

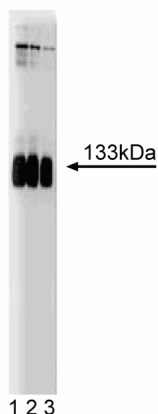
Technical Data Sheet

Purified Mouse Anti-mGluR1**Product Information**

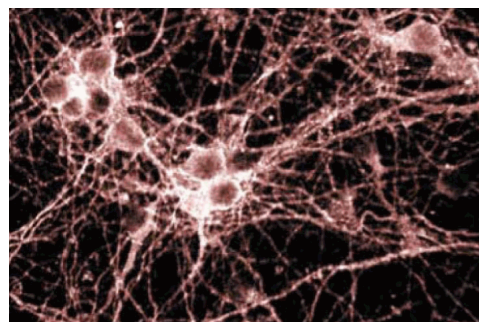
Material Number:	610964
Alternate Name:	Metabotropic Glutamate Receptor-1
Size:	50 µg
Concentration:	250 µg/ml
Clone:	20/mGluR1
Immunogen:	Rat mGluR1 aa. 1042-1160
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse
Target MW:	133 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Glutamate is a major excitatory neurotransmitter and functions in multiple roles in the CNS. The functional diversity of glutamate is exemplified by two distinct groups of glutamate receptors: ionotropic and metabotropic. Coupling with G proteins provides the metabotropic glutamate receptors (mGluRs) with the capacity for intracellular signal transduction. Eight metabotropic glutamate receptors (mGluR1-8) and several Ca²⁺ sensing receptors belong to a novel G-protein coupled receptor (GPCR) family. The mGluRs possess the seven putative transmembrane domains which are characteristic of GPCR proteins. However, they exhibit no additional sequence homology to any member of other GPCR families. mGluR1 has large hydrophilic sequences in both the N- and C-terminal sides of the seven transmembrane domains. The sizable extracellular N-terminal domain is homologous to bacterial periplasmic binding proteins and serves as the glutamate binding site. mGluR1 activates phospholipase C (PLC), resulting in phosphoinositide turnover and, in turn, Ca²⁺ mobilization necessary for many signal transduction events.



Western blot analysis of mGluR1 on a rat cerebrum lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1: 10,000 dilution of the mouse anti-mGluR1 antibody.



Immunofluorescence staining of cortical neurons.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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