



Cacna2d4 Polyclonal Antibody

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|---------------------------|---|
| Catalog No | YP-Ab-16396 |
| Isotype | IgG |
| Reactivity | Human;Mouse;Rat |
| Applications | WB;ELISA |
| Gene Name | CACNA2D4 |
| Protein Name | Voltage-dependent calcium channel subunit alpha-2/delta-4 |
| 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 | CACNA2D4; Voltage-dependent calcium channel subunit alpha-2/delta-4; Voltage-gated calcium channel subunit alpha-2/delta-4 |
| Observed Band | 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!

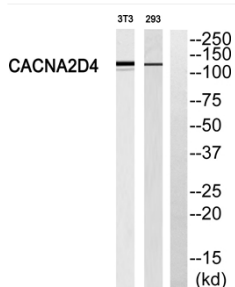
Usage suggestions

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

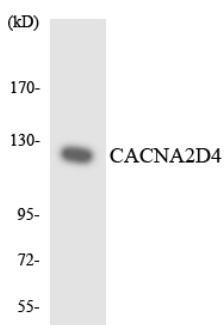
Products Images



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.