

Rev03
Update: Dec,14,2021

DATASHEET

NMDAR1 Antibody, pAb, Rabbit

Cat. No.: A01587

Overview

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
Host Species	Rabbit
Immunogen	KLH-coupled synthetic peptide within residues 900-950 of human NMDAR1 (Swiss Prot: Q05586)
Species Reactivity	Mouse
Conjugate	Unconjugated

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.

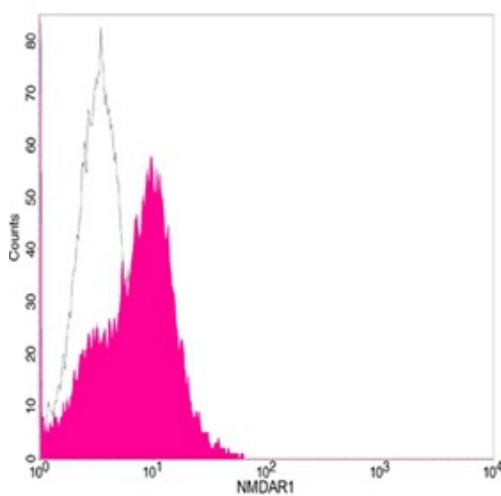
Application	Recommended Usage
Western blot	0.5-1 µg/ml
Flow cytometry	1-3 µg for 1×10^6 cells
Other applications	User-optimized

Properties

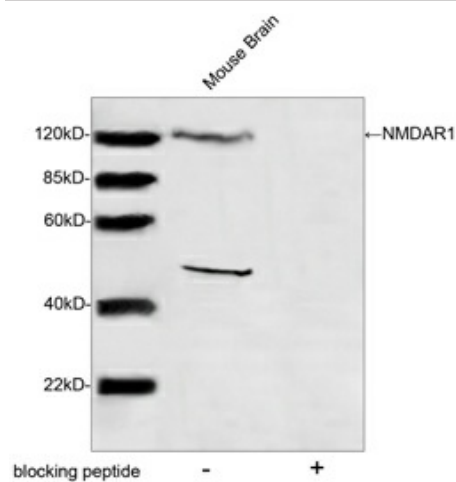
Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.

Storage Instructions	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.
Purification	Affinity chromatography
Isotype	Rabbit IgG
Clonality	Polyclonal
Clone Id	Not applicable

Examples



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.



Western blot analysis of tissue lysates using NMDAR1 Antibody (GenScript, A01587, 1 µg/ml)

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

Predicted Size: 105 KD

Observed Size: 120 KD

Additional bands: 54 KD. Unidentified.

Background

Target Background : 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).

Synonyms : GRIN1 Antibody ;

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.