Best Tools for immunology Research

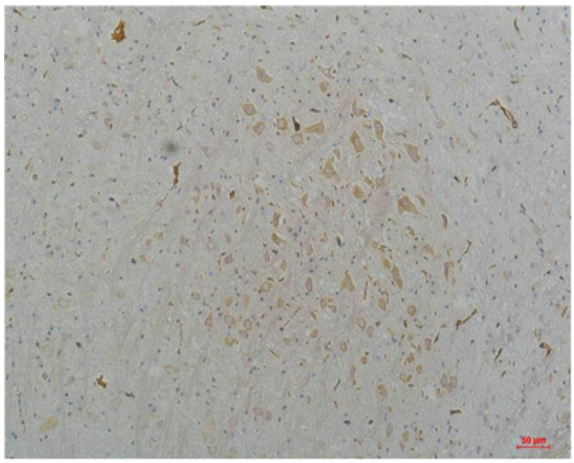
Cav2.2 Polyclonal Antibody

Catalog No :	YN5641
Reactivity :	Human;Rat;Mouse
Applications :	IHC;IF
Target :	Cav2.2
Fields :	>>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
Gene Name :	CACNA1B
Protein Name :	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.
Human Gene Id :	774
Human Swiss Prot No :	Q00975
Mouse Swiss Prot No :	O55017
Rat Swiss Prot No :	Q02294
Immunogen :	Synthetic Peptide of Cav2.2 AA range: 230-310
Specificity :	Cav2.2 protein(A205) detects endogenous levels of Cav2.2
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:50-100. IF 1:50-200

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	263kD
Cell Pathway :	MAPK_ERK_Growth;MAPK_G_Protein;Calcium;Taste transduction;Type II diabetes mellitus;
Background :	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],
Function :	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
Subcellular Location :	Membrane ; Multi-pass membrane protein .
Expression :	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).
Sort :	3241
No4 :	1
Host :	Rabbit

Modifications : Unmodified

Products Images



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