Product name: Anti-S1P1/EDG1 antibody

Description: Rabbit polyclonal to S1P1/EDG1

Host species: Rabbit

Specificity: ab11424 detects S1P1/EDG1 protein in transfected human cell samples. This antibody shows no cross-reactivity to S1P3.

Tested applications: Suitable for: ICC/IF, WB, IP, Flow Cyt, IHC-P

Species reactivity: Reacts with: Mouse, Human

Predicted to work with: Rat, Horse, Cow, Cat, Monkey

Immunogen: Synthetic peptide corresponding to Mouse S1P1/EDG1 aa 359-372.

Sequence: SHPQKDDGDNPETI

(Peptide available as ab39763)

Positive control: Transfected HEK293 cells.

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
Consituents: 99% PBS, 1% BSA

Purity: Immunogen affinity purified

Clonality: Polyclonal

Isotype: IgG

Our Abpromise guarantee covers the use of ab11424 in the following tested applications.
Function
Receptor for the lysosphingolipid sphingosine 1-phosphate (S1P). S1P is a bioactive lysophospholipid that elicits diverse physiological effect on most types of cells and tissues. This inducible epithelial cell G-protein-coupled receptor may be involved in the processes that regulate the differentiation of endothelial cells. Seems to be coupled to the G(i) subclass of heteromeric G proteins.

Tissue specificity
Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin.

Sequence similarities
Belongs to the G-protein coupled receptor 1 family.

Post-translational modifications
S1P-induced endothelial cell migration requires the PKB/AKT1-mediated phosphorylation of the third intracellular loop at the Thr-236 residue.

Cellular localization
Cell membrane.

Target

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Images

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★☆☆☆☆☆</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 44 kDa. Band represents recombinant S1P1 from transfected HEK293 cells.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 20733200 \n<strong>ab171870</strong> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

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Lane 1: Anti-S1P1/EDG1 antibody (ab11424) at 2 µg/ml
Lane 2: Anti-S1P1/EDG1 antibody (ab11424) at 2 mg/ml

Lane 1: Rat brain tissue extract
Lane 2: Neuro-2a Cells

Secondary

All lanes: Goat anti-rabbit IgG (H+L), HRP conjugated at 0.4 µg/ml

Developed using the ECL technique.
Immunocytochemical analysis of Neuro-2a cells, labeling S1P1/EDG1 with ab11424. Cells were fixed in 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. Immunostaining with anti-EDG1 diluted 2µg/ml in 0.1% BSA for 3 hours at room temperature.

Green staining - ab11424
Blue staining - DAPI for nuclear localization
Red staining - F-actin

The right-most image is a control (no primary antibody staining).

Flow cytometry analysis of SH-SY5Y cells, labeling S1P1/EDG1 with ab11424 (3-5µg/million cells in 2.5% BSA). Cells were fixed with 70% ethanol for 10 minutes, permeabilized with 0.25% Triton™ X-100 for 20 minutes and blocked with 5% BSA for 30 minutes at room temperature.

Red histogram - labeling with anti-S1P1/EDG1 antibody
Purple histogram - Unstained
Green histogram - No primary antibody control
Pink histogram - Rabbit Isotype control

ab11424 staining S1P1/EDG1 in transfected CCL39 cells by Immunocytochemistry/Immunofluorescence.

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