

Monoclonal Anti-human IL3-R α /CD123

Product reference: DDX0300

Description:

IL3 exerts its biologic activity (survival and proliferation of multipotent hematopoietic cells, development of pDCs) through its interaction with a cell surface receptor that consists of two subunits. The α subunit (CD123) specifically binds IL3, whereas the β subunit is required for signaling and is common to the GM-CSF-R and IL5-R. Interplay of α and β chains leads to the formation of a high-affinity receptor complex able to transduce proliferative, apoptotic and differentiation signals. Plasmacytoid DCs express IL3-R and differentiate into functional DCs with IL3. The leukemic pDC counterpart also expresses high levels of IL3-R α . Upon IL3 treatment *in vitro*, leukemic cells become inducers of T-cell proliferation, as reported for normal pDCs. The role of IL3-R in oncogenesis has been explored in several animal models. Over expression of the IL3-R α chain may represent one of the mechanisms contributing to the development of a highly malignant leukemic phenotype.

(Treilleux I et al, 2004 ; Clin. Canc. Res., 10: 7466-7474)

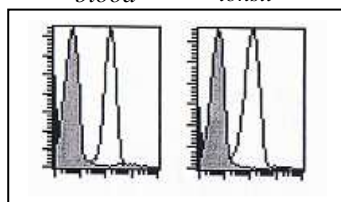
Clone:	107D2.08
Species:	mouse
Specificity:	human CD123 (epitope in extracellular domain)
Immunogen:	sorted human tonsillar pDC
Species cross-reactivity:	nd
Isotype:	IgG1
Purification:	QMA Hyper D ion exchange chromatography
Formulation/size:	Purified: 100 μ g in 200 μ l / 50 μ g in 100 μ l Tris-NaCl pH 8 Coupled: 100 μ g in 200 μ l / 50 μ g in 100 μ l PBS 50% glycerol

Available formats:

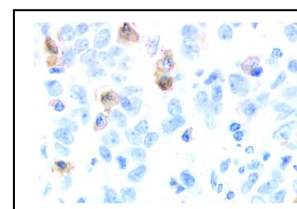
Reference N°		Format	Application tested
50 μ g	100 μ g		
DDX0300P-50	DDX0300P-100	purified	IHC, Bouin paraffin, IP, Flow cytometry
DDX0300A488-50	DDX0300A488-100	Alexa-fluor®488	Surface Flow cytometry, IF
DDX0300A546-50	DDX0300A546-100	Alexa-fluor®546	IF
DDX0300A647-50	DDX0300A647-100	Alexa-fluor®647	(on request)
DDX0300B-50	DDX0300B-100	biotin	(on request)

Applications tested:

Flow cytometry, IHC
blood tonsil



IL3-R α FACS surface expression on human pDCs



Bouin Paraffin section of human invasive breast tumor. Presence of IL3-R α + pDCs revealed by HRP

Usage recommendation:

- *This monoclonal antibody may be used between 5-20 μ g/ml.
- *Optimal dilution should be determined by each laboratory for each application.
- *Coupled antibody: to maintain RT before use.

Aliquot storage conditions:

- 20°C. KEEP CONTENTS STERILE: no preservative.**
- Purified antibodies: avoid repeated freeze/thaw cycles.**
- Coupled antibodies: glycerol protects from freezing.**

Not for use in Humans. For research purpose only