**DESCRIPTION**

Source  
*E. coli* derived Leu25-Glu176, with an N-terminal Met  
Accession # AAF36679

N-terminal Sequence  
Analysis  
Met

Predicted Molecular Mass  
17.6 kDa

**SPECIFICATIONS**

Activity  
Measured in a cell proliferation assay using BaF3 mouse pro-B cells transfected with human IL-20 Ra and human IL-20 Rβ. The EC_{50} for this effect is 0.2-0.6 ng/mL.

Endotoxin Level  
<0.01 EU per 1 μg 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 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

Reconstitution  
Reconstitute at 10 μg/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 20 (IL-20) was identified by searching sequence databases for translated sequences containing a signal sequence and amphipathic helices found in helical cytokines. Human IL-20 is synthesized as a 176 amino acid (aa) precursor with a 24 aa signal sequence and a 152 aa mature segment. There are no N-linked glycosylation sites and it is doubtful that the native molecule is glycosylated. Although IL-20 is a distant member of the IL-10 family, it functions as a monomer. IL-20 shares less than 40% aa sequence identity with other IL-10 family members. Mouse and human IL-20 share 77% aa sequence identity in their mature segments. Human IL-20 is active on mouse cells. IL-20 production has been found in skin and trachea. In particular, activated keratinocytes and, possibly, monocytes are reported to express IL-20. There are two heterodimeric receptor complexes for IL-20. The first is composed of IL-20 Ra and IL-20 Rβ. The second is composed of IL-22 R and IL-20 Rβ. Whereas the IL-22 R/IL-20 Rβ complex is shared with IL-24/MDA-7, the IL-20 Ra/IL-20 Rβ complex is shared with both IL-19 and IL-24. Little is known about the function of IL-20. It is reported to induce the proliferation of multipotential hematopoietic progenitor cells, direct the differentiation and expansion of keratinocytes, and promote the release of proinflammatory mediators in keratinocytes and other IL-20 receptor expressing cells (1 - 6).

**References:**