

# Anti-MAPK6/ERK3 antibody [EP1720Y] - BSA and Azide free ab247348

KO VALIDATED Recombinant RabMAb

4 Images

### Overview

Product name	Anti-MAPK6/ERK3 antibody [EP1720Y] - BSA and Azide free
Description	Rabbit monoclonal [EP1720Y] to MAPK6/ERK3 - BSA and Azide free
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
Tested applications	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or ICC/IF
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type HeLa, 2.4G2, HAP1, A431, C2C12, and HeLa ( <a href="#">ab150035</a> ) whole cell lysates, and rat brain tissue lysates. IHC-P: Human kidney carcinoma and breast carcinoma tissues.
General notes	<p>ab247348 is the carrier-free version of <a href="#">ab53277</a>.</p> <p>The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> </ul>

- Long-term security of supply
  - Animal-free production
- For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP1720Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab247348 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

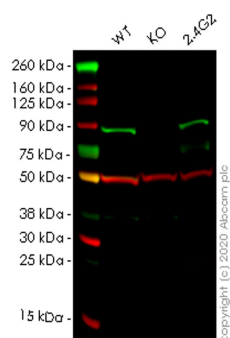
Application	Abreviews	Notes
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 105 kDa (predicted molecular weight: 63 kDa).
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

## Target

<b>Function</b>	Phosphorylates microtubule-associated protein 2 (MAP2). May promote entry in the cell cycle.
<b>Tissue specificity</b>	Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
<b>Domain</b>	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
<b>Post-translational</b>	Dually phosphorylated on Thr-626 and Tyr-628, which activates the enzyme.

## Images



Western blot - Anti-MAPK6/ERK3 antibody [EP1720Y] - BSA and Azide free (ab247348)

**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 IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

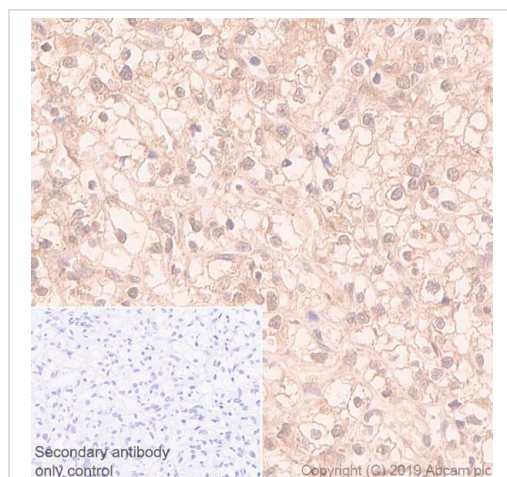
**Predicted band size:** 63 kDa

**Observed band size:** 90 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab53277](#)).

**Lanes 1-3:** Merged signal (red and green). Green - [ab53277](#) observed at 90 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

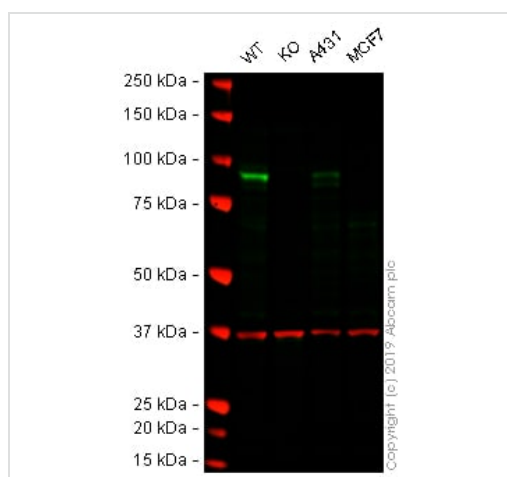
[ab53277](#) Anti-MAPK6/ERK3 antibody [EP1720Y] was shown to specifically react with 3 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab264910](#) (knockout cell lysate [ab257526](#)) was used. Wild-type and 3 knockout samples were subjected to SDS-PAGE. [ab53277](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) 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 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAPK6/ERK3 antibody [EP1720Y] - BSA and Azide free (ab247348)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab53277**)



Western blot - Anti-MAPK6/ERK3 antibody [EP1720Y] - BSA and Azide free (ab247348)

**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

This data was developed using the same antibody clone in a different buffer formulation (**ab53277**).

**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.

Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

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

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