



# Anti-GRIN2A (N-terminal) polyclonal antibody (CPBT-66137RR)

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

## PRODUCT INFORMATION

### Product Overview

This product recognises the NR2A subunit of the NMDA (N-methyl-D-aspartate) receptor. Receptors for NMDA belong to a group of ionotropic glutamate receptors which play a key role in the mediation of glutamate neurotransmission within the mammalian central nervous system (CNS), including involvement in memory and learning processes. Several antagonists and agonists of NMDA receptors (NMDAR) have been identified. Properties of NMDAR include modulation by glycine, inhibition by  $Zn^{2+}$ , voltage-dependent  $Mg^{2+}$  blockade and high  $Ca^{2+}$ -permeability. The involvement of NMDAR in the CNS has become a focus area for neurodegenerative diseases such as Alzheimer's disease and also epilepsy and ischemic neuronal cell death. Western Blotting detects a band of approximately 180kDa in rat hippocampal cell lysates.

<b>Specificity</b>	NMDAR NR2A
<b>Immunogen</b>	Peptide from the N-terminus of the NR2A subunit of rat NMDA receptor.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Rat, Bovine, Dog, Mouse
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Purified IgG - liquid
<b>Size</b>	100 µl
<b>Preservative</b>	0.09% Sodium Azide

<b>Storage</b>	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Grin2a glutamate receptor, ionotropic, N-methyl D-aspartate 2A [ Rattus norvegicus (Norway rat) ]</a>
<b>Official Symbol</b>	GRIN2A
<b>Synonyms</b>	GRIN2A; glutamate receptor, ionotropic, N-methyl D-aspartate 2A; NR2A; GluN2A; NMDAR2A; glutamate receptor ionotropic, NMDA 2A; N-methyl D-aspartate receptor subtype 2A; N-methyl-D-aspartate receptor subunit 2A; glutamate [NMDA] receptor subunit epsilon-1
<b>Entrez Gene ID</b>	<a href="#">24409</a>
<b>Protein Refseq</b>	<a href="#">NP_036705</a>
<b>UniProt ID</b>	Q00959
<b>Chromosome Location</b>	10q11
<b>Pathway</b>	Activation of NMDA receptor upon glutamate binding and postsynaptic events; Alcoholism; Alzheimers disease; Amphetamine addiction; Amyotrophic lateral sclerosis (ALS); CREB phosphorylation through the activation of CaMKII; CREB phosphorylation through the activation of Ras; Calcium signaling pathway;
<b>Function</b>	ATPase binding; N-methyl-D-aspartate selective glutamate receptor activity; contributes_to N-methyl-D-aspartate selective glutamate receptor activity; calcium channel activity; contributes_to calcium channel activity; contributes_to cation channel activity; cation channel activity; cell adhesion molecule binding; extracellular-glutamate-gated ion channel activity; contributes_to extracellular-glutamate-gated ion channel activity; glutamate binding; glutamate receptor binding; ionotropic glutamate receptor activity; Contributes_to ionotropic glutamate receptor activity; neurotransmitter binding; protein binding; protein complex binding; protein dimerization activity; protein heterodimerization activity; protein kinase binding; receptor binding; scaffold protein binding; voltage-gated cation channel activity; zinc ion binding;