



Mouse Anti-Human CD123 monoclonal antibody, clone JID234 (CABT-L2902)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human CD123
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID234
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Blastic Plasmacytoid, Dendritic Cell Neoplasm
Format	Liquid
Size	Predilute: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml
Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Cluster of differentiation 123 (CD123), also known as interleukin-3 receptor, is normally expressed on pluripotent progenitor cells. It plays an important role in regulating the immune system by transmitting interleukin-3 signals, thereby promoting proliferation and differentiation of hematopoietic stem cells into myeloid or lymphoid progenitor cells. Samples obtained from intermediate risk groups suggest that the expression of CD123 is observed in most Acute Myeloid Leukemia (AML) subtypes, including leukemic stem cells. CD123 positive AML has demonstrated higher marrow blast percentages and monocytic differentiation, and clinical presentations for AML mostly include bone marrow involvement and regional lymphadenopathy. As there are overlapping clinical presentations between AML and blastic NK-cell lymphomas, differential diagnosis is important; use of an IHC panel that includes antibodies against CD123, CD4, CD56, and TCL-1 can help with this distinguishment between AML and myeloid involvement from blastic NK-cell lymphomas.
Keywords	IL3RA;interleukin 3 receptor, alpha chain;CD123;SUT-1;CDw123;interleukin-3 receptor subunit alpha;IL-3 receptor alpha SP2 isoform;IL-3 receptor alpha chain;IL-3 receptor subunit alpha;IL-3R subunit alpha;IL-3R-alpha;IL-3RA;IL-3 alpha subunit;interleukin-3 receptor class II alpha chain;

GENE INFORMATION

Gene Name	IL3RA interleukin 3 receptor, alpha (low affinity) [Homo sapiens (human)]
Official Symbol	IL3RA
Synonyms	IL3RA; interleukin 3 receptor, alpha (low affinity); IL3R; CD123; IL3RX; IL3RY; IL3RAY; hIL-3Ra; interleukin-3 receptor subunit alpha; IL-3RA; IL-3R-alpha; CD123 antigen; IL-3R subunit alpha; IL-3 receptor subunit alpha; IL-3 receptor alpha SP2 isoform;
Entrez Gene ID	3563
Protein Refseq	NP_001254642
UniProt ID	P26951
Chromosome Location	Xp22.3 or Yp11.3

Pathway	Apoptosis; Cytokine Signaling in Immune system; Cytokine-cytokine receptor interaction; G beta:gamma signalling through PI3Kgamma; G-protein beta:gamma signalling; GPCR downstream signaling; GPVI-mediated activation cascade; Hematopoietic cell lineage;
Function	interleukin-3 receptor activity;