abcam

ab177153

Anti-MST4 antibody [EPR12766]

Recombinant | RabMAb

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	EPR12766
Purification technique	Affinity purification Protein A
Concentration	0.467 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

Species	Mouse
Dilution info	1/1000 - 1/5000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/5000
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.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information STK26

Function Serine/threonine-protein kinase that acts as a mediator of cell growth (PubMed:11641781, PubMed:17360971). Modulates apoptosis (PubMed:11641781, PubMed:17360971). In association with STK24 negatively regulates Golgi reorientation in polarized cell migration upon RHO activation (PubMed:27807006). Phosphorylates ATG4B at 'Ser-383', thereby increasing autophagic flux (PubMed:29232556). Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes. STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling. Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:18782753).

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

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	MST4 also known as mammalian sterile 20-like kinase 4 is a serine/threonine kinase with a molecular mass of approximately 53 kDa. It belongs to the germinal center kinase (GCK) family and is expressed in various tissues showing higher levels in the brain and testis. MST4 localizes to the Golgi apparatus where it plays a role in regulating cellular processes.
Biological function summary	MST4 contributes to cell growth apoptosis and stress response signaling. It does not operate alone; MST4 is a part of the STRIPAK complex. The protein involves itself in the regulation of the actin cytoskeleton thereby influencing cell motility and polarity. By modulating these processes MST4 can impact developmental and stress-induced cellular pathways.
Pathways	MST4 participates in the Hippo signaling pathway which regulates organ size by controlling cell proliferation and apoptosis. In this pathway MST4 interacts with other proteins such as MST1 and MST2 to execute its functions. MST4 also participates in the MAPK signaling pathway where it connects to various cellular stress responses contributing to the transcriptional activity of downstream effectors.
Associated diseases and disorders	MST4 has implications in cancer and neurodegenerative diseases. Alterations in MST4 expression or activity have been associated with tumor progression in several cancers. Additionally it's linked to neurodegeneration through its interactions with proteins such as Tau where dysregulated pathways may lead to

pathological conditions. These connections highlight the importance of MST4 in maintaining cellular homeostasis and the implications of its dysfunction in disease states.

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

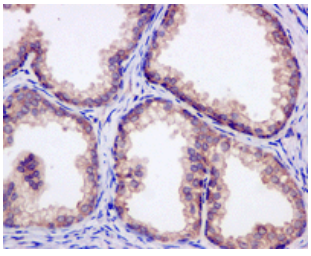
We do not recommend this combination. It is not covered by our product promise.

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.

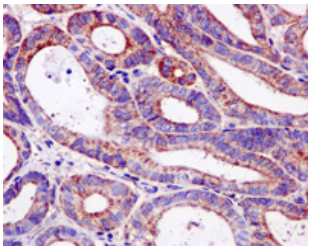
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MST4 antibody [EPR12766] (ab177153)

MST4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MST4 antibody

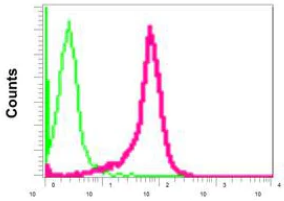
Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling MST4 with ab177153 at 1/50 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MST4 antibody [EPR12766] (ab177153)

MST4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MST4 antibody

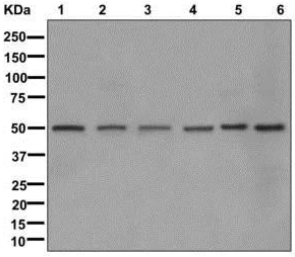
Immunohistochemical analysis of paraffin-embedded Human gastric carcinoma tissue labeling MST4 with ab177153 at 1/50 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-MST4 antibody [EPR12766] (ab177153)

MST4 Flow Cytometry (Intracellular) staining using rabbit Anti-MST4 antibody

Intracellular flow cytometric analysis of permeabilized Jurkat cellslabeling MST4with ab177153 at 1/10 dilution (red), or a rabbit IgG (negative) (green).



Western blot - Anti-MST4 antibody [EPR12766] (ab177153)

All lanes:
Western blot - Anti-MST4 antibody [EPR12766] (ab177153) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
293T cell lysate at 10 µg

Lane 3:
Jurkat cell lysate at 10 µg

Lane 4:
Human fetal brain tissue lysate at 10 µg

Lane 5:
PC-12 cell lysate at 10 µg

Lane 6:
NIH/3T3 cell lysate at 10 µg

Secondary

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

Predicted band size: 47 kDa

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