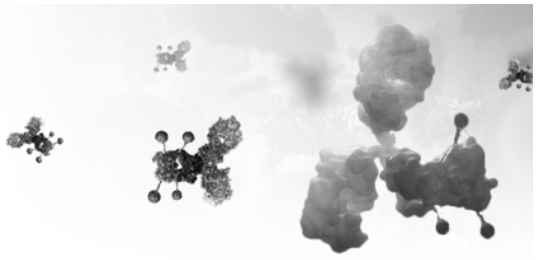

Mouse anti-Mouse GluR δ2 monoclonal antibody, clone 59 (CABT-B9210)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Mouse GluR δ2 aa. 665-786
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat, Mouse
Clone	59
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IHC
Format	Liquid
Concentration	250 μg/ml
Size	50 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Glutamate is a major excitatory neurotransmitter of the CNS. The diversity of glutamate is

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	exemplified by two distinct groups of receptors: ionotropic and metabotropic. Ionotroic receptors are ligand-gated cation channels. They can be subdivided into two classes: NMDA and AMPA/kainate receptors. GluR δ2 exhibits only 25% amino acid identity to either ionotropic receptor type. It presents selective and abundant exression in cerebellar Purkinje cells. It is targeted to a subset of Purkinje cell spines and is coexpressed with ionotropic receptors. GluR δ2 is involved in motor coordination, Purkinje cell synapse formation, and cerebellar long-term depression (LTD). The latter is a decrease in the efficacy of the synaptic transmission between parallel fibers and Purkinje neurons and is a cellular basis of motor learning. In fact, mGluR δ2-deficient mice lack LTD. Additionally, an amino acid substitution in transmembrane III of δ2 is responsible for the neurodegeneration seen in Lurcher mice. This substitution is a gain of function mutation that results in disruption of Purkinje membrane potential. Thus, GluR δ2 is an important regulatory component of the Purkinje GluR channel.
Keywords	GRID2; glutamate receptor, ionotropic, delta 2; GluD2; glutamate receptor ionotropic, delta-2; gluR delta-2 subunit; glutamate receptor delta-2 subunit;

GENE INFORMATION

Entrez Gene ID	2895
UniProt ID	O43424

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