



Recombinant Protein Technical Manual  
Recombinant Human Interleukin8/IL8 Protein (GST  
Tag)  
RPES0519

### Product Data:

**Product SKU:** RPES0519

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q14116

### Protein Information:

**Molecular Mass:** 48.6 kDa

**AP Molecular Mass:**

**Tag:** N-GST

**Bio-activity:**

**Purity:** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**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 sterile PBS, pH 7.5

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

**Application:**

**Synonyms:** IGIF;IL8;ILg;IL1F4;Interleukin 18

## Immunogen Information:

**Sequence:** Met 1-Asp 193

## Background:

Interleukin8 (IL8, also known as interferon-gamma inducing factor) is a proinflammatory cytokine that belongs to the IL superfamily and is produced by macrophages and other cells. This cytokine can induce the IFN-gamma production of T cells. The combination of IL8 and IL12 has been shown to inhibit IL4 dependent IgE and IgG1 production, and enhance IgG2a production of B cells. IL8 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity. IL8 is an IL-like cytokine that requires cleavage with caspase to become active, was found to increase IgE production in a CD4+ T cells-, IL-4- and STAT6-dependent fashion. IL8 and T cell receptor-mediated stimulation could induce naïve CD4+ T cells to develop into IL-4-producing cells in vitro. Thus, caspase and IL8 may be critical in regulation of IgE production in vivo, providing a potential therapeutic target for allergic disorders. IL8 production in primary synovial cultures and purified synovial fibroblasts was, in turn, upregulated by TNF- $\alpha$  and IL $\beta$ , suggesting that monokine expression can feed back to promote Th1 cell development in synovial membrane. Besides, synergistic combinations of IL8, IL2, and IL5 may be of importance in sustaining both Th1 responses and monokine production in RA.