

Mouse Anti-CD123/IL3RA [7G3]: MC0509, MC0509RTU7

Intended Use: For Research Use Only

Description: Human CD123, the 70 kD IL-3 receptor chain (IL-3R α), is associated with the 120-140 kD β subunit. The β chain is shared with the receptors for interleukins IL-5 and GM-CSF. IL-3R α 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, basophilhistamine 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 α and β . CD123 antibody is useful in diagnosis of Kikuchi disease, hyaline vascular type of Castleman disease, lupus, and primary cutaneous marginal zone B-cell lymphoma.

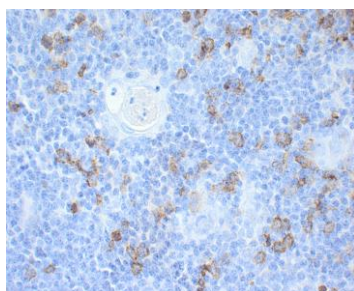
Specifications:

Clone: 7G3
 Source: Mouse
 Isotype: IgG2a/k
 Reactivity: Human
 Localization: Cytoplasm
 Formulation: Purified ascites in PBS pH7.4, containing BSA, and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., ICC/IF, WB
 Package:

Description	Catalog No.	Size
CD123/IL3RA Concentrated	MC0509	1 ml
CD123/IL3RA Prediluted	MC0509RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Lymph node, thymus
 Concentrated Dilution: 25-100
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 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 thymic 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- MC0509
Rev. A