

For Research Use Only

# IL3RA/CD123 Recombinant monoclonal antibody

Catalog Number: 84256-1-RR



## Basic Information

<b>Catalog Number:</b> 84256-1-RR	<b>GenBank Accession Number:</b> BC035407	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3563	<b>CloneNo.:</b> 241267B1
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000185291	<b>Recommended Dilutions:</b> IHC: 1:250-1:1000
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P26951	
	<b>Full Name:</b> interleukin 3 receptor, alpha (low affinity)	
	<b>Calculated MW:</b> 378 aa, 43 kDa	

## Applications

<b>Tested Applications:</b> IHC, ELISA	<b>Positive Controls:</b> IHC : human tonsil tissue,
<b>Species Specificity:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

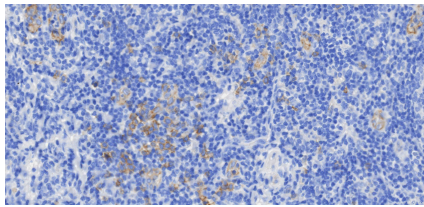
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

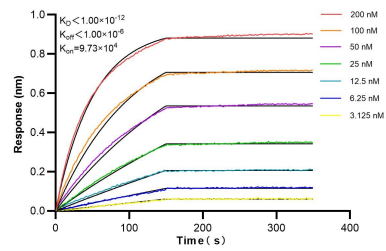
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## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded 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.