SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-CACNB4 antibody

SL11983R

Product Name	CACNB4
Chinese Name	L 型电压依赖型钙通道 β4 抗体
Alias	CAB4; L-type Ca++ CPβ4; CACB4_HUMAN; Cacnb4; CACNLB4; Calcium channel voltage d subunit; Calcium channel voltage dependent subunit beta 4; Calcium channel voltage-dependent Dihydropyridine sensitive L type calcium channel beta 4 subunit; EA5; EIG9; EJM; EJM4; Volt L-type calcium channel subunit beta-4.
Research Area	Cell biology Neurobiology Signal transduction Channel protein
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted: Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Sheep,)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	58kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CACNB4/L-type Ca++ CPβ4: 301-400/
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d applications.

PubMed

PubMed

Voltage-dependent calcium channels are essential for the release of neurotransmitters. L-type (lo current) voltage-dependent calcium channels are composed of four subunits: an Alpha1 subunit, a Beta subunit and an Alpha2 Gamma subunit. The Beta subunit is encoded by four genes, designa 4, all of which contribute to the diversity of calcium currents and are involved in membrane traff Beta subunit. L-type Ca++ CP Beta 4, also known as CACNB4 (Calcium channel voltage-depend 4), CACNLB4 or CAB4, is a 484 amino acid protein that contains one SH3 domain and is expre brain and smooth muscle. Functioning as one of the four components of the Beta subunit, L-type 4 increases the peak calcium current in voltage-dependent calcium channels, thereby shifting the dependencies of activation and inactivation and controlling G protein inhibition and Beta membr Two isoforms of L-type Ca++ CP Beta4 exist due to alternative splicing events.

Product Detail

Function:
The beta subunit of voltage-dependent calcium channels contributes to the function of the calciu increasing peak calcium current, shifting the voltage dependencies of activation and inactivation protein inhibition and controlling the alpha-1 subunit membrane targeting.

Subunit:
The L-type calcium channel is composed of four subunits: alpha-1, alpha-2, beta and gamma. In FASLG.

Tissue Specificity:
Expressed predominantly in the cerebellum and kidney.

DISEASE:
Genetic variations in CACNB4 are the cause of susceptibility to idiopathic generalized epilepsy [MIM:607682]. IGE9 is characterized by recurring generalized seizures in the absence of detectab and/or metabolic abnormalities. Generalized seizures arise diffusely and simultaneously from bo of the brain.
Genetic variations in CACNB4 are the cause of susceptibility to juvenile myoclonic epilepsy typ [MIM:607682]. EJM6 is a subtype of idiopathic generalized epilepsy. Patients have afebrile seiz onset in adolescence (rather than in childhood) and myoclonic jerks which usually occur after awa triggered by sleep deprivation and fatigue.

Similarity:
Belongs to the calcium channel beta subunit family.
Contains 1 SH3 domain.

SWISS:
O00305

Gene ID:
785

Database links:

Entrez Gene: 785 Human

Entrez Gene: 12298 Mouse

Entrez Gene: 58942 Rat

Omim: 601949 Human

SwissProt: O00305 Human

SwissProt: Q8R0S4 Mouse

Unigene: 120725 Human

Unigene: 330223 Mouse

Unigene: 472778 Mouse

Unigene: 9863 Rat