Product datasheet

Anti-Cannabinoid Receptor II antibody ab45942

Overview

Product name
Anti-Cannabinoid Receptor II antibody

Description
Rabbit polyclonal to Cannabinoid Receptor II

Host species
Rabbit

Specificity
According to BLAST results, the antibody could cross-react with both rat isoforms. No experiments were done to confirm this possibility.

Tested applications
Suitable for: IHC-FoFr, WB, IHC-P, ICC/IF

Species reactivity
Reacts with: Mouse, Rat, Human

Immunogen
Synthetic peptide corresponding to Rat Cannabinoid Receptor II aa 200-300 conjugated to keyhole limpet haemocyanin.
(Peptide available as ab45941)

Positive control
ab45942 gave a positive result in the following tissue lysates: Rat Spinal Cord, and Mouse Thymus. ICC/IF: PC12 cell line

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
Preservative: 0.02% Sodium Azide
Constituents: 1% BSA, PBS, pH 7.4

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab45942 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
### Function

### Tissue specificity
Preferentially expressed in cells of the immune system with higher expression in B cells and NK cells (at protein level). Expressed in skin in suprabasal layers and hair follicles (at protein level). Highly expressed in tonsil and to a lower extent in spleen, peripheral blood mononuclear cells, and thymus. PubMed:14657172 could not detect expression in normal brain. Expressed in brain by perivascular microglial cells and dorsal root ganglion sensory neurons (at protein level).

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

### Post-translational modifications
Constitutively phosphorylated on Ser-352; phosphorylation increases cell internalization and desensitizes the receptor.

### Cellular localization

### Images

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<tr>
<td>IHC-FoFr</td>
<td><img src="Image" alt="Image 32x175 to 215x312" /></td>
<td>1/300.</td>
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<tr>
<td>WB</td>
<td><img src="Image" alt="Image 87x753 to 138x763" /></td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 45 kDa). Can be blocked with Cannabinoid Receptor II peptide (ab45941).</td>
</tr>
<tr>
<td>IHC-P</td>
<td><img src="Image" alt="Image 87x726 to 138x735" /></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td><img src="Image" alt="Image 87x686 to 138x696" /></td>
<td>Use a concentration of 10 µg/ml.</td>
</tr>
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**Images**

![Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cannabinoid Receptor II antibody (ab45942)](Image)

This image is courtesy of an Abreview submitted by Mehmet Özbeik.

ab45942 staining Cannabinoid Receptor II in Rat ileum tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with Bouin’s solution and blocked with 10% BSA for 10 minutes at 25°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody for 17 hours at 4°C. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/100) was used as the secondary antibody.
Immunocytochemical immunofluorescence analysis of methanol-fixed HT29 human cell line, labelling cannabinoid receptor II with ab45942 at 1/50 dilution incubated for 18 hours at 4°C in 1% BSA. Fixed cells were permeabilized with 0.25% Tween. Secondary used was a Goat anti-Rabbit polyclonal Alexa Fluor® 488. Counterstain is DAPI against nuclear DNA.

ab45942 staining Cannabinoid Receptor II in PC12 cells. The cells were fixed with 100% methanol (5 min) at room temperature, and then incubated with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 1h at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab45942 at 10µg/ml and ab7291 (Mouse monoclonal to alpha Tubulin - Loading Control) used at a 1/1000 dilution overnight at +4°C. The secondary antibodies were ab150081, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed, (pseudo-colored green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594) preadsorbed, (colored red), both used at a 1/1000 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43 µM for 1hour at room temperature.

All lanes : Anti-Cannabinoid Receptor II antibody (ab45942) at 1 µg/ml

Lane 1 : Rat spinal cord tissue lysate
Lane 2 : Mouse thymus tissue lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 45 kDa
Observed band size: 45 kDa
Exposure time: 8 minutes

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

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