



# Mouse anti-Rat Glutamate Receptor monoclonal antibody, clone 7D5 (CABT-B9211)

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

## PRODUCT INFORMATION

<b>Immunogen</b>	GluR2 aa.175-430 trpE Recombinant Fusion
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Rat, Monkey, Dog
<b>Clone</b>	7D5
<b>Purification</b>	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IHC; WB; EM; RIA
<b>Format</b>	Liquid
<b>Concentration</b>	0.5 mg/ml
<b>Size</b>	100 µg
<b>Buffer</b>	Aqueous buffered solution containing ≤0.09% sodium azide.
<b>Storage</b>	Store undiluted at 4°C.

## BACKGROUND

**Introduction** Glutamate is a major excitatory neurotransmitter in mammalian brain. Glutamatergic

neurotransmission is mediated by a family of glutamate receptors which can be grouped in two classes, ionotropic (GluR) and metabotropic (mGluR) receptors. The ionotropic GluRs can be divided into two subclasses, N-methyl-D-Aspartate (NMDA) and non-NMDA receptors. Five different forms of NMDA receptors (NMDAR1, R2A, R2B, R2C, and R2D) have been isolated. NMDAR1 is always required for the formation of functional NMDA receptors. Non-NMDA receptors can be divided into at least two subtypes, AMPA receptors which bind to methyl-4-isoxazole propionic acid (AMPA) and kainate binding (KA or kainic acid) receptors. Multiple subunits appear to comprise the family of non-NMDA receptors. GluR1-4 receptors (also known as GluR-A, B, C, and D) preferentially bind to AMPA. KA receptors consist of five subunits: GluR5, 6, 7, KA-1, and KA-2. Functional receptors are formed by various combinations of these subunits and multiple forms of GluR are expressed in the same populations of neurons. GluR2 migrates at a molecular weight of ~102 kDa in SDS-PAGE.

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**Keywords**

GRIN1; glutamate receptor, ionotropic, N-methyl D-aspartate 1; NR1; MRD8; GluN1; NMDA1; NMDAR1; glutamate receptor ionotropic, NMDA 1; NMD-R1; glutamate [NMDA] receptor subunit zeta 1

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## GENE INFORMATION

**Entrez Gene ID**

[24408](#)

**UniProt ID**

[P35439](#)

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