

# NMDA Receptor 1 Rabbit Recombinant Oligoclonal Antibody – Purified

Catalog no. 710020

(See product label for lot information)



**Clone/PAD:** 1HCLC  
**Isotype:** IgG  
**Gene ID:** 2902  
**Protein Acc. no.:** Q05586  
**Qty:** 100 µg  
**Volume:** 200 µL  
**Concentration:** 0.5 mg/mL

## Formulation

PBS + 0.09% sodium azide

## Application

For use in Western Blotting

## Reactivity

This antibody is specific for human NMDA Receptor 1

## Immunogen

Recombinant NMDA Receptor 1 protein corresponding to amino acids 834–938

## Sequence Identity

Human

## Sequence Homology

Mouse

## Expected Reactivity

Based on sequence identity and similarity, reactivity to Mouse is predicted.

## Storage

2–8°C for up to 1 month, –20°C for long term storage. Avoid repeated freezing and thawing.

## Expiration Date

Expires one year from date of receipt when stored as instructed.

## Background

NMDA Receptor 1 (N-methyl-D-aspartate receptor 1) which belongs to the glutamate receptor channel superfamily, in humans is encoded by gene GRIN1 (Glutamate [NMDA] receptor subunit zeta-1) located on chromosome 9q34.3.(1). Different NRI subunits are expressed by splicing of the GRIN1 gene sequence (2). Glutamate receptors are highly permeable to Ca<sup>+</sup>, important for controlling plasticity, memory and learning (3-5). NMDA receptors are important for the functioning of the nervous system (6).

## References

1. Collins C, Duff C, Duncan AM, Planells-Cases R, Sun W, Norremolle A, Michaelis E, Montal M, Worton R, Hayden MR. (1993). Mapping of the human NMDA receptor subunit (NMDAR1) and the proposed NMDA receptor glutamate-binding subunit (NMDARA1) to chromosomes 9q34.3 and chromosome 8, respectively. *Genomics*.17(1):237-9.
2. Lin JW, Wyszynski M, Madhavan R, Sealock R, Kim JU, Sheng M. (1998). Yotiao, a novel protein of neuromuscular junction and brain that interacts with specific splice variants of NMDA receptor subunit NR1. *The Journal Of Neuroscience* 15;18(6):2017-27.
3. Raymond Dingleline Karin Borges, Derek Bowie and Stephen F. Traynelis. (1999). *The Glutamate Receptor Ion Channels. Pharmacological Reviews.*
4. Terence J. Coderre and Ronald Melzack.(1992). The Role of NMDA Receptor-operated Calcium Channels in Persistent Nociception after Formalin-induced Tissue Injury. *The Journal of Neuroscience*,3671-3675
5. Monyer H, Sprengel R, Schoepfer R, Herb A, Higuchi M, Lomeli H, Burnashev N, Sakmann B, Seeburg PH. (1992). Heteromeric NMDA receptors: molecular and functional distinction of subtypes. *Science*. 2;256(5060):1217-21.
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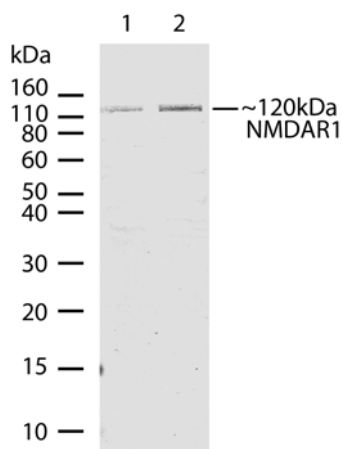
## Applications:

	Species	Test Material	Concentration
Western Blotting	Rat	Brain	4–5 µg/mL

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**Western Blot of NMDA Receptor 1 labeled with NMDA Receptor 1 Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710020).**

NMDA Receptor 1 Rabbit Recombinant Oligoclonal Antibody (5 µg/mL) was used to detect NMDA Receptor 1 in Lane 1: Rat Brain cell lysate (30 µg/lane) and Lane 2: Mouse Brain cell lysate (30 µg/lane). The western was performed using the WesternBreeze® kit with NBT/BCIP as the substrate (Cat. no. WB7105).

**Explanation of symbols**

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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