Recombinant Human CACNA1H, His-tagged

Cat. No. CACNA1H-26604TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment, corresponding to amino acids 2027-2347 of Human CACNA1H with N terminal His tag; 321 amino acids, 57kDa.
Species	Human
Source	E.coli
ProteinLength	2027-2347 a.a.
Description	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).
Conjugation	HIS
Form	Lyophilised:Reconstitute with 111 µl aqua dest.
Storage buffer	Preservative: NoneConstituents: 0.5% Trehalose, 6M Urea, 100mM Sodium

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	phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	DTLDPAEPGEKTPVRPVTQGGSLQSPPRSPRPASVRTRKH TFGQRCVSSRPAAPG GEEAEASDPADEEVSHITSSACP WQPTAEPHGPEASPVAGGERDLRRLYSVDAQG FLDKPGRA DEQWRPSAELGSGEPGEAKAWGPEAEPALGARRKKKMS PPCISVEP PAEDEGSARPSAAEGGSTTLRRRTPSCEAT PHRDSLEPTEGSGAGGDPAAKGER WGQASCRAEHLTVPSF AFEPLDLGVPSGDPFLDGSHSVTPESRASSSGAIVPLE P PESEPPMPVGDPPEKRRGLYLTVPQCPLEKPGSPSAT PAPGGGADDPV

GENE INFORMATION

Gene Name	CACNA1H calcium channel, voltage-dependent, T type, alpha 1H subunit [Homo sapiens]
Official Symbol	CACNA1H
Synonyms	CACNA1H; calcium channel, voltage-dependent, T type, alpha 1H subunit; voltage-dependent T-type calcium channel subunit alpha-1H; Cav3.2;
Gene ID	8912
mRNA Refseq	NM_001005407
Protein Refseq	NP_001005407
MIM	607904
Uniprot ID	O95180

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Chromosome Location	16p13.3
Pathway	Axon guidance, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Developmental Biology, organism-specific biosystem; MAPK signaling pathway, organism-specific biosystem;
Function	low voltage-gated calcium channel activity; voltage-gated ion channel activity;

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