abcam

Product datasheet

Recombinant human PDE5A/PDE5 protein ab125581

1 References 5 Images

Description

Product name	Recombinant human PDE5A/PDE5 protein
Biological activity	The specific activity of ab125581 was determined to be 2275 nmol/min/mg.
Purity	> 90 % Densitometry. The purity was determined to be 95% by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	O76074
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	63 kDa including tags
Amino acids	537 to 875
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab125581** 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 PDE5A

Preparation and Storage

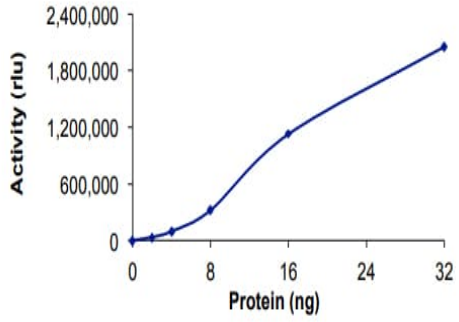
Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.002% PMSF, 0.5% Magnesium chloride, 0.003% DTT, 0.79% Tris HCl, 25% Glycerol (glycerin, glycerine), 0.29% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

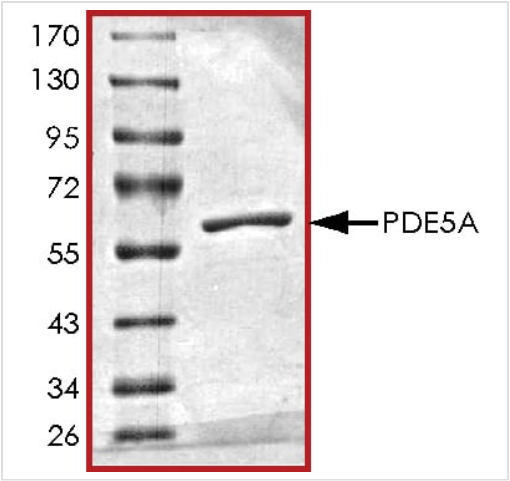
Function	Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This phosphodiesterase catalyzes the specific hydrolysis of cGMP to 5'-GMP.
Tissue specificity	Expressed in aortic smooth muscle cells, heart, placenta, skeletal muscle and pancreas and, to a much lesser extent, in brain, liver and lung.
Pathway	Purine metabolism; 3',5'-cyclic GMP degradation; GMP from 3',5'-cyclic GMP: step 1/1.
Sequence similarities	Belongs to the cyclic nucleotide phosphodiesterase family. Contains 2 GAF domains.
Domain	Composed of a C-terminal catalytic domain containing two putative divalent metal sites and an N-terminal regulatory domain which contains two homologous allosteric cGMP-binding regions, A and B.
Post-translational modifications	Phosphorylation is regulated by binding of cGMP to the two allosteric sites.

Images



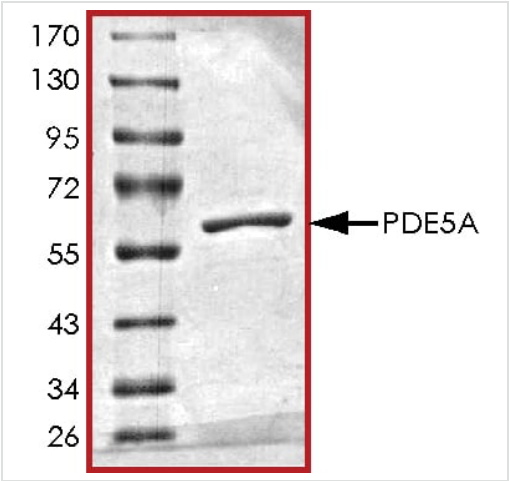
Functional Studies - Recombinant human PDE5A/PDE5 protein (ab125581)

The specific activity of PDE5A/PDE5 (ab125581) was determined to be 1940 nmol/min/mg as per activity assay protocol



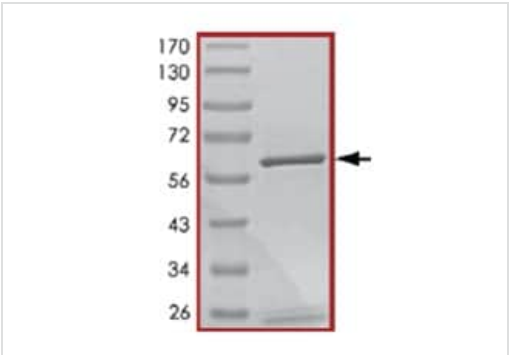
SDS-PAGE - Recombinant human PDE5A/PDE5 protein (ab125581)

SDS PAGE analysis of ab125581



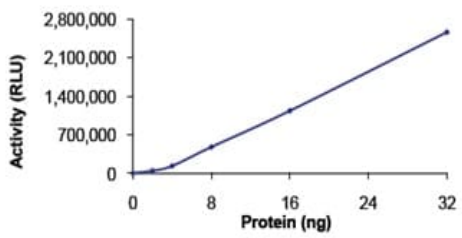
SDS-PAGE - Recombinant human PDE5A/PDE5 protein (ab125581)

SDS PAGE analysis of ab125581



SDS-PAGE - Recombinant human PDE5A/PDE5 protein (ab125581)

SDS Page analysis of ab125581



Functional Studies - Recombinant human PDE5A/PDE5 protein (ab125581)

The specific activity of ab125581 was determined to be 2275 nmol/min/mg.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors