



Recombinant Protein Technical Manual

Recombinant Mouse IL-5RA/IL-5 R α Protein (Human Cells, His Tag) (Active)

RPES2004

Product Data:

Product SKU: RPES2004

Size: 10 μ g

Species: Mouse

Expression host: Human Cells

Uniprot: P21183

Protein Information:

Molecular Mass: 37.6 kDa

AP Molecular Mass: 48 kDa

Tag: C-6His

Bio-activity: Immobilized Human IL5RA&IL5-Fc(Cat: PKSH032567) at 10 μ g/ml(100 μ l/well) can bind Human IL-5RA-His.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per μ g 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 μ m filtered solution of PBS, pH7.4.

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

Application: Functional ELISA

Synonyms: Interleukin-5 receptor subunit alpha; IL-5 receptor subunit alpha; IL-5R subunit alpha; IL-5R-alpha; IL-5RA; CD125; IL5ra; IL5r

Immunogen Information:

Sequence: Asp18-His339

Background:

Interleukin 5 Receptor alpha (IL-5 R α), also known as CD125, is a hematopoietin receptor that plays a dominant role in eosinophil biology. Mature mouse IL-5 R α consists of a 322 amino acid (aa) extracellular domain (ECD) with a WSxWS motif and a four cysteine motif, a 22 aa transmembrane segment, and a 54 aa cytoplasmic domain. The high affinity receptor for IL-5 is a complex that consists of the ligand binding IL-5 R α and the transmembrane common β chain (β c/CD131) which is shared with the receptor complexes for IL-3 and GM-CSF. IL-5 R α binds IL-5 at low affinity and then associates with preformed β c oligomers to form the signaling-competent receptor complex. IL-5 stimulation of CD34+ hematopoietic progenitor cells induces the up-regulation of transmembrane IL-5 R α followed by eosinophilic differentiation and activation. IL-5 R α also promotes the differentiation of basophils and B cells. Exposure of mature eosinophils to IL-5 attenuates their IL-5 responsiveness by inducing the down-regulation of surface IL-5 R α and increased production of soluble IL-5 R α .