

## Product datasheet

# Recombinant human PTP4A1 protein ab157013

### Overview

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<b>Product name</b>	Recombinant human PTP4A1 protein
<b>Protein length</b>	Full length protein

### Description

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<b>Nature</b>	Recombinant
<b>Source</b>	Escherichia coli

### Amino Acid Sequence

<b>Accession</b>	<a href="#">Q93096</a>
<b>Species</b>	Human
<b>Sequence</b>	ARMNRPAPVEVITYKNMRFILITHNPTNATLNKFIEELKKYGVTTIVRVCEA TYDTTLVEKEGIHVLDPFDDGAPPSNQMDWLSLVKIKFREEPGCCIA VHCVAGLGRAPVLVALALIEGGMKYEDAVQFIRQKRRGAFNSKQLLYLEK YRPKMRLRFKDSNGHRNNCCIQ
<b>Molecular weight</b>	20 kDa including tags
<b>Amino acids</b>	2 to 173
<b>Tags</b>	His tag N-Terminus

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab157013** in the following tested applications.

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

<b>Biological activity</b>	Specific activity of ab157013 is 0.168U/μg. One unit will hydrolyze 1pmol para-nitrophenyl phosphate (PNPP) per minute at 37°C. Assay buffer: 50mM TRIS, pH 7.4, containing 150mM sodium chloride, 5mM dithiothreitol and 12.5mM PNPP.
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<b>Applications</b>	Functional Studies SDS-PAGE
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<b>Purity</b>	>90% by SDS-PAGE.
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<b>Form</b>	Liquid
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<b>Additional notes</b>	Dilution of the enzyme followed by refreezing may lead to loss of activity.
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## Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.06% DTT, 0.395% Tris HCl, 0.05% Tween, 20% Glycerol, 0.58% Sodium chloride  This product is an active protein and may elicit a biological response in vivo, handle with caution.
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## General Info

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<b>Function</b>	Protein tyrosine phosphatase which stimulates progression from G1 into S phase during mitosis. May play a role in the development and maintenance of differentiating epithelial tissues. Enhances cell proliferation, cell motility and invasive activity, and promotes cancer metastasis.
<b>Tissue specificity</b>	Expressed in bone marrow, lymph nodes, T lymphocytes, spleen, thymus and tonsil. Overexpressed in tumor cell lines.
<b>Sequence similarities</b>	Belongs to the protein-tyrosine phosphatase family. Contains 1 tyrosine-protein phosphatase domain.
<b>Developmental stage</b>	Expressed in fetal liver.
<b>Post-translational modifications</b>	Farnesylated. Farnesylation is required for membrane targeting. Unfarnesylated forms are shifted into the nucleus.
<b>Cellular localization</b>	Cell membrane. Early endosome. Endoplasmic reticulum. Cytoplasm. Cytoplasm > cytoskeleton > spindle. And mitotic spindle.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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- 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
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- 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.

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