Product datasheet

Anti-MAPK6 / ERK-3 antibody [EP1720Y] ab53277

Overview

Product name: Anti-MAPK6 / ERK-3 antibody [EP1720Y]
Description: Rabbit monoclonal [EP1720Y] to MAPK6 / ERK-3
Host species: Rabbit
Tested applications:
Suitable for: IP, WB, Flow Cyt, IHC-P
Unsuitable for: ICC/IF
Species reactivity: Reacts with: Mouse, Rat, Human
Immunogen: Synthetic peptide within Human MAPK6/ ERK-3 aa 1-100 (N terminal). The exact sequence is proprietary.
Database link: Q16659
Positive control: HeLa whole cell lysate (ab150035) or human breast carcinoma tissue.
General notes:
Previously labelled as MAPK6.
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Storage buffer: pH: 7.20
Preservative: 0.01% Sodium azide
 Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity: Protein A purified
Clonality: Monoclonal
Clone number: EP1720Y
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab53277 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 22505454</td>
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<tr>
<td>WB</td>
<td>1/1000 - 1/10000. Detects a band of approximately 105 kDa (predicted molecular weight: 63 kDa).</td>
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<tr>
<td>Flow Cyt</td>
<td>1/100 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
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<tr>
<td>IHC-P</td>
<td>1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
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Application notes: Is unsuitable for ICC/IF.

Target

Function: Phosphorylates microtubule-associated protein 2 (MAP2). May promote entry in the cell cycle.
Tissue specificity: Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts.
Sequence similarities: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
Domain: The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
Post-translational modifications: Dually phosphorylated on Thr-626 and Tyr-628, which activates the enzyme.
Western blot - Anti-MAPK6 / ERK-3 antibody [EP1720Y] (ab53277)

Anti-MAPK6 / ERK-3 antibody [EP1720Y] (ab53277) at 1/1000 dilution + HeLa cell lysate at 10 µg

Secondary
Goat anti-Rabbit HRP labeled at 1/2000 dilution

Predicted band size: 63 kDa
Observed band size: 105 kDa
why is the actual band size different from the predicted?

Overlay histogram showing A431 cells stained with ab53277 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab53277, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.
Ab53277 (1:50) staining human MAPK6 / ERK-3 in human breast carcinoma tissue by immunohistochemistry using paraffin embedded tissue.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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