

**CACNA1A Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21701c****Specification**

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**CACNA1A Blocking Peptide (Center) - Product Information**Primary Accession [O00555](#)**CACNA1A Blocking Peptide (Center) - Additional Information****Gene ID** 773**Other Names**

Voltage-dependent P/Q-type calcium channel subunit alpha-1A, Brain calcium channel I, BI, Calcium channel, L type, alpha-1 polypeptide isoform 4, Voltage-gated calcium channel subunit alpha Cav21, CACNA1A, CACH4, CACN3, CACNL1A4

**Target/Specificity**

The synthetic peptide sequence is selected from aa 918-932 of HUMAN CACNA1A

**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.

**CACNA1A Blocking Peptide (Center) - Protein Information****Name** CACNA1A ([HGNC:1388](#))**Synonyms** CACH4, CACN3, CACNL1A4**Function**

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-1A gives rise to P and/or Q- type calcium currents. P/Q-type calcium channels belong to the 'high- voltage activated' (HVA) group and are specifically blocked by the spider omega-agatoxin-IVA (AC P54282) (By similarity). They are however insensitive to dihydropyridines (DHP).

**Cellular Location**

Cell membrane; Multi-pass membrane protein

**Tissue Location**

Brain specific; mainly found in cerebellum, cerebral cortex, thalamus and hypothalamus. Expressed in the small cell lung carcinoma cell line SCC-9. No expression in heart, kidney, liver or muscle. Purkinje cells contain predominantly P-type VSCC, the Q-type being a prominent calcium current in cerebellar granule cells

**CACNA1A Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

**CACNA1A Blocking Peptide (Center) - Images****CACNA1A Blocking Peptide (Center) - Background**

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**CACNA1A Blocking Peptide (Center) - References**

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Zhuchenko O.,et al.Nat. Genet. 15:62-69(1997).  
Toru S.,et al.J. Biol. Chem. 275:10893-10898(2000).  
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