

Glycophorin-A / CD235a Monoclonal Mouse Antibody (GPHN02)

Product Description

Recognizes a sialoglycoprotein of 39 kDa, identified as glycophorin A (GPA). It is present on red blood cells (RBC) and erythroid precursor cells. It has been shown that glycophorin acts as the receptor for Sandei virus and parvovirus. Glycophorins A (GPA) and B (GPB), which are single, trans-membrane sialoglycoproteins. GPA is the carrier of blood group M and N specificities, while GPB accounts for S and U specificities. GPA and GPB provide the cells with a large mucin like surface and it has been suggested this provides a barrier to cell fusion, so minimizing aggregation between red blood cells in the circulation. This antibody is available purified with BSA/azide at 200 ug/mL, or BSA/azide-free at 1 mg/mL.

References

Cartron JP and Rahuel C. Human erythrocyte glycophorins: protein and gene structure analyses. *Transfus Med Rev* 1992,6(2):63-92 | Gahmberg CG et al. Biosynthesis of the major human red cell sialoglycoprotein, glycophorin A. A review. *Rev Fr Transfus Immunohematol* 1981,24(1):53-73 | Wybenga LE et al. Glycophorin as a receptor for Sendai virus. *Biochemistry* 1996, 35(29):9513-8 | Rahuel C et al. Post-transcriptional regulation of the cell surface expression of glycophorins A, B, and E. *J Biol Chem* 1994, 269(52):32752-8 | Thacker TC and Johnson FB. Binding of bovine parvovirus to erythrocyte membrane sialoglycoproteins. *J Gen Virol* 1998, 79:2163-

Product attributes

Antibody number	#0865
Antibody reactivity (target)	CD235a, Glycophorin-A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	GPHN02
Isotype	IgM, kappa
Molecular weight	39 kDa
Synonyms	Blood group-MN locus; GPA; GPErik; GpMIII; GPSAT; GYPA; MN sialoglycoprotein; MNS; PAS2; Sialoglycoprotein alpha
Human gene symbol	GYPA
Entrez gene ID	2993 & 2994
SwissProt	P02724
Unigene	434973 & 654368
Immunogen	Human erythrocytes treated with neuraminidase
Antibody target cellular localization	Plasma membrane
Species reactivity	Cow, Human
Antibody application notes	For coating for ELISA, order Ab without BSA. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	Erythrocytes
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Hematology
Cell/tissue expression	Red blood cells