abcam

Product datasheet

Anti-AMF antibody [EPR11663(B)] ab167394

KO VALIDATED Recombinant RabMAb

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Overview

Product name	Anti-AMF antibody [EPR11663(B)]
Description	Rabbit monoclonal [EPR11663(B)] to AMF
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide corresponding to Human AMF. Database link: P06744
Positive control	WB: HEK-293T, HepG2, HeLa, HT29, and A549 cell lysates. IHC-P: Human brain, pancreas, skeletal muscle, ovarian carcinoma, prostatic hyperplasia and thyroid carcinoma tissues. ICC/IF: MCF7 and HepG2 cells. Flow Cyt (intra): A549 cells.
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 RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

	supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR11663(B)
Isotype	IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab167394 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)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (1)	1/1000 - 1/10000. Predicted molecular weight: 63 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/500.

Application notes Is unsuitable for IP.

Target

Function Besides it's role as a glycolytic enzyme, mammalian GPI can function as a tumor-secreted cytokine and an angiogenic factor (AMF) that stimulates endothelial cell motility. GPI is also a neurotrophic factor (Neuroleukin) for spinal and sensory neurons.

Pathway Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose: step 2/4.

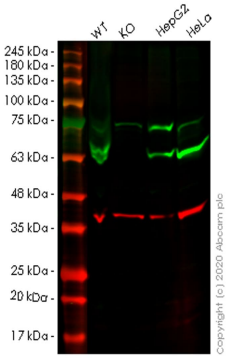
Involvement in disease Defects in GPI are the cause of hemolytic anemia non-spherocytic due to glucose phosphate isomerase deficiency (HA-GPID) [MIM:613470]. It is a form of anemia in which there is no abnormal hemoglobin or spherocytosis. It is caused by glucose phosphate isomerase deficiency. Severe GPI deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment.

Sequence similarities Belongs to the GPI family.

Post-translational modifications Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may contribute to secretion by a non-classical secretory pathway.
ISGylated.

Cellular localization Cytoplasm. Secreted.

Images



Western blot - Anti-AMF antibody [EPR11663(B)] (ab167394)

All lanes : Anti-AMF antibody [EPR11663(B)] (ab167394) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate
Lane 2 : GPI knockout HEK293T cell lysate
Lane 3 : HepG2 cell lysate
Lane 4 : HeLa cell lysate

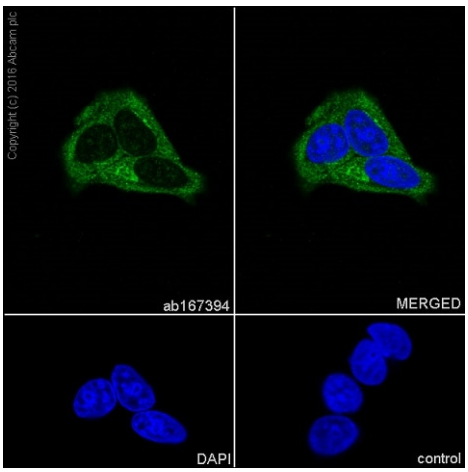
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 63 kDa
Observed band size: 63 kDa

Lanes 1-4: Merged signal (red and green). Green - ab167394 observed at 63 kDa. Red - loading control ab8245 observed at 36 kDa.

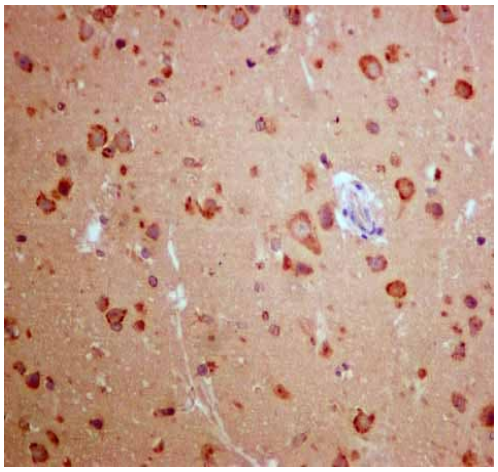
ab167394 Anti-AMF antibody [EPR11663(B)] was shown to specifically react with AMF in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266834 (knockout cell lysate ab257458) was used. Wild-type and AMF knockout samples were subjected to SDS-PAGE. ab167394 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-AMF antibody [EPR11663(B)] (ab167394)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 (human breast carcinoma) labelling AFM with purified ab167394 at 1/500. Cells were fixed with 100% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (Ab150077). Nuclei counterstained with DAPI (blue).

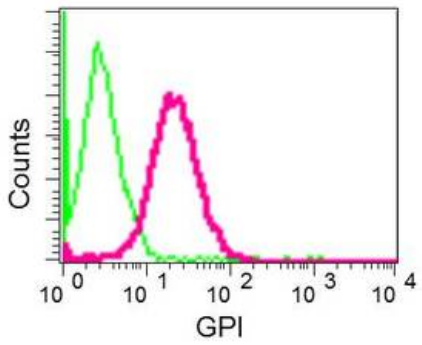
Control: PBS only



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

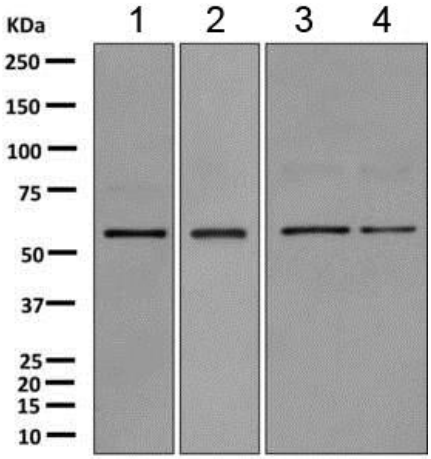
ab167394 showing +ve staining in Human normal brain.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-AMF antibody [EPR11663(B)] (ab167394)

Intracellular flow cytometric analysis of permeabilized A549 cells, labeling AFM with ab167394 at 1/10 dilution.



Western blot - Anti-AMF antibody [EPR11663(B)] (ab167394)

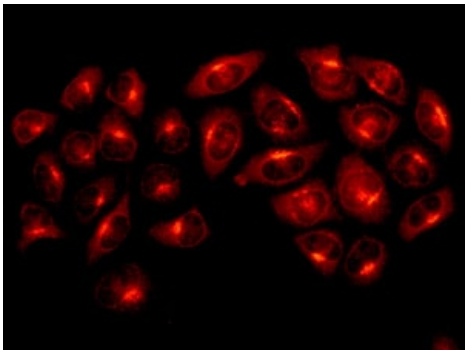
All lanes : Anti-AMF antibody [EPR11663(B)] (ab167394) at 1/1000 dilution

Lane 1 : HepG2 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : HT29 cell lysate
Lane 4 : A549 cell lysate

Lysates/proteins at 10 µg per lane.

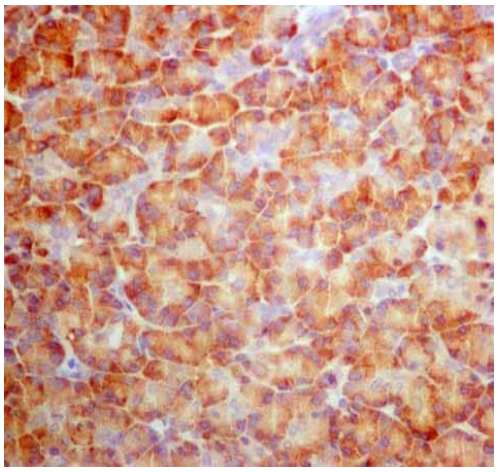
Secondary
All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 63 kDa



Immunocytochemistry/ Immunofluorescence - Anti-AMF antibody [EPR11663(B)] (ab167394)

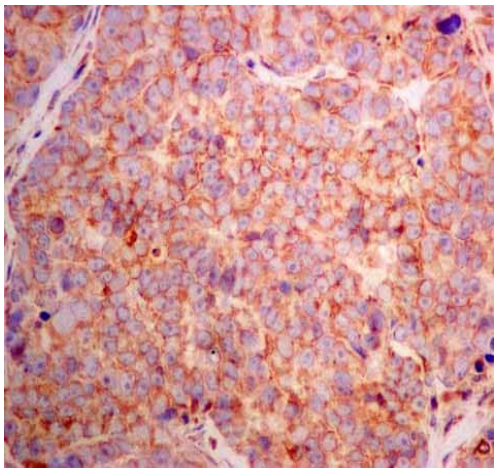
Immunofluorescent analysis of HepG2 cells labeling AFM with ab167394 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

ab167394 showing +ve staining in Human normal pancreas.

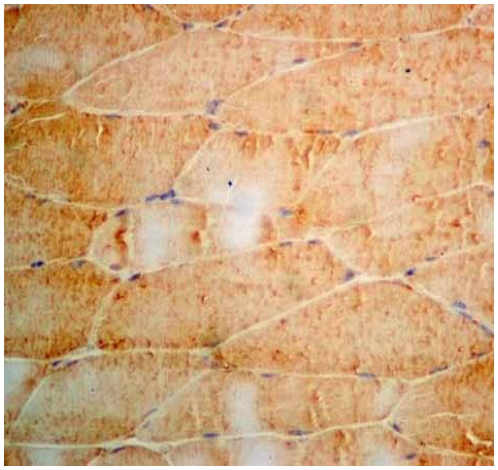
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

ab167394 showing +ve staining in Human ovarian carcinoma.

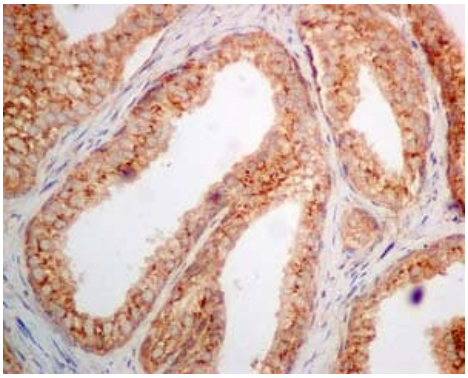
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

ab167394 showing +ve staining in Human skeletal muscle.

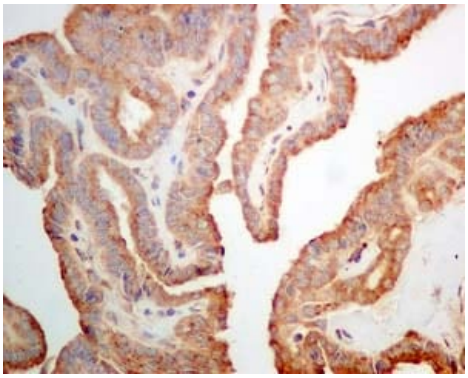
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

Immunohistochemical analysis of paraffin-embedded Human prostatic hyperplasia tissue, labeling AFM with ab167394 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AMF antibody [EPR11663(B)] (ab167394)

Immunohistochemical analysis of paraffin-embedded Human thyroid carcinoma tissue labeling AFM with ab167394 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Anti-AMF antibody [EPR11663(B)] (ab167394)

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