

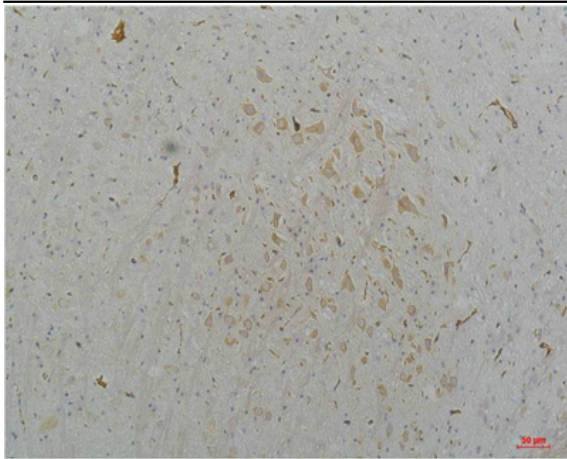
## Cav2.2 Polyclonal Antibody

<b>Catalog No :</b>	YN5641
<b>Reactivity :</b>	Human;Rat;Mouse
<b>Applications :</b>	IHC;IF
<b>Target :</b>	Cav2.2
<b>Fields :</b>	>>MAPK signaling pathway;>>Calcium signaling pathway;>>Synaptic vesicle cycle;>>Retrograde endocannabinoid signaling;>>Cholinergic synapse;>>Serotonergic synapse;>>GABAergic synapse;>>Dopaminergic synapse;>>Type II diabetes mellitus;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Morphine addiction;>>Nicotine addiction;>>Chemical carcinogenesis - receptor activation
<b>Gene Name :</b>	CACNA1B
<b>Protein Name :</b>	Voltage-dependent N-type calcium channel subunit alpha-1B (Brain calcium channel III) (BIII) (Calcium channel, L type, alpha-1 polypeptide isoform 5) (Voltage-gated calcium channel subunit alpha Cav2.
<b>Human Gene Id :</b>	774
<b>Human Swiss Prot No :</b>	Q00975
<b>Mouse Swiss Prot No :</b>	O55017
<b>Rat Swiss Prot No :</b>	Q02294
<b>Immunogen :</b>	Synthetic Peptide of Cav2.2 AA range: 230-310
<b>Specificity :</b>	Cav2.2 protein(A205) detects endogenous levels of Cav2.2
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IHC 1:50-100. IF 1:50-200

<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	263kD
<b>Cell Pathway :</b>	MAPK_ERK_Growth;MAPK_G_Protein;Calcium;Taste transduction;Type II diabetes mellitus;
<b>Background :</b>	calcium voltage-gated channel subunit alpha1 B(CACNA1B) Homo sapiens The protein encoded by this gene is the pore-forming subunit of an N-type voltage-dependent calcium channel, which controls neurotransmitter release from neurons. The encoded protein forms a complex with alpha-2, beta, and delta subunits to form the high-voltage activated channel. This channel is sensitive to omega-conotoxin-GVIA and omega-agatoxin-IIIa but insensitive to dihydropyridines. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011],
<b>Function :</b>	domain:Each of the four internal repeats contains five hydrophobic transmembrane segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids at every third position.,function:Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1B gives rise to N-type calcium currents. N-type calcium channels belong to the 'high-voltage activated' (HVA) group and are blocked by omega-conotoxin-GVIA (omega-CTx-GVIA) and by omega-agatoxin-IIIa (omega-Aga-IIIa). They are however insensitive to dihydropyridines (DH
<b>Subcellular Location :</b>	Membrane ; Multi-pass membrane protein .
<b>Expression :</b>	Isoform Alpha-1b-1 and isoform Alpha-1b-2 are expressed in the central nervous system, but not in skeletal muscle or aorta. Expressed in the cerebral white matter, cortex, hippocampus, basal ganglia, and cerebellum (PubMed:30982612).

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## Products Images



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using Cav2.2Rabbit pAb diluted at 1:200.