

DATASHEET

Version: 2016-08-17

NMDAR1 Antibody, pAb, Rabbit

Cat. No.: A01587-40

Size: 40 μg

Synonyms: GRIN1 Antibody ;

Description:

N-methyl-D-aspartate receptor (NMDAR) forms a heterodimer of at least one NMDAR1 and one NR2A-D subunit. NMDAR1 subunits and NR2 subunits bind to the co-agonist glycine and the neurotransmitter glutamate, respectively. PKC can phosphorylate NMDAR1 of the receptor at Ser890/Ser896, and PKA can phosphorylate NMDAR1 at Ser897. The phosphorylation of NMDAR1 by PKC decreases its affinity for calmodulin, thus preventing the inhibitory effect of calmodulin on NMDAR. The phosphorylation of NMDAR1 by PKA probably counteracts the inhibitory effect of calcineurin on the receptor.

GenScript NMDAR1 Antibody is developed in rabbit using a KLH-coupled synthetic peptide within residues 900-950 of human NMDAR1 (Swiss Prot: Q05586).

Immunogen: KLH-coupled synthetic peptide within residues

900-950 of human NMDAR1 (Swiss Prot: Q05586)

Host: Rabbit

Antigen Synonyms: Human Conjugation: Unconjugated

Predicated Band Size:

105 KD

Observed Band Size:

120 KD

Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02%

Example

sodium azide.

Ig Subclass: Rabbit IgG

Specificity: GenScript NMDAR1 Antibody detects endogenous levels of mouse NMDAR1. It is predicted to react with human and rat NMDAR1 protein according to sequence homology.

Positive Control: Mouse brain

Purification: Immunoaffinity chromatography

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western blot: $0.5\text{-}1 \mu g/ml$

Flow cytometry: 1-3 μg for 1 x 10⁶ cells Other applications: user-optimized

Species Reactivity: Mouse

Reconstitution:

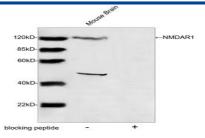
Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

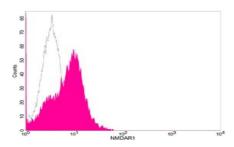
Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.









Western blot analysis of tissue lysates using NMDAR1 Antibody

(GenScript, A01587, 1 μ g/ml)

The signal was developed with IRDyeTM 800 Conjugated Goat Anti-Rabbit IgG.

Predicted Size: 105 KD
Observed Size: 120 KD

Additional bands: 54 KD. Unidentified.

Flow cytometric analysis of Ramos cells using NMDAR1 antibody, pAb, Rabbit (GenScript, A01587; shaded histogram) or with an isotype control antibody (GenScript, A01008; open histogram), followed by R-PE conjugated anti-rabbit IgG.