10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CACNA1F Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21695c

Product Information

Application	WB, E
Primary Accession	O60840
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53557
Calculated MW	220678

Additional Information

Gene ID	778
Other Names	Voltage-dependent L-type calcium channel subunit alpha-1F, Voltage-gated calcium channel subunit alpha Cav14, CACNA1F, CACNAF1
Target/Specificity	This CACNA1F antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 743-776 amino acids from the Central region of human CACNA1F.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
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.
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.
Precautions	CACNA1F Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CACNA1F (HGNC:1393)
Synonyms	CACNAF1
Function	[Isoform 1]: 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, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1F gives rise to L-type calcium currents. Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group. They are blocked by dihydropyridines (DHP), phenylalkylamines, and by benzothiazepines. Activates at more negative voltages and does not undergo calcium- dependent inactivation (CDI), due to incoming calcium ions, during depolarization.
Cellular Location	Membrane; Multi-pass membrane protein
Tissue Location	Expression in skeletal muscle and retina (PubMed:10873387). Isoform 4 is expressed in retina (PubMed:27226626)

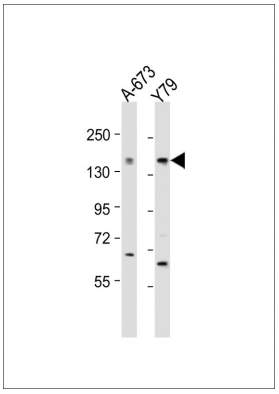
Background

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, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1F gives rise to L-type calcium currents. Long-lasting (L-type) calcium channels belong to the 'high-voltage activated' (HVA) group. They are blocked by dihydropyridines (DHP), phenylalkylamines, benzothiazepines, and by omega-agatoxin-IIIA (omega-Aga-IIIA). They are however insensitive to omega-conotoxin- GVIA (omega-CTx-GVIA) and omega-agatoxin-IVA (omega-Aga-IVA).

References

Strom T.M.,et al.Nat. Genet. 19:260-263(1998).
Bech-Hansen N.T.,et al.Nat. Genet. 19:264-267(1998).
Naylor M.J.,et al.Genomics 66:324-327(2000).
Sinnegger-Brauns M.J.,et al.Mol. Pharmacol. 75:407-414(2009).
Ross M.T.,et al.Nature 434:325-337(2005).

Images



All lanes : Anti-CACNA1F Antibody (Center) at 1:2000 dilution Lane 1: A-673 whole cell lysate Lane 2: Y79 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 221 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.