

ARG53799 anti-CD235a antibody [HIR2] (PE)

Package: 100 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [HIR2] recognizes CD235a
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone HIR2 recognizes N-terminal portion of glycophorin A (and weakly of glycophorin B). Its antigen is expressed on early erythroblasts, late erythroblasts, erythroblasts, mature erythrocytes and the cells of erythroid cell lines K562 and HEL, but not on all other cells. HLDA VII; WS Code 70299
Host	Mouse
Clonality	Monoclonal
Clone	HIR2
Isotype	IgG2b
Target Name	CD235a
Species	Human
Immunogen	Synthetic peptide (Human, N-terminal)
Conjugation	PE
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	20 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

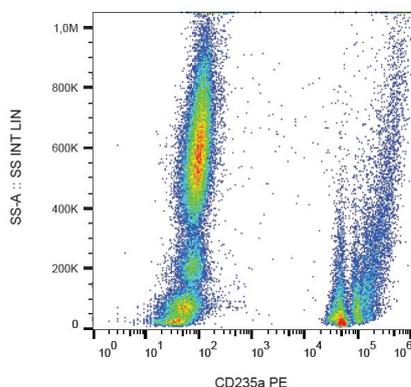
Calculated Mw

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



ARG53799 anti-CD235a antibody [HIR2] (PE) FACS image

Flow Cytometry: Human peripheral blood stained with ARG53799 anti-CD235a antibody [HIR2] (PE).