

IL-5RA
Catalog # PVGS1664**Specification**

IL-5RA - Product InformationPrimary Accession [Q01344](#)**Species**
Human**Sequence**
Asp21-Glu335**Purity**
> 95% as analyzed by SDS-PAGE**Endotoxin Level**
< 1 EU/ µg of protein by LAL method**Expression System**
Human CellsFormulation **Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.****Reconstitution**
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to 100 µg/ml.**Storage & Stability**
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4-7°C and up to 3 months at -20°C or below. Avoid repeated freeze-thaw cycles.**IL-5RA - Additional Information****Gene ID** 3568**Other Names**
Interleukin-5 receptor subunit alpha, IL-5 receptor subunit alpha, IL-5R subunit alpha, IL-5R-alpha, IL-5RA, CDw125, CD125, IL5RA, IL5R**Target 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 GM-CSF. 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-5R α followed by eosinophilic differentiation and activation.

IL-5RA - Protein Information

Name IL5RA

Synonyms IL5R

Function

Cell surface receptor that plays an important role in the survival, differentiation, and chemotaxis of eosinophils (PubMed:9378992). Acts by forming a heterodimeric receptor with CSF2RB subunit and subsequently binding to interleukin-5 (PubMed:1495999, PubMed:22528658). In unstimulated conditions, interacts constitutively with JAK2. Heterodimeric receptor activation leads to JAK2 stimulation and subsequent activation of the JAK-STAT pathway (PubMed:9516124).

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed on eosinophils and basophils.

IL-5RA - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IL-5RA - Images