

DESCRIPTION

Source *E. coli*-derived
Leu25-Ala177, with an N-terminal Met
Accession # AAN40906

N-terminal Sequence Analysis Met

Predicted Molecular Mass 18 kDa (monomer)

SPECIFICATIONS

Activity Measured in a cell proliferation assay using BaF3 mouse pro-B cells transfected with human IL-20 R α and human IL-20 R β .
The ED₅₀ for this effect is typically 0.5-1.5 ng/mL.

Endotoxin Level <0.10 EU per 1 μ g of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 10 μ g/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Interleukin 19 (IL-19) is a member of the IL-10 family of related cytokines. Its gene contains two alternate translation initiation sites, generating precursors of 215 amino acids (aa) and 177 aa, respectively. Both isoforms are processed to 17 kDa, 153 aa mature molecules. IL-19 contains seven helices and is secreted as a 35 kDa monomer. There are two potential N-linked glycosylation sites, and it is likely that the molecule is glycosylated. Mature human IL-19 shares 69% aa sequence identity with the mature mouse homologue. Although mouse IL-19 is active on human cells, human IL-19 is not active on mouse cells. IL-19 expression is limited to activated keratinocytes and monocytes. IL-19 binds a receptor complex consisting of the IL-20 receptor alpha (IL-20 R α , also known as IL-20 R1) and the IL-20 receptor beta (IL-20 R β or IL-20 R2). This receptor complex is also shared by IL-20 and IL-24. Functionally, IL-19 induces IL-6 and TNF- α production by monocytes, and drives T-helper cell differentiation towards a Th2 response (1 - 5).

References:

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4. Romer, J. *et al.* (2003) *J. Invest. Dermatol.* **121**:1306.
5. Pestka, S. *et al.* (2004) *Annu. Rev. Immunol.* **22**:929.