

Product datasheet

Recombinant human PDE4D7 protein (Active)
ab271681

2 Images

Description

Product name	Recombinant human PDE4D7 protein (Active)
Biological activity	Specific Activity: $\geq 10,000$ pmol/min/ μ g. Unit Definition: One unit is defined as the amount of enzyme that will convert 1 pmole of 3', 5'-cAMP to 5'-AMP per minute at 37°C. Assay Conditions: 10 mM Tris-HCl, pH 7.4, 10 mM MgCl ₂ , 0.1 mg/ml BSA, 0.05% Tween-20, 200 μ M cAMP, 2.5 kU 5'-nucleotidase, and serial dilutions of PDE4D7 at 37°C for 20 min. Quantified by 5'- nucleotidase cleaving the 5' -AMP product and releasing the phosphate group which is detected by Malachite Green Reagent.
Purity	≥ 57 % SDS-PAGE. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	Q08499-11
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	111 kDa including tags
Amino acids	2 to 748
Tags	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab271681** 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

Preparation and Storage

Stability and Storage

Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.71% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.61% Glutathione, 10% Glycerol (glycerin, glycerine)

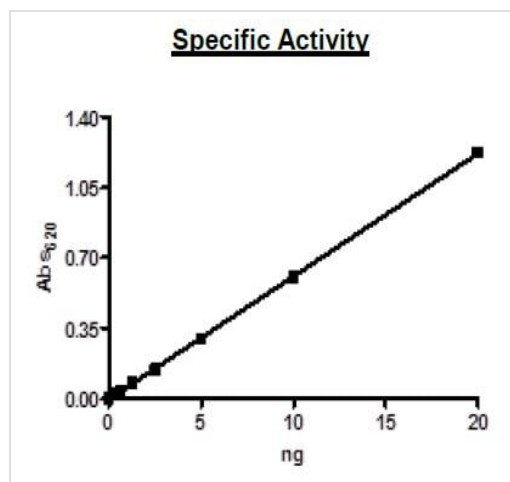
This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Relevance

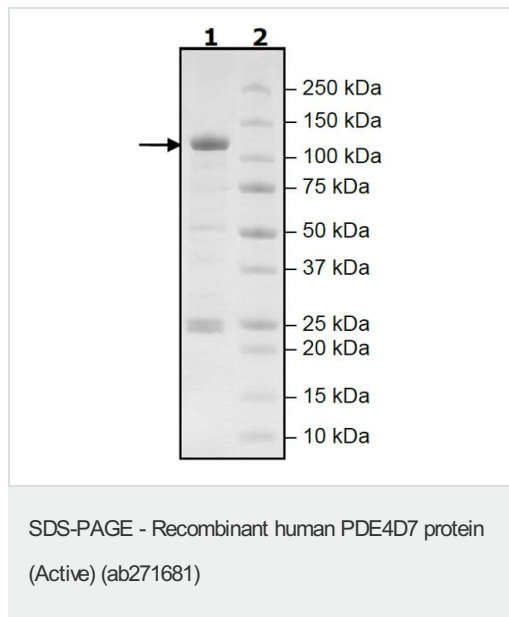
Cyclic AMP dependent phosphodiesterase type D (PDE4D) family is comprised of 5 variants (PDE4D1, D2, D3, D4, D6, D7, and D8; 1, 2). One or more PDE4D subtype variants are ubiquitously present in all mammalian cells. In CNS all five PDE4D subtype variants are expressed in varying ratios, and their activity is regulated in tandem with GPCRs stimulation and selective phosphorylation by PKA and other kinases. Peripheral tissues also exhibit differential expression of PDE4D variants. PDE4D1/D2 mRNA levels rise in response to an increase in cAMP. Short term regulation of PDE4D variants involved PKA, MAP kinases and Erk2 phosphorylation that results in rapid change in their enzymatic activities. Other regulatory mechanism involved protein protein interactions with cytoskeletal scaffolding proteins. Anti PDE4D antibodies are ideal tools for studying regulation, expression, phosphorylation, and protein protein interactions of PDE4D variants employing pull down immunoprecipitation protocol.

Images



Specific activity of ab271681 was $\geq 10,000$ pmol/min/ μ g.

Functional Studies - Recombinant human PDE4D7 protein (Active) (ab271681)



SDS-PAGE analysis of 2 µg ab271681.

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

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