Product datasheet

Anti-MAP1LC3A antibody [EP1528Y] ab52628

Overview

Product name  Anti-MAP1LC3A antibody [EP1528Y]
Description  Rabbit monoclonal [EP1528Y] to MAP1LC3A
Host species  Rabbit
Tested applications  
Suitable for:  WB, IP, ICC, IHC-P  
Unsuitable for:  Flow Cyt
Species reactivity  Reacts with:  Mouse, Rat, Human
Immunogen  Synthetic peptide within Human MAP1LC3A (N terminal). The exact sequence is proprietary.
Positive control  Fetal brain cytoplasmic cell lysate Human brain tissue
General notes  
Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents
This product is a recombinant rabbit monoclonal antibody.

Properties

Form  Liquid
Storage instructions  Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer  pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant
Purity  Tissue culture supernatant
Clonality  Monoclonal
Clone number  EP1528Y
Isotype  IgG

Applications

Our Abpromise guarantee covers the use of ab52628 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>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/50000. Detects a band of approximately 16 kDa (predicted molecular weight: 14 kDa).</td>
<td></td>
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<tr>
<td>IP</td>
<td>1/100.</td>
<td></td>
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<tr>
<td>ICC</td>
<td>1/50 - 1/100.</td>
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<tr>
<td>IHC-P</td>
<td>Use at an assay dependent concentration.</td>
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**Application notes**

Is unsuitable for Flow Cyt.

**Target**

**Function**

Probably involved in formation of autophagosomal vacuoles (autophagosomes).

**Tissue specificity**

Most abundant in heart, brain, liver, skeletal muscle and testis but absent in thymus and peripheral blood leukocytes.

**Sequence similarities**

Belongs to the MAP1 LC3 family.

**Post-translational modifications**

The precursor molecule is cleaved by APG4B/ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II.

**Cellular localization**

Cytoplasm > cytoskeleton. Endomembrane system. Cytoplasmic vesicle > autophagosome membrane. LC3-II binds to the autophagic membranes.

**Images**

![Western blot - Anti-MAP1LC3A antibody [EP1528Y] (ab52628)](attachment:image)

Anti-MAP1LC3A antibody [EP1528Y] (ab52628) at 1/50000 dilution + Fetal brain lysate at 10 µg

**Secondary**

goat anti-rabbit HRP labelled at 1/2000 dilution

**Predicted band size**: 14 kDa

**Observed band size**: 16 kDa
IHC image of ab52628 staining in human hippocampus formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat meditated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab52628, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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