

Rabbit Anti-CACNB3 antibody

SL10432R

Product Name CACNB3

Chinese Name L 型电压依赖型钙通道 β 3(L-type Ca^{++} CP β 3)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.

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse(predicted:Human,Rat,Pig,Cow,Horse,Rabbit,Sheep)

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 54kDa

Cellular localization cytoplasmic The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human CACNB3: 101-200/484

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°C. 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 diagnostic applications.

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

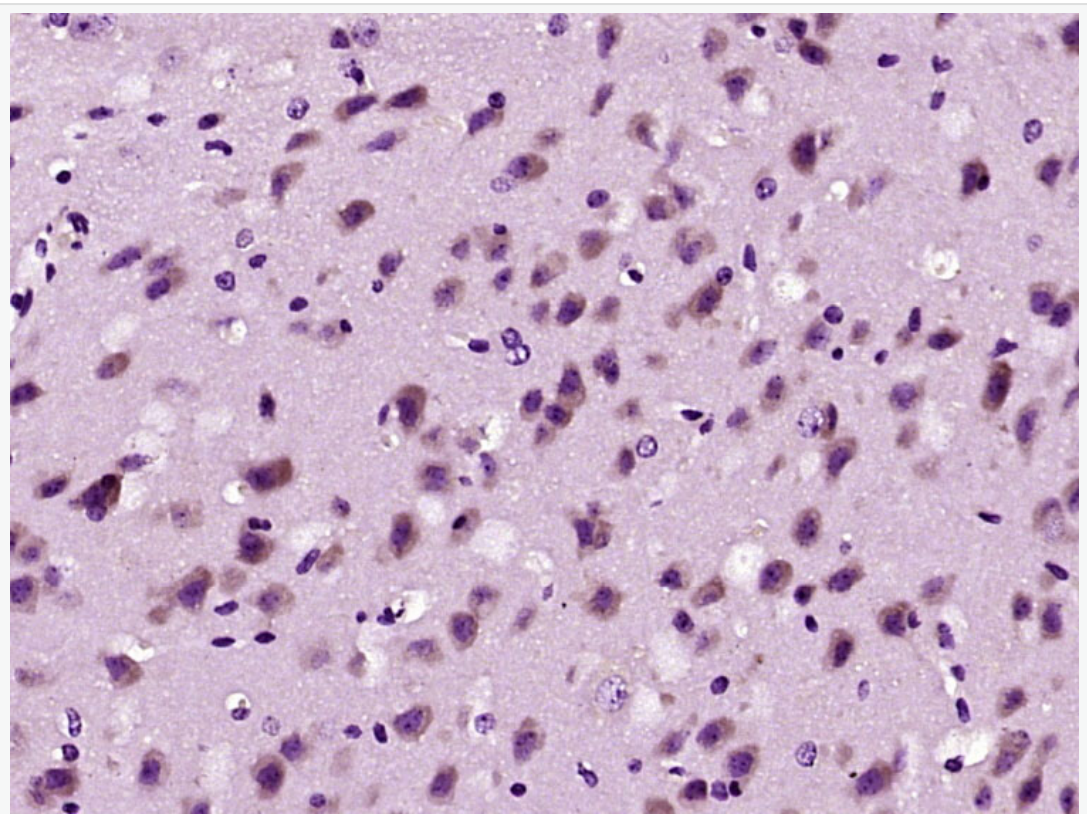
[SwissProt: P54287](#) Rat

[Unigene: 250712](#) Human

[Unigene: 3544](#) Mouse

[Unigene: 2808](#) Rat

**Product
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 (SL0186R) at 1:400 overnight at 4°C, followed by operating



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according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.