

Human IL5Ra / CD125 Protein (His Tag)

Catalog Number: 10392-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD125; CDw125; HSIL5R3; IL5R; CD125; CDw125; IL5r

Protein Construction:

A DNA sequence encoding the human IL5Ra isoform 2 (Q01344-2) (Met 1-Arg 335) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA. 2. Immobilized recombinant mouse IL5-his at 5 µg/mL (100 µL/well) can bind biotinylated human IL5Ra-his with a linear range of 32-4000 ng/mL. 3. Measured by its ability to inhibit IL5 dependent proliferation of TF1 human erythroleukemic cells. The ED₅₀ for this effect is typically 0.7-2.8 µg/mL.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Asp 21

Molecular Mass:

The recombinant human IL5Ra consists of 326 amino acids after removal of the signal peptide and has a predicted molecular mass of 37.3 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhIL5Ra is approximately 45-50 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

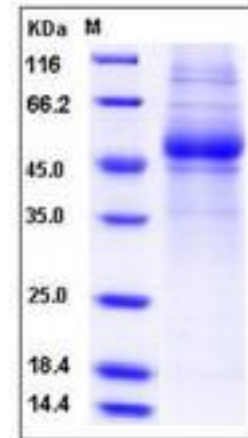
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 terminal differentiation, activation and survival of committed eosinophil precursors.

References

1. Isobe M, *et al.* (1992) Localization of the gene encoding the alpha subunit of human interleukin-5 receptor (IL5RA) to chromosome region 3p24-3p26. *Genomics*. 14(3): 755-8.
2. Cheong HS, *et al.* (2005) Association analysis of interleukin 5 receptor alpha subunit (IL5RA) polymorphisms and asthma. *J Hum Genet.* 50(12): 628-34.
3. Isobe M, *et al.* (1992) Localization of the gene encoding the alpha subunit of human interleukin-5 receptor (IL5RA) to chromosome region 3p24-3p26. *Genomics*. 14(3): 755-8.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>