

## Anti-GluN2B/NR2B glutamate receptor [N59/36.1] Standard Size Ab02249-10.3

This antibody was created using our proprietary Fc Silent<sup>™</sup> engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors. Variable region sequences were determined by Dr. James Trimmer at the University of California, Davis, as supported by National Institutes of Health BRAIN Initiative award U24 NS109113.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent<sup>™</sup>, Kappa Clone Number: N59/36.1

Alternative Name(s) of Target: N59/36.1R; GluN2B; Glutamate receptor ionotropic, NMDA 2B;

Glutamate [NMDA] receptor subunit epsilon-2; N-methyl D-aspartate receptor subtype 2B; NMDAR2B; NR2B

**UniProt Accession Number of Target Protein:** Q00960

Published Application(s): ICC, IP, KO, WB, IF, IHC

Published Species Reactivity: Rat, Human, Mouse

**Immunogen:** This antibody was raised by immunising BALB/c mice with a fusion of protein amino acids 20-271 (extracellular N-terminus) of rat NR2B.

**Specificity:** This antibody is specific for the NR2B protein, a component of NMDA receptor complexes that function as heterotetrameric, ligand-gated ion channels with high calcium permeability and voltage-dependent sensitivity to magnesium.

**Application Notes:** The IgG2a version of this antibody has been used in western blotting on rat cortical neurons (Plowey et al, 2014; PMID: 24874075). Co-immunoprecipitation has been preformed on extrasynaptic membranes of adult rat brains with the IgG2A version of this antibody (Chiu et al, 2019; PMID:31291571). This antibody has shown use in immunocytochemistry, immunofluorescence, immunohistochemistry or for knock out.

**Antibody First Published in:** Plowey et al. Mutant LRRK2 Enhances Glutamatergic Synapse Activity and Evokes Excitotoxic Dendrite Degeneration Biochim Biophys Acta. 2014 Sep; 1842(9): 1596–1603. PMID:24874075

**Note on publication:** Describes research on the mutations of the LRRK2 gene. These mutations might have something to do with parkinsons disease.

## **Product Form**

**Size:** 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

## Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.