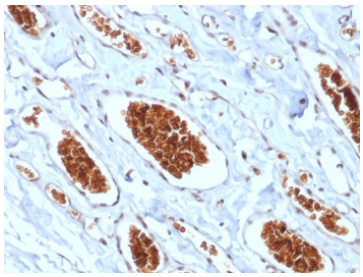
GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody [clone rGYPA/280] (V3604)

Catalog No.	Formulation	Size
V3604-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3604-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3604SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3604IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

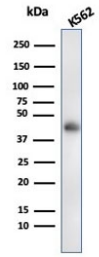
Recombinant MOUSE MONOCLONAL

Bulk quote request

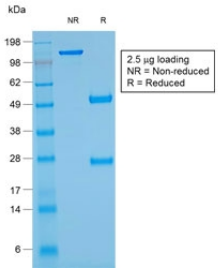
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rGYPA/280
Purity	Protein G affinity chromatography
UniProt	P02724
Localization	Cytoplasmic, membranous
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.25-0.5ug/ml for 30 min at RT
Limitations	This GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody is available for research use only.



GYPA Antibody rGYPA/280 in Human Angiosarcoma IHC. Immunohistochemistry testing of GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody in FFPE human angiosarcoma tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min. Strong immunoreactivity is concentrated in erythrocytes within vascular spaces, while the surrounding tissue shows comparatively little staining.



GYPA Antibody rGYPA/280 in Human K562 Erythroleukemia Cells WB. Western blot testing of GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody in human K562 erythroleukemia cell lysate. A prominent band is observed at approximately 38 kDa. The elevated apparent molecular weight relative to the GYPA polypeptide backbone is consistent with the extensive glycosylation of mature glycophorin A. This GYPA Antibody demonstrates detection of glycophorin A in erythroid-lineage K562 cells.



GYPA Antibody rGYPA/280 Purity Analysis by SDS-PAGE. Electrophoretic analysis of purified, BSA-free GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody with 2.5 ug loaded under non-reducing (NR) and reducing (R) conditions. The non-reduced sample shows predominantly intact antibody at approximately 150 kDa, while the reduced sample shows major bands at approximately 50 and 25 kDa corresponding to the antibody heavy and light chains, respectively.

Description

GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody recognizes glycophorin A, a major transmembrane sialoglycoprotein of human erythrocytes encoded by the GYPA gene. Also known as GPA and CD235a, glycophorin A is strongly associated with cells of the erythroid lineage and is widely used as a marker for studying erythroid differentiation and mature red blood cells. The protein contains a heavily glycosylated extracellular region, a single transmembrane domain and a short cytoplasmic region.

Glycophorin A carries the M and N antigenic determinants of the MNS blood group system. Extensive O-linked glycosylation and sialylation of its extracellular region contribute to the highly charged surface of erythrocytes and strongly influence the biochemical properties of the protein. These modifications also account for the characteristic electrophoretic behavior of glycophorin A, which migrates substantially above the predicted molecular weight of its polypeptide backbone.

GYPA participates in erythrocyte membrane organization and contributes to the normal function and membrane expression of the anion exchanger SLC4A1, also known as band 3. Glycophorin A is additionally involved in host-pathogen interactions. Its sialylated extracellular glycans serve as binding determinants for the Plasmodium falciparum erythrocyte-binding ligand EBA-175, making GYPA relevant to research involving malaria parasite invasion as well as erythrocyte membrane biology. These properties make glycophorin A an important target in studies of erythropoiesis, blood group biology and red blood cell physiology.

Clone rGYPA/280 is a recombinant mouse monoclonal antibody generated against recombinant human Glycophorin A protein and purified by Protein G affinity chromatography. NSJ Bioreagents provides this GYPA Antibody for research into erythroid differentiation, erythrocyte membrane biology and glycophorin A expression. An Erythrocyte Marker Antibody can support investigation of GYPA-positive cells and the molecular biology of the erythroid lineage.

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 GYPA Antibody rGYPA/280 / Erythrocyte Marker Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human Glycophorin A protein was used as the immunogen for the recombinant GYPA antibody.

Storage

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

Alternate Names

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

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