Anti-P2X7 antibody ab48871

Overview

Product name: Anti-P2X7 antibody
Description: Rabbit polyclonal to P2X7
Host species: Rabbit
Tested applications: Suitable for: WB, IHC-P, ELISA
Species reactivity: Reacts with: Human
Predicted to work with: Mouse, Rat, Cow
Immunogen: Synthetic peptide within Human P2X7 aa 21-70 (N terminal). The exact sequence is proprietary.
Sequence:
IQSMNYGTIKWFFHVIIFSYVCFALVSDKLYQRKEPVISSVHTKVKGIAE
Database link: Q99572
Positive control: Jurkat cell lysate; Human kidney tissue

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: Preservative: 0.09% Sodium azide
Constituents: 2% Sucrose, PBS
Purity: Protein A purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab48871 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**Function**
Receptor for ATP that acts as a ligand-gated ion channel. Responsible for ATP-dependent lysis of macrophages through the formation of membrane pores permeable to large molecules. Could function in both fast synaptic transmission and the ATP-mediated lysis of antigen-presenting cells.

**Tissue specificity**
Widely expressed with highest levels in brain and immune tissues.

**Sequence similarities**
Belongs to the P2X receptor family.

**Post-translational modifications**
- Phosphorylation results in its inactivation.
- ADP-ribosylation at Arg-125 is necessary and sufficient to activate P2RX7 and gate the channel.
- Palmitoylation of several cysteines in the C-terminal cytoplasmic tail is required for efficient localization to cell surface.

**Cellular localization**
Cell membrane.

### Western blot

**Applications**

<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>Use a concentration of 1.25 µg/ml. Detects a band of approximately 31 kDa (predicted molecular weight: 31 kDa). Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 4 - 8 µg/ml.</td>
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<tr>
<td>ELISA</td>
<td></td>
<td>Use at an assay dependent concentration. ELISA titre using peptide based assay: 1:312500</td>
</tr>
</tbody>
</table>

**Target**

**Function**
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Cell membrane.

### Images

**90 kDa**

90 kDa

60 kDa

42 kDa

32 kDa

23 kDa

Anti-P2X7 antibody (ab48871) at 1.25 µg/ml + Jurkat cell lysate at 10 µg

**Secondary**

HRP conjugated anti-Rabbit IgG at 1/50000 dilution

Developed using the ECL technique.

**Predicted band size:** 31 kDa

**Observed band size:** 31 kDa

 Antibody diluted in 5% skim milk / PBS buffer; Gel concentration 12%
Ab48871 at 4.0µg/ml staining paraffin embedded human kidney. Magnification x400. Arrows indicate staining of epithelial cells of renal tubule.

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