Product datasheet

Anti-ADIPOR1 antibody ab70362

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Overview

Product name: Anti-ADIPOR1 antibody
Description: Rabbit polyclonal to ADIPOR1
Host species: Rabbit
Tested applications: Suitable for: ICC/IF, WB
Species reactivity: Reacts with: Mouse, Rat, Human
Predicted to work with: Chicken, Cow, Pig, Zebrafish

Immunogen: Synthetic peptide corresponding to ADIPOR1 aa 350 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin.
(Peptide available as ab59184, ab74394)


General notes: This product was previously labelled as Adiponectin Receptor 1

Properties

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: pH: 7.40
Preservative: 0.02% Sodium azide
Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG
Function
Receptor for globular and full-length adiponectin (APM1), an essential hormone secreted by adipocytes that acts as an antidiabetic. Probably involved in metabolic pathways that regulate lipid metabolism such as fatty acid oxidation. Mediates increased AMPK, PPARA ligand activity, fatty acid oxidation and glucose uptake by adiponectin. Has some high-affinity receptor for globular adiponectin but low-affinity receptor for full-length adiponectin.

Tissue specificity

Sequence similarities
Belongs to the ADIPOR family.

Domain
The N-terminus is known to be cytoplasmic while the C-terminus is known to be extracellular.

Cellular localization
Membrane. Localized to the cell membrane and intracellular organelles.

Applications
Our Abpromise guarantee covers the use of ab70362 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>ICC/IF</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 5 µg/ml.</td>
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<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 43 kDa (predicted molecular weight: 43 kDa).</td>
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Target
Receptor for globular and full-length adiponectin (APM1), an essential hormone secreted by adipocytes that acts as an antidiabetic. Probably involved in metabolic pathways that regulate lipid metabolism such as fatty acid oxidation. Mediates increased AMPK, PPARA ligand activity, fatty acid oxidation and glucose uptake by adiponectin. Has some high-affinity receptor for globular adiponectin but low-affinity receptor for full-length adiponectin.

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Images
ab70362 staining ADIPOR1 in HepG2 cells treated with sodium 4-phenylbutyrate (ab141253), by ICC/IF. Increase of aADIPOR1 expression correlates with increased concentration of sodium 4-phenylbutyrate, as described in literature.
The cells were incubated at 37°C for 6 hours in media containing different concentrations of ab141253 (sodium 4-phenylbutyrate) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab70362 (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.
All lanes: Anti-ADIPOR1 antibody (ab70362) at 1 µg/ml

Lane 1: Skeletal Muscle (Rat) Tissue Lysate
Lane 2: Human skeletal muscle tissue lysate - total protein (ab29330)
Lane 3: Skeletal Muscle (Mouse) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 43 kDa
Observed band size: 43 kDa

Exposure time: 90 seconds

ab70362 staining ADIPOR1 in HepG2 cells treated with valproic acid, sodium salt (ab120745), by ICC/IF. Increased cytoplasmatic staining of ADIPOR1 correlates with increased concentration of valproic acid, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120745 (valproic acid) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab70362 (5 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.
Immunocytochemistry/ Immunofluorescence - Anti-ADIPOR1 antibody (ab70362)

ICC/IF image of ab70362 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab70362, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 100% methanol fixed (5 min) Hek293, HepG2 and MCF7 cells at 5µg/ml, and in 4% PFA fixed (10 min) HeLa, Hek293, HepG2 and MCF7 cells at 5µg/ml.

Immunocytochemistry/ Immunofluorescence - Anti-ADIPOR1 antibody (ab70362)

ICC/IF image of ab70362 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab70362, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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