

Rabbit anti-Human, Mouse CACNA2D2 Polyclonal Antibody | anti-CACNA2D2 antibody

CACNA2D2 Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290295	Rabbit	Human, Mouse	Immunohistochemistry, ELISA, Western Blot

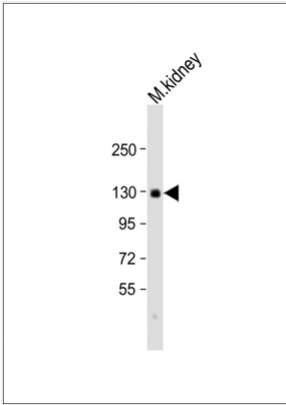
PRODUCT SYNONYMS

CACNA2D2; Polyclonal Antibody; CACNA2D2 Antibody (Center); Voltage-dependent calcium channel subunit alpha-2/delta-2; Voltage-gated calcium channel subunit alpha-2/delta-2; Voltage-dependent calcium channel subunit alpha-2-2; Voltage-dependent calcium channel subunit delta-2; KIAA0558; anti-CACNA2D2 antibody

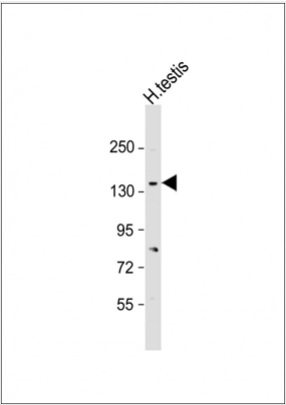
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This CACNA2D2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 643-671 amino acids from the Central region of human CACNA2D2.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Positions	643-671
Sequence Length	1,152
Applicable Applications for anti-CACNA2D2 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Function	The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q- type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) and possibly T-type (CACNA1G) (PubMed:15111129, PubMed:23339110). Overexpression induces apoptosis.
Cellular Location	Membrane; Single-pass type I membrane protein. Note=Colocalizes with CACNA1A in lipid raft fractions.
Tissue Location	Predominantly present in cerebellar cortex. Present in various lung tumor cell lines, while it is absent in normal lung (at protein level). Highly expressed in heart, lung, testis, pancreas and skeletal muscle. Also expressed in kidney, liver, placenta and brain
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

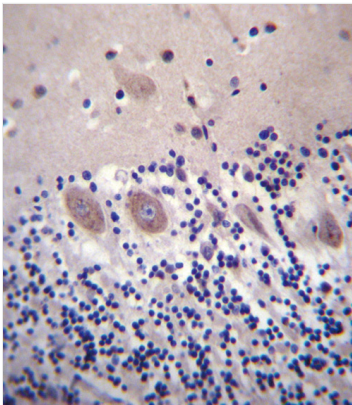
IMAGES



WB (Western Blot)
Anti-CACNA2D2 Antibody (Center) (AAA290295) at 1:2000 dilution + mouse kidney lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 130 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



WB (Western Blot)
Anti-CACNA2D2 Antibody (Center) (AAA290295) at 1:2000 dilution + human testis lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 130 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



IHC (Immunohistochemistry)
CACNA2D2 Antibody (Center) (AAA290295) immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CACNA2D2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

ADDITIONAL INFORMATION

Related Product Information for anti-CACNA2D2 antibody	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, encoding different isoforms, have been characterized.
Product Categories/Family for anti-CACNA2D2 antibody	Cell Biology; Neuroscience; Signal Transduction
References	Donato, R., et al. J. Neurosci. 26(48):12576-12586(2006) Ivanov, S.V., et al. Am. J. Pathol. 165(3):1007-1018(2004) Carboni, G.L., et al. Oncogene 22(4):615-626(2003) Honorio, S., et al. Mol. Cell. Probes 15(6):391-393(2001) Angeloni, D., et al. Mol. Cell. Probes 15(2):125-127(2001)

NCBI AND UNIPROT INFORMATION

NCBI GI #	54112392
NCBI GeneID	9254
NCBI Accession #	NP_001005505.1; NP_001167522.1; NP_006021.2

NCBI GenBank Nucleotide #	NM_001005505.2
UniProt Accession #	Q9NY47 ; Q9NY48 ; Q9UEW0 ; Q9Y268 ; A7MD15
NCBI Official Full Name	voltage-dependent calcium channel subunit alpha-2/delta-2 isoform a
NCBI Official Synonym Full Names	calcium channel, voltage-dependent, alpha 2/delta subunit 2
NCBI Official Symbol	CACNA2D2
NCBI Official Synonym Symbols	CACNA2D
NCBI Protein Information	voltage-dependent calcium channel subunit alpha-2/delta-2
UniProt Protein Name	Voltage-dependent calcium channel subunit alpha-2/delta-2
UniProt Gene Name	CACNA2D2
UniProt Synonym Gene Names	KIAA0558
UniProt Entry Name	CA2D2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cacna2d2-antibody-immunohistochemistry-western-blot-elisa/290295>