Product datasheet

Anti-Lgi1/EPT antibody ab30868

Overview

Product name: Anti-Lgi1/EPT antibody
Description: Rabbit polyclonal to Lgi1/EPT
Host species: Rabbit
Tested applications: Suitable for: IHC-FoFr, WB, ICC/IF
Species reactivity: Reacts with: Mouse, Rat, Hamster, Human
Predicted to work with: Chicken, Cow
Immunogen: Synthetic peptide corresponding to Rat Lgi1/EPT aa 200-300 conjugated to keyhole limpet haemocyanin.
(Peptide available as ab33114, ab33115)
Positive control: WB: Rat and mouse brain tissue lysate. ICC/IF: CHO cells. IHC-FoFr: Rat spinal cord sections.
General notes: This product was previously labelled as Lgi1

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 ab30868 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
Function
Regulates voltage-gated potassium channels assembled from KCNA1, KCNA4 and KCNAB1. It slows down channel inactivation by precluding channel closure mediated by the KCNAB1 subunit. Ligand for ADAM22 that positively regulates synaptic transmission mediated by AMPA-type glutamate receptors (By similarity). Plays a role in suppressing the production of MMP1/3 through the phosphatidylinositol 3-kinase/ERK pathway. May play a role in the control of neuroblastoma cell survival.

Tissue specificity
Predominantly expressed in neural tissues, especially in brain. Expression is reduced in low-grade brain tumors and significantly reduced or absent in malignant gliomas. Isoform 1 is absent in the cerebellum and is detectable in the occipital cortex and hippocampus; higher amounts are observed in the parietal and frontal cortices, putamen, and, particularly, in the temporal neocortex, where it is 3.5 times more abundant than in the hippocampus (at protein level). Isoform 3 shows the highest expression in the occipital cortex and the lowest in the hippocampus (at protein level).

Involvement in disease
Defects in LGI1 are the cause of lateral temporal lobe epilepsy autosomal dominant (ADLTE) [MIM:600512]; also known as autosomal dominant partial epilepsy with auditory features (ADPEAF). ADLTE is a form of epilepsy characterized by partial seizures, usually preceded by auditory signs.

Sequence similarities
Contains 7 EAR repeats.
Contains 3 LRR (leucine-rich) repeats.
Contains 1 LRRCT domain.
Contains 1 LRRNT domain.

Post-translational modifications
Glycosylated.

Cellular localization
Secreted. Cell junction > synapse. Isoform 1 but not isoform 2 is secreted. Isoform 1 is enriched in the Golgi apparatus while isoform 2 accumulates in the endoplasmic reticulum.

Images
**Western blot - Anti-Lgi1/EPT antibody (ab30868)**

**All lanes**: Anti-Lgi1/EPT antibody (ab30868) at 1 μg/ml

**Lane 1**: Mouse brain whole tissue lysate

**Lane 2**: Mouse brain tissue lysate - total protein (0 days) (ab7188)

**Lane 3**: Rat brain whole tissue lysate

Lysates/proteins at 20 μg per lane.

**Secondary**

**All lanes**: IR Dye 680 Conjugated Goat anti-Rabbit IgG (H+L) at 1/15000 dilution

Performed under reducing conditions.

**Predicted band size**: 64 kDa

**Observed band size**: 64 kDa

**Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Lgi1/EPT antibody (ab30868)**

This image is courtesy of an abreview submitted by Sophie Pezet, ESPCI, France

IHC-FoFr image of Lgi1/EPT staining in rat spinal cord sections. The sections used came from animals perfused fixed with 4% paraformaldehyde in 0.2M phosphate buffer. Following postfixation in the same fixative overnight, the tissues were cryoprotected in 30% sucrose overnight. Tissues were then cut using a cryostat and the immunostainings were preformed using the ‘free floating’ technique. Image B is a higher power magnification of the Image A, at the level of the interface between the white and grey matter in the lamina V. Numbers in image A are Rexed’s laminae numbers.
Immunocytochemistry/Immunofluorescence - Anti-Lgi1/EPT antibody (ab30868)

This image is courtesy of an anonymous Abreview ab30868 at 10 µg/ml staining hamster CHO cells by ICC/IF. The cells were paraformaldehyde fixed, permeabilized and blocked before incubation with the antibody for 16 hours. An Alexa Fluor® 488 conjugated goat polyclonal antibody was used as the secondary.

Western blot - Anti-Lgi1/EPT antibody (ab30868)

This image is courtesy of an anonymous Abreview Anti-Lgi1/EPT antibody (ab30868) at 1/1000 dilution + rat brain tissue lysate at 30 µg

Secondary

HRP-conjugate Goat anti-rabbit IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 64 kDa

**Observed band size:** 64 kDa

**Exposure time:** 5 minutes

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

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