Datasheet for ABIN742290

anti-CD235a/GYPA antibody (AA 74-150)

1 Image

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Overview

Quantity:	100 µL
Target:	CD235a/GYPA (GYPA)
Binding Specificity:	AA 74-150
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CD235a/GYPA antibody is un-conjugated
Application:	Flow Cytometry (FACS), Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunofluorescence (Cultured Cells) (IF (cc))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse Glycophorin A
Isotype:	IgG
Cross-Reactivity:	Mouse
Purification:	Purified by Protein A.

Target Details

Target:	CD235a/GYPA (GYPA)
Alternative Name:	GYPA (GYPA Products)

Target Details

Background:	Synonyms: Glycophorin A, AI853584, CD235a, GPA, Gypa, MN sialoglycoprotein, PAS-2, Sialoglycoprotein alpha, Glycophorin A MNS blood group, GlycophorinA, GPErik, GpMiIII, GPSAT, GYPA, GYPA, included, HGpMiIII, HgpMiV, HgpMiX, HgpMiXI, HGpStaC, MN, MN sialoglycoprotein, MNS, PAS-2, PAS2. Background: Glycophorins A (GPA) and B (GPB) are single pass membrane sialoglycoproteins. GPA is the carrier of blood group M and N specificities, while GPB accounts for S and U specificities. 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 and also binds influenza virus.
Gene ID:	2993
UniProt:	P14220
Pathways:	Maintenance of Protein Location

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions:	For Research Use only

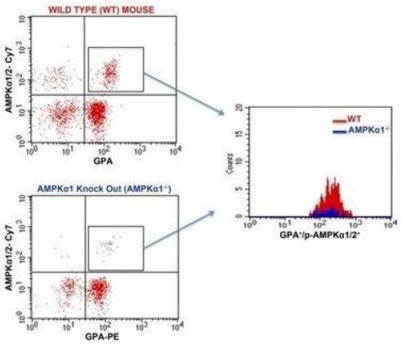
Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



AMPK, a hetero-trimeric enzyme, is the master-regulator of cellular energetics and metabolism. AMPKα with two isoforms (AMPKα1 and AMPKα2) is the catalytic unit of AMPK. AMPKα1 is a predominant isoform in endothelial cells, immune cells as well as circulating blood cells. RBCs primarily (70 – 90%) express AMPKα1. Genetic deletion of AMPKα1 in mouse causes loss in RBCs deformability index (that is increased RBCs rigidity) and severe splenomegaly. In humans diabetics have poor AMPK-activity and erythrocytic DI-values. Therefore, we analyzed RBCs for AMPK-activity via FACS-analysis of AMPKα1 phosphorylation with RBC-associated marker GPA. Whole blood samples were stained with fluorochrome-conjugated antibodies as shown above and analyzed using a four-color flow cytometer (FACS Calibur, BD Biosciences, San Diego, CA) and CellQuest software. Very mild p-AMPKα present in the AMPKα1 KO mouse can be seen due to presence of low level of AMPKα2 in RBCs.

Flow Cytometry

Image 1. FACS Analysis of Glycophorin A and phospho-AMPK alpha 1/2 (Thr172/183) in Red Blood Cells in WT and AMPK alpha 1 knockout mice using Rabbit Anti-GPA Polyclonal Antibody . Image kindly submitted by Nasrul Hoda, PhD, Georgia Regents University