abcam

Product datasheet

Anti-STK3/MST-2 antibody [EP1466Y] ab52641

敲除验证 重组 RabMAb

33 References 9 图像

概述

产品名称	Anti-STK3/MST-2抗体[EP1466Y]
描述	兔单克隆抗体[EP1466Y] to STK3/MST-2
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human STK3/MST-2 aa 1-100 (N terminal). The exact sequence is proprietary.
阳性对照	ICC/IF: Wildtype HAP1 cells, NIH/3T3 (Mouse embryonic fibroblast) cells; WB: NIH/3T3, Hek293, HeLa, C6 cell lysate; IHC-P: Human lymphoma tissue; Flow Cyt (intra): NIH/3T3 (Mouse embryonic fibroblast).
常规说明	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**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EP1466Y

同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用**ab52641**于以下的**经测试应用

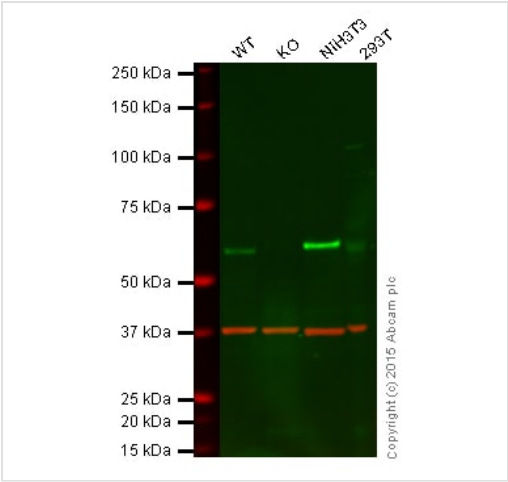
"应用说明"**部分 下显示的**仅为**推荐的起始稀释度**;实际**最佳的稀释度**/浓**度应由使用者检定。**

应用	Ab评论	说明
Flow Cyt (Intra)		1/70.
ICC/IF		Use a concentration of 5 µg/ml.
WB		1/10000 - 1/50000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
IP		1/50 - 1/100.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Antigen retrieval step strongly recommended for enhanced signal.

靶标

功能	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.
组织特异性	Expressed at high levels in adult kidney, skeletal and placenta tissues and at very low levels in adult heart, lung and brain tissues.
序列相似性	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain. Contains 1 SARAH domain.
细胞定位	Cytoplasm. Nucleus. The caspase-cleaved form cycles between nucleus and cytoplasm.

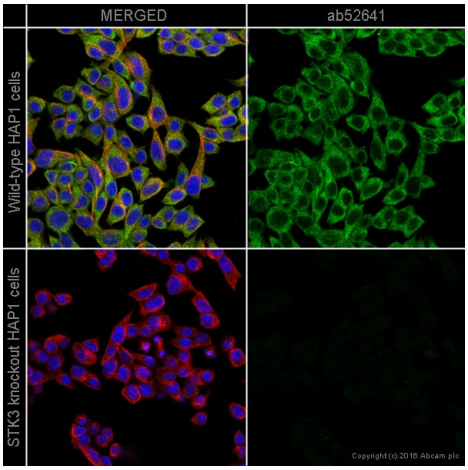
图片



Western blot - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

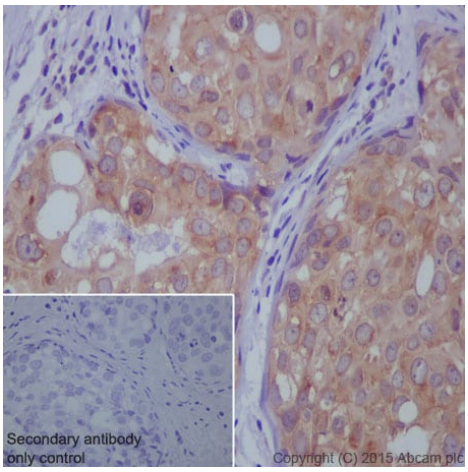
Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: STK3/MST-2 knockout HAP1 cell lysate (20 µg)
Lane 3: NIH/3T3 cell lysate (20 µg)
Lane 4: 293T cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab52641 observed at 56 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab52641 was shown to specifically react with STK3/MST-2 when STK3/MST-2 knockout samples were used. Wild-type and STK3/MST-2 knockout samples were subjected to SDS-PAGE. ab52641 and **ab8245** (loading control to GAPDH) were diluted 1/10 000 and 1/2000 and incubated overnight at 4°C. 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 1/10 000 dilution for 1 h at room temperature before imaging.



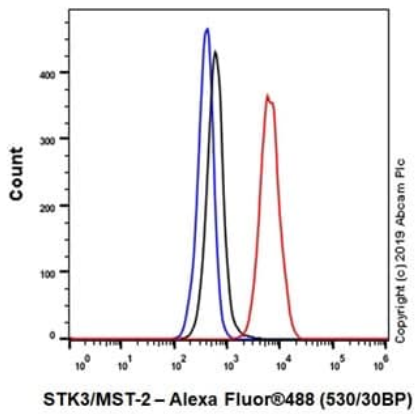
Immunocytochemistry/ Immunofluorescence - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

ab52641 staining STK3/MST-2 in wild-type HAP1 cells (top panel) and STK3/MST-2 knockout HAP1 cells (bottom panel). The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab52641 at 5µg/ml concentration and **ab195889** at 1/250 dilution (shown in pseudo colour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.



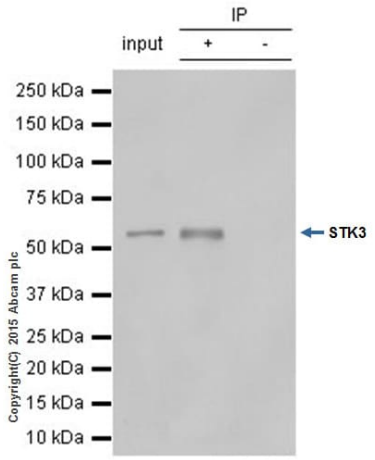
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

Immunohistochemical staining of paraffin embedded human breast carcinoma with purified ab52641 at a working dilution of 1/50. The secondary antibody used is **ab97051**, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



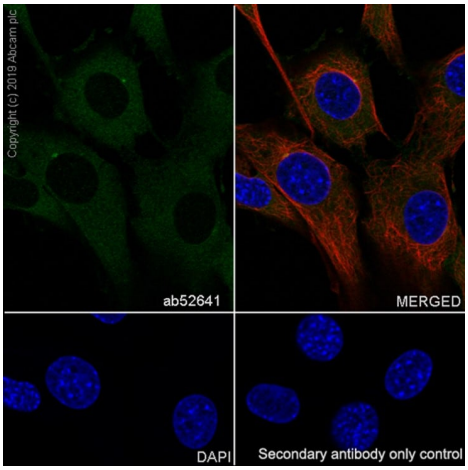
Flow Cytometry (Intracellular) - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

NIH/3T3 (Mouse embryonic fibroblast) cells were fixed with4% paraformaldehyde and permeabilised with 90% methanol. The primary antibody (ab52641) was used at a 1/70 dilution (1 µg) (red). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at a 1/2000 dilution. A Rabbit monoclonal IgG (**ab172730**) (black) was used as an isotype control.Cells without incubation with primary antibody and secondary antibody were used as an unlabelled control (blue).



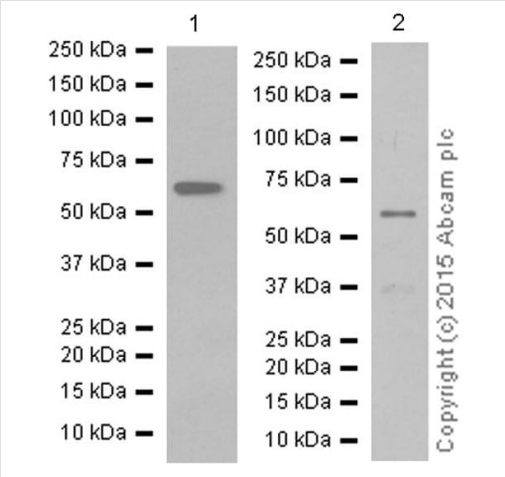
Immunoprecipitation - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

ab52641 (purified) at 1/50 immunoprecipitating STK3/MST-2 in 10 µg C6 cell lysate (Lanes 1 and 2, observed at 56 kDa). Lane 3 - Rabbit monoclonal IgG (**ab172730**). For western blotting, HRP Veriblot for IP (**ab131366**) was used for detection (1/10 000). Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

Confocal image showing cytoplasmic staining of STK3/MST-2 in NIH/3T3 (mouse embryonic fibroblast) cells using ab52641 . The cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. The cells were then incubated with ab52641 at 1/70 dilution and counterstained with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/100 dilution (red). Goat anti Rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at 1/1000 dilution (green). Nuclei counterstained with DAPI (blue).



Western blot - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

All lanes : Anti-STK3/MST-2 antibody [EP1466Y] (ab52641) at 1/50000 dilution (purified)

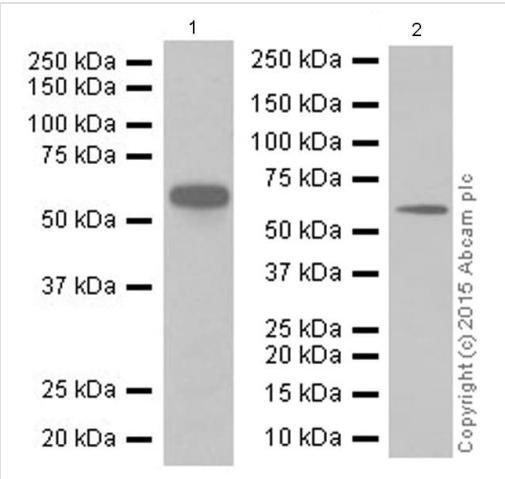
Lane 1 : C6 whole cell lysate
Lane 2 : NIH/3T3 whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 56 kDa
Observed band size: 56 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



Western blot - Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

All lanes : Anti-STK3/MST-2 antibody [EP1466Y] (ab52641) at 1/50000 dilution (purified)

Lane 1 : HEK293 whole cell lysate
Lane 2 : HeLa whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 56 kDa
Observed band size: 56 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST

Anti-STK3/MST-2 antibody [EP1466Y] (ab52641)

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