

# Recombinant Human PTP1B/PTPN1 Protein (His Tag)

Catalog Number:PKSH030416



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

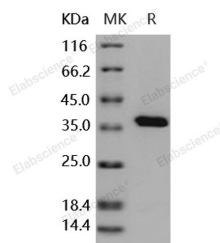
## Description

<b>Synonyms</b>	PTP1B;PTPN1
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Glu 2-Asn 321
<b>Accession</b>	NP_002818.1
<b>Calculated Molecular Weight</b>	38 kDa
<b>Observed molecular weight</b>	38 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Measured by its ability to dephosphorylate a phosphotyrosine residue in an EGF receptor (aa988-998) phosphopeptide substrate, R&D Systems, Catalog # ES006. The specific activity is > 15 nmoles/min/μg.

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as sterile solution of PBS, pH 7.4
<b>Reconstitution</b>	Not Applicable

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

PTP1B, also known as PTPN1, belongs to the protein-tyrosine phosphatase (PTP) family. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. PTP1B contains 1 tyrosine-protein phosphatase domain and is expressed in many tissues. PTP1B is localized to the cytoplasmic face of the endoplasmic reticulum. PTP1B was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of PTP1B in cell growth control, and cell response to IFN stimulation.

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Fax: 1-832-243-6017