## For Research Use Only

## IL3RA/CD123 Recombinant antibody

Catalog Number:83243-3-RR



**Purification Method:** 

Protein A purfication

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:500-1:2000

CloneNo.:

240042E5

**Basic Information** 

Catalog Number: GenBank Accession Number:

83243-3-RR BC035407 GeneID (NCBI): Size: 100ul, Concentration: 1000 ug/ml by 3563

Nanodrop: ENSEMBL Gene ID: ENSG00000185291 Rabbit **UNIPROT ID:** Isotype: P26951 IgG Full Name:

Immunogen Catalog Number: interleukin 3 receptor, alpha (low

AG4452 affinity)

> Calculated MW: 378 aa, 43 kDa Observed MW: 70 kDa

**Applications** 

**Tested Applications:** WB, IHC, ELISA

Species Specificity:

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

buffer pH 6.0

Positive Controls:

WB: HL-60 cells,

IHC: human tonsillitis tissue,

## **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

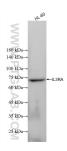
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

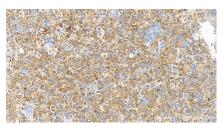
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

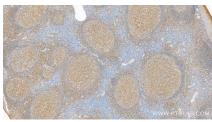
## **Selected Validation Data**



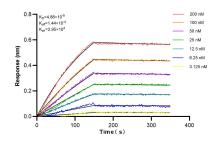
HL-60 cells were subjected to SDS PAGE followed by western blot with 83243-3-RR (IL3RA/CD123 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 83243-3-RR (IL3RA/CD123 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 83243-3-RR (IL3RA/CD123 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82672-1-RR against Human IL3RA/CD123 were performed. The affinity constant is 4.88 nM.