

#### **IL-19**

Catalog # PVGS1146

# **Specification**

#### IL-19 - Product Information

Primary Accession **Species**Human

Q9UHD0

**Sequence** 

Leu25-Ala177 (Phe175Ser)

**Purity** 

> 95% as analyzed by SDS-PAGE<br/>br>> 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-20R $\alpha$  and human IL-20R $\beta$  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  $\mu$ m 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 $^{\circ}$ C or -20 $^{\circ}$ C. Upon reconstitution, the product should be stable for up to 1 week at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C. Avoid repeated freeze-thaw cycles.

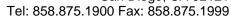
## IL-19 - Additional Information

**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 α and IL-20 Receptor β, 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# IL-19 - Images