

PDE1C active protein

PDE1C, Active

CATALOG # AAA73095	HOST Sf9 cells
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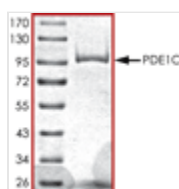
PRODUCT SYNONYMS

PDE1C; Active; PDE1C active protein

PRODUCT SPECIFICATIONS

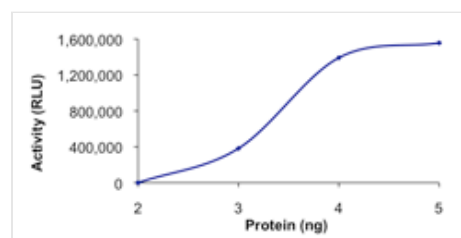
Host	Sf9 cells
Specificity	Full length recombinant protein expressed in Sf9 cells
Purity/Purification	>90%
Form/Format	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Concentration	0.1 ug/ul (varies by lot)
Specific Activity	445 nmol/min/mg
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Shipping: Dry Ice 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.

IMAGES



Application Data

The purity of PDE1C was determined to be >90% by densitometry. Approx MW 99kDa



Application Data

The specific activity of PDE1C was determined to be 445 nmol/min/mg as per activity assay protocol

ADDITIONAL INFORMATION

Related Product Information for PDE1C active protein

Description: Full-length recombinant human PDE1C was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.

Scientific Background: PDE1C is a member of the phosphodiesterases (PDE) family which catalyzes the hydrolysis of cyclic nucleotides cAMP and cGMP to the corresponding nucleoside 5-prime-monophosphates. PDE1C binds both cAMP and cGMP with high affinity and hydrolyzes both substrates with similar rates of catalysis (1). PDE1C is a calmodulin-dependent PDE and is stimulated by calcium-calmodulin complex. PDE1C is expressed at high levels in human cardiac myocytes with an intracellular distribution distinct from that of other phosphodiesterases (2). PDE1C levels decrease in all conditions that inhibited cell proliferation and PDE1C is a useful marker in studying the dynamics of proliferation and migration of various cells.

Product Categories/Family for PDE1C active protein	Enzymes; Active Phosphodiesterases
References	1. Loughney, K. et al: Isolation and characterization of cDNAs corresponding to two human calcium, calmodulin-regulated, 3-prime, 5-prime-cyclic nucleotide phosphodiesterases. J. Biol. Chem. 271: 796-806, 1996. 2. Vandeput, F. et al; Cyclic nucleotide phosphodiesterase PDE1C1 in human cardiac myocytes. J. Biol. Chem. 282: 32749-42757, 2007.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1015120667
NCBI GeneID	5137
NCBI Accession #	NM_005020.4
NCBI GenBank Nucleotide #	NM_005020
UniProt Accession #	Q14123 ; Q14124 ; Q8NB10 ; B3KPC6 ; E9PE92
Molecular Weight	~99 kDa
NCBI Official Full Name	Homo sapiens phosphodiesterase 1C (PDE1C), transcript variant 4, mRNA
NCBI Official Synonym Full Names	phosphodiesterase 1C
NCBI Official Symbol	PDE1C
NCBI Official Synonym Symbols	Hcam3; hCam-3; cam-PDE 1C
NCBI Protein Information	calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1C
UniProt Protein Name	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1C
UniProt Gene Name	PDE1C
UniProt Synonym Gene Names	Cam-PDE 1C

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/sf9-active-protein/pde1c/73095>