

p-NMDA ζ 1 (Ser 896): sc-101757

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 contain glutamate-gated ion channels. The NMDA receptors consist of five subunits: ϵ 1, 2, 3, 4 and one ζ subunit. The ζ subunit is expressed throughout the brainstem whereas the four ϵ subunits display limited distribution. Phosphorylation is an important mechanism for the regulation of ligand-gated ion channels, including NMDA receptors. NMDA receptor phosphorylation by PKA and PKC can be induced via the activation of β -adrenergic receptors, and metabotropic glutamate or opioid receptors, respectively.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GRIN1 (human) mapping to 9q34.3; Grin1 (mouse) mapping to 2 A3.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

SOURCE

p-NMDA ζ 1 (Ser 896) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 896 of NMDA ζ 1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

p-NMDA ζ 1 (Ser 896) is recommended for detection of Ser 896 phosphorylated NMDA ζ 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1–2 μ g per 100–500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for NMDA ζ 1 siRNA (h): sc-36081 and NMDA ζ 1 siRNA (m): sc-36082.

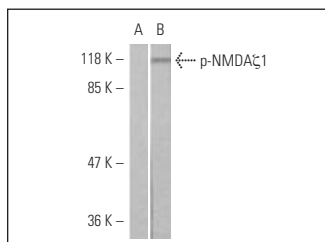
Molecular Weight of p-NMDA ζ 1: 115 kDa.

Positive Controls: estradiol-treated MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



p-NMDA ζ 1 (Ser 896): sc-101757. Western blot analysis of phosphorylated NMDA ζ 1 expression in untreated (A) and estradiol-treated (B) MCF7 whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.