For Research Use Only

IL3RA/CD123 Recombinant monoclonal antibody

Catalog Number:84256-1-RR



Purification Method:

CloneNo.:

241267B1

Protein A purification

Recommended Dilutions:

IHC: 1:250-1:1000

Basic Information

Catalog Number:

84256-1-RR

Source: Genel D (NCBI): Rabbit 3563

Isotype:ENSEMBL Gene ID:IgGENSG00000185291

UNIPROT ID: P26951 Full Name:

BC035407

interleukin 3 receptor, alpha (low

Positive Controls:

IHC: human tonsil tissue,

GenBank Accession Number:

affinity)
Calculated MW:
378 aa, 43 kDa

Applications

Tested Applications:

IHC, ELISA

Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Interleukin-3 receptor subunit alpha (IL3RA), also known as CD123, belongs to the cytokine receptor family. It is a glycoprotein containing an extracellular domain, involving a predicted Ig-like domain, two FnIII domains, a transmembrane domain and an intracellular domain (PMID: 24513123). IL3RA is expressed on hematopoietic progenitor cells, plasmacytoid dendritic cells, basophils, monocytes, some B cells, and in a variety of hematologic malignancies (PMID: 10527461; 34855461). IL-3 initially binds to IL3RA and subsequently recruits the beta chain (CD131) to form the high-affinity receptor, resulting in the activation of a series of signaling pathways including the JAK/STAT, Ras-MAPK, and phosphatidylinositol 3-kinase pathways (PMID: 29296749). IL-3R signaling regulates the proliferation, survival, and differentiation of hematopoietic cells.

Storage

Storage:

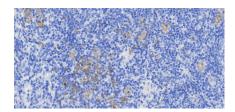
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

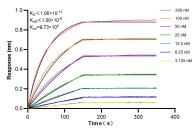
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunohistochemical analysis of paraffinembedded human tonsil tissue slide using 84256-1-RR (IL3RA/CD123 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84256-1-RR against Human IL3RA/CD123 were performed. The affinity constant is below 1 pM.