



Cacna2d4 Polyclonal Antibody

Catalog No	YP-Ab-16396
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	CACNA2D4
Immunogen	The antiserum was produced against synthesized peptide derived from human CACNA2D4. AA range:548-597
Specificity	Cacna2d4 Polyclonal Antibody detects endogenous levels of Cacna2d4 protein.
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 epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RCD4;Voltage-dependent calcium channel subunit alpha-2/delta-4;Voltage-dependent calcium channel subunit alpha-2-4;Voltage-dependent calcium channel subunit delta-4;Voltage-gated calcium channel subunit alpha-2/delta-4;Cacna2d4
Observed Band	130kD
Calculated Molecular Weight	130kD
Cell Pathway	Membrane ; Single-pass type I membrane protein .
Tissue Specificity	Predominantly expressed in certain types of endocrine cells. Present in the Paneth cells of the small intestine. Also present in the erythroblasts in the fetal liver, in the cells of the zona reticularis of the adrenal gland and in the basophils of the pituitary. Present at low level in some brain regions such as the cerebellum (at protein level).
Function	disease:Defects in CACNA2D4 are the cause of retinal cone dystrophy 4 (RCD4) [MIM:610478]. RCD4 is characterized by minimal symptoms except for slowly progressive reduction in visual acuity.,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.,miscellaneous:In contrast to CACNA2D1 and CACNA2D2, it does not bind gabapentin, an antiepileptic drug.,PTM:May be proteolytically processed into subunits alpha-2-4 and delta-4 that are disulfide-linked. It is however unclear whether such cleavage really takes place in vivo and has a functional role.,similarity:Belongs to the calcium channel

Background

calcium voltage-gated channel auxiliary subunit alpha2delta 4(CACNA2D4) 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

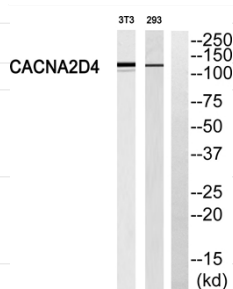
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



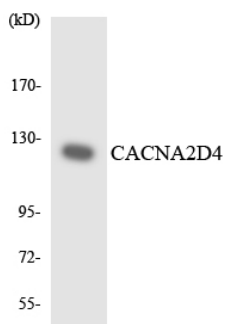
Products Images



Western Blot analysis of various cells using Cacna2d4 Polyclonal Antibody



Western blot analysis of CACNA2D4 Antibody. The lane on the right is blocked with the CACNA2D4 peptide.



Western blot analysis of the lysates from COLO205 cells using CACNA2D4 antibody.