


Anti-STK3/MST-2 antibody ab70546

[2 References](#) [3 Images](#)

Overview

Product name	Anti-STK3/MST-2 antibody
Description	Rabbit polyclonal to STK3/MST-2
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Rabbit, Horse, Guinea pig, Cow, Turkey, Xenopus laevis, Chimpanzee, Zebrafish, Rhesus monkey, Gorilla, Tilapia, Orangutan, Xenopus tropicalis 
Immunogen	Synthetic peptide corresponding to Human STK3/MST-2 (C terminal).
Positive control	Whole cell lysate from HeLa, Ramos or NIH3T3 cells
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab70546 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
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/5000 - 1/15000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
IP		Use at 2-5 µg/mg of lysate.

Target**Function**

Stress-activated, pro-apoptotic kinase which, following caspase-cleavage, enters the nucleus and induces chromatin condensation followed by internucleosomal DNA fragmentation. Key component of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein MST1/MST2, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. MST1/MST2 are required to repress proliferation of mature hepatocytes, to prevent activation of facultative adult liver stem cells (oval cells), and to inhibit tumor formation. Phosphorylates NKX2-1.

Tissue specificity

Expressed at high levels in adult kidney, skeletal and placenta tissues and at very low levels in adult heart, lung and brain tissues.

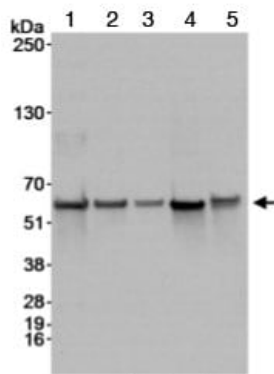
Sequence similarities

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain.
Contains 1 SARAH domain.

Cellular localization

Cytoplasm. Nucleus. The caspase-cleaved form cycles between nucleus and cytoplasm.

Images



Western blot - Anti-STK3/MST-2 antibody (ab70546)

All lanes : Anti-STK3/MST-2 antibody (ab70546) at 1/10000 dilution

Lane 1 : Whole cell lysate from HeLa cells at 50 µg

Lane 2 : Whole cell lysate from HeLa cells at 15 µg

Lane 3 : Whole cell lysate from HeLa cells at 5 µg

Lane 4 : Whole cell lysate from Ramos cells at 50 µg

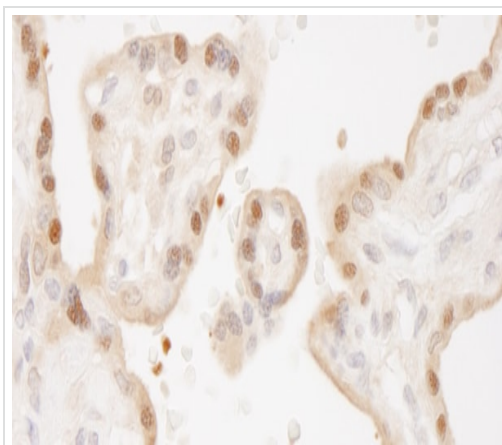
Lane 5 : Whole cell lysate from NIH3T3 cells at 50 µg

Developed using the ECL technique.

Predicted band size: 56 kDa

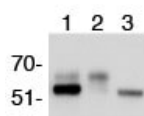
Observed band size: 56 kDa

Exposure time: 3 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STK3/MST-2 antibody (ab70546)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue labelling STK3/MST-2 with ab70546 at 1/1000 (1µg/ml). Detection: DAB.



Immunoprecipitation - Anti-STK3/MST-2 antibody (ab70546)

1mg whole cell lysate from HeLa cells was immunoprecipitated with ab70546 at 3µg/mg of lysate (lane 1) or a control rabbit IgG (lane 2).

For the subsequent blot, 25% of the immunoprecipitate (lanes 1 and 2) or the input (lane 3) were probed with ab70546 at 1mg/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Promise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors