Recombinant Human IL5RA/IL-5 Rα Protein (Fc Tag)

Catalog Number:PKSH032652

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Note: Centrifuge before opening to ensure complete recovery of vial contents.

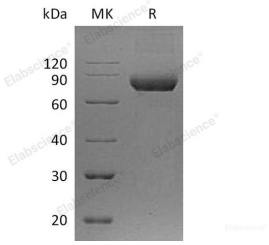
Description

Synonyms	Interleukin-5 receptor subunit alpha;IL-5 receptor subunit alpha;IL-5R subunit alpha;IL-5R-alpha;IL-5RA;CDw125;CD125;IL5RA;IL5R
Species	Human
Expression Host	HEK293 Cells
Sequence	Asp21-Glu335
Accession	Q01344
Calculated Molecular Weight	62.5 kDa
Observed molecular weight	70-85 kDa
Tag	C-Fc

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.4. 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.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Interleukin-5 Receptor alpha (IL-5Rα; CD125) is a 60 kDa hematopoietin receptor that plays a dominant role in eosinophil biology. Mature human IL-5 Rα consists of a 322 aa extracellular domain (ECD) with a WSxWS motif and a four cysteine motif; a 20 aa transmembrane segment; and a 58 aa cytoplasmic domain. Within the ECD; human IL-5Rα shares 71% aa sequence identity with mouse and rat IL-5 Rα. Alternate splicing of human IL-5 Rα generates soluble secreted forms which function as IL-5 antagonists. The high affinity receptor for IL-5 is a complex that consists of the ligand binding IL-5 Rα and the transmembrane common β chain (βc/CD131) which is shared with the receptor complexes for IL-3 and GMCSF. IL-5 Rα binds IL-5 at low affinity and then associates with preformed βc oligomers to form the

signaling competent receptor complex. IL-5 stimulation of CD34+ hematopoietic progenitor cells induces the up-regulation of transmembrane IL-5Rα followed by eosinophilic differentiation and activation.