abcam

Product datasheet

Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] ab51134

KO 評価済 リコンビナント RabMAb

24 References 画像数 7

製品の概要

製品名	Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y]
製品の詳細	Rabbit monoclonal [EP1465Y] to Serine/threonine-protein kinase 4/MST-1
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human Serine/threonine-protein kinase 4/MST-1 aa 1-100 (N terminal). The exact sequence is proprietary.
ポジティブ・コントロール	WB: Jurkat, Ramos and HeLa cell lysate and mouse spleen, rat spleen and human urinary bladder tissues. ICC/IF: Raw264.7 cells. IHC-P:Human gastric carcinoma. IP: Jurkat cell lysate. Flow Cyt (intra): HeLa cells.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EP1465Y
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab51134の使用に適用されます

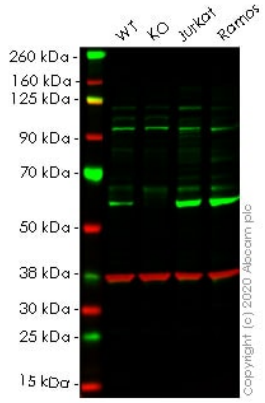
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/50.
WB		1/10000. Detects a band of approximately 59 kDa (predicted molecular weight: 56 kDa).
IHC-P		1/50 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. We strongly recommend that customers perform an antigen retrieval step.
ICC/IF		1/100 - 1/250.
IP		1/30 - 1/100.

ターゲット情報

機能	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 (By similarity). Phosphorylates 'Ser-14' of histone H2B (H2BS14ph) during apoptosis. Phosphorylates FOXO3 upon oxidative stress, which results in its nuclear translocation and cell death initiation.
組織特異性	Ubiquitously expressed.
配列類似性	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain. Contains 1 SARAH domain.
翻訳後修飾	Autophosphorylated on serine and threonine residues.
細胞内局在	Cytoplasm. Nucleus. The caspase-cleaved form cycles between the nucleus and cytoplasm.

画像



Western blot - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

All lanes : Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : STK4 knockout HeLa cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : Ramos cell lysate

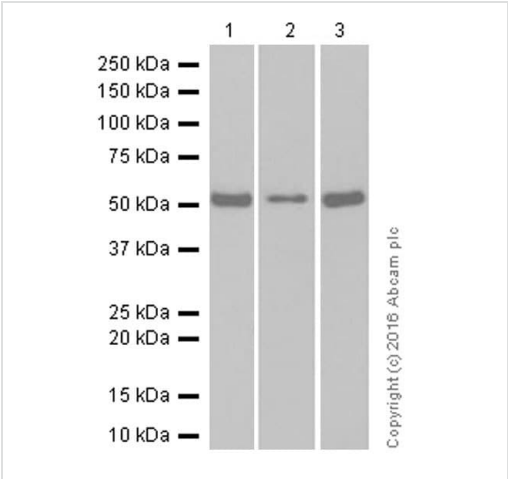
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 56 kDa

Lanes 1-4: Merged signal (red and green). Green - ab51134 observed at 52 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab51134 Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] was shown to specifically react with MST-1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265442** (knockout cell lysate **ab258215**) was used. Wild-type and MST-1 knockout samples were subjected to SDS-PAGE. ab51134 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C 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.



Western blot - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

All lanes : Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134) at 1/50000 dilution

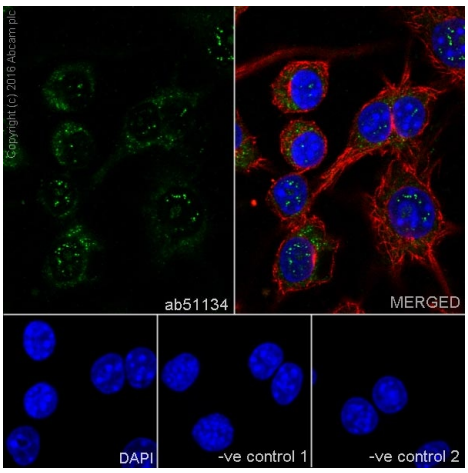
Lane 1 : Jurkat (human acute T cell leukemia) whole cell lysate
Lane 2 : Mouse spleen
Lane 3 : Rat spleen

Lysates/proteins at 1/20 dilution per lane.

Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 56 kDa

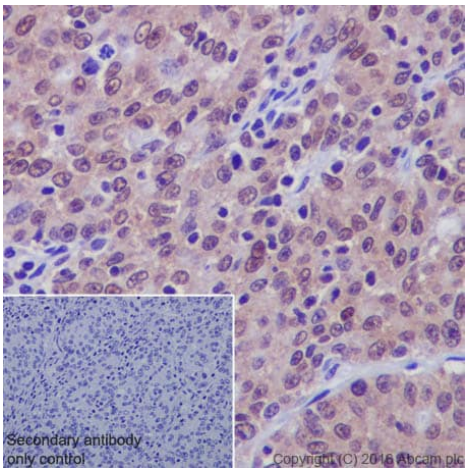
Diluting and blocking buffer: 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

ab51134 staining Serine/threonine-protein kinase 4/MST-1 in Raw264.7 (mouse abelson murine leukemia virus-induced tumor) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 100% methanol and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a concentration of 1/1000. **ab7291** anti-Tubulin (mouse mAb) (1/1000) and **ab150120** AlexaFluor®594 Goat anti-Mouse secondary (1/1000) were used as counterstains for primary antibody ab51134 and secondary antibody **ab150077** respectively and DAPI was used as a nuclear counterstain.

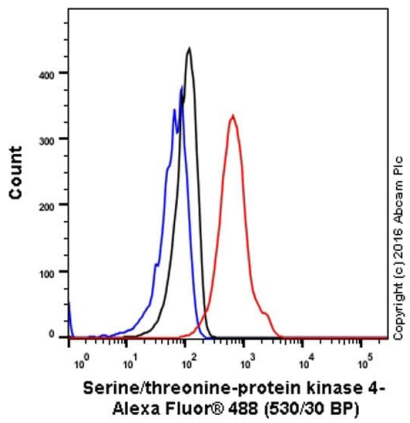
Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (**ab150120**)
Negative control 2: Mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

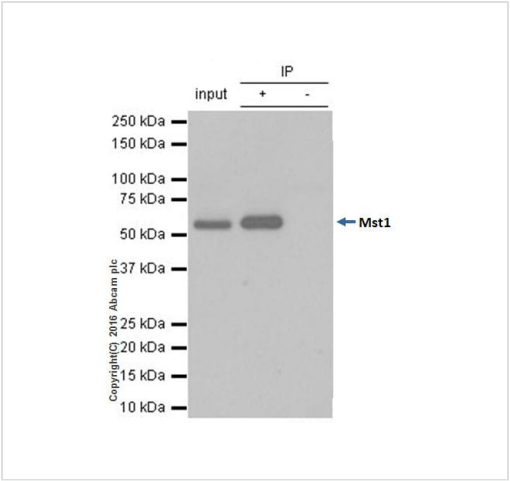
ab51134 staining Serine/threonine-protein kinase 4/MST-1 in human gastric carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/50. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.



Flow Cytometry (Intracellular) - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

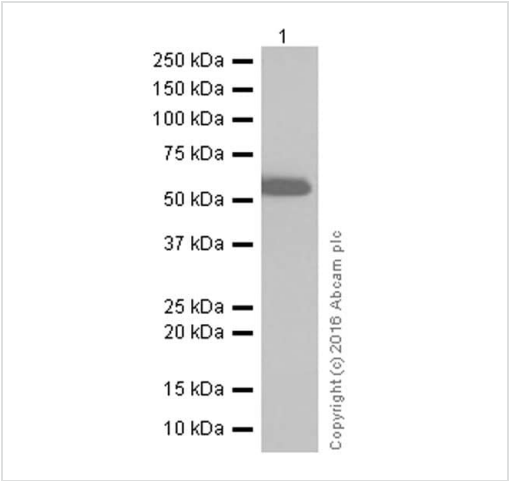
Intracellular Flow Cytometry analysis of HeLa cells labelling Serine/theronine-protein kinase 4/MST-1 with purified ab51134 at a dilution of 1/50 (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. An Alexa Flour® 488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Immunoprecipitation - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

ab51134 immunoprecipitating Serine/threonine-protein kinase 4/MST-1. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/30 and VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at a dilution of 1/1000.

Lane 1: Jurkat (human acute T cell leukemia) whole cell lysate (10ug)
Lane 2: Jurkat (human acute T cell leukemia) whole cell lysate
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab51134 in Jurkat (human acute T cell leukemia) whole cell lysate



Western blot - Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134)

Anti-Serine/threonine-protein kinase 4/MST-1 antibody [EP1465Y] (ab51134) at 1/10000 dilution + HeLa (human cervix adenocarcinoma) whole cell lysate at 20 µg

Secondary
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 56 kDa

Diluting and blocking buffer: 5% NFDM/TBST

Terms and conditions

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