



Rabbit Anti-CACNB3 antibody

SL10432R

Product Name:	CACNB3
Chinese Name:	L型电压依赖型钙通道β3(L-type Ca ⁺⁺ CPβ3)抗体
Alias:	CAB3; CACB3_HUMAN; CACNLB3; Calcium Channel Voltage Dependent Beta 3 Subunit; Calcium channel voltage-dependent subunit beta 3; FLJ58949; Voltage-dependent L-type calcium channel subunit beta-3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	54kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CACNB3:101-200/484
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.

Function:

The beta subunit of voltage-dependent calcium channels contributes to the function of the calcium channel by increasing peak calcium current, shifting the voltage dependencies of activation and inactivation, modulating G 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. Interacts with CACNA2D4. Interacts with FASLG.

Tissue Specificity:

Expressed mostly in brain, smooth muscle and ovary.

Similarity:

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

SWISS:

P54284

Gene ID:

784

Database links:

[Entrez Gene: 784](#)Human

[Entrez Gene: 12297](#)Mouse

[Entrez Gene: 25297](#)Rat

[Omim: 601958](#)Human

[SwissProt: P54284](#)Human

[SwissProt: P54285](#)Mouse

[SwissProt: P54287](#)Rat

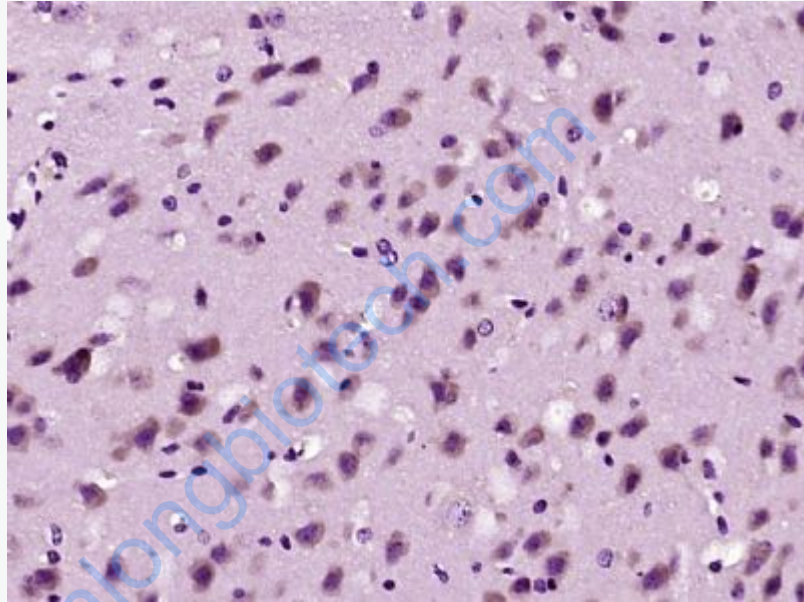
[Unigene: 250712](#)Human

[Unigene: 3544](#)Mouse

[Unigene: 2808](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IRS3) Polyclonal Antibody, Unconjugated (SL10432R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.