



CAC1A Polyclonal Antibody

Catalog No	YP-Ab-07324
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF
Gene Name	CACNA1A CACH4 CACN3 CACNL1A4
Immunogen	Synthesized peptide derived from human protein . at AA range: 1401-1450
Specificity	CAC1A Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	IHC-p 1:50-300. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CAC1A_HUMAN;CACNA1A;Brain calcium channel I (BI);Calcium channel;L type;alpha-1 polypeptide isoform 4;Voltage-gated calcium channel subunit alpha Cav2.1;CACH4;CACN3;CACNL1A4;APCA;BI;CAV2.1;DEE42;EA2;EIEE42;FHM;HPCA;MHP;MHP1;SCA6;CAC1A;CACNA1A CACH4 CACN3 CACNL1A4; Voltage-dependent P/Q-type calcium channel subunit alpha-1A (Brain calcium channel I) (BI) (Calcium channel;alpha-1 polypeptide isoform 4) (Voltage-gated calcium channel subunit alpha Cav2.1)
Observed Band	275kD
Calculated Molecular Weight	275kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Brain specific; mainly found in cerebellum, cerebral cortex, thalamus and hypothalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in heart, kidney, liver or muscle. Purkinje cells contain predominantly P-type VSCC, the Q-type being a prominent calcium current in cerebellar granule cells.
Function	alternative products:Additional isoforms seem to exist,disease:Defects in CACNA1A are the cause of episodic ataxia type 2 (EA2) [MIM:108500]; also known as acetazolamide-responsive hereditary paroxysmal cerebellar ataxia



(APCA). EA2 is an autosomal dominant disorder characterized by acetazolamide-responsive attacks of ataxia, migraine-like symptoms, interictal nystagmus, and cerebellar atrophy. Defects in CACNA1A are the cause of familial hemiplegic migraine (FHM) [MIM:141500]; also known as migraine familial hemiplegic 1 (MHP1). FHM, a rare autosomal dominant subtype of migraine with aura, is associated with ictal hemiparesis and, in some families, progressive cerebellar atrophy. Defects in CACNA1A are the cause of spinocerebellar ataxia type 6 (SCA6) [MIM:183086]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patient

Background

calcium voltage-gated channel subunit alpha1 A(CACNA1A) Homo sapiens Voltage-dependent calcium channels mediate the entry of calcium ions into excitable cells, and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, and gene expression. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas, the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1A subunit, which is predominantly expressed in neuronal tissue. Mutations in this gene are associated with 2 neurologic disorders, familial hemiplegic migraine and episodic ataxia 2. This gene also exhibits

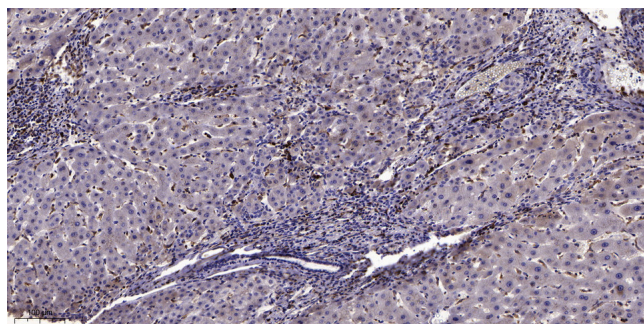
matters needing attention

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



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).