

Product datasheet

Recombinant rat PDE7B protein ab198460

[2 Images](#)

Description

Product name	Recombinant rat PDE7B protein
Biological activity	<p>Specific Activity: ≥ 324 pmol/min/μg.</p> <p>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.</p> <p>Assay conditions: 10 mM Tris-HCl, pH 7.4, 10 mM MgCl₂, 0.05% Tween-20, 0.1 mg/ml BSA, 200 μM cAMP, 2.5 kU 5'-nucleotidase, and serial dilutions of ab198460 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.</p>
Purity	<p>30 % SDS-PAGE.</p> <p>Affinity purified.</p>
Expression system	Baculovirus infected Sf9 cells
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Rat
Sequence	<pre> MLSKVGMWDFDIFLFDRLTNGNSLVTLCHLFNSHGLIHHF KLDMVTLHR FLVMVQEDYHGHNPYHNAVHAADVQAMHCYLKEPKLAS FLTPLDIMLGL LAAAHDVDHPGVNQPFLLIKTNHHLANLYQNMSVLENHH WRSTIGMLRES RLLAHLPKEMTQDIEQQLGSLILATDINRQNEFLTRLKAHLH NKDLRLEN IQDRHFMLQIALKCADICNPCRWEMSKQWSERVCEEFYR QGDLEQKFEL EISPLCNQQKDSIPSIIQIGFMTYVEPLFREWARFTGNSTLS ESMLNHLA HNKAQWKSLLSNQHRRRSGQDPAGTAPETLEQTEGAT P </pre>
Predicted molecular weight	65 kDa including tags
Amino acids	108 to 446
Tags	GST tag N-Terminus

Additional sequence information NM_080894.

Specifications

Our **Abpromise guarantee** covers the use of **ab198460** in the following tested applications.

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

Applications	SDS-PAGE Functional Studies
Form	Liquid
Additional notes	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Preparation and Storage

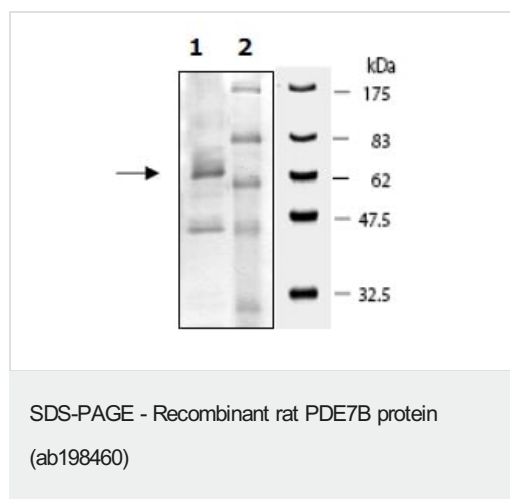
Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.71% Tris HCl, 0.72% Sodium chloride, 0.02% Potassium chloride, 0.55% Glutathione, 10% Glycerol (glycerin, glycerine), 0.05% (R*,R*)-1,4-Dimercaptobutan-2,3-diol This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

Relevance	PDE7B is a cAMP specific phosphodiesterase. The cAMP-specific phosphodiesterase type-7 (PDE7) family is comprised of 2 genes (PDE7A and PDE7B) each with multiple splice variants generated by RNA splicing and use of alternate initiation sites. PDE7B has three splice variants (PDE7B1 = 446 amino acid; PDE7B2 = 359 amino acids and PDE7B3 = 459 amino acids. Both PDE7B2 and PDE7B3 possess unique N-terminal sequences. PDE7B is expressed in various tissues including skeletal muscle, heart, lung and testis. PDE7B may be involved in the control of cAMP-mediated neural activity and cAMP metabolism in the brain.
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Cellular localization	cytosol
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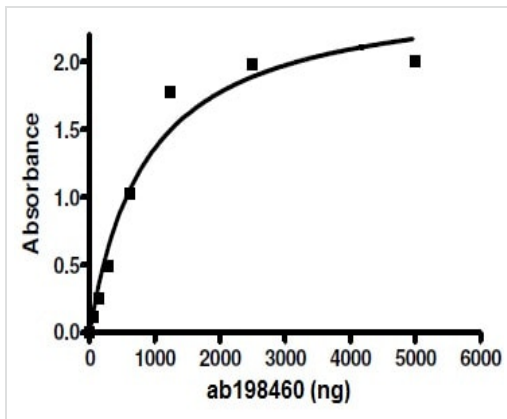
Images



10% SDS-PAGE analysis of ab198460 with Coomassie staining.

Lane 1: 4 µg ab198460

Lane 2: Protein marker



Specific activity of ab198460.

Functional Studies - Recombinant rat PDE7B protein (ab198460)

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

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