

## Product datasheet

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# 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

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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)-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-(1-3)-Gal-beta-(1