

## Product datasheet

# Recombinant human PTPN13 protein ab42581

### Overview

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<b>Product name</b>	Recombinant human PTPN13 protein
<b>Protein length</b>	Protein fragment

### Description

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

### Amino Acid Sequence

<b>Species</b>	Human
<b>Molecular weight</b>	72 kDa including tags
<b>Amino acids</b>	2091 to 2490
<b>Tags</b>	GST tag N-Terminus

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab42581** 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: 5 U/μg. One unit will hydrolyze 1 nmol p-nitrophenyl phosphate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 2 mM EDTA, 3mM DTT, 100 mM NaCl, 50 mM pNPP. The specific activity of PTPN13 was determined using pNPP. Enzyme reaction condition: 20 mM pNPP, 5 min incubation at 30°C, 1μg enzyme.
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<b>Applications</b>	Inhibition Assay
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<b>Form</b>	Liquid
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### Preparation and Storage

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<b>Stability and Storage</b>	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. Preservative: None Constituents: 50% Glycerol, 0.05% Tween 20, 75mM Sodium chloride, 25mM Tris HCl, 10mM Glutathione, 1mM DTT, pH 8.0 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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### Relevance

PTPN13 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large protein that possesses a PTP domain at C-terminus, and multiple noncatalytic domains, which include a domain with similarity to band 4.1 superfamily of cytoskeletal associated proteins, a region consisting of five PDZ domains, and a leucine zipper motif. This PTP was found to interact with, and dephosphorylate Fas receptor, as well as I-kappa-B-alpha through the PDZ domains, which suggested its role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathway.

### Cellular localization

Cytoplasmic

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