

Product datasheet

Recombinant human PPP1A/PPP1CA protein ab113150

[1 Image](#)

Description

Product name	Recombinant human PPP1A/PPP1CA protein
Biological activity	>3,000 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37 °C, pH 7.5, using 10 mM of substrate.
Purity	> 80 % SDS-PAGE. ab113150 was purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	<u>P62136</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	40 kDa including tags
Amino acids	1 to 330
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab113150** 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 Mass Spectrometry Functional Studies
Mass spectrometry	MALDI-TOF
Form	Liquid
Additional notes	This product was previously labelled as PPP1A

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.5

Constituents: 0.002% PMSF, 0.02% DTT, 0.79% Tris HCl, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride, 0.01% Manganese chloride

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

General Info

Function

Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca(2+)/calmodulin dependent protein kinase II. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase.

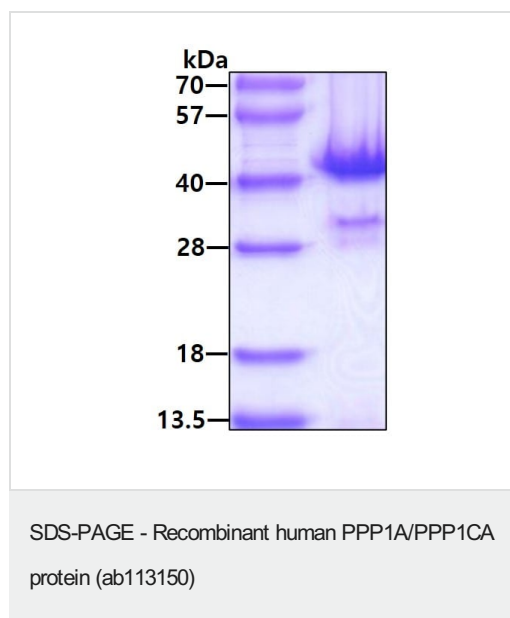
Sequence similarities

Belongs to the PPP phosphatase family. PP-1 subfamily.

Cellular localization

Cytoplasm. Nucleus. Nucleus > nucleoplasm. Nucleus > nucleolus. Primarily nuclear and largely excluded from the nucleolus. Highly mobile in cells and can be relocalized through interaction with targeting subunits. NOM1 plays a role in targeting this protein to the nucleolus. In the presence of PPP1R8 relocalizes from the nucleus to nuclear speckles.

Images



SDS-PAGE showing ab113150 (3 µg) under reducing conditions with coomassie blue protein stain

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

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