



Anti-GRIN1 polyclonal antibody (CPBT-66740RN)

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

PRODUCT INFORMATION

Product Overview

Rabbit anti NMDA Receptor/NR1 Subunit/splice variant C2 antibody recognizes the 120kDa NR1 subunit of the NMDA (N-methyl-D-aspartate) receptor, containing the C2 splice variant insert. This antibody does not recognize the NR1 subunit, where the C2 splice variant insert is absent. Receptors for NMDA (NMDAR) 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. Properties of NMDAR include modulation by glycine, inhibition by Zn²⁺, voltage-dependent Mg²⁺ blockade and high Ca²⁺ permeability. The NR1 subunit has eight splice variants, arising from either the deletion or insertion of three exon cassettes within the C-terminal (C1, C2) and N-terminal (N1) NR1 domains. These splice variants differ in both their expression and pharmacological properties.

Specificity	NMDAR/NR1/C2
Immunogen	Synthetic peptide from rat NMDA receptor NR1 subunit, containing the C2 splice variant insert.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Rat, Human, Mouse
Conjugate	Unconjugated
Applications	IHC-Fr; WB
Format	Purified IgG - lyophilised
Size	25 µg

Preservative	None
Storage	in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	Grin1 glutamate receptor, ionotropic, N-methyl D-aspartate 1 [Rattus norvegicus (Norway rat)]
Official Symbol	GRIN1
Synonyms	GRIN1; glutamate receptor, ionotropic, N-methyl D-aspartate 1; NR1; GluN1; NMDAR1; glutamate receptor ionotropic, NMDA 1; NMD-R1; neurotransmitter receptor; NMDA R1 receptor C1 cassette; N-methyl-D-aspartate glutamate receptor; glutamate [NMDA] receptor s
Entrez Gene ID	24408
Protein Refseq	NP_001257531
UniProt ID	P35438
Chromosome Location	3p13
Pathway	Activation of NMDA receptor upon glutamate binding and postsynaptic events; Alcoholism; Alzheimers disease; Amphetamine addiction; Amyotrophic lateral sclerosis (ALS); Axon guidance; CREB phosphorylation through the activation of CaMKII; CREB phosphorylation through the activation of Ras;
Function	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; calcium ion binding; calmodulin binding; cation channel activity; enzyme binding; extracellular-glutamate-gated ion channel activity; glutamate binding; glutamate receptor binding; glycine binding; ionotropic glutamate receptor activity; neurotransmitter binding; protein binding; protein dimerization activity; protein heterodimerization activity; receptor binding; voltage-gated cation channel activity;