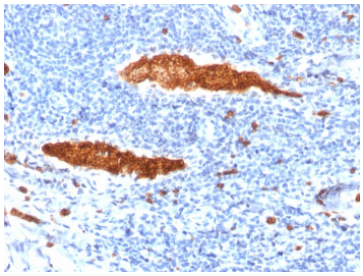
Glycophorin A Antibody JC 159 / GPA Antibody [clone JC 159] (V3328)

Catalog No.	Formulation	Size
V3328-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3328-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3328SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

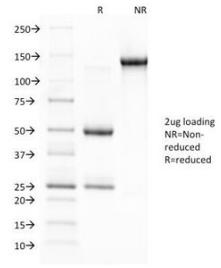
Citations (17)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	JC 159
Purity	Protein G affinity chromatography
UniProt	P02724
Localization	Cytoplasmic, membranous
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 0.25-0.5ug/ml for 30 min at RT
Limitations	This Glycophorin A Antibody JC 159 / GPA Antibody is available for research use only.



Glycophorin A Antibody JC 159 in Human Tonsil IHC. Immunohistochemistry testing of Glycophorin A Antibody JC 159 / GPA Antibody in FFPE human tonsil tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9, 10 mM Tris with 1 mM EDTA for 10-20 min. Strong immunoreactivity is concentrated in erythrocytes within vascular spaces, while the surrounding lymphoid tissue shows comparatively little staining.



Glycophorin A Antibody JC 159 Purity Analysis by SDS-PAGE. Electrophoretic analysis of purified, BSA-free Glycophorin A Antibody JC 159 / GPA Antibody with 2 ug loaded under reducing (R) and non-reducing (NR) conditions. The reduced sample shows major bands at approximately 50 and 25 kDa, corresponding to antibody heavy and light chains, while the non-reduced sample shows predominantly intact antibody at approximately 140-150 kDa.

Description

Glycophorin A Antibody JC 159 / GPA Antibody recognizes glycophorin A, a major transmembrane sialoglycoprotein of the human erythrocyte membrane encoded by the GYPA gene. Also known as GPA and CD235a, glycophorin A is strongly associated with the erythroid lineage and is widely used as a marker of erythroid differentiation and mature red blood cells. The protein contains a heavily glycosylated extracellular region, a single transmembrane domain and a short intracellular region.

Glycophorin A carries the M and N antigenic determinants of the MNS blood group system. Extensive O-linked glycosylation and terminal sialic acid residues contribute to the strong negative charge of the erythrocyte surface, helping maintain normal interactions between circulating red blood cells. These carbohydrate modifications also substantially influence the electrophoretic behavior of glycophorin A and contribute to its characteristic apparent molecular weight relative to the considerably smaller GYPA polypeptide backbone.

In addition to its importance as an erythroid marker and blood group antigen carrier, glycophorin A contributes to erythrocyte membrane organization and interacts functionally with other red blood cell membrane proteins. Its extracellular glycans also participate in host-pathogen interactions. GYPA serves as an erythrocyte receptor for the Plasmodium falciparum ligand EBA-175, making the protein relevant to studies of malaria parasite invasion as well as erythrocyte membrane biology. Glycophorin A is consequently studied in hematology, erythropoiesis, blood group biology and host-pathogen interactions.

Clone JC 159 is a mouse monoclonal antibody generated using formalin-fixed membrane from hairy cell leukemia as the immunogen and purified by Protein G affinity chromatography. The clone has been extensively used in published research and recognizes human glycophorin A. NSJ Bioreagents provides this Glycophorin A Antibody for research into erythroid cells, red blood cell membrane biology and GYPA expression. A GPA Antibody can support investigation of glycophorin A as a marker of erythroid lineage and differentiation.

For additional information on glycophorin A and a reagent with extensive tissue and cell-based validation, visit our Glycophorin A Antibody / Erythroid Cell Marker page.

Application Notes

Optimal dilution of the Glycophorin A Antibody JC 159 / GPA Antibody should be determined by the researcher.

Immunogen

Formalin fixed membrane from a Hairy cell leukemia was used as the immunogen for the Glycophorin A antibody.

Storage

Store the Glycophorin A antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Glycophorin A antibody, GPA antibody, GYPA antibody, CD235a antibody, MN sialoglycoprotein antibody, sialoglycoprotein alpha antibody

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