rβ co-transfected murine BaF3 pro-B cells is less than 1.5 ng/ml, corresponding to a specific activity of > 6.7 × 10<sup>5</sup> IU/mg.

**Expression System**  
E. coli

**Theoretical Molecular Weight**  
17.9 kDa

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.**

**Reconstitution**  
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in 100 mM HAC up to 0.1-1.0 mg/ml.

**Storage & Stability**  
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

**IL-19 - Additional Information**

**Gene ID** 29949

**Other Names**  
Interleukin-19, IL-19, Melanoma differentiation-associated protein-like protein, NG.1, IL19, ZMDA1

**Target Background**

Interleukin-19 (IL-19) is a cytokine belonging to the interleukin family. Structurally, IL-19 is grouped into the IL-10 sub-family, which also includes IL-20, IL-22, IL-24, and IL-26. In contrast to IL-10, which exists as a homodimer, IL-19 is stable and active as a monomer in vivo. IL-19 functions through the receptor complex composed of IL-20 Receptor  $\alpha$  and IL-20 Receptor  $\beta$ , which is also utilized by IL-20 and IL-24. IL-19 is produced by active monocytes and stimulated synergistically by IL-17 and IL-13. The functions of IL-19 are to promote the development and function of Th2 cells and to enhance the production of Th2 cytokines. IL-19 is implicated in aging, vascular disease, Type I diabetes, and rheumatoid arthritis.

## IL-19 - Protein Information

**Name** IL19

**Synonyms** ZMDA1

### Function

Cytokine that functions as an anti-inflammatory and proangiogenic factor (PubMed:<a href="http://www.uniprot.org/citations/34932373" target="\_blank">34932373</a>). Polarizes adaptive immunity to an anti-inflammatory phenotype through induction of T-helper 2 responses by both down-regulation of IFN-gamma and up-regulation of IL4 and IL13 (PubMed:<a href="http://www.uniprot.org/citations/16365913" target="\_blank">16365913</a>). Produced by osteocytes, stimulates granulopoiesis and neutrophil formation (By similarity). Exerts its biological effect through a receptor complex consisting of a heterodimer of IL20RA and IL20RB (PubMed:<a href="http://www.uniprot.org/citations/12351624" target="\_blank">12351624</a>). In turn, activates the Janus kinase (JAK) and signal transducer and activator of transcription (STAT) pathway, and importantly, STAT3 (PubMed:<a href="http://www.uniprot.org/citations/11564763" target="\_blank">11564763</a>).

### Cellular Location

Secreted.

## IL-19 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## IL-19 - Images