

Rabbit Anti-GRIN1 Polyclonal Antibody

CPB-1169RH Rabbit(GRIN1)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-GRIN1 Polyclonal Antibody
Antigen Description	NMDA receptors are members of the ionotropic class of glutamate receptors, which also includes Kainate and AMPA receptors. NMDA receptors consist of NR1 subunits combined with one or more NR2 (A-D) or NR3 (A-B) subunits. The ligand-gated channel is permeable to cations including Ca ²⁺ , and at resting membrane potentials NMDA receptors are inactive due to a voltage-dependent blockade of the channel pore by Mg ²⁺ . NMDA receptor activation, which requires binding of glutamate and glycine, leads to an influx of Ca ²⁺ into the postsynaptic region where it activates several signaling cascades, including pathways leading to the induction of long-term potentiation (LTP) and depression (LTD). NMDA receptors have a critical role in excitatory synaptic transmission and plasticity in the CNS. They govern a range of physiological conditions including neurological disorders caused by excitotoxic neuronal injury, psychiatric disorders and neuropathic pain syndromes.
specificity	The antibody detects endogenous level of total NMDAR1 protein.
Target	GRIN1
Immunogen	Peptide sequence around aa. 895~899 (R-S-S-K-D) derived from Human NMDAR1.
Host	Rabbit
Species	Human
Cross Reactivity	Human; Mouse; Rat
conjugation	N/A
Applications	IFA

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

ANTIGEN GENE INFORMATION

Gene Name	GRIN1 glutamate receptor, ionotropic, N-methyl D-aspartate 1 [Homo sapiens]
Official Symbol	GRIN1
Synonyms	GRIN1; glutamate receptor, ionotropic, N-methyl D-aspartate 1; NMDAR1; glutamate [NMDA] receptor subunit zeta-1; GluN1; NMD-R1; glutamate [NMDA] receptor subunit zeta 1; N-methyl-D-aspartate receptor subunit NR1; N-methyl-D-aspartate receptor channel, subunit zeta-1; NR1; MRD8; NMDA1;
GeneID	2902
mRNA Refseq	NM_000832
Protein Refseq	NP_000823
MIM	138249

UniProt ID	Q05586
Chromosome Location	9q34.3
Pathway	Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Amphetamine addiction, organism-specific biosystem; Amphetamine addiction, conserved biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem;
Function	contributes_to N-methyl-D-aspartate selective glutamate receptor activity; contributes_to calcium channel activity; calcium ion binding; calmodulin binding; extracellular-glutamate-gated ion channel activity; glutamate binding; glycine binding; glycine binding; ion channel activity; ionotropic glutamate receptor activity; protein binding; receptor activity; transporter activity;