

Recombinant mouse IL-3R alpha/IL3RA protein

Catalog Number: ATGP4091

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

17-331aa

UniProt No.

P26952

NCBI Accession No.

NP_032395

Alternative Names

Interleukin-3 receptor subunit alpha, IL-3R subunit alpha, IL-3R-alpha, Interleukin-3 receptor class II alpha chain, L3RA, CD123, hIL-3Ra, IL3R, SUT-1

PRODUCT SPECIFICATION

Molecular Weight

61.5kDa (554aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 30% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

hIgG-His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

IL-3R alpha/CD123, also known as interleukin 3 receptor subunit alpha, is a member of the type 1 cytokine receptor family and type 5 subfamily. It is expressed on multiple cell types, including endothelial cells, monocytes, eosinophils, basophils plus mast cells, and plasmacytoid CD4+ T cells. It serves as a low affinity

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binding protein for monomeric IL-3. The IL-3 and IL-3 R alpha complex likely interacts with a preformed signaling homodimer comprised of either beta IL-3 or beta c chains. The extracellular domain of mouse IL-3 R alpha/CD123 shares only 44% and 29% aa sequence identity with rat and human IL-3 R alpha, respectively. Nevertheless, human IL-3 is reported to be active on the mouse receptor complex that is expressed on select cell types. Also, the specific alpha subunit of the interleukin 3 receptor is strongly expressed in various leukemic blasts and leukemic stem cells and seems to be an excellent target for the therapy of leukemias. Recombinant mouse IL-3R alpha/CD123, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

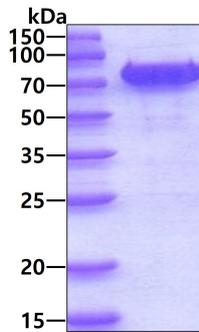
SDLAAVREAP PTAVTTPIQN LHIDPAHYTL SWDPAPGADI TTGAFCRKGR DIFVWADPGL ARCSFQSLSL CHVTNFTVFL GKDRAVAGSI QFPPDDDGDH EAAAQDLRCW VHEGQLSCQW ERGPKATGDV HYRMFWRDVR LGPAHNRECP HYHSLDVNTA GPAPHGGHEG CTLDLDTVLG STPNSPDLVP QVTITVNGSG RAGPVPCMDN TVDLQRAEVL APPTLTVECN GSEAHARWVA RNRFHGGLL YTLQVNQSSR SEPQEYNVSI PHFWVPNAGA ISFRVKSRSE VYPRKLSSWS EAWGLVCPPE VMPVK<LEPKS CDKTHTCPPC PAPELLGGPS VFLFPPKPKD TLMISRTPEV TCVVVDVSH E DPEVKFNWYV DGVEVHNAKT KPREEQYNST YRVVSVLTVL HQDWLNGKEY KCKVSNKALP APIEKTISKA KGQPREPQVY TLPPSRDEL T KNQVSLTCLV KGFYPSDIAV EWESNGQPEN NYKTTTPVLD SDGSFFLYSK LTVDKSRWQQ GNVFSCSVMH EALHNHYTQK SLSLSPGKHH HHHH>

General References

Kosugi H., et al, (1995) *Biochem. Biophys. Res. Commun.* 208:360-367.
 Testa U., et al, (2004) *Leukemia.* 18:219-226.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain