

## **GluR-3 Monoclonal Antibody**

Catalog No: YM0309

Reactivity: Human

**Applications:** WB;IHC;IF;ELISA

Target: GluR-3

Fields: >>cAMP signaling pathway;>>Neuroactive ligand-receptor

interaction;>>Circadian entrainment;>>Retrograde endocannabinoid

signaling;>>Glutamatergic synapse;>>Dopaminergic synapse;>>Long-term depression;>>Huntington disease;>>Spinocerebellar ataxia;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction;>>Nicotine

addiction;>>>Transcriptional misregulation in cancer

Gene Name: GRIA3

**Protein Name:** Glutamate receptor 3

Q9Z2W9

Human Gene ld: 2892

**Human Swiss Prot** P42263

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of human GluR-3 expressed in E. Coli.

**Specificity:** GluR-3 Monoclonal Antibody detects endogenous levels of GluR-3 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

**Dilution :** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/3



Molecularweight: 101kD

**Cell Pathway:** Neuroactive ligand-receptor interaction; Long-term depression;

P References: 1. Am J Med Genet B Neuropsychiatr Genet. 2010 Mar 5;153B(2):468-76.

2. Am J Med Genet A. 2009 Jun;149A(6):1280-9.

**Background:** Glutamate receptors are the predominant excitatory neurotransmitter receptors

in the mammalian brain and are activated in a variety of normal neurophysiologic processes. These receptors are heteromeric protein complexes composed of multiple subunits, arranged to form ligand-gated ion channels. The classification of glutamate receptors is based on their activation by different pharmacologic agonists. The subunit encoded by this gene belongs to a family of AMPA (alpha-amino-3-hydroxy-5-methyl-4-isoxazole propionate)-sensitive glutamate receptors, and is subject to RNA editing (AGA->GGA; R->G). Alternative splicing at this locus results in different isoforms, which may vary in their signal transduction

properties. [provided by RefSeq, Jul 2008],

**Function:** caution:It is uncertain whether Met-1 or Met-7 is the initiator..disease:Defects in

GRIA3 are the cause of mental retardation X-linked type 94 (MRX94)

[MIM:300699]. Mental retardation is characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. MRX94 patients have moderate mental retardation. Other variable features are macrocephaly, seizures, myoclonic jerks, autistic behavior, asthenic body habitus, distal muscle weakness and hyporeflexia.,function:lonotropic glutamate receptor. L-glutamate acts as an excitatory neurotransmitter at many synapses in the central nervous system. Binding of the excitatory neurotransmitter L-glutamate induces a conformation change, leading to the opening of the cation channel, and thereby converts the

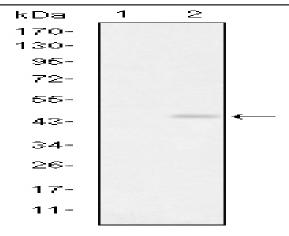
chemical signal to an electrical impulse.

Subcellular Location : Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Interaction with

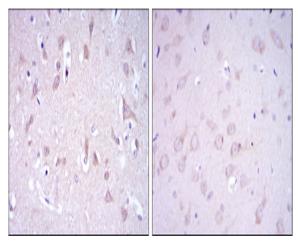
CNIH2 and CNIH3 promotes cell surface expression. .

**Expression:** Brain, Hippocampus, Skin,

## **Products Images**



Western Blot analysis using GluR-3 Monoclonal Antibody against HEK293 (1) and GluR-3-hlgGFc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human brain tissues (left) and rat brain tissues (right) with DAB staining using GluR-3 Monoclonal Antibody.

