

Recombinant Protein Technical Manual

Recombinant Mouse IL-5RA/IL-5 Rα Protein (Baculovirus, His Tag) (Active) **RPES2391**

Product SKU: RPES2391	Size: 20µg
Species: Mouse	Expression host: Baculovirus-Insect Cells

Species: Mouse

Uniprot: P21183

Molecular Mass:	36.8 kDa
AP Molecular Mass:	45 kDa
Tag:	C-His
Bio-activity:	1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse IL5Ra-His at $10\mu g/mL$ ($100\mu L/well$) can bind biotinylated mouse IL5-His, the EC50 of biotinylated mouse IL5-His is $3000ng/mL$.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage:	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 sterile 20mM Tris, 500mM NaCl, 10% gly, pH 7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	Interleukin-5 receptor subunit alpha; IL-5 receptor subunit alpha; IL-5R subunit alpha; IL-5R-alpha; IL-5RA; CD125; Il5ra; Il5r

Sequence: Met1-Val328

Background:

Interleukin 5 receptor, alpha (IL5RA) also known as CD125 (Cluster of Differentiation 125) is a subunit of the Interleukin-5 receptor. IL5RA (CD125) is an interleukin 5 specific subunit of a heterodimeric cytokine receptor. The receptor is comprised of a ligand specific alpha subunit and a signal transducing beta subunit shared by the receptors for interleukin 3 (IL3), colony stimulating factor 2 (CSF2/GM-CSF), and interleukin 5 (IL5). The binding of this protein to IL5 depends on the beta subunit. The beta subunit is activated by the ligand binding, and is required for the biological activities of IL5. This protein has been found to interact with syndecan binding protein (syntenin), which is required for IL5 mediated activation of the transcription factor SOX4. Six alternatively spliced transcript variants encoding three distinct isoforms have been reported. IL5RA (CD125) is a T-cell-derived cytokine which is particularly important in the development of asthma for the lerminal differentiation, activation and survival of committed cosinophil precursors.