abcam

ab167394

Anti-AMF antibody [EPR11663(B)]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11663(B)
Purification technique	Affinity purification Protein A
Concentration	0.383 - 0.389 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information GPI

Function	Isomerase that catalyzes the conversion of alpha-D-glucose-6-phosphate to beta-D-fructose-6-phosphate, the second step in glycolysis, and the reverse reaction in

gluconeogenesis, within the cytoplasm (PubMed:28803808). Also shows C2-epimerase activity, interconverting D-glucose-6-phosphate (G6P) and D-mannose-6-phosphate (M6P) (By similarity). Also displays anomerase activity, interconverting alpha and beta-anomeric forms of G6P, D-fructose-6-phosphate and M6P (By similarity). In addition to its metabolic role, this enzyme functions extracellularly as a cytokine: acts as autocrine motility factor (AMF), a secreted angiogenic factor that enhances endothelial cell motility (PubMed:11437381). Functions as neuroleukin, a neurotrophic factor supporting the survival of spinal and sensory neurons (PubMed:11004567, PubMed:3352745). Released by lectin-stimulated T-cells to induce immunoglobulin secretion (PubMed:11004567, PubMed:3352745).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

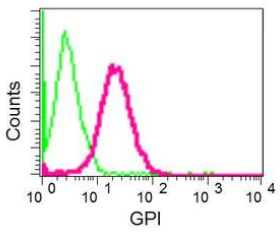
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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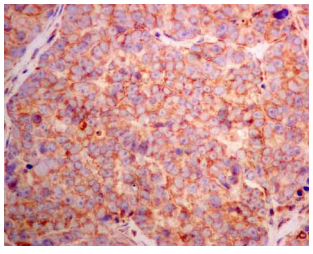
11 product images



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

AMF Flow Cytometry (Intracellular) staining using rabbit Anti-AMF antibody

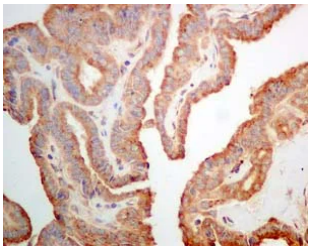
Intracellular flow cytometric analysis of permeabilized A549 cells, labeling AFM with ab167394 at 1/10 dilution.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

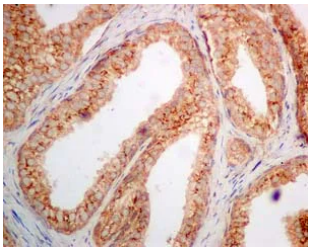
ab167394 showing +ve staining in Human ovarian carcinoma.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

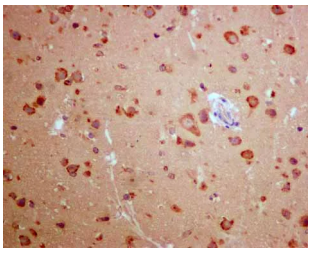
Immunohistochemical analysis of paraffin-embedded Human thyroid carcinoma tissue labeling AFM with ab167394 at 1/100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

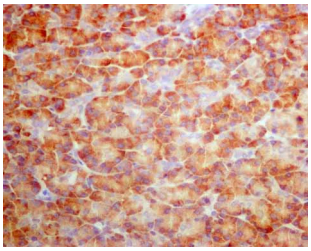
Immunohistochemical analysis of paraffin-embedded Human prostatic hyperplasia tissue, labeling AFM with ab167394 at 1/100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

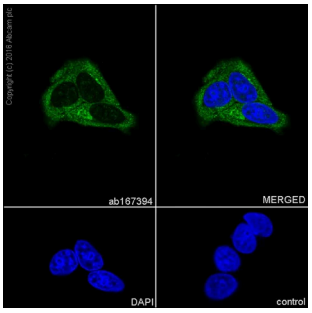
ab167394 showing +ve staining in Human normal brain.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

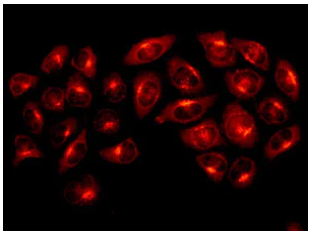
ab167394 showing +ve staining in Human normal pancreas.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

AMF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-AMF antibody

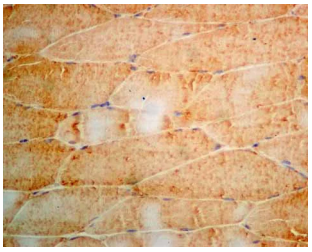
Immunocytochemistry/Immunofluorescence analysis of MCF-7 (human breast carcinoma) labelling AFM with purified ab167394 at 1/500. Cells were fixed with 100% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody (ab150077). Nuclei counterstained with DAPI (blue).
Control: PBS only



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

AMF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-AMF antibody

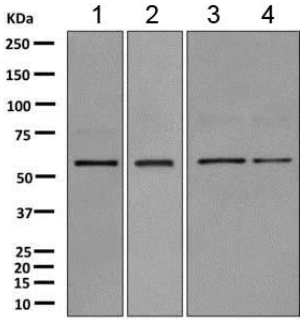
Immunofluorescent analysis of HepG2 cells labeling AFM with ab167394 at 1/100 dilution.



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

AMF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AMF antibody

ab167394 showing +ve staining in Human skeletal muscle.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

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

Lane 1:
HepG2 cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

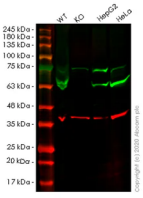
Lane 3:
HT29 cell lysate at 10 µg

Lane 4:
A549 cell lysate at 10 µg

Secondary

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

Predicted band size: 63 kDa



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

AMF Western blot staining using rabbit Anti-AMF antibody

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.

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

Lane 1:
Wild-type HEK293T cell lysate at 20 µg

Lane 2:
Western blot - Human GPI (AMF) knockout HEK-293T cell lysate (ab257458) at 20 µg

Lane 3:
HepG2 cell lysate at 20 µg

Lane 4:
HeLa cell lysate at 20 µg

Secondary

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

Predicted band size: 63 kDa

Observed band size: 63 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.