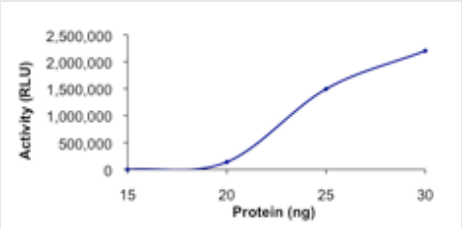
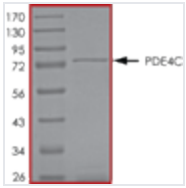
PDE4C Recombinant Protein

PRODUCT OVERVIEW

Product Name	PDE4C, Recombinant Protein
Full Product Name	PDE4C, Active
Product Gene Name	PDE4C recombinant protein
Product Synonym Gene Name	DPDE1; MGC126222
Host	Sf9 insect cells using baculovirus
Form/Format	50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Molecular Weight	~75 kDa
Sequence Positions	287-end
OMIM	Z46632 mRNA
3D Structure	ModBase 3D Structure for Q08493
Species	Human
Tag	GST tag
Dry Ice Shipment	Extra charge fee may add to your shipping cost as dry ice is required to ship this product.
Product Categories/Family for PDE4C recombinant protein	Enzymes; Active Phosphodiesterases
Applications Tested/Suitable for PDE4C recombinant protein	PDE Assay
Related Product Information for PDE4C recombinant protein	Description: Recombinant human PDE4C (287-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. Scientific Background: PDE4C is a member of the phosphodiesterase (PDE) family that is cAMP-specific and has homology to the 'dunce' gene of Drosophila. The 'dunce' gene is one of several genes critical for normal learning and memory in the fly. Homozygous mutations in 'dunce' cause defective short-term memory and behavioral defects (1). PDE4C is assigned to human chromosome 19 by Southern analyses while in situ hybridization localized the PDE4C gene to 19p13.1. PDE4C has been shown to be a substrate for phosphorylation by ERK2 within the C-terminal portion of the PDE4C catalytic unit and this phosphorylation can regulate the activity of PDE4C (2).
Product References and Citations for PDE4C recombinant protein	1. Bolger G, et al: A family of human phosphodiesterases homologous to the dunce learning and memory gene product of Drosophila melanogaster are potential targets for antidepressant drugs. Molec. Cell. Biol. 13: 6558-6571, 1993. 2. Baillie G S, et al: Sub-family selective actions in the ability of Erk2 MAP kinase to phosphorylate and regulate the activity of PDE4 cyclic AMP-specific phosphodiesterases. Br J Pharmacol. 2000 Oct;131 (4):811-9.
Other Notes	Small volumes of PDE4C recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PDE4C purchase	MBS515632 is a recombinant protein targeting PDE4C. Also known as PDE4C, Active. Host: Sf9 insect cells using baculovirus.



Testing Data of PDE4C recombinant protein



Testing Data #2 of PDE4C recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PDE4C. It may not necessarily be applicable to this product.

NCBI GI #	1054412301
NCBI GeneID	5143
NCBI Accession #	NM_000923.5
UniProt Primary Accession #	Q08493
UniProt Secondary Accession #	Q9UN44; Q9UN45; Q9UN46; Q9UPJ6; B3KTC4
UniProt Related Accession #	Q08493
GenBank Nucleotide #	NM_000923
NCBI Official Full Name	Homo sapiens phosphodiesterase 4C (PDE4C), transcript variant 1, mRNA
NCBI Official Synonym Full Names	phosphodiesterase 4C
NCBI Official Symbol	PDE4C
NCBI Official Synonym Symbols	DPDE1; PDE21
UniProt Protein Name	cAMP-specific 3',5'-cyclic phosphodiesterase 4C
UniProt Synonym Protein Names	DPDE1; PDE21
Protein Family	cAMP-specific 3',5'-cyclic phosphodiesterase
UniProt Gene Name	PDE4C
UniProt Synonym Gene Names	DPDE1
NCBI Protein Information	cAMP-specific 3',5'-cyclic phosphodiesterase 4C
NCBI Summary for PDE4C	The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE4 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.[provided by RefSeq, Jul 2011]
UniProt Comments for PDE4C	PDE4C: Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. Belongs to the cyclic nucleotide phosphodiesterase family. PDE4 subfamily. 7 isoforms of the human protein are produced by alternative splicing. Protein type: EC 3.1.4.53; Nucleotide Metabolism - purine; Phosphodiesterase Chromosomal Location of Human Ortholog: 19p13.11 Cellular Component: cilium; cytosol; extracellular space Molecular Function: 3',5'-cyclic-AMP phosphodiesterase activity
Research Articles on PDE4C	**1.** Data show that PDE4C is downregulated through promoter hypermethylation in glioma.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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