abcam

Product datasheet

Recombinant human PDE4A protein ab125603

2 Images

Description

Product name	Recombinant human PDE4A protein
Biological activity	The specific activity was determined to be 1082 nmol/min/mg
Purity	> 95 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	**P27815**
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	110 kDa including tags
Amino acids	332 to 886
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab125603** 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

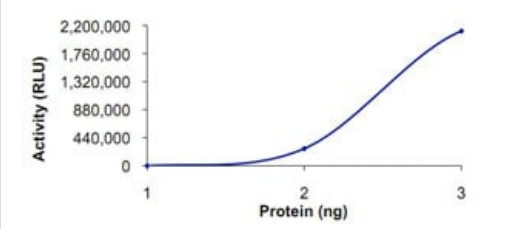
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.002% PMSF, 0.004% DTT, 0.79% Tris HCl, 25% Glycerol (glycerin, glycerine), 0.88% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes.
Tissue specificity	Isoform 1 is widely expressed. Isoform 2 is abundant in liver, stomach, testis, thyroid and adrenal glands. It is also found in placenta, kidney, pancreas, ovary, uterus, skin, monocytes, mast cells, macrophages, as well as in bronchial smooth muscle. Isoform 6 is expressed at high levels in the heart and small intestine. It is also found in the brain, kidney, spleen, colon, salivary gland, ovary and peripheral blood lymphocytes. Isoform 7 is expressed predominantly in skeletal muscle and brain and at lower levels in the testis. Isoform 7 is expressed in the brain. Found in specific neuronal subpopulations in cortex, spinal cord and cerebellum (at protein level).
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. PDE4 subfamily.
Post-translational modifications	Phosphorylated at Ser-686 and Ser-688 when expressed in S.frugiperda cells. Isoform 2 and isoform 7 are activated by phosphorylation at Ser-119 and Ser-123 respectively by PKA. Proteolytically cleaved by caspase-3.
Cellular localization	Cytoplasm > perinuclear region; Cytoplasm > perinuclear region. Cell projection > ruffle membrane; Cytoplasm. Membrane. Predominantly cytoplasmic and Membrane. Isoform 4 has propensity for association with membranes.

Images



Functional Studies - Recombinant human PDE4A protein (ab125603)

SDS-PAGE - Recombinant human PDE4A protein (ab125603)

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

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
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