CACNA2D4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CACNA2D4, Polyclonal Antibody
Full Product Name	CACNA2D4, NT (CACNA2D4, Voltage-dependent calcium channel subunit alpha-2/delta-4, Voltage-gated calcium channel subunit alpha-2/delta-4, Voltage-dependent calcium channel subunit alpha-2-4, Voltage-dependent calcium channel subunit delta-4) (MaxLight 405
Product Gene Name	anti-CACNA2D4 antibody
Product Synonym Names	CACNA2D4; Voltage-dependent calcium channel subunit alpha-2/delta-4; Voltage-gated calcium channel subunit alpha-2/delta-4; Voltage-dependent calcium channel subunit alpha-2-4; Voltage-dependent calcium channel subunit delta-4
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight405.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes human CACNA2D4.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight405 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	127,938 Da
Chromosome Location	Chromosome: 12; NC_000012.11 (1901123..2027870, complement). Location: 12p13.33
OMIM	608171
3D Structure	ModBase 3D Structure for Q7Z3S7
Immunogen	KLH-conjugated synthetic peptide mapping to a fragment of residues within amino acids 89-118 in the N-terminal region of human CACNA2D4, UniProt Accession #Q7Z3S7.
Conjugate	MaxLight405
Note	Preservative Free
Product Categories/Family for anti-CACNA2D4 antibody	Antibodies; Ion Channel
Applications Tested/Suitable for anti-CACNA2D4 antibody	Flow Cytometry (FC/FACS), Western Blot (WB), FLISA
Application Notes for anti-CACNA2D4 antibody	FC/FACS: 1:10-1:50 WB: 1:1000 Applications are based on unconjugated antibody.
Related Product Information for anti-CACNA2D4 antibody	MBS6280336 is an antibody targeting CACNA2D4. Also known as CACNA2D4, NT (CACNA2D4, Voltage-dependent calcium channel subunit alpha-2/delta-4, Voltage-gated calcium channel subunit alpha-2/delta-4, Voltage-dependent calcium channel subunit alpha-2-4, Voltage-dependent calcium channel subunit delta-4) (MaxLight 405. Reactive in Human. Host: Rabbit.

Product References and Citations for anti-CACNA2D4 antibody	1. Wycisk, K.A., et al. Am. J. Hum. Genet. 79(5):973-977(2006). 2. Qin, N., et al. Mol. Pharmacol. 62(3):485-496(2002).
Other Notes	Small volumes of anti-CACNA2D4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CACNA2D4. It may not necessarily be applicable to this product.

NCBI GI #	132566536
NCBI GeneID	93589
NCBI Accession #	NP_758952.4
UniProt Primary Accession #	Q7Z3S7
UniProt Secondary Accession #	Q7Z3S8; Q86XZ5; Q8IZS9
UniProt Related Accession #	Q7Z3S7
GenBank Nucleotide #	NM_172364.4
NCBI Official Full Name	voltage-dependent calcium channel subunit alpha-2/delta-4
NCBI Official Synonym Full Names	calcium channel, voltage-dependent, alpha 2/delta subunit 4
NCBI Official Symbol	CACNA2D4
NCBI Official Synonym Symbols	RCD4
UniProt Protein Name	Voltage-dependent calcium channel subunit alpha-2/delta-4
UniProt Synonym Protein Names	Voltage-gated calcium channel subunit alpha-2/delta-4
Protein Family	Voltage-dependent calcium channel
UniProt Gene Name	CACNA2D4
UniProt Entry Name	CA2D4_HUMAN
NCBI Protein Information	voltage-dependent calcium channel subunit alpha-2/delta-4; voltage-gated calcium channel alpha(2)delta-4 subunit; voltage-gated calcium channel subunit alpha-2/delta-4
NCBI Summary for CACNA2D4	This gene encodes a member of the alpha-2/delta 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. Various versions of each of these subunits exist, either expressed from similar genes or the result of alternative splicing. Research on a highly similar protein in rabbit suggests the protein described in this record is cleaved into alpha-2 and delta subunits. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

UniProt Comments for CACNA2D4	CACNA2D4: The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Defects in CACNA2D4 are the cause of retinal cone dystrophy 4 (RCD4). RCD4 is characterized by minimal symptoms except for slowly progressive reduction in visual acuity. Belongs to the calcium channel subunit alpha-2/delta family. 6 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Channel, calcium Chromosomal Location of Human Ortholog: 12p13.33 Cellular Component: voltage-gated calcium channel complex Molecular Function: voltage-gated calcium channel activity; metal ion binding Biological Process: detection of light stimulus involved in visual perception Disease: Retinal Cone Dystrophy 4
Research Articles on CACNA2D4	**1.** A rare, partial deletion of 35.7 kb in CACNA2D4 in two unrelated late onset bipolar I patients and in one control individual, were identified.
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