

## GRID2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GRID2. Catalog # AT2263a

### **Specification**

# GRID2 Antibody (monoclonal) (M01) - Product Information

**Application** WB, E **Primary Accession** 043424 Other Accession NM 001510 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 113356

### GRID2 Antibody (monoclonal) (M01) - Additional Information

#### **Gene ID 2895**

#### **Other Names**

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

### Target/Specificity

GRID2 (NP\_001501, 908 a.a.  $\sim$  1007 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

## **Dilution**

WB~~1:500~1000

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

## Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

### **Precautions**

GRID2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## GRID2 Antibody (monoclonal) (M01) - Protocols

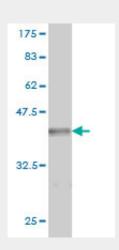
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

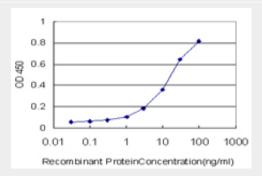


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## GRID2 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa).



Detection limit for recombinant GST tagged GRID2 is approximately 1ng/ml as a capture antibody.

### GRID2 Antibody (monoclonal) (M01) - Background

Human glutamate receptor delta-2 (GRID2) is a relatively new member of the family of ionotropic glutamate receptors which are the predominant excitatory neurotransmitter receptors in the mammalian brain. GRID2 is a predicted 1,007 amino acid protein that shares 97% identity with the mouse homolog which is expressed selectively in cerebellar Purkinje cells. A point mutation in mouse GRID2, associated with the phenotype named 'lurcher', in the heterozygous state leads to ataxia resulting from selective, cell-autonomous apoptosis of cerebellar Purkinje cells during postnatal development. Mice homozygous for this mutation die shortly after birth from massive loss of mid- and hindbrain neurons during late embryogenesis. This strongly suggests a role for GRID2 in neuronal apoptotic death.

## GRID2 Antibody (monoclonal) (M01) - References

A whole genome association study of mother-to-child transmission of HIV in Malawi. Joubert BR, et al. Genome Med, 2010 Mar 1. PMID 20487506.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.Differential regulation of synaptic plasticity and cerebellar motor learning by the C-terminal PDZ-binding motif of GluRdelta2. Kakegawa W, et al. J Neurosci, 2008 Feb 6. PMID





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18256267. Binding of glutamate receptor delta2 to its scaffold protein, Delphilin, is regulated by PKA. Sonoda T, et al. Biochem Biophys Res Commun, 2006 Nov 24. PMID 17027646. Adaptor protein complex-4 (AP-4) is expressed in the central nervous system neurons and interacts with glutamate receptor delta2. Yap CC, et al. Mol Cell Neurosci, 2003 Oct. PMID 14572453.