

Monoclonal Anti-human DC-ASPGR/CD301

Product reference: DDX0011

Description

ASGPR/MGL (asialoglycoprotein receptor / macrophage galactose lectin receptor) / CD301 is a Ca²⁺ dependent type II transmembrane lectin. In search for genes specifically expressed by dendritic cells (DC), we have cloned several cDNAs encoding different forms of asialoglycoprotein receptor (ASGPR), that were expressed in eukaryotic cells for use as immunogens. Immunoprecipitation from DCs using anti-DC-ASGPR mAb yields a major 40-kDa protein. mAb 121A5.01 recognized the ASGPR isoform expressed by DC but not the isoform expressed by monocytes. This antibody stained CD14⁺ derived DCs obtained from CD34⁺ progenitors, but not the CD1a⁺ derived subset. Accordingly, both monocyte-derived DCs and tonsillar interstitial-type DCs express DC-ASGPR protein, while Langerhans-type cells do not. DC-ASGPR is a feature of immaturity, as its expression is lost upon CD40L activation. In agreement with the presence of tyrosine-based and dileucine motifs in the intracytoplasmic domain, mAb against DC-ASGPR is rapidly internalized by DCs at 37°C. Finally, intracellular DC-ASGPR is localized in early endosomes, suggesting that the receptor recycles to the cell surface following internalization of ligand. (*Valladeau J et al, 2001, J. Immunol., 167: 5767*).

Clone:	121A5.01 (<i>referred to as AS-3; Valladeau J, JI 2001</i>)
Species:	mouse
Specificity:	human ASGPR/MGL
Immunogen:	human ASGPR Ig fusion protein
Species cross-reactivity:	nd
Isotype:	IgG1
Purification:	QMA Hyper D ion exchange chromatography)
Formulation/size:	Purified: 100 µg in 200 µl / 50µg in 100 µl Tris-NaCl pH 8
	Coupled: 100 µg in 200 µl / 50µg in 100 µl PBS 50% glycerol

Available formats:

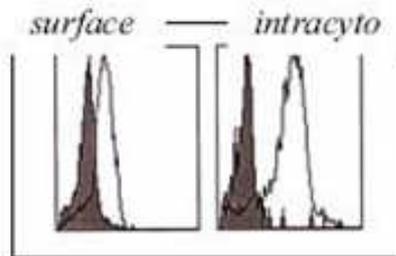
Reference N°		Format	Application tested
50 µg	100 µg		
DDX0011P-50	DDX0011P-100	Purified	IHC, IP, WB, Antigen capture endocytosis
DDX0011A488-50	DDX0011A488-100	Alexa-fluor® 488	Surface and intracyto Flow cytometry, IF
DDX0011A546-50	DDX0011A546-100	Alexa- fluor® 546	IF
DDX0011A647-50	DDX0011A647-100	Alexa- fluor® 647	Surface and intracyto Flow cytometry
DDX0011B-50	DDX0011B-100	Biotin	IP

Other clones available on request

Applications tested: Flow cytometry, IHC on cryosection, antigen-capture endocytosis.



Tonsil tissue section : cells stained with 121A5.01 (blue) are found throughout the tonsil except in follicles (f)



Monocyte-derived DC (GM+IL4) stained with 121A5.01+GAM FITC

Usage recommendation:

- *This monoclonal antibody may be used between 5-20 µg/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