



# Recombinant Protein Technical Manual

## Recombinant Mouse Interleukin8/IL8 Protein (His Tag)

RPES1686

### Product Data:

**Product SKU:** RPES1686

**Size:** 10µg

**Species:** Mouse

**Expression host:** E. coli

**Uniprot:** P70380

### Protein Information:

**Molecular Mass:** 19.7 kDa

**AP Molecular Mass:** 18 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Interleukin8;Il18;Interferon gamma-inducing factor;IFN-gamma-inducing factor;Interleukin gamma;IL gamma;lgif

## Immunogen Information:

**Sequence:** Asn36-Ser192

## Background:

Interleukin8 (IL8) is a protein which belongs to the IL family. It is expressed as a 24 kDa precursor by endothelial and epithelial cells, keratinocytes, gamma  $\delta$  T cells, and phagocytes. Mature mouse IL8 shares 63% and 91% amino acid sequence identity with mouse and rat IL8, respectively. IL8 binds to the widely expressed IL8 R alpha which recruits IL8 R beta to form the signaling receptor complex. Its bioactivity is negatively regulated by interactions with IL8 binding proteins and virally encoded IL8BP homologs. It augments natural killer cell activity in spleen cells and stimulates interferon gamma production in T-helper type I cells. In the presence of IL2 or IL5, IL8 enhances anti-viral Th1 immune responses by inducing IFN-gamma production and the cytolytic activity of CD8+ T cells and NK cells. In the absence of IL2 or IL5, however, IL8 promotes production of the Th2 cytokines IL-4 and IL3 by CD4+ T cells and basophils.