

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

Catalog No. PKSM041096

Description

Synonyms	Interleukin-5 receptor subunit alpha, IL-5 receptor subunit alpha, IL-5R subunit alpha, IL-5R-alpha, IL-5RA, CD125, I15ra, I15r
Species	Mouse
Expression_host	HEK293 Cells
Sequence	Asp18-His339
Accession	P21183
Mol_Mass	37.6 kDa
AP_Mol_Mass	48 kDa
Tag	C-6His
Bio_activity	Immobilized Human IL-15RA&IL-15-Fc(Cat: PKSH032567) at 10 μ g/ml(100 μ l/well) can bind Human IL-5RA-His.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.
Storage	Generally, 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. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

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 .

SDS-PAGE

