

Recombinant human PDE7A/HCP1 protein ab125786

5 Images

Description	
Product name	Recombinant human PDE7A/HCP1 protein
Biological activity	The specific activity of ab125786 was determined to be 166 nmol/min/mg.
Purity	> 85 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	<u>Q13946-2</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MSPILGYWKIKGLVQPTRLL LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYADKHN MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK KRIEAIQID KYLKSSKYIA WPLQGWWQATF GGGDHPPKSD LVPRGSSNSL NILDDDYNGQ AKCMLEKVGN WNFDFLFDRL TNNGNSLVSL TFHLFSLHGL IEYFHLDMMK LRRFLVMIQE DYHSQNPYHN AVHAADVTQA MHCYLKEPKL ANSVTPWDIL LSLIAAATHD LDHPGVNQPF LIKTNHYLAT LYKNTSVLEN HHWRSVGLL RESGLFSLHP LESRQQMETQ IGALILATDI SRQNEYLSLF RSHLDRGDLC LEDTRHRHLV LQMALKCADI CNPCRTWELS KQWSEKVTEE FFHQGDIEKK YHLGVSPLCD RHTESIANIQ IGFMTYLVEP LFTWARFSN TRLSQTMLGH VGLNKASWKG LQREQSSSED TDAAFELNSQ LLPQENRLS
Predicted molecular weight	64 kDa including tags
Amino acids	104 to 456
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab125786** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	SDS-PAGE
Form	Liquid
Additional notes	This product was previously labelled as PDE7A

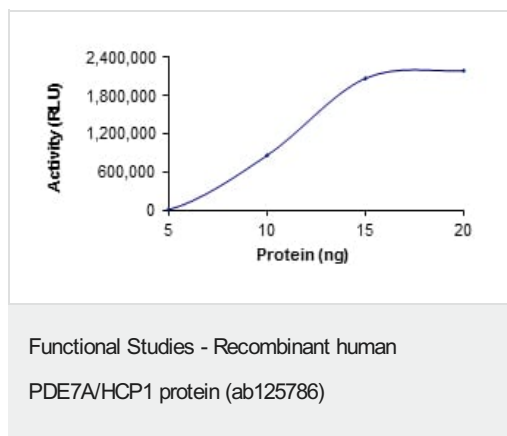
Preparation and Storage

Stability and Storage	<p>Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.</p> <p>pH: 7.50</p> <p>Constituents: 0.002% PMSF, 0.4% DTT, 0.79% Tris HCl, 25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride</p> <p>This product is an active protein and may elicit a biological response in vivo, handle with caution.</p>
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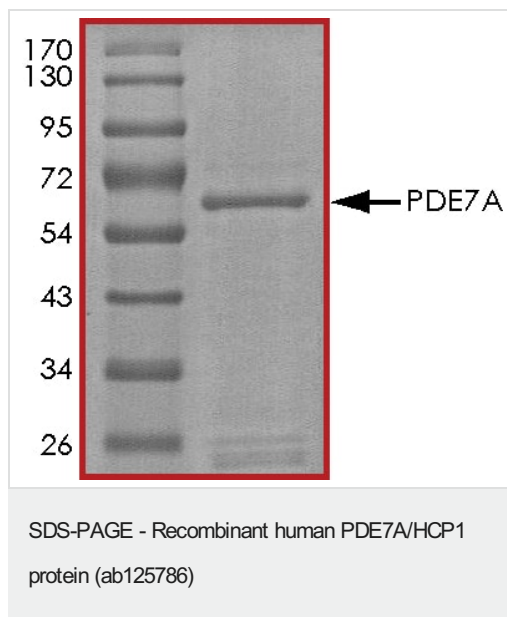
General Info

Function	Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. May have a role in muscle signal transduction.
Tissue specificity	PDE7A1 is found at high levels in skeletal muscle and at low levels in a variety of tissues including brain and heart. It is expressed as well in two T-cell lines. PDE7A2 is found abundantly in skeletal muscle and at low levels in heart.
Pathway	Purine metabolism; 3',5'-cyclic AMP degradation; AMP from 3',5'-cyclic AMP: step 1/1.
Sequence similarities	Belongs to the cyclic nucleotide phosphodiesterase family. PDE7 subfamily.
Developmental stage	Developmentally regulated. PDE7A1 and PDE7A2 are found in several fetal tissues, expression is reduced throughout development. It persists strongly only in adult skeletal muscle.
Domain	Composed of a C-terminal catalytic domain containing two putative divalent metal sites and an N-terminal regulatory domain.
Cellular localization	Cytoplasm > cytosol. PDE7A1 (57 kDa) is located mostly to soluble cellular fractions and Cytoplasm. PDE7A2 (50 kDa) is located to particulate cellular fractions.

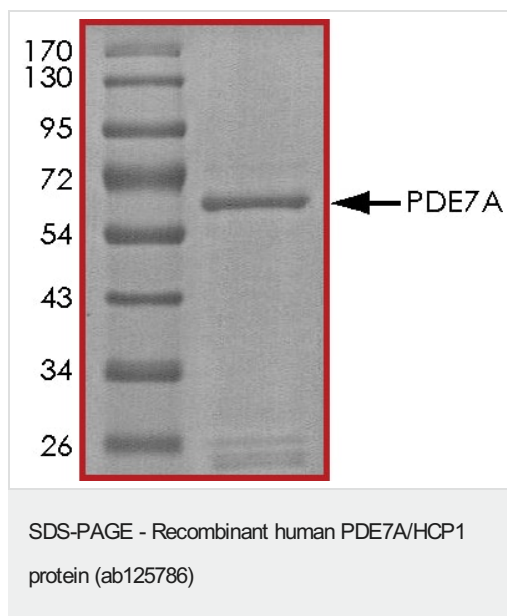
Images



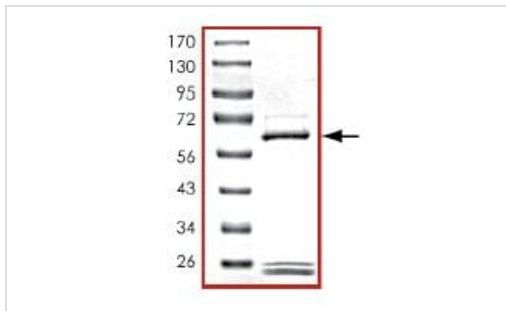
The specific activity of PDE7A/HCP1 (ab125786) was determined to be 160 nmol/min/mg as per activity assay protocol



SDS PAGE analysis of ab125786

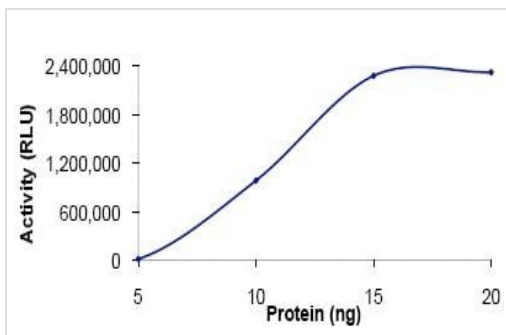


SDS PAGE analysis of ab125786



SDS-PAGE analysis of ab125786.

SDS-PAGE - Recombinant human PDE7A/HCP1 protein (ab125786)



Sample assay showing the specific activity of ab125786 to be 166 nmol/min/mg.

Functional Studies - Recombinant human PDE7A/HCP1 protein (ab125786)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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