# abcam

# Product datasheet

# Anti-Ionotropic Glutamate receptor 2 antibody ab20673

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Overview

Product name Anti-Ionotropic Glutamate receptor 2 antibody

**Description** Rabbit polyclonal to lonotropic Glutamate receptor 2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat

Predicted to work with: Chicken, Human

**Immunogen** Synthetic peptide conjugated to KLH derived from within residues 150 - 250 of Mouse GluR2.

Read Abcam's proprietary immunogen policy (Peptide available as ab25708.)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**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

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### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab20673 in the following tested applications.

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

Application	Abreviews	Notes
WB		Use a concentration of 3 - 10 µg/ml. Detects a band of approximately 99 kDa (predicted molecular weight: 99 kDa).

### **Target**

#### **Function**

lonotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the chemical signal to an electrical impulse. The receptor then desensitizes rapidly and enters a transient inactive state, characterized by the presence of bound agonist. In the presence of CACNG4 or CACNG7 or CACNG8, shows resensitization which is characterized by a delayed accumulation of current flux upon continued application of glutamate.

# Sequence similarities

Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. GRIA2 subfamily.

# Post-translational modifications

Palmitoylated. Depalmitoylated upon glutamate stimulation. Cys-610 palmitoylation leads to Golgi retention and decreased cell surface expression. In contrast, Cys-836 palmitoylation does not

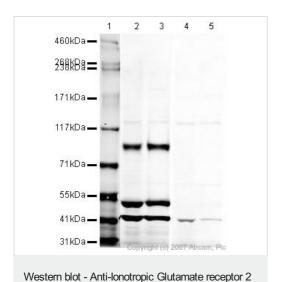
affect cell surface expression but regulates stimulation-dependent endocytosis.

### **Cellular localization**

antibody (ab20673)

Cell membrane. Endoplasmic reticulum membrane. Cell junction > synapse > postsynaptic cell membrane. Interaction with CACNG2, CNIH2 and CNIH3 promotes cell surface expression.

### **Images**



Lane 1: Marker

**Lanes 2-5 :** Anti-lonotropic Glutamate receptor 2 antibody (ab20673) at 1 μg/ml

Lane 2: Brain (Mouse) Tissue Lysate at 10 µg

Lane 3: Cortex (Mouse) Tissue Lysate at 10 µg

Lane 4: Brain (Mouse) Tissue Lysate at 10 µg with Mouse

lonotropic Glutamate receptor 2 peptide (ab25708) at 1 µg/ml

Lane 5: Cortex (Mouse) Tissue Lysate at 10 µg with Mouse

lonotropic Glutamate receptor 2 peptide (ab25708) at 1 μg/ml

### Secondary

Lanes 2-5: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 99 kDa Observed band size: 99 kDa

**Additional bands:** The band observed at ~50KDa is consistent with the predicted size of Gria2 protein, for which GluR2 is the precursor. We are unsure as to the identity of the band at ~43KDa.

Anti-lonotropic Glutamate receptor 2 antibody (ab20673) at 1  $\mu$ g/ml + Brain (Rat) Tissue Lysate - normal tissue at 10  $\mu$ g

## Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

**Predicted band size:** 99 kDa **Observed band size:** 99 kDa

Additional bands at: 43 kDa. We are unsure as to the identity of

these extra bands.

The band observed at 50KDa is consistent with the predicted size of Gria2 protein, for which GluR2 is the precursor.

250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
25 kDa —
25 kDa —
25 kDa —
15 kDa —
15 kDa —
10 kDa —

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

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