10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Glycophorin A / CD235a (Erythrocyte Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone GPHN02]
Catalog # AH11370

Product Information

Application	IF, FC
Primary Accession	P02724
Other Accession	2993, 2994, 434973, 654368
Reactivity	Human, Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgM, kappa
Clone Names	GPHN02
Calculated MW	16430

Additional Information

Gene ID	2993
Other Names	Glycophorin-A, MN sialoglycoprotein, PAS-2, Sialoglycoprotein alpha, CD235a, GYPA, GPA
Application Note	IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Glycophorin A / CD235a (Erythrocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GYPA (HGNC:4702)
Function	Component of the ankyrin-1 complex, a multiprotein complex involved in the stability and shape of the erythrocyte membrane (PubMed:35835865). 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.
Cellular Location	Cell membrane; Single-pass type I membrane protein Note=Appears to be colocalized with SLC4A1

Background

Recognizes a sialoglycoprotein of 39kDa, 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.

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 sialylglycoproteins. J Gen Virol 1998, 79:2163-