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PDE11A Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP14002a

Specification

PDE11A Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9HCR9

PDE11A Antibody (N-term) Blocking peptide - Additional Information

Gene ID 50940

Other Names
Dual 3', 5'-cyclic-AMP and -GMP phosphodiesterase 11A, cAMP and cGMP phosphodiesterase 11A, PDE11A

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP14002a was selected from the N-term region of PDE11A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

PDE11A Antibody (N-term) Blocking peptide - Protein Information

Name PDE11A {ECO:0000303|PubMed:10906126, ECO:0000312|HGNC:HGNC:8773}

Function
Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides cAMP and cGMP (PubMed:10725373, PubMed:10906126, PubMed:11050148, PubMed:16330539). Catalyzes the hydrolysis of both cAMP and cGMP to 5'-AMP and 5'-GMP, respectively (PubMed:10725373, PubMed:10906126, PubMed:11050148).

Cellular Location

Cytoplasm, cytosol.

Tissue Location
Isoform 1 is present in prostate, pituitary, heart and liver. It is however not present in testis nor in penis, suggesting that weak inhibition by Tadalafil (Cialis) is not relevant (at protein level). Isoform 2 may be expressed in testis. Isoform 4 is expressed in adrenal cortex.

PDE11A Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

PDE11A Antibody (N-term) Blocking peptide - Images

PDE11A Antibody (N-term) Blocking peptide - Background

The 3',5'-cyclic nucleotides cAMP and cGMP function assecond messengers in a wide variety of signal transductionpathways. 3',5'-cyclic nucleotide phosphodiesterases (PDEs)catalyze the hydrolysis of cAMP and cGMP to the corresponding5'-monophosphates and provide a mechanism to downregulate cAMP andcGMP signaling. This gene encodes a member of the PDE proteinsuperfamily. Mutations in this gene are a cause of Cushing diseaseand adrenocortical hyperplasia. Multiple transcript variantsencoding different isoforms have been found for this gene.

PDE11A Antibody (N-term) Blocking peptide - References

DeWan, A.T., et al. J. Allergy Clin. Immunol. 126(4):871-873(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Perlis, R.H., et al. Biol. Psychiatry 67(11):1110-1113(2010)Bosker, F.J., et al. Mol. Psychiatry (2010) In press :