

Rabbit Anti-SCN2B antibody

SL12122R

Product Name SCN2B

Chinese Name 神经元电压门控钠 Channel protein β 2/Na⁺ CP type II β 抗体

Alias Neuronal voltage gated sodium channel beta 2 subunit; Scn 2b; Scn2b; SCN2B_HUMAN; Sodium channel beta 2 subunit; Sodium channel subunit beta 2; Sodium channel subunit beta-2; Sodium channel voltage gated type II beta; Sodium channel voltage gated type II beta polypeptide.

Research Area Neurobiology Channel protein The cell membrane 受体

Immunogen Species Rabbit

Clonality Polyclonal

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

IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 21kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human SCN2B: 65-180/215 <Extracellular>

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

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Voltage-gated sodium channels are selective ion channels that regulate the permeability of sodium ions in excitable cells. During the propagation of an action potential, sodium channels allow an influx of sodium ions, which rapidly depolarizes the cell. Na⁺ CP type II beta(sodium channel, voltage-gated, type II, beta), also known as SCN2B, is a 215 amino acid single-pass type I membrane protein that plays a critical role in the expression and assembly of the heterotrimeric complex of the sodium channel and interacts with Tenascin-R to influence the clustering and regulation of sodium channels at nodes of Ranvier. Expressed specifically in brain, Na⁺ CP type II beta contains one Ig-like C2-type (immunoglobulin-like) domain and is encoded by a gene that maps to human chromosome 11q23.3 and mouse chromosome 9 A5.2.

Function:

Crucial in the assembly, expression, and functional modulation of the heterotrimeric complex of the sodium channel. The subunit beta-2 causes an increase in the plasma membrane surface area and in its folding into microvilli. Interacts with TNR may play a crucial role in clustering and regulation of activity of sodium channels at nodes of Ranvier.

Subunit:

[SUBUNIT] The sodium channel consists of a pore-forming alpha subunit, beta-1 and beta-2 subunits. Beta-1 is non-covalently associated with alpha, while beta-2 is covalently linked by disulfide bonds. Interaction with SCN10A and TNR (By similarity).

Product Detail

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Tissue Specificity:

Brain specific.

Similarity:

Belongs to the sodium channel auxiliary subunit SCN2B (TC 8.A.17) family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

SWISS:

O60939

Gene ID:

6327

Database links:

[Entrez Gene: 6327](#) Human

[Entrez Gene: 72821](#) Mouse



[Entrez Gene: 25349](#) Rat

[Omim: 601327](#) Human

[SwissProt: O60939](#) Human

[SwissProt: Q56A07](#) Mouse

[SwissProt: P54900](#) Rat

[Unigene: 129783](#) Human

[Unigene: 229373](#) Mouse

[Unigene: 477575](#) Mouse

[Unigene: 88636](#) Rat