# abcam

## Product datasheet

# Anti-MAPK6/ERK3 antibody [EP1720Y] ab53277





重组 RabMAb

★★★★★ 1 Abreviews 25 References 6 图像

概述

产品名称 Anti-MAPK6/ERK3抗体[EP1720Y]

描述 兔单克隆抗体[EP1720Y] to MAPK6/ERK3

宿主 Rabbit

特异性 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

经测试应用 适用于: WB, IHC-P

不适用于: Flow Cyt or ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide within Human MAPK6/ERK3 aa 1-100 (N terminal). The exact sequence is

proprietary.

Database link: Q16659

阳性对照 WB: Wild-type HAP1, A431, C2C12, 2.4G2 and HeLa (ab150035) whole cell lysates, and rat

brain tissue lysates. IHC-P: Human kidney carcinoma and breast carcinoma tissues.

常规说明 The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and rat.

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.

Avoid freeze / thaw cycle.

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

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab53277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	<b>★</b> ★ ★ ★ ★ <b>(1)</b>	1/1000 - 1/10000. Detects a band of approximately 105 kDa (predicted molecular weight: 63 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. For unpurified use at 1/50

应用说明 Is unsuitable for Flow Cyt or ICC/IF.

靶标

功能 Phosphorylates microtubule-associated protein 2 (MAP2). May promote entry in the cell cycle.

组织特异性 Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta,

lung, liver, pancreas, kidney and skin fibroblasts.

序列相似性 Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase

subfamily.

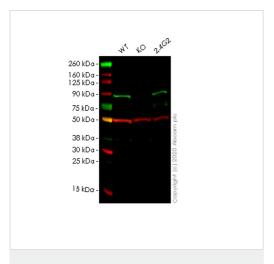
Contains 1 protein kinase domain.

结**构域** The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the

MAP kinases.

翻译后修饰 Dually phosphorylated on Thr-626 and Tyr-628, which activates the enzyme.

图片



Western blot - Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277)

**All lanes :** Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: MAPK6 knockout HeLa cell lysate

Lane 3: 2.4G2 (Rat B cell lymphoma B lymphocyte) cell lysate

Lysates/proteins at 20 µg per lane.

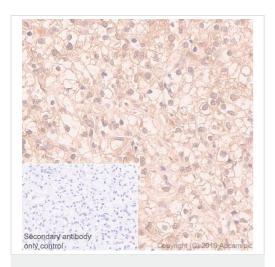
#### **Secondary**

**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

**Predicted band size:** 63 kDa **Observed band size:** 90 kDa

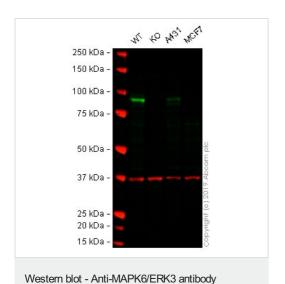
**Lanes 1-3:** Merged signal (red and green). Green - ab53277 observed at 90 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab53277 Anti-MAPK6/ERK3 antibody [EP1720Y] was shown to specifically react with MAPK6/ERK3 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mab264910">ab264910</a> (knockout cell lysate <a href="mab257526">ab257526</a>) was used. Wild-type and MAPK6/ERK3 knockout samples were subjected to SDS-PAGE. ab53277 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mab245">ab8245</a>) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney carcinoma tissue sections labeling MAPK6/ERK3 with Purified ab53277 at 1:100 dilution (13.52 µg/ml). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Purified)ImmunoHistoProbe one step HRP Polymer (ready to use) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



[EP1720Y] (ab53277)

**All lanes :** Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: MAPK6 knockout HAP1 whole cell lysate

Lane 3: A431 whole cell lysate
Lane 4: MCF7 whole cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 63 kDa **Observed band size:** 90 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab53277 observed at 90 kDa. Red - loading control, **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab53277 was shown to react with MAPK6 in HAP1 wild-type cells in Western blot. Loss of signal was observed when MAPK6 knockout sample was used. HAP1 wild-type and MAPK6 knockout whole cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% Milk in TBS-T (0.1% Tween®) before incubation with ab53277 and ab8245 (Mouse anti-GAPDH antibody [6C5])

overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

1 2 3

250 kDa —

150 kDa —

100 kDa —

50 kDa —

37 kDa —

25 kDa —

20 kDa —

15 kDa —

15 kDa —

10 kDa —

Western blot - Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277) **All lanes :** Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277) at 1/1000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: Rat brain lysates

Lane 3: C2C12 (Mouse myoblasts myoblast) whole cell lysates

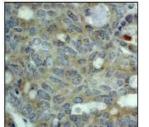
Lysates/proteins at 15 µg per lane.

### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 63 kDa **Observed band size:** 105 kDa

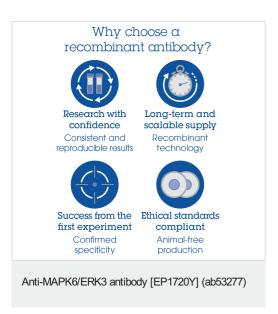
The molecular weight observed is consistent with what has been described in PMID:30642948 and 30166347



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MAPK6/ERK3 antibody [EP1720Y] (ab53277)

Unpurified ab53277 (1:50) staining human MAPK6/ERK3 in human breast carcinoma tissue by immunohistochemistry using paraffin embedded tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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