

## CaV $\alpha$ 2 $\delta$ 1 Polyclonal Antibody

<b>Catalog No :</b>	YN5638
<b>Reactivity :</b>	Rat
<b>Applications :</b>	WB;IHC;IF
<b>Target :</b>	CaV $\alpha$ 2 $\delta$ 1
<b>Fields :</b>	>>MAPK signaling pathway;>>Cardiac muscle contraction;>>Adrenergic signaling in cardiomyocytes;>>Oxytocin signaling pathway;>>Hypertrophic cardiomyopathy;>>Arrhythmogenic right ventricular cardiomyopathy;>>Dilated cardiomyopathy
<b>Gene Name :</b>	CACNA2D1
<b>Protein Name :</b>	Voltage-dependent calcium channel subunit alpha-2/delta-1 (Voltage-gated calcium channel subunit alpha-2/delta-1) [Cleaved into: Voltage-dependent calcium channel subunit alpha-2-1; Voltage-dependent
<b>Human Gene Id :</b>	781
<b>Human Swiss Prot No :</b>	P54289
<b>Mouse Swiss Prot No :</b>	O08532
<b>Rat Swiss Prot No :</b>	P54290
<b>Immunogen :</b>	Synthetic Peptide of CaV $\alpha$ 2 $\delta$ 1
<b>Specificity :</b>	The antibody detects endogenous CaV $\alpha$ 2 $\delta$ 1 protein
<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>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	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 :** 100-130kD

**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Cardiac muscle contraction;Hypertrophic cardiomyopathy (HCM);Arrhythmogenic right ventricular cardiomyopathy (ARVC);Dilated cardiomyopathy;

**Background :** calcium voltage-gated channel auxiliary subunit alpha2delta 1(CACNA2D1) Homo sapiens The preproprotein encoded by this gene is cleaved into multiple chains that comprise the alpha-2 and delta subunits of the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization. Mutations in this gene can cause cardiac deficiencies, including Brugada syndrome and short QT syndrome. Alternate splicing results in multiple transcript variants, some of which may lack the delta subunit portion. [provided by RefSeq, Nov 2014],

**Function :** domain:The MIDAS-like motif in the VWFA domain binds divalent metal cations and is required to promote trafficking of the alpha-1 (CACNA1) subunit to the plasma membrane by an integrin-like switch.,function:The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Plays an important role in excitation-contraction coupling.,miscellaneous:Binds gabapentin, an antiepileptic drug.,PTM:Proteolytically processed into subunits alpha-2-1 and delta-1 that are disulfide-linked.,similarity:Belongs to the calcium channel subunit alpha-2/delta family.,similarity:Contains 1 cache domain.,similarity:Contains 1 VWFA domain.,subunit:Dimer formed of alpha-2-1 and delta-1 chains; disulfide-linked. Voltage-dependent calcium channels are multisubunit complexes, consisting of alpha-1 (CACNA1), alpha-2 (CACNA2D

**Subcellular Location :** Membrane ; Single-pass type I membrane protein .

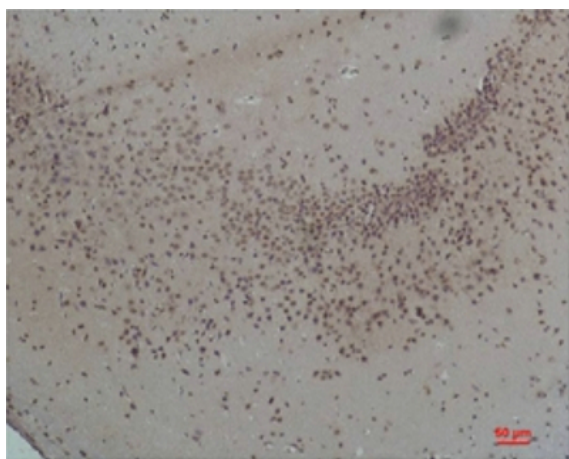
**Expression :** Isoform 1 is expressed in skeletal muscle. Isoform 2 is expressed in the central nervous system. Isoform 2, isoform 4 and isoform 5 are expressed in neuroblastoma cells. Isoform 3, isoform 4 and isoform 5 are expressed in the aorta.

## Products Images

170KD —  
130KD —  
95KD —  
70KD —  
55KD —



Western blot analysis of Rat Brain Tissue with CaVα2δ1 Rabbit pAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using CaV α2δ1 Rabbit pAb diluted at 1:200.