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CACNA1F Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21695c

Specification

CACNA1F Blocking Peptide (Center) - Product Information

Primary Accession O60840

CACNA1F Blocking Peptide (Center) - 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
The synthetic peptide sequence is selected from aa 763-776 of HUMAN CACNA1F

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CACNA1F Blocking Peptide (Center) - 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)

CACNA1F Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CACNA1F Blocking Peptide (Center) - Images

CACNA1F Blocking Peptide (Center) - 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).

CACNA1F Blocking Peptide (Center) - 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).