

IL-20, Human

Cat. No.: Z02714-10

Size: 10.0 ug

Synonyms: Interleukin-20 (IL-20), Human;

Description:

IL-20 is a member of the IL-10 family of regulatory cytokines which includes IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26. Members of this family share partial homology in their amino acid sequences but they are dissimilar in their biological functions. IL-20 is a hematopoietic growth factor capable of stimulating colony formation by CD34+ multipotential progenitors, but not by other progenitor cells. IL-20 signals through a receptor system composed of type I IL-20R- α and type II IL-20R- β . Over-expression of IL-20 in keratinocytes expressing both receptor subunits has been implicated in the induction of inflammatory skin disease.

Amino Acid Sequence:

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00001 MLKTLNLGSC VIATNLQEIR NGFSEIRGSV QAKDGNIDIR
00041 ILRRTESLQD TKPANRCCLL RHLLRLYLDR VFKNYQTPDH
00081 YTLRKISSLA NSFLTIKKDL RLCHAHMTCH CGEAMKKYS
00121 QILSHFEKLE PQAQVVKALG ELDILLQWME ETE
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using human IL-20R α and human IL-20R β co-transfected murine BaF3 pro-B cells is less than 0.5 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^6$ IU/mg.

Molecular Weight: Approximately 17.6 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.2, with trehalose.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rHuIL-20 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.