Anti-GluN2B/NR2B glutamate receptor, NeuroMab clone N59/20

Immunogen:
Fusion protein amino acids 20-271 (extracellular N-terminus) of rat GluN2B/NR2B (also known as Glutamate/N-methyl D-aspartate/NMDA receptor subtype 2B or subunit epsilon 2, N-methyl-D-aspartate receptor subunit 3, NMDAR2B, NR3 and Grin2b, accession number Q00960)
Mouse: 99% identity (250/252 amino acids identical)
Human: 99% identity (250/252 amino acids identical)
<50% identity with GluN2A/NR2A, GluN2C/NR2C and GluN2D/NR2D

Monoclonal antibody info:
Mouse strain: Balb/C
Myeloma cell: SP2/0
Mouse Ig Isotype: IgG2a

NeuroMab Applications:
Immunoblotting, Immunocytochemistry, Immunohistochemistry and Immunoprecipitation

Species Reactivity: rat, mouse, human

Does not cross-react with GluN2A/NR2A, GluN2C/NR2C or GluN2D/NR2D (based on KO validation results)

MW: 170 kDa (note that the 148 kDa band of SeeBlue Plus2 marker runs at ~180 kDa in our in-house gel system)

Top left: cultured rat hippocampal neuron immunofluorescence. Image courtesy of Anthone Dunah (Harvard) and Morgan Sheng (MIT).

Top middle: immunoblots on brain membranes prepared from whole rat (RBM, also top right figure) and mouse (MBM) brain, and from human cerebral cortex [HBM(Cx)] and hippocampus [HBM(H)] probed with N59/20 (left) or N52A/42 (right) TC supe.

Lower middle: immunoblot against rat brain membranes (RBM) and neuronal lysates from NR2B knockout (KO) and heterozygote (Het) mice. Samples courtesy of Ben Hall and Anirvan Ghosh (UCSD).

Bottom: adult rat hippocampus immunofluorescence under standard protocol (left) and with antigen retrieval via pepsin pretreatment (right).