

## Basic Information

Product Name	Anti-NMDAR2B/GRIN2B Antibody
Gene Name	GRIN2B
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 1 mg BSA and 50% glycerol.
Immunogen	E.coli-derived human NMDAR2B recombinant protein (Position: N1076-D1332). Human NMDAR2B shares 97.7% and 97.3% amino acid (aa) sequence identity with mouse and rat NMDAR2B, respectively.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	166KD
Dilution Ratios	Western blot(WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

The N-methyl-D-aspartate receptor 2B (NMDAR2B), also names as GRIN2B. The sequence of the predicted 1,484-amino acid human protein is 98% and 96% identical to the sequences of the rat and mouse Nmdar2b proteins, respectively. Nmdar2B gene is located on mouse chromosome 6 between Rho and Ly49 centromerically and Glb telomerically. Mapping of the human NMDAR2B receptor subunit gene (GRIN2B) to chromosome 12p12 overexpression of NMDA receptor 2B (NR2B) in the forebrains of transgenic mice leads to enhanced activation of NMDA receptors, facilitating synaptic potentiation in response to stimulation at 10-100 Hz.

## Selected Validation Data

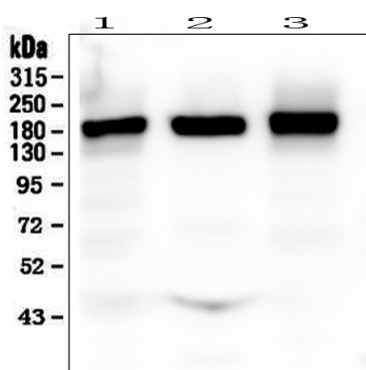


Figure 1. Western blot analysis of NMDAR2B using anti- NMDAR2B antibody (PB0414). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat C6 whole cell lysates, Lane 3: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- NMDAR2B antigen affinity purified polyclonal antibody (Catalog # PB0414) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NMDAR2B at approximately 190KD. The expected band size for NMDAR2B is at 166KD.