

**Rabbit Anti-CD123/IL3RA [IL3RA/2947R]: RM0220, RM0220RTU7**

**Intended Use:** For Research Use Only

**Description:** Human CD123, the 70 kD IL-3 receptor chain (IL-3R  $\alpha$ ), is associated with the 120-140 kD  $\beta$  subunit. The  $\beta$  chain is shared with the receptors for interleukins IL-5 and GM-CSF. IL-3R  $\alpha$  is expressed on hematopoietic progenitors and plays an important role in hematopoietic progenitor cell growth and differentiation. This antibody has been reported to block the binding of 125I-IL-3 to high and low affinity IL-3 receptors. In functional experiments, this antibody was found to inhibit acute myeloid leukemia cell proliferation, basophil/histamine release, endothelial cell-mediated IL-8 secretion, and neutrophil transmigration. At the Fifth HLDA Workshop, the human IL-3 receptor was designated CD123. This antibody reacts with plasmacytoid dendritic cells (PDC). PDC plays a crucial role in the initiation of antiviral and antitumoral immune responses and produce type I interferons  $\alpha$  and  $\beta$ . CD123 antibody is useful in diagnosis of Kikuchi disease, hyaline vascular type of Castleman disease, lupus, and primary cutaneous marginal zone B-cell lymphoma.

**Specifications:**

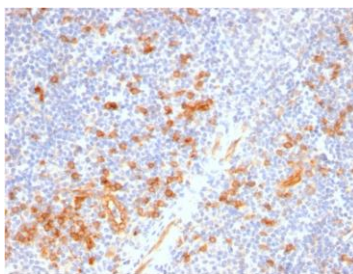
Clone: IL3RA/2947R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Immunogen: Recombinant fragment of human IL3RA protein around aa 26-171  
 Localization: Cytoplasm, membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA  
 Package:

Description	Catalog No.	Size
CD123/IL3RA Concentrated	RM0220	1 ml
CD123/IL3RA Prediluted	RM0220RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Lymph node, thymus  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human tonsil stained with anti-CD123 using DAB

**References:**

1. TCL1 expression in plasmacytoid dendritic cells (DC2s) and the related CD4+ CD56+ blastic tumors of skin. Herling M, et al. Blood 101:5007-9, 2003.
2. Leukocyte Typing V: White Cell Differentiation Antigens. Schlossman SF, et al. Oxford: Oxford University Press; 1995.
3. Monoclonal antibody 7G3 recognizes the N-terminal domain of the human interleukin-3 (IL-3) receptor alpha-chain and functions as a specific IL-3 receptor antagonist. Sun Q, et al. Blood. 87(1):83-92m 1996.

Doc. 100-RM0220

Rev. A