



# Recombinant Protein Technical Manual

## Recombinant Human IL36G/IL1F9 Protein (Active)

RPES2420

### Product Data:

**Product SKU:** RPES2420

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q9NZH8

### Protein Information:

**Molecular Mass:** 17.0 kDa

**AP Molecular Mass:** 146 kDa

#### Tag:

**Bio-activity:** Measured by its ability to induce IL-8 secretion in A431 human epithelial carcinoma cells. The ED50 for this effect is 5-20 ng/ml.

**Purity:** > 95 % as determined by reducing 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 20mM Tris,100mM NaCl,0.1mM EDTA,pH8.0.

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

#### Application:

**Synonyms:** Interleukin-36 gamma; IL36G; IL-related protein 2; ILRP2; IL epsilon; ILF9; Interleukin homolog 1; ILH1;IL1E;IL1F9;IL1H1;IL1RP2

## Immunogen Information:

**Sequence:** Ser18-Asp169

## Background:

Interleukin-36 gamma (IL-36 $\gamma$ ) is a member of the interleukin 1 cytokine family that includes three closely related genes, IL-36 $\alpha$ ,  $\beta$ , and  $\gamma$ , formerly known as ILF6, F8, and F9 respectively. IL-36 $\alpha$  has been detected in both neuronal and synovial tissue, whereas IL-36 $\beta$  and IL-36 $\gamma$  are expressed in both cutaneous and mucosal epithelial cells, including the respiratory tract. IL-36 $\beta$  and IL-36 $\gamma$  stimulate proliferation, maturation and/or cytokine expression by innate immune cells (such as keratinocytes and dendritic cells), and adaptive immune cells (neutrophils and T-cells) in both humans and mice. The activity of IL-36 $\alpha$  is mediated by interleukin 1 receptor-like 2 (IL1RL2/IL1R-rp2), and is specifically inhibited by interleukin 1 family, member 5 (IL1F5/IL delta). IL-36 $\gamma$  plays an important role in communicating the cell death to surrounding cells.