ARG23057
anti-CD235a antibody [YTH89.1]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [YTH89.1] recognizes CD235a Rat anti Human CD235a antibody, clone YTH89.1 recognizes glycophorin A, a major sialoglycoprotein of the human erythrocyte membrane.
Tested Reactivity	Hu
Tested Application	FACS, IHC-Fr, IHC-P
Host	Rat
Clonality	Monoclonal
Clone	YTH89.1
Isotype	IgG2b
Target Name	CD235a
Species	Human
Conjugation	Un-conjugated
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	Neat - 1:10
IHC-Fr	Assay-dependent
IHC-P	Assay-dependent

Application Note: IHC-P: This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. 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

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).