

# GRID2 Antibody (monoclonal) (M01)

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

### **Product Information**

**Application** WB, E **Primary Accession** 043424 Other Accession NM 001510 Reactivity Human Host mouse Clonality monoclonal Isotype IgG1 Kappa **Clone Names** 1A1

#### **Additional Information**

Calculated MW

**Gene ID** 2895

Other Names Glutamate receptor ionotropic, delta-2, GluD2, GluR delta-2 subunit, GRID2,

GLURD2

113356

**Target/Specificity** GRID2 (NP\_001501, 908 a.a. ~ 1007 a.a) partial recombinant protein with GST

tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

**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.

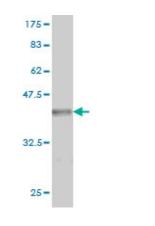
# **Background**

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.

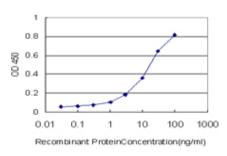
### References

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 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.

## **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.