

CD125

Catalog # PVGS1377

Product Information

Primary Accession Q01344
Species Human

Sequence DLLPDEKISL LPPVNFTIKV TGLAQVLLQW KPNPDQEQRN VNLEYQVKIN

APKEDDYETR ITESKCVTIL HKGFSASVRT ILQNDHSLLA SSWASAELHA PPGSPGTSIV NLTCTTNTTE DNYSRLRSYQ VSLHCTWLVG TDAPEDTQYF LYYRYGSWTE ECQEYSKDTL GRNIACWFPR TFILSKGRDW LAVLVNGSSK HSAIRPFDQL FALHAIDQIN PPLNVTAEIE GTRLSIQWEK PVSAFPIHCF DYEVKIHNTR NGYLQIEKLM TNAFISIIDD LSKYDVQVRA AVSSMCREAG

LWSEWSQPIY VGNDE

Purity > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level

Formulation Lyophilized after extensive dialysis against PBS. **Reconstitution** Reconstituted in ddH_2O or PBS at 100 $\lceil g/m \rceil$.

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-5RA), also known as CD125, belongs to the

Type 5 subfamily in the type I cytokine receptor family. It is composed of a ligand-specific alpha subunit and a signal-transducing beta subunit shared by the receptors for IL-3 and GM-CSF. IL-5RA is mainly expressed on eosinophils and basophils, and plays important roles in the immunobiology of these cell types. It is reported that when stimulated by IL-5, eosinophils down-regulate surface IL-5RA expression to attenuate their IL-5 responsiveness. Elevated IL-5 production may induce immune cell infiltration which leads to allergic inflammation. IL-5RA has also been reported to promote the differentiation of

basophils and B cells.

Protein Information

Name IL5RA

Synonyms IL5R

Function Cell surface receptor that plays an important role in the survival,

differentiation, and chemotaxis of eosinophils (PubMed:<u>9378992</u>). Acts by forming a heterodimeric receptor with CSF2RB subunit and subsequently binding to interleukin-5 (PubMed:<u>1495999</u>, PubMed:<u>22528658</u>). In unstimulated conditions, interacts constitutively with JAK2. Heterodimeric receptor activation leads to JAK2 stimulation and subsequent activation of the JAK-STAT pathway (PubMed:<u>9516124</u>).

Cellular Location Membrane; Single-pass type I membrane protein.

Tissue Location Expressed on eosinophils and basophils.

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