

Product datasheet

Anti-STK3 antibody [EP1466Y] ab52641

KO 評価済 RabMAb[®]

12 References 画像数 6

製品の概要

製品名	Anti-STK3 antibody [EP1466Y]
製品の詳細	Rabbit monoclonal [EP1466Y] to STK3
アプリケーション	適用あり: ICC/IF, IHC-Fr, WB, IP, IHC-P 適用なし: Flow Cyt
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) corresponding to Human STK3 aa 1-100 (N terminal).
ポジティブ・コントロール	ICC/IF: Wildtype HAP1 cells. WB: C6 cell lysate. IHC-P: Human lymphoma tissue.
特記事項	We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team. Alternative versions available: Anti-STK3 antibody (HRP) [EP1466Y] (ab202883) 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. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP1466Y

アイソタイプ

IgG

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab52641** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 5 µg/ml.
IHC-Fr		Use at an assay dependent concentration. PubMed: 24595170
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. Antigen retrieval step strongly recommended for enhanced signal.

追加情報

Is unsuitable for Flow Cyt.

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. Phosphorylates NKX2-1.

組織特異性

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

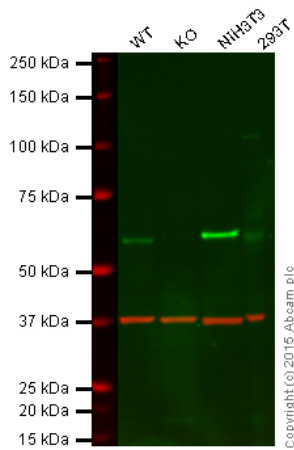
配列類似性

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

細胞内局在

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

画像



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

Predicted band size : 56 kDa

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: STK3 knockout HAP1 cell lysate (20 µg)

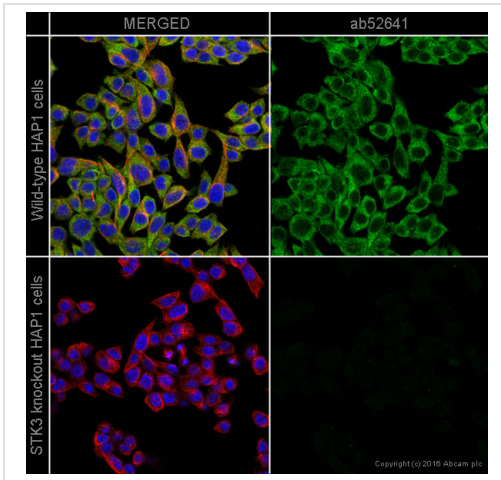
Lane 3: NIH/3T3 cell lysate (20 µg)

Lane 4: 293T cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green).

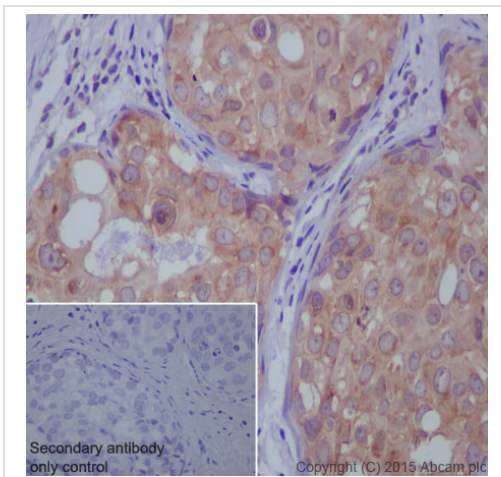
Green - ab52641 observed at 56 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab52641 was shown to specifically react with STK3 when STK3 knockout samples were used. Wild-type and STK3 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.



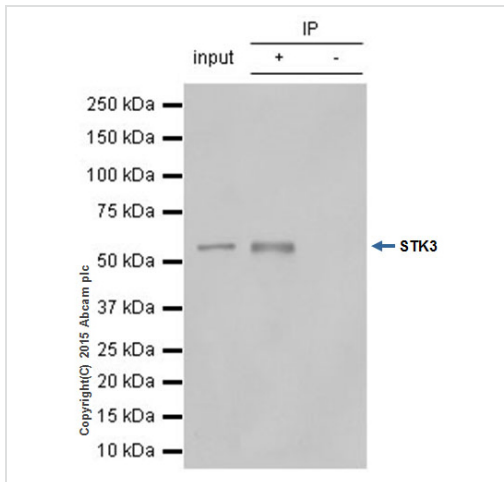
Immunocytochemistry/ Immunofluorescence - Anti-STK3 antibody [EP1466Y] (ab52641)

ab52641 staining STK3 in wild-type HAP1 cells (top panel) and STK3 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 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 performed 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.

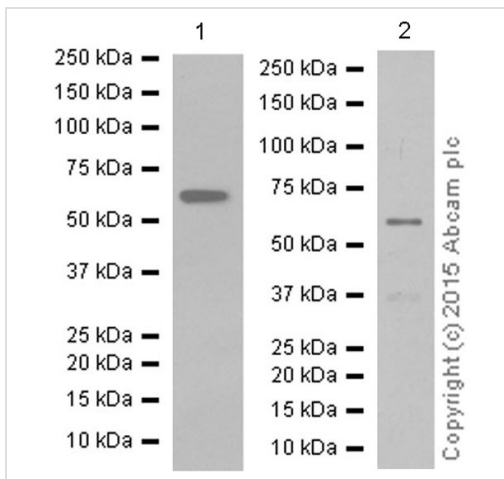


Immunoprecipitation - Anti-STK3 antibody
[EP1466Y] (ab52641)

ab52641 (purified) at 1/50

immunoprecipitating STK3 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 as the secondary antibody (1/10 000). Blocking buffer and concentration: 5% NFDN/TBST Dilution buffer and concentration: 5% NFDN/TBST



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

All lanes : Anti-STK3 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

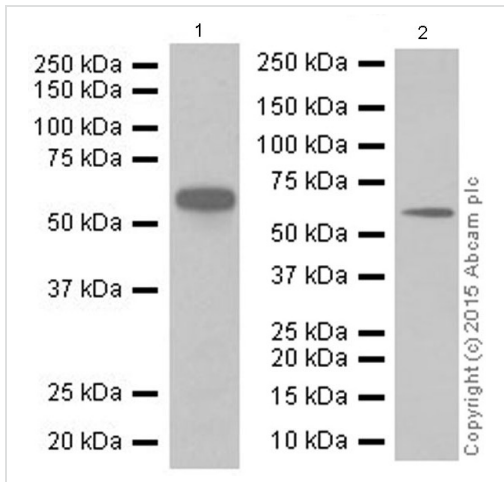
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size : 56 kDa

Observed band size : 56 kDa

Blocking buffer: 5% NFDN/TBST

Dilution buffer: 5% NFDN/TBST



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

All lanes : Anti-STK3 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

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

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