

**PDE1C Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21818c****Specification**

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**PDE1C Blocking Peptide (Center) - Product Information**Primary Accession [Q14123](#)**PDE1C Blocking Peptide (Center) - Additional Information****Gene ID** 5137**Other Names**

Calcium/calmodulin-dependent 3', 5'-cyclic nucleotide phosphodiesterase 1C, Cam-PDE 1C, hCam-3, PDE1C

**Target/Specificity**

The synthetic peptide sequence is selected from aa 395-409 of HUMAN PDE1C

**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.

**PDE1C Blocking Peptide (Center) - Protein Information****Name** PDE1C ([HGNC:8776](#))**Function**

Calmodulin-dependent cyclic nucleotide phosphodiesterase with a dual specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes (PubMed:<a href="http://www.uniprot.org/citations/29860631" target="\_blank">29860631</a>, PubMed:<a href="http://www.uniprot.org/citations/8557689" target="\_blank">8557689</a>). Has a high affinity for both cAMP and cGMP (PubMed:<a href="http://www.uniprot.org/citations/8557689" target="\_blank">8557689</a>). Modulates the amplitude and duration of the cAMP signal in sensory cilia in response to odorant stimulation, hence contributing to the generation of action potentials. Regulates smooth muscle cell proliferation. Regulates the stability of growth factor receptors, including PDGFRB (Probable).

**Cellular Location**

Lysosome {ECO:0000250|UniProtKB:Q64338}.

**Tissue Location**

Isoform PDE1C2 is present in the heart and brain and, at lower levels in the lung, liver, kidney and skeletal muscle (PubMed:8557689). Isoform PDE1C1 is expressed in the heart and brain and, at lower levels in lung (PubMed:8557689). Also expressed at low levels in uterus and testis (PubMed:8557689)

### **PDE1C Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

### **PDE1C Blocking Peptide (Center) - Images**

### **PDE1C Blocking Peptide (Center) - Background**

Cyclic nucleotide phosphodiesterase with a dual- specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. Has a high affinity for both cAMP and cGMP.

### **PDE1C Blocking Peptide (Center) - References**

Loughney K.,et al.J. Biol. Chem. 271:796-806(1996).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Hillier L.W.,et al.Nature 424:157-164(2003).  
Oppermann F.S.,et al.Mol. Cell. Proteomics 8:1751-1764(2009).