

CACNB3 Rabbit pAb

Catalog # AP98181

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P54284
Other Accession	P54284
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54532
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CACNB3
Epitope Specificity	101-200/484
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the calcium channel beta subunit family. Contains 1 SH3 domain.
SUBUNIT	The L-type calcium channel is composed of four subunits: alpha-1, alpha-2, beta and gamma. Interacts with CACNA2D4. Interacts with FASLG.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Voltage-dependent calcium channels are essential for the release of neurotransmitters. L-type (long lasting current) voltage-dependent calcium channels are composed of four subunits: an Alpha1 subunit, a Beta subunit, a Beta subunit and an Alpha2 Gamma subunit. The Beta subunit is encoded by four genes, designated Beta1-Beta4, all of which contribute to the diversity of calcium currents and are involved in membrane trafficking of the Beta subunit. L-type Ca ⁺⁺ CP Beta3, also known as CACNB3 (Calcium channel voltage-dependent subunit beta 3), CACNLB3 or CAB3, is a 484 amino acid protein that contains one SH3 domain and is expressed in ovary, brain and smooth muscle. Functioning as one of the four components of the Beta subunit, L-type Ca ⁺⁺ CP Beta 3 increases the peak calcium current in voltage-dependent calcium channels, thereby shifting the voltage dependencies of activation and inactivation and controlling G protein inhibition and Beta membrane targeting. Two isoforms of L-type Ca ⁺⁺ CP Beta3 exist due to alternative splicing events.

Additional Information

Gene ID	784
Other Names	CAB3; CACNLB3; Beta3; Ca(v)beta3; Cchb3; CACH3B; CACB3_HUMAN; CACNB3; Calcium channel voltage-dependent subunit beta 3; CACB3_MOUSE; Calcium channel voltage-dependent subunit beta 3 (CCHB3); CACB3_RAT; calcium voltage-gated channel auxiliary subunit beta 3; calcium channel, voltage-dependent, beta 3 subunit

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CACNB3
Synonyms	CACNLB3 {ECO:0000303 PubMed:7557998}
Function	Regulatory subunit of the voltage-gated calcium channel that gives rise to L-type calcium currents (PubMed: 8119293). Increases CACNA1B peak calcium current and shifts the voltage dependencies of channel activation and inactivation (By similarity). Increases CACNA1C peak calcium current and shifts the voltage dependencies of channel activation and inactivation (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Expressed mostly in brain, colon and ovary.

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