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Anti-Glycophorin A / CD235a (Erythrocyte Marker) Antibody

Mouse Monoclonal Antibody
Catalog # AH13285

Product Information

Application	IHC-P, IF, FC
Primary Accession	P02724
Other Accession	434973, 654368, 2994
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	JC159
Calculated MW	16430

Additional Information

Gene ID	2993
Other Names	Blood group--MN locus; GPA; GPErik; GpMiIII; GPSAT; GYPA; MN sialoglycoprotein; MNS; PAS2; Sialoglycoprotein alpha
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.25-0.5ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Glycophorin A / CD235a (Erythrocyte Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

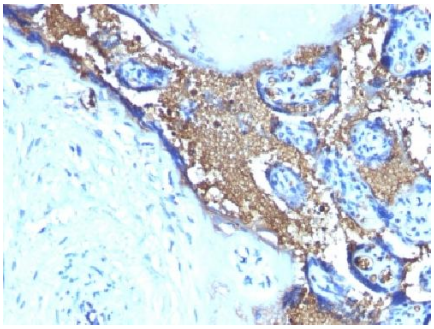
Name	GYPA (HGNC:4702)
Function	Component of the ankyrin-1 complex, a multiprotein complex involved in the stability and shape of the erythrocyte membrane (PubMed:35835865). Glycophorin A is the major intrinsic membrane protein of the erythrocyte. The N-terminal glycosylated segment, which lies outside 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.

Images



Formalin-fixed, paraffin-embedded human Placenta
Stained with Glycophorin A Monoclonal Antibody (JC159)