Product datasheet

Anti-Munc18-1 antibody ab3451

Overview

Product name: Anti-Munc18-1 antibody
Description: Rabbit polyclonal to Munc18-1
Host species: Rabbit
Tested applications: Suitable for: WB
Species reactivity: Reacts with: Mouse, Rat, Dog
Predicted to work with: Chicken, Cow, Human, Pig
Immunogen: Synthetic peptide corresponding to Human Munc18-1 aa 58-70.
Sequence: VEDINKRREPIPS

(Peptide available as ab4982)

General notes

Reproducibility is key to advancing scientific discovery and accelerating scientists’ next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.
Form: Liquid

Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer: Preservative: 0.05% Sodium azide
Constituents: 0.1% BSA, 99% PBS

Purity: Immunogen affinity purified

Clonality: Polyclonal

Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab3451 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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<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 67 kDa. By Western blot, this antibody detects an ~67 kDa protein representing Munc-18 from rat whole brain extract.</td>
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Target

Function: May participate in the regulation of synaptic vesicle docking and fusion, possibly through interaction with GTP-binding proteins. Essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 ratio. Can interact with syntaxins 1, 2, and 3 but not syntaxin 4. May play a role in determining the specificity of intracellular fusion reactions.

Tissue specificity: Brain and spinal cord. Highly enriched in axons.

Involvement in disease: Defects in STXBP1 are the cause of epileptic encephalopathy early infantile type 4 (EIEE4) [MIM:612164]. Affected individuals have neonatal or infantile onset of seizures, suppression-burst pattern on EEG, profound mental retardation, and MRI evidence of hypomyelination.

Sequence similarities: Belongs to the STXBP/unc-18/SEC1 family.

Cellular localization: Cytoplasm. Membrane.
Western blot - Anti-Munc18-1 antibody (ab3451) at 1/5000 dilution + Mouse hippocampal homogenate at 5 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97069) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Observed band size:** 67 kDa

**why is the actual band size different from the predicted?**

**Exposure time:** 1 minute

Western blot of Munc-18 in rat brain homogenate immunoprecipitated with ab3451.

1. Extract only.
2-4. 750 ug of extract immunoprecipitated with 1 ug, 5 ug, and 10 ug of ab3451, respectively.

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**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](https://www.abcam.com/abpromise) or contact our technical team.
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