

## 32-7128: Recombinant Human Interleukin-20/IL-20

**Gene :** IL20  
**Gene ID :** 50604  
**Uniprot ID :** Q9NYY1

### Description

Source: E.coli.  
MW :20.07kD.

Recombinant Human Interleukin-20 is produced by our E.coli expression system and the target gene encoding Leu25-Glu176 is expressed. 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 Ra and IL-20 R beta. The second is composed of IL-22 R and IL-20 R beta. Whereas the IL-22 R/IL-20 R beta complex is shared with IL-24, the IL-20 Ra/IL-20 R beta 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-a 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.  
**Storage condition :** 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.  
**Amino Acid :** MLKTLNLGSCVIATNLQEIRNGFSEIRGSVQAKDGNIDIRILRRTESLQDTKPANRCCLLRHLLRLYLDRVFKNYQTPDHYTLRKISSLANSLFTIKKDLRLCHAAMTCHCGEEAMKKYSQILSHFEKLEPQAQAVVKALGELDILLQWMEE TE

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.