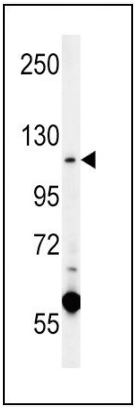
CACNA2D4 Antibody – Rabbit Polyclonal

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) (Azide free)
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 Horseradish Peroxidase (HRP).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes human CACNA2D4.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and 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	HRP
Note	Preservative Free
Product Categories/Family for anti-CACNA2D4 antibody	Antibodies; Ion Channel
Applications Tested/Suitable for anti-CACNA2D4 antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-CACNA2D4 antibody	WB: 1:100-500 ELISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-CACNA2D4 antibody	MBS6280335 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) (Azide free). 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.



Western Blot (WB) of anti-CACNA2D4 antibody
Western Blot analysis in K562 cell line lysates (15ug/lane) usingMBS6006158. This demonstrates that MBS6006158 detected the CACNA2D4 protein (arrow).

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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