

## Cav1.3 Polyclonal Antibody

Catalog No :	YN5642
Reactivity :	Human;Rat;Mouse
Applications :	IHC;IF
Target :	Cav1.3
Fields :	>>MAPK signaling pathway;>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Cellular senescence;>>Cardiac muscle contraction;>>Tight junction;>>Circadian entrainment;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>Serotonergic synapse;>>GABAergic synapse;>>Dopaminergic synapse;>>Insulin secretion;>>GnRH signaling pathway;>>Oxytocin signaling pathway;>>Renin secretion;>>Aldosterone synthesis and secretion;>>Cortisol synthesis and secretion;>>GnRH secretion;>>Type II diabetes mellitus;>>Cushing syndrome;>>Growth hormone synthesis, secretion and action;>>Carbohydrate digestion and absorption;>>Alzheimer disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction;>>Chemical carcinogenesis - receptor activation;>>Hypertrophic cardiomyopathy;>>Arrhythmogenic right ventricular cardiomyopathy;>>Dilated card
Gene Name :	CACNA1D
Protein Name :	Voltage-dependent L-type calcium channel subunit alpha-1D (Calcium channel, L type, alpha-1 polypeptide, isoform 2) (Voltage-gated calcium channel subunit alpha Cav1.3)
Human Gene Id :	776
Human Swiss Prot No :	Q01668
Mouse Swiss Prot	Q99246
Rat Swiss Prot No :	P27732
Immunogen :	Synthetic Peptide of Cav1.3 AA range: 1060-1140



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Specificity :	Cav1.3 protein(A202) detects endogenous levels of Cav1.3
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:100-200. 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 :	245kD
Cell Pathway :	MAPK_ERK_Growth;MAPK_G_Protein;Calcium;Cardiac muscle contraction;Vascular smooth muscle contraction;GnRH;Type II diabetes mellitus;Alzheimer's disease;Hypertrophic cardiomyopathy (HCM);Arrhythmogenic
Background :	calcium voltage-gated channel subunit alpha1 D(CACNA1D) Homo sapiens Voltage-dependent calcium channels 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, and gene expression. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, namely alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1D subunit. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2012],
Function :	alternative products:Additional isoforms seem to exist,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-1D gives rise to L-type calcium currents. Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group. They are blocked by dihydropyridines (DHP), phenylalkylamines, benzothiazepines, an



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Subcellular Location :	Membrane ; Multi-pass membrane protein .	
Expression :	Expressed in pancreatic islets and in brain, where it has been seen in cerebral cortex, hippocampus, basal ganglia, habenula and thalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in skeletal muscle.	
Sort :	3239	
No4 :	1	
Host :	Rabbit	
Modifications :	Unmodified	

## **Products Images**

Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using Cav1.3Rabbit pAb diluted at 1:200.

