

## Recombinant Human IL-20

Catalog No: C147

<b>Description</b>	Recombinant Human Interleukin-20 is produced by our E.coli expression system and the target gene encoding Leu25-Glu176 is expressed.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Interleukin-20; IL-20; Cytokine Zcyto10; IL20; ZCYTO10
<b>Accession No.</b>	Q9NYY1
<b>Predicted Molecular Weight</b>	17.7KDa
<b>Apparent Molecular Weight</b>	17kDa, reducing conditions.
<b>Quality Control</b>	Purity: >95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
<b>Background</b>	Interleukin-20 (IL-20) is a member of the IL-10 family of regulatory cytokines that 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 exhibits approximately 28% amino acid identity with IL-10 and 76% amino acid identity with mouse IL-20. There are two heterodimeric receptor complexes for IL-20. The first is composed of IL-20 Rα 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, the IL-20 Rα/IL-20 Rβ complex is shared with both IL-19 and IL-24. IL-20 has been shown to initiate transduction cascades involving STAT3 and stimulates the induction of pro-inflammatory genes including TNF-α and MCP-1. Initial functional studies using transgenic mice suggest that IL-20 has the ability to regulate skin development. The over-expression of both human and mouse forms of IL-20 results in keratinocyte hyper-proliferation, abnormal epidermal differentiation, and neonatal lethality. In humans, IL-20 and its receptors are up-regulated in psoriatic skin, and polymorphisms in the IL-20 gene have been associated with plaque-type psoriasis. IL-20 may also have a role in hematopoiesis. It enhances the proliferation of multi-potential progenitors in vitro and increases their numbers and cell cycling status in IL-20 transgenic mice. IL-20 is also shown to suppress COX-2 and PGE2 and acts as an inhibitor of angiogenesis in model systems.

### SDS-PAGE

