abcam

Product datasheet

Anti-Glycophorin A antibody [EPR8200] ab129024



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Overview

Product name Anti-Glycophorin A antibody [EPR8200]

Description Rabbit monoclonal [EPR8200] to Glycophorin A

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human Glycophorin A aa 100 to the C-terminus. The exact sequence is

proprietary.

Database link: P02724

Positive control Fetal liver lysate, Human lung tissue, Human spleen tissue.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

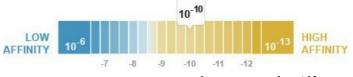
Our $\mathsf{RabMAb}^{\texttt{®}}$ technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 2.38 \times 10^{-10} M$ Dissociation constant (K_D)



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 0.05% BSA, 40% Glycerol

Purity Protein A purified

Clonality Monoclonal
Clone number EPR8200

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab129024 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/90. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Detects a band of approximately 38 kDa (predicted molecular weight: 16 kDa).
IHC-P	*****(1)	1/2500 - 1/5000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/100 - 1/250.

Target

Function 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. Is a receptor for influenza virus. Is a receptor for Plasmodium falciparum erythrocyte-binding antigen 175 (EBA-175); binding of EBA-175 is dependent on sialic acid residues of the O-linked glycans. Appears

to be a receptor for Hepatitis A virus (HAV).

Sequence similarities Belongs to the glycophorin A family.

Post-translational The major O-linked glycan are NeuAc-alpha-(2-3)-Gal-beta-(1-3)-[NeuAc-alpha-(2-6)]-GalNacOH modifications (about 78 %) and NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH (17 %). Minor O-glycans (5 %)

include NeuAc-alpha-(2-3)-Gal-beta-(1-3)-[NeuAc-alpha-(2-6)]-GalNAcOH NeuAc-alpha-(2-8)-NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH. About 1% of all O-linked glycans carry blood group A, B and H determinants. They derive from a type-2 precursor core structure, Gal-beta-(1,3)-GlcNAc-beta-1-R, and the antigens are synthesized by addition of fucose (H antigen-specific) and then N-acetylgalactosamine (A antigen-specific) or galactose (B antigen-specific). Specifically O-linked-glycans are NeuAc-alpha-(2-3)-Gal-beta-(1-3)-GalNAcOH-(6-1)-GlcNAc-beta-(4-1)-[Fuc-

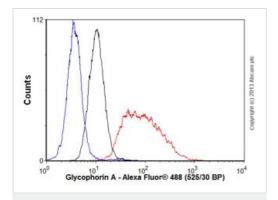
alpha-(1-2)]-Gal-beta-(3-1)-GalNAc-alpha (about 1%, B antigen-specific) and NeuAc-alpha-(2-3)-

Gal-beta-(1-3)-GalNAcOH-(6-1)-GlcNAc-beta-(4-1)-[Fuc-alpha-(1-2)]-Gal-beta (1 %, O antigen-, A antigen- and B antigen-specific).

Cellular localizationCell membrane. Appears to be colocalized with SLC4A1.

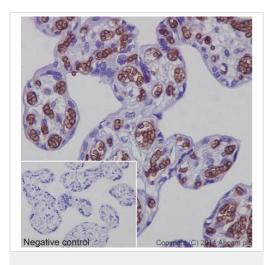
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Images



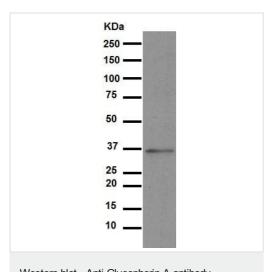
Flow Cytometry (Intracellular) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

Overlay histogram showing K562 cells stained with unpurified ab129024 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab129024, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor 488 goat anti-rabbit lgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1 μ g/1x106 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024 staining Glycophorin A in Human placenta tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, paraffin-embedded sections). Tissue was fixed and paraffinembedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/2500). ab97051(1/500) HRP-conjugated goat anti-rabbit IgG(H&L) was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.



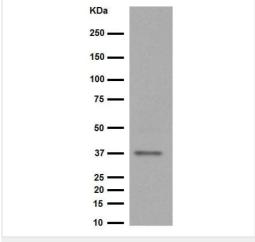
Anti-Glycophorin A antibody [EPR8200] (ab129024) at 1/1000 dilution + Human fetal kidney at 10 μg

Secondary

Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

Predicted band size: 16 kDa





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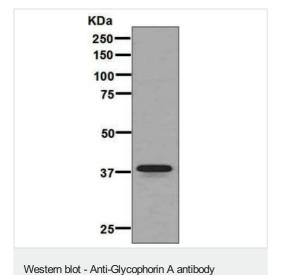
Anti-Glycophorin A antibody [EPR8200] (ab129024) at 1/2000 dilution + Human fetal liver lysate at 20 μg

Secondary

Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

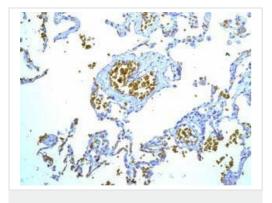
Western blot - Anti-Glycophorin A antibody

[EPR8200] (ab129024)



Anti-Glycophorin A antibody [EPR8200] (ab129024) at 1/1000 dilution (unpurified) + Fetal liver lysate at 10 μg

Predicted band size: 16 kDa **Observed band size:** 38 kDa

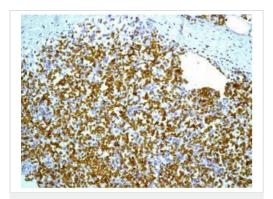


[EPR8200] (ab129024)

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, at 1/100 dilution staining Glycophorin A in formalin fixed paraffin embedded Human lung tissue by immunohistochemistry.

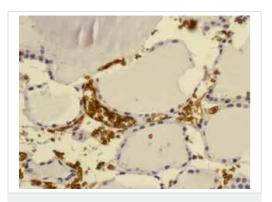
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, at 1/100 dilution staining Glycophorin A in formalin fixed paraffin embedded Human spleen tissue by immunohistochemistry.

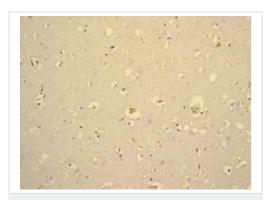
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, showing positive staining in Thyroid gland erythrocytes tissue.

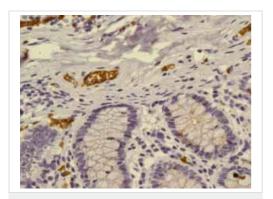
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, showing negative staining in Normal brain tissue.

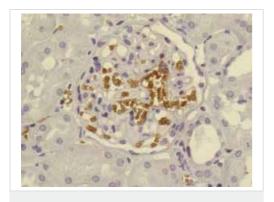
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, showing positive staining in Normal colon erythrocytes tissue.

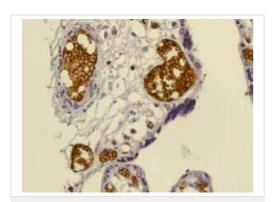
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, showing positive staining in Normal kidney erythrocytes tissue.

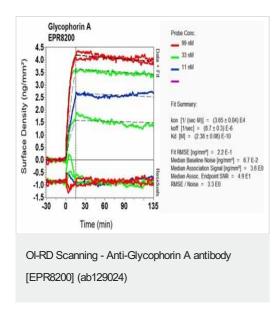
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Glycophorin A antibody [EPR8200] (ab129024)

ab129024, unpurified, showing positive staining in Normal placenta erythrocytes tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Equilibrium disassociation constant (K_D)

Learn more about KD

Click here to learn more about K_D



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