Anti-Cav3.2 calcium channel, NeuroMab clone N55/10

Immunogen:
Fusion protein amino acids 1019-1293 (cytoplasmic loop between repeat II and repeat III) of human Cav3.2 (also known as Voltage-dependent T-type calcium channel subunit alpha-1H, Low-voltage-activated calcium channel alpha1 3.2 subunit, CACNA1H and Kiaa1120, accession number O95180), epitope mapped to amino acids 1179-1192 (AEDGRAAPGPRATP)

Rat: 77% identity (224/279 amino acids identical), 54% identity for epitope (12/22 amino acids identical), 89% identity for highlighted epitope sequence (8/9 amino acids identical)

Mouse: 77% identity (224/279 amino acids identical), 54% identity for epitope (12/22 amino acids identical), 89% identity for highlighted epitope sequence (8/9 amino acids identical)

Monoclonal antibody info:
Mouse strain: Balb/C
Myeloma cell: SP2/0
Mouse Ig Isotype: IgG1

NeuroMab Applications:
Immunoblot, Immunocytochemistry, Immunohistochemistry and Immunoprecipitation

Species Reactivity: human, mouse

Does not cross-react with Cav3.1

MW: 260 kDa

Stable cell immunoblot: extracts of HEK cells stably-expressing Flag-tagged Cav3.2, Cav3.1 or untagged Kv2.1 plasmid and probed with N55/10 TC supe (left) or Rabbit anti-Flag (right).

Immunohistochemistry of coronal brain sections from WT and Cav3.2 KO mice. Reproduced with permission from Mala Shah (University College London, England, UK) and Nature Neuroscience (2011 Huang et al, PMID 21358644).

Supplementary Fig 9: Ca_{3.2} labelling is absent in Ca_{3.2} null tissue. (A) Immunoreactivity for Ca_{3.2} in wildtype (WT) sections at light microscopy level. Immunoreactivity was detected throughout the brain and was especially intense in the cortex (Ct) and hippocampus (Hp). (B) Immunoreactivity was absent in Ca_{3.2} null tissue. Cpu, caudate putamen; Th, thalamus; Hth, hypothalamus. Scale bar in (A) represents 1 mm and applies to both sections.