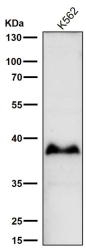
CD235a Antibody ADOG-7 / Erythroid Marker Antibody [clone ADOG-7] (RQ5004)

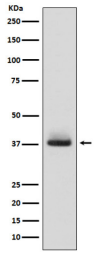
Catalog No.	Formulation	Size
RQ5004	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

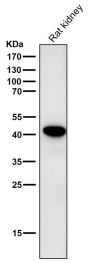
Availability	1-2 weeks
Species Reactivity	Human, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ADOG-7
Purity	Affinity purified
UniProt	P02724
Applications	Western blot: 1:500-1:1000 Immunohistochemistry (FFPE): 1:50-1:100 Flow cytometry: 1:20
Limitations	This CD235a Antibody ADOG-7 / Erythroid Marker Antibody is available for research use only.



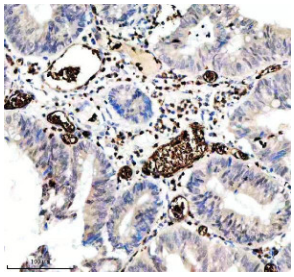
CD235a Antibody in Human K562 Erythroleukemia Cells WB. Western blot testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in human K562 erythroleukemia cell lysate. The antibody was used at a 1:1,000 dilution for 1 hour at RT. A prominent band is observed at approximately 38-40 kDa, consistent with the elevated apparent molecular weight of heavily glycosylated glycophorin A. This CD235a Antibody demonstrates detection of GYPA in erythroid-lineage K562 cells.



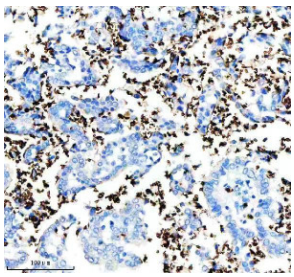
CD235a Antibody in Human Fetal Liver WB. Western blot testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in human fetal liver lysate. A strong, discrete band is observed at approximately 38 kDa. Glycophorin A has a calculated polypeptide molecular weight of approximately 16.3 kDa but migrates at a substantially higher apparent molecular weight due to its extensive glycosylation. This CD235a Antibody demonstrates detection of the mature GYPA glycoprotein in human fetal liver.



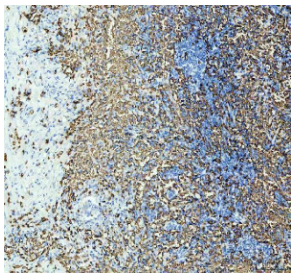
CD235a Antibody in Rat Kidney WB. Western blot testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in rat kidney lysate. The antibody was used at a 1:1,000 dilution for 1 hour at RT. A strong, discrete band is observed at approximately 40-42 kDa, with minimal additional background. The observed band indicates recognition of a glycophorin A-related protein in the tested rat kidney lysate.



CD235a Antibody in Human Colon Cancer IHC. Immunohistochemistry testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in FFPE human colon cancer tissue. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. The antibody was used at 1:100 overnight at 4oC, followed by peroxidase-conjugated goat anti-rabbit IgG and DAB detection. Strong staining is observed predominantly in erythrocytes within vascular spaces, while the surrounding colonic epithelial cells show little staining.



CD235a Antibody in Human Lung Cancer IHC. Immunohistochemistry testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in FFPE human lung cancer tissue. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. The antibody was used at 1:100 overnight at 4oC, followed by peroxidase-conjugated goat anti-rabbit IgG and DAB detection. Strong staining is concentrated in numerous small cells consistent with erythrocytes, while the larger tumor epithelial cells show comparatively little immunoreactivity.



CD235a Antibody in Human Lung Cancer Tissue IHC. Immunohistochemistry testing of CD235a Antibody ADOG-7 / Erythroid Marker Antibody in a second FFPE human lung cancer tissue section. Heat-induced epitope retrieval was performed in EDTA buffer, pH 8.0, and the antibody was used at 1:100 overnight at 4oC. Widespread immunoreactivity is visible throughout the tissue, including numerous small cells within the tumor-associated stroma.

Description

CD235a Antibody ADOG-7 / Erythroid Marker Antibody recognizes glycophorin A, a major sialoglycoprotein of the human erythrocyte membrane encoded by the GYPA gene. Glycophorin A is also known as GPA and carries the CD designation CD235a. Its strong association with erythroid cells makes CD235a an established marker for studying erythroid lineage development, differentiation and red blood cell biology. GYPA is a single-pass membrane protein with a heavily glycosylated extracellular domain that contributes substantially to the biochemical properties of the erythrocyte surface.

Glycophorin A is a component of the ankyrin-1 membrane complex, which contributes to erythrocyte membrane organization, stability and shape. GYPA also interacts with the anion exchanger SLC4A1, commonly known as band 3,

and contributes to its normal membrane expression and activity. The extracellular region of glycophorin A carries the M and N antigenic determinants of the MNS blood group system, making the protein relevant to studies of erythrocyte membrane biology and blood group antigen expression.

Extensive O-linked glycosylation and sialylation are defining biochemical characteristics of glycophorin A. These carbohydrate modifications contribute to the highly charged erythrocyte surface and substantially increase the apparent molecular weight of GYPA during electrophoresis relative to its predicted polypeptide mass. Glycophorin A also participates in host-pathogen interactions and serves as an erythrocyte receptor for the Plasmodium falciparum ligand EBA-175, whose interaction with GYPA depends on sialic acid-containing O-linked glycans.

Clone ADOG-7 is a rabbit monoclonal antibody generated against a synthetic peptide specific to human glycophorin A/GYPA/CD235a and purified by affinity chromatography. NSJ Bioreagents provides this CD235a Antibody for research into erythroid differentiation, erythrocyte biology and GYPA expression. An Erythroid Marker Antibody can support investigation of CD235a-positive cells and the biological functions of glycophorin A.

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 CD235a Antibody ADOG-7 / Erythroid Marker Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Glycophorin A / GYPA / CD235a was used as the immunogen for the Glycophorin A / CD235a antibody.

Storage

Store the Glycophorin A / CD235a antibody at -20oC.

Alternate Names

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

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