

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

IL-5RA - Product Information

Primary 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 Cells

Formulation **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 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-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