# abcam

### Product datasheet

## Anti-STK3/MST-2 antibody [3067C3a] ab71960



#### 1 References 3 图像

概述

产**品名称** Anti-STK3/MST-2抗体[3067C3a]

**抽述** 小鼠单克隆抗体[3067C3a] to STK3/MST-2

**宿主** Mouse

经测试应用 适用于: WB

种属反应性 与反应: Human, Recombinant fragment

免疫原 Recombinant fragment corresponding to Human STK3/MST-2.

Database link: Q13188

**阳性**对照 WB: HeLa, HAP1 and NIH3T3 cell lysates; Recombinant human STK3/MST-2.

常规说明

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.

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 7.40

Preservative: 0.05% Sodium azide

Constituents: 1% BSA, 0.03% Potassium phosphate, 0.812% Sodium chloride, 0.1312% Sodium

phosphate, 0.0225% Potassium chloride, PBS

纯**度** Protein G purified

纯**化**说明 ab71960 was purified using protein G column chromatography from culture supernatant of

hybridoma cultured in a medium containing bovine IgG-depleted (approximately 95%) fetal bovine

serum and filtered through a 0.22µm membrane.

**克隆** 单克隆

1

**克隆编号** 3067C3a

同种型 lgG2b

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab71960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
WB		Use at an assay dependent concentration. Detects a band of approximately 37 kDa (predicted molecular weight: 56 kDa).

#### 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.

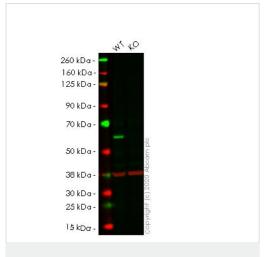
Contains 1 protein kinase domain.

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 [3067C3a] (ab71960)

**All lanes :** Anti-STK3/MST-2 antibody [3067C3a] (ab71960) at 1/10000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: STK3 knockout HeLa cell lysate

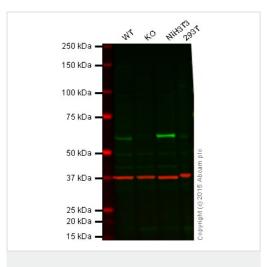
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

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

**Lanes 1-2:** Merged signal (red and green). Green - ab71960 observed at 56 kDa. Red - Anti-GAPDH antibody[EPR16891] - Loading Control (ab181602) observed at 37 kDa.

ab71960 was shown to react with STK3/MST-2 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line <a href="mailto:ab265082">ab265082</a> (knockout cell lysate <a href="mailto:ab257714">ab257714</a>) was used. Wild-type HeLa and STK3 knockout HeLa cell lysates were subjected to SDS-PAGE. ab71960 and Anti-GAPDH antibody[EPR16891] - Loading Control (<a href="mailto:ab181602">ab181602</a>) were incubated overnight at 4°C at a 1 in 10000 Dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye®800CW) preadsorbed (<a href="mailto:ab216772">ab216772</a>) and Goat Anti-Rabbit IgG H&L (IRDye®680RD) preadsorbed (<a href="mailto:ab216777">ab216777</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-STK3/MST-2 antibody [3067C3a] (ab71960)



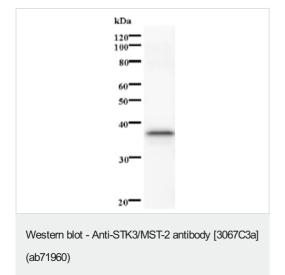
Lane 2: STK3/MST-2 knockout HAP1 cell lysate (20 µg)

Lane 3: NIH/3T3 cell lysate (20 µg)

Lane 4: 293T cell lysate (20 µg)

**Lanes 1 - 4**: Merged signal (red and green). Green - ab71960 observed at 56 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab71960 was shown to recognize STK3/MST-2 when STK3/MST-2 knockout samples were used, along with additional cross-reactive bands. Wild-type and STK3/MST-2 knockout samples were subjected to SDS-PAGE. ab71960 and <a href="mailto:ab181602">ab181602</a> (loading control to STK3/MST-2) were diluted 1 µg/mL and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse lgG H&L (IRDye® 800CW) preadsorbed <a href="mailto:ab216772">ab216772</a> and Goat Anti-Rabbit lgG H&L (IRDye® 680RD) preadsorbed <a href="mailto:ab216777">ab216777</a> secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Anti-STK3/MST-2 antibody [3067C3a] (ab71960) + immunising recombinant protein

Predicted band size: 56 kDa
Observed band size: 37 kDa

The molecular weight of the band on the western blot does not correspond to the molecular weight of the natural protein because only a fragment of the protein was used.

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

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