

Cav3.2 Polyclonal Antibody

Catalog No: YN5640

Reactivity: Human;Rat;Mouse

Applications: IHC;IF

Target: Cav3.2

Fields: >>MAPK signaling pathway;>>Calcium signaling pathway;>>Circadian

entrainment:>>Aldosterone synthesis and secretion:>>Cortisol synthesis and

secretion;>>GnRH secretion;>>Cushing syndrome

Gene Name: CACNA1H

Protein Name: Voltage-dependent T-type calcium channel subunit alpha-1H (Low-voltage-

activated calcium channel alpha1 3.2 subunit) (Voltage-gated calcium channel

subunit alpha Cav3.2)

Human Gene Id: 8912

Human Swiss Prot 095180

No:

Mouse Swiss Prot 088427

No:

Rat Swiss Prot No: Q9EQ60

Immunogen: Synthetic Peptide of Cav3.2 AA range: 1718-1768

Specificity: Cav3.2 protein(A208) detects endogenous levels of Cav3.2

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:50-100. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 260kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;Calcium;

Background: calcium voltage-gated channel subunit alpha1 H(CACNA1H) Homo sapiens

This gene encodes a T-type member of the alpha-1 subunit family, a protein in the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. The alpha-1 subunit has 24 transmembrane segments and forms the pore through which ions pass into the cell. There are multiple isoforms of each of the proteins in the complex, either encoded by different genes or the result of alternative splicing of transcripts. Alternate transcriptional splice variants, encoding different isoforms, have been characterized for the gene described here. Studies suggest certain mutations in this gene lead to childhood absence epilepsy (CAE).

[provided by RefSeq, Jul 2008],

Function: disease:Defects in CACNA1H are a cause of susceptibility to idiopathic

generalized epilepsy type 6 (IGE6) [MIM:611942]. IGE is characterized by recurring generalized seizures in the absence of detectable brain lesions and/or metabolic abnormalities. Generalized seizures arise diffusely and simultaneously from both hemispheres of the brain. IGE6 is a polygenic and multifactorial disease.,domain:Each of the four internal repeats contains five hydrophobic transmembrane segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids at every third position.,function:Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of

calcium-dependent processes, including muscle contraction

Subcellular Location:

Cell membrane ; Multi-pass membrane protein . Interaction with STAC increases

expression at the cell membrane. .

Expression:

Expressed in the adrenal glomerulosa (at protein level) (PubMed:25907736, PubMed:27729216). In nonneuronal tissues, the highest expression levels are found in the kidney, liver, and heart. In the brain, most abundant in the amygdala, caudate nucleus, and putamen (PubMed:9670923, PubMed:9930755). In the heart, expressed in blood vessels.; [Isoform 1]: Expressed in testis, primarily in the germ cells, but not in other portions of the reproductive tract, such as ductus deferens (PubMed:11751928). Expressed in the brain (PubMed:11751928).; [Isoform 2]: Expressed in testis, primarily in the germ cells, but not in other portions of the reproductive tract, such as ductus deferens (PubMed:11751928). Not expressed in the brain (PubMed:11751928).



Products Images



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using Cav3.2Rabbit pAb diluted at 1:200.