

## PDE2A Blocking Peptide (C-Term)

Synthetic peptide Catalog # BP22001b

## **Specification**

## PDE2A Blocking Peptide (C-Term) - Product Information

Primary Accession <u>000408</u>

Other Accession <u>P14099</u>, <u>Q922S4</u>, <u>Q01062</u>

## PDE2A Blocking Peptide (C-Term) - Additional Information

**Gene ID** 5138

#### **Other Names**

cGMP-dependent 3', 5'-cyclic phosphodiesterase, 3.1.4.17, Cyclic GMP-stimulated phosphodiesterase, CGS-PDE, cGSPDE, PDE2A

#### **Target/Specificity**

The synthetic peptide sequence is selected from aa 807-821 of HUMAN PDE2A

#### **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.

# PDE2A Blocking Peptide (C-Term) - Protein Information

## Name PDE2A (HGNC:8777)

#### **Function**

cGMP-activated 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/9210593" target="\_blank">9210593</a>, PubMed:<a href="http://www.uniprot.org/citations/29392776" target="\_blank">29392776</a>, PubMed:<a href="http://www.uniprot.org/citations/15938621" target="\_blank">15938621</a>). Has a higher efficiency with cGMP compared to cAMP (PubMed:<a href="http://www.uniprot.org/citations/15938621" target="\_blank">15938621</a>). Plays a role in cell growth and migration (PubMed:<a href="http://www.uniprot.org/citations/24705027" target="\_blank">24705027</a>).

#### **Cellular Location**

[Isoform PDE2A3]: Cell membrane; Lipid- anchor [Isoform PDE2A1]: Cytoplasm



## **Tissue Location**

Widely expressed (PubMed:9210593, PubMed:29392776). Expressed in brain, with high expression observed in the corpus striatum (PubMed:29392776). Also expressed in heart, placenta, lung, skeletal muscle, kidney and pancreas (PubMed:9210593, PubMed:29392776)

# PDE2A Blocking Peptide (C-Term) - Protocols

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

## • Blocking Peptides

PDE2A Blocking Peptide (C-Term) - Images

## PDE2A Blocking Peptide (C-Term) - Background

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

# PDE2A Blocking Peptide (C-Term) - References

Rosman G.J., et al. Gene 191:89-95(1997). Bugaj-Gaweda B., et al. Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Taylor T.D., et al. Nature 440:497-500(2006). Russwurm C., et al. J. Biol. Chem. 284:25782-25790(2009).