

# **Recombinant Protein Technical Manual**

# Recombinant Human Interleukin-5/IL-5 Protein (His Tag)(Active) RPES2561

#### Product Data:

**Product SKU:** RPES2561 **Size:** 10μg

Species: Human Cells

**Uniprot:** P05113

#### **Protein Information:**

Molecular Mass: 14.2 kDa

AP Molecular Mass: 20 kDa

Tag: C-6His

**Bio-activity:** Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The

ED50 for this effect is 0.1-0.5 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 PBS, pH7.4.

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

**Application:** Cell Culture

Synonyms: Interleukin-5;IL-5;B-cell differentiation factor I;Eosinophil differentiation factor;T-

cell replacing factor;TRF;IL5

## Immunogen Information:

Sequence: Ile20-Ser134

### Background:

IL-5 is expressed in eosinophils, NK cells, TC2 CD8+ T cells, mast cells, CD45+ CD4+ T cells, gamma delta T cells and IL beta activated endothelial cells. IL-5 acts as a growth and differentiation factor for both B cells and eosinophils. Relative to B cells, IL-5 appears to induce the differentiation of activated conventional B-2 cells into Ig-secreting cells. In addition, it induces the growth of B progenitors as well as IgM production by B cells. IL-5 appears to perform a number of functions on eosinophils. These include the down modulation of Mac,the upregulation of receptors for IgA and IgG,the stimulation of lipid mediator (leukotriene C4 and PAF) secretion and the induction of granule release. IL-5 also promotes the growth and differentiation of eosinophils.