

ARG42291 anti-CD235a antibody [JC159] (APC)

Package: 50 tests
Store at: 4°C

Summary

Product Description	APC-conjugated Mouse Monoclonal antibody [JC159] recognizes CD235a
Tested Reactivity	Hu, Rat
Tested Application	FACS
Specificity	The mouse monoclonal antibody JC159 recognizes an epitope between amino acids 27 and 40 of the extracellular portion of CD235a (glycophorin A), a sialoglycoprotein expressed on early erythroblasts, late erythroblasts, erythroblasts, mature erythrocytes and the cells of erythroid cell lines K562 and HEL. The antibody does not react with glycophorin B.
Host	Mouse
Clonality	Monoclonal
Clone	JC159
Isotype	IgG1
Target Name	CD235a
Species	Human
Immunogen	Membrane preparation from splenic hairy cell leukemia.
Conjugation	APC
Alternate Names	MN; GPERik; MNS; GPA; GPSAT; PAS-2; MN sialoglycoprotein; CD235a; HGpMiV; CD antigen CD235a; HGpMiXI; Sialoglycoprotein alpha; HGpSta(C); Glycophorin-A

Application Instructions

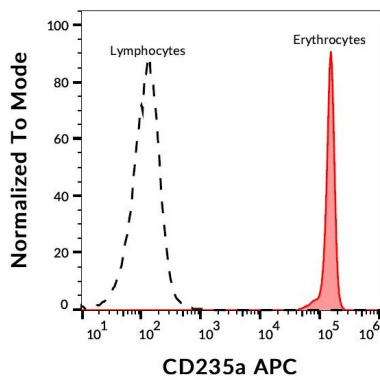
Application table	Application	Dilution
	FACS	10 µl / 100 µl of whole blood or 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Gene Symbol	GYPA
Gene Full Name	glycophorin A (MNS blood group)
Background	Glycophorins A (GYPA) and B (GYPB) are major sialoglycoproteins of the human erythrocyte membrane which bear the antigenic determinants for the MN and Ss blood groups. In addition to the M or N and S or s antigens that commonly occur in all populations, about 40 related variant phenotypes have been identified. These variants include all the variants of the Miltenberger complex and several isoforms of Sta, as well as Dantu, Sat, He, Mg, and deletion variants Ena, S-s-U- and Mk. Most of the variants are the result of gene recombinations between GYPA and GYPB. [provided by RefSeq, Jul 2008]
Function	Glycophorin A is the major intrinsic membrane protein of the erythrocyte. The N-terminal glycosylated segment, which lies outside the erythrocyte membrane, has MN blood group receptors. Appears to be important for the function of SLC4A1 and is required for high activity of SLC4A1. May be involved in translocation of SLC4A1 to the plasma membrane. Is a receptor for influenza virus. Is a receptor for Plasmodium falciparum erythrocyte-binding antigen 175 (EBA-175); binding of EBA-175 is dependent on sialic acid residues of the O-linked glycans. Appears to be a receptor for Hepatitis A virus (HAV). [UniProt]
Calculated Mw	16 kDa
PTM	The major O-linked glycan are NeuAc-alpha-(2-3)-Gal-beta-(1-3)-[NeuAc-alpha-(2-6)]-GalNAcOH (about 78 %) and NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH (17 %). Minor O-glycans (5 %) include NeuAc-alpha-(2-3)-Gal-beta-(1-3)-[NeuAc-alpha-(2-6)]-GalNAcOH NeuAc-alpha-(2-8)-NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH. About 1% of all O-linked glycans carry blood group A, B and H determinants. They derive from a type-2 precursor core structure, Gal-beta-(1,3)-GlcNAc-beta-1-R, and the antigens are synthesized by addition of fucose (H antigen-specific) and then N-acetylgalactosamine (A antigen-specific) or galactose (B antigen-specific). Specifically O-linked-glycans are NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH-(6-1)-GlcNAc-beta-(4-1)-[Fuc-alpha-(1-2)]-Gal-beta-(3-1)-GalNAc-alpha (about 1%, B antigen-specific) and NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH-(6-1)-GlcNAc-beta-(4-1)-[Fuc-alpha-(1-2)]-Gal-beta (1 %, O antigen-, A antigen- and B antigen-specific). [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Note=Appears to be colocalized with SLC4A1. [UniProt]

Images



ARG42291 anti-CD235a antibody [JC159] (APC) FACS image

Flow Cytometry: Human peripheral blood (erythrocytes and leukocytes) stained with ARG42291 anti-CD235a antibody [JC159] (APC).