Product datasheet

Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] ab110025

Overview

Product name: Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11]
Description: Mouse monoclonal [4A11] to Mitochondrial Pyruvate dehydrogenase kinase 1
Host species: Mouse
Tested applications: Suitable for: WB, ICC/IF, IHC-P, ELISA, Flow Cyt
Species reactivity: Reacts with: Mouse, Rat, Human, Monkey
Immunogen: Recombinant fragment corresponding to Human Mitochondrial Pyruvate dehydrogenase kinase 1.
Positive control: NIH3T3, Hela, Jurkat, HepG2, PC-12, and Cos7 cell lysate, human breast cancer and Human brain tissues, HELA and Lovo cells

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: Preservative: 0.05% Sodium azide
Constituent: PBS
Purity: Protein G purified
Purification notes: Purified from tissue culture supernatant.
Clonality: Monoclonal
Clone number: 4A11
Isotype: IgG1

Applications

Our Abpromise guarantee covers the use of ab110025 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**Function**
Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

**Tissue specificity**
Expressed predominantly in the heart.

**Sequence similarities**
Belongs to the PDK/BCKDK protein kinase family.
Contains 1 histidine kinase domain.

**Cellular localization**
Mitochondrion matrix.

### Application

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/500 - 1/2000. Detects a band of approximately 44 kDa (predicted molecular weight: 49 kDa).</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/200 - 1/1000.</td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td>1/200 - 1/1000.</td>
<td></td>
</tr>
<tr>
<td>ELISA</td>
<td>1/10000.</td>
<td></td>
</tr>
<tr>
<td>Flow Cyt</td>
<td>Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.</td>
<td></td>
</tr>
</tbody>
</table>

### Target

**Function**
Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.

**Tissue specificity**
Expressed predominantly in the heart.

**Sequence similarities**
Belongs to the PDK/BCKDK protein kinase family.
Contains 1 histidine kinase domain.

**Cellular localization**
Mitochondrion matrix.

### Images

**Western blot - Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody (ab110025) at 1/500 dilution**

All lanes: Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] (ab110025) at 1/500 dilution

- **Lane 1**: NIH3T3 cell lysate
- **Lane 2**: Hela cell lysate
- **Lane 3**: Jurkat cell lysate
- **Lane 4**: HepG2 cell lysate
- **Lane 5**: PC-12 cell lysate
- **Lane 6**: Cos7 cell lysate

**Predicted band size**: 49 kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] (ab110025)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissues using ab110025 at a dilution of 1/200 with DAB staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] (ab110025)

Immunohistochemical analysis of paraffin-embedded Human brain tissues using ab110025 at a dilution of 1/200 with DAB staining.

Immunocytochemistry/ Immunofluorescence - Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] (ab110025)

Immunofluorescence analysis of HELA cells using ab110025 at a dilution of 1/200 (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

Flow Cytometry - Anti-Mitochondrial Pyruvate dehydrogenase kinase 1 antibody [4A11] (ab110025)

Flow cytometric analysis of Lovo cells using ab110025 (green) and negative control (purple).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
• Response to your inquiry within 24 hours

• We provide support in Chinese, English, French, German, Japanese and Spanish

• Extensive multi-media technical resources to help you

• We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

**Terms and conditions**

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors