

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

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.

GRID2 Antibody (monoclonal) (M01) - Protocols

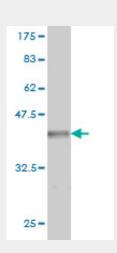
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

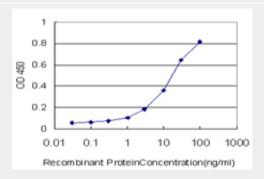


- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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





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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.