

**CaV $\alpha$ 2 $\delta$ 3 Polyclonal Antibody**

<b>Catalog No :</b>	YN5636
<b>Reactivity :</b>	Human;Rat;Mouse
<b>Applications :</b>	WB
<b>Target :</b>	CaV $\alpha$ 2 $\delta$ 3
<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>	CACNA2D3
<b>Protein Name :</b>	Voltage-dependent calcium channel subunit alpha-2/delta-3 (Voltage-gated calcium channel subunit alpha-2/delta-3) [Cleaved into: Voltage-dependent calcium channel subunit alpha-2-3; Voltage-dependent
<b>Human Gene Id :</b>	55799
<b>Human Swiss Prot No :</b>	Q8IZS8
<b>Mouse Swiss Prot No :</b>	Q9Z1L5
<b>Rat Swiss Prot No :</b>	Q8CFG5
<b>Immunogen :</b>	Synthetic Peptide of CaV $\alpha$ 2 $\delta$ 3 AA range: 500-580
<b>Specificity :</b>	CaV $\alpha$ 2 $\delta$ 3 protein(A210) detects endogenous levels of CaV $\alpha$ 2 $\delta$ 3
<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 1:1000-2000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 120kD

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

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**Background :** calcium voltage-gated channel auxiliary subunit alpha2delta 3(CACNA2D3) Homo sapiens This gene encodes a member of the alpha-2/delta subunit family, a protein in the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Various versions of each of these subunits exist, either expressed from similar genes or the result of alternative splicing. Research on a highly similar protein in rabbit suggests the protein described in this record is cleaved into alpha-2 and delta subunits. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008],

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**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. Acts as a regulatory subunit for P/Q-type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) but not T-type (CACNA1G).,miscellaneous:In contrast to CACNA2D1 and CACNA2D2, it does not bind gabapentin, an antiepileptic drug.,PTM:May be proteolytically processed into subunits alpha-2-3 and delta-3 that are disulfide-linked. It is however unclear whether such cleavage really takes place in vivo and has a functional role.,PTM:N-glycosylated.,similarity:Belongs to the calcium channel subunit alpha-2/delta family.

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

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**Expression :** Only detected in brain. Not present in lung, testis, aorta, spleen, jejunum, ventricular muscle and kidney (at protein level). According to PubMed:11687876, it is brain-specific, while according to PubMed:11245980, it is widely expressed.

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## Products Images

Western blot analysis of 1) Mouse Brain Tissue, 2) Human Brain Tissue, with CaV $\alpha$ 2 $\delta$ 3 Rabbit pAb diluted at 1:2,000.

