

ARG54263 anti-CD235a antibody [JC159] (PE)

Package: 50 tests

Store at: 4°C

Summary

Product Description	PE-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
Immunogen	Membrane preparation from splenic hairy cell leukemia
Conjugation	PE
Alternate Names	MN; GP _E rik; 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 / 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

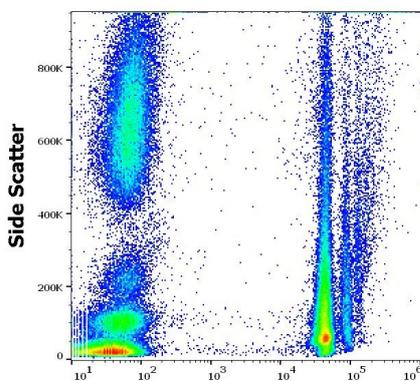
Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
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.

Bioinformation

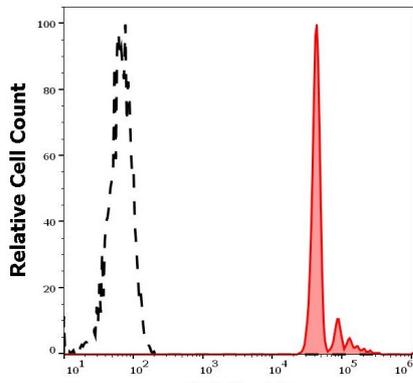
Database links	GeneID: 2993 Human Swiss-port # P02724 Human
Gene Symbol	GYPA
Gene Full Name	glycophorin A (MNS blood group)
Background	CD235a (Glycophorin A, GPA) is a transmembrane sialoglycoprotein expressed on erythrocytes and their precursors. Similarly to glycophorin B (GPB), these molecules provide the cells with a large mucin-like surface, which minimalizes aggregation between erythrocytes in the circulation. GPA is the carrier of blood group M and N specificities, while GPB accounts for S, s and U specificities. CD235a is a receptor of Hsa, an Streptococcus adhesin.
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]
Research Area	Cell Biology and Cellular Response antibody
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).

Images



ARG54263 anti-CD235a antibody [JC159] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG54263 anti-CD235a antibody [JC159] (PE) (10 µl reagent / 100 µl of peripheral whole blood).



ARG54263 anti-CD235a antibody [JC159] (PE) FACS image

Flow Cytometry: Separation of human erythrocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG54263 anti-CD235a antibody [JC159] (PE) (10 μ l reagent / 100 μ l of peripheral whole blood).