

Product datasheet for **AP21181PU-M**

Glutamate receptor ionotropic, NMDA 2D (GRIN2D) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western blot: 1/500-1/1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of NMDAε4 protein. (region surrounding Pro706)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~170 kDa
Gene Name:	glutamate ionotropic receptor NMDA type subunit 2D
Database Link:	Entrez Gene 14814 Mouse Entrez Gene 24412 Rat Entrez Gene 2906 Human O15399



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Background:

Glutamate receptors mediate most excitatory neurotransmission in the brain and play an important role in neural plasticity, neural development and neurodegeneration . Ionotropic glutamate receptors are categorized into NMDA receptors and kainate/AMPA receptors, both of which contain glutamate-gated, cation-specific ion channels . Kainate/AMPA receptors are co-localized with NMDA receptors in many synapses and consist of seven structurally related subunits designated GluR-1 to -7 . The kainate/AMPA receptors are primarily responsible for the fast excitatory neurotransmission by glutamate whereas the NMDA receptors are functionally characterized by a slow kinetic and a high permeability for Ca^{2+} ions . The NMDA receptors consist of five subunits: epsilon 1, 2, 3, 4 and one zeta subunit . The zeta subunit is expressed throughout the brainstem, whereas the four epsilon subunits display limited distribution.

Synonyms:

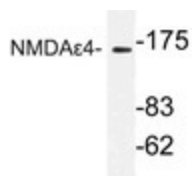
NR2D, GRIN2D, NMDAR2D

Protein Families:

Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

Protein Pathways:

Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Calcium signaling pathway, Long-term potentiation, Neuroactive ligand-receptor interaction

Product images:


Western blot (WB) analysis of NMDAε4 antibody (Cat.-No.: [AP21181PU-N]) in extracts from COS-7 cells.