



# CaVα2δ3 Polyclonal Antibody

Catalog No	YP-Ab-16322
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	CACNA2D3
Protein Name	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
Immunogen	Synthetic Peptide of CaVα2δ3 AA range: 500-580
Specificity	CaVα2δ3 protein(A210) detects endogenous levels of CaVα2δ3
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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 calcium channel subunit delta-3]
Observed Band	120kD
Cell Pathway	Membrane ; Single-pass type I membrane protein .
Tissue Specificity	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.
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.

#### 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],

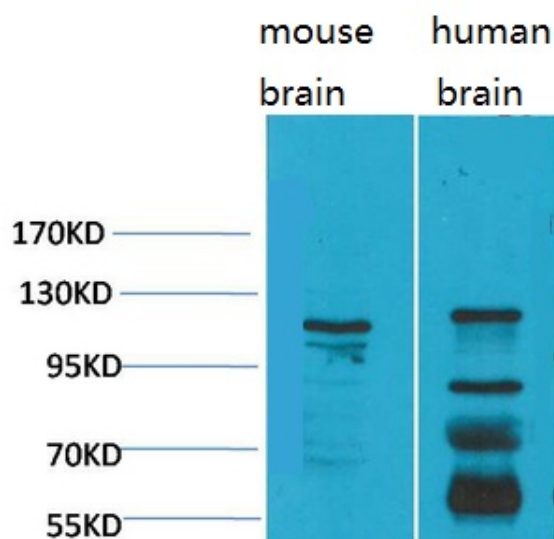
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### 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.