



Product Information Sheet

Polyclonal Anti-NMDAR1 (Magnetic Bead Conjugate)

Catalogue No. PA1222-M	Immunogen A synthetic peptide corresponding to a sequence at the N-terminal of human NMDAR1, identical to the related rat and mouse sequence.
Lot No. 10F02	
Ig type: rabbit IgG1	Purification Immunogen affinity purified
Size: 100µg/Vial	Contents Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN ₃ .
Specificity Human, rat. No cross reactivity with other proteins.	Storage Store at 4°C for frequent use.
Recommended application <i>Immunoprecipitation(IP)</i>	Description: This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

BACKGROUND

The NMDA receptor (NMDAR) is a specific type of ionotropic glutamate receptor. NMDA (*N*-methyl *D*-aspartate) is the name of a selective agonist that binds to NMDA receptors but not to other glutamate receptors. Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. NMDAR1 gene is mapped to 9q34.3 and encodes a 938-amino acid protein which showed high evolutionary conservation in structure and physiologic properties.¹ It consists of 21 exons distributed over about 31 kb. Three of the exons that are alternatively spliced in the rat and which produce 8 isoforms in that species were also present in the human sequence. The promoter region contained 2 DNA binding sites for the homeobox proteins 'even-skipped'.² The gene is a candidate for the site of the mutation in torsion dystonia.^{3, 4} The NMDA receptor is a non-specific cation channel and thus directly contributes to excitatory synaptic transmission by depolarizing the postsynaptic cell. NMDA receptors are modulated by a number of endogenous and exogenous compounds and play a key role in a wide range of physiologic and pathologic processes, such as excitotoxicity.

REFERENCE

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