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

Mouse Monoclonal Antibody [Clone GYPA/280]
Catalog # AH11379

Product Information

Application	IHC, IF, FC
Primary Accession	P02724
Other Accession	2993, 2994, 434973, 654368
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	GYPA/280
Calculated MW	16430

Additional Information

Gene ID	2993
Other Names	Glycophorin-A, MN sialoglycoprotein, PAS-2, Sialoglycoprotein alpha, CD235a, GYPA, GPA
Application Note	IHC~~1:100~500 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

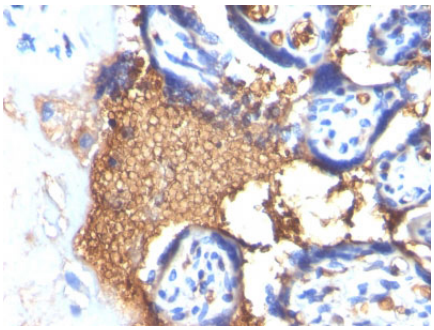
Background

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.

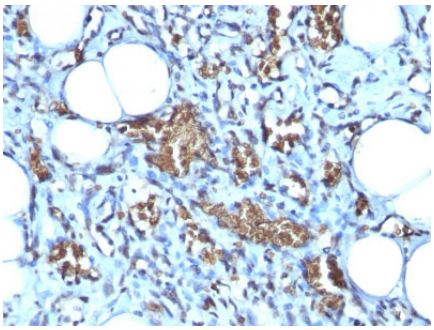
References

Andersson, L.C., et al. 1979. Glycophorin A as a cell surface marker of early erythroid differentiation in acute leukemia. Int. J. Cancer 23: 717-720. | Liszka, K., et al., 1983. Glycophorin A expression in malignant hematopoiesis. Am. J. Hematol. 15: 219-226

Images



Formalin-fixed, paraffin-embedded human Placenta stained with Glycophorin A Monoclonal Antibody (GYPA/280)



Formalin-fixed, paraffin-embedded human Angiosarcoma stained with Glycophorin A Monoclonal Antibody (GYPA/280)