

CACNA1F Blocking Peptide (Center)
Synthetic peptide
Catalog # BP21695c**Specification**

CACNA1F Blocking Peptide (Center) - Product InformationPrimary 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).