

# GRID2 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP13471b

# **Specification**

# GRID2 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

043424

# GRID2 Antibody (C-term) Blocking peptide - Additional Information

**Gene ID 2895** 

#### **Other Names**

Glutamate receptor ionotropic, delta-2, GluD2, GluR delta-2 subunit, GRID2, GLURD2

### Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13471b was selected from the C-term region of GRID2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# **GRID2 Antibody (C-term) Blocking peptide - Protein Information**

Name GRID2

Synonyms GLURD2

## **Function**

Receptor for glutamate. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. The postsynaptic actions of Glu are mediated by a variety of receptors that are named according to their selective agonists. Promotes synaptogenesis and mediates the D-Serine-dependent long term depression signals and AMPA receptor endocytosis of cerebellar parallel fiber- Purkinje cell (PF-PC) synapses through the beta-NRX1-CBLN1-GRID2 triad complex (PubMed:<a href="http://www.uniprot.org/citations/27418511" target="blank">27418511</a>).

# **Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi- pass membrane protein



# GRID2 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

#### • Blocking Peptides

GRID2 Antibody (C-term) Blocking peptide - Images

# GRID2 Antibody (C-term) Blocking peptide - Background

Human glutamate receptor delta-2 (GRID2) is a relativelynew member of the family of ionotropic glutamate receptors whichare the predominant excitatory neurotransmitter receptors in themammalian brain. GRID2 is a predicted 1,007 amino acid proteinthat shares 97% identity with the mouse homolog which is expressedselectively in cerebellar Purkinje cells. A point mutation inmouse GRID2, associated with the phenotype named 'lurcher', in theheterozygous state leads to ataxia resulting from selective, cell-autonomous apoptosis of cerebellar Purkinje cells duringpostnatal development. Mice homozygous for this mutation dieshortly after birth from massive loss of mid- and hindbrain neuronsduring late embryogenesis. This strongly suggests a role for GRID2in neuronal apoptotic death.

# GRID2 Antibody (C-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Joubert, B.R., et al. Genome Med 2 (3), 17 (2010) :Kakegawa, W., et al. J. Neurosci. 28(6):1460-1468(2008)Sonoda, T., et al. Biochem. Biophys. Res. Commun. 350(3):748-752(2006)Yap, C.C., et al. Biochem. Biophys. Res. Commun. 301(4):1122-1128(2003)