

Tyrosine Phosphatase Non Receptor Type-1 Active Protein | PTPN1 active protein

Recombinant Human Protein Tyrosine Phosphatase Non Receptor Type-1

CATALOG # AAA38391	HOST E Coli
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PRODUCT SYNONYMS

Tyrosine Phosphatase Non Receptor Type-1; Recombinant Human Protein Tyrosine Phosphatase Non Receptor Type-1; PTPN1 Human; Protein Tyrosine Phosphatase Non Receptor Type-1 Human Recombinant; Tyrosine-protein phosphatase non-receptor type 1; EC 3.1.3.48; Protein-tyrosine phosphatase 1B; PTP-1B; PTPN1; PTP1B; PTPN1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The protein contains 25mM Tris-HCl, pH 7.5, 2mM b-mercaptoethanol, 1mM EDTA, 1mM DTT and 20% Glycerol. Sterile filtered colorless solution.
Sequence	MEMEKEFEQI DKSGSWAAIY QDIRHEASDF PCRVAKLPKN KNRNRYRDVS PFDHSRIKLH QEDNDYINAS LIKMEEAQRS YILTQGPLPN TCGHFWEMVW EQKSRGVVML NRVMEKGSLK CAQYWPQKEE KEMIFEDTNL KLTLISEDIK SYITVRQLEL ENLTTQETRE ILHFHYTTWP DFGVPESPAS FLNFLFKVRE SGSLSPEHGP VVVHCSAGIG RSGTFCLADT CLLMDKRD PSSVDIKKVL LEMRKFRMGL IQTADQLRFS YLAVIEGAKF IMGDSSVQDQ WKELSHEDLE PPPEHI PPPP RPPKRILEPH N
Sequence Length	362
Unit Defenition	One unit will hydrolyze 1 nanomole of p-nitrophenylphosphatate per minute at pH 7.4 at 37 degree C using 10mM of substrate.
Biological Activity	Specific activity: 6,000-12,000units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37C, pH7.5 using 10mM of substrate.
Preparation and Storage	Store at 4 degree C if entire vial will be used within 2-4 weeks. Store, frozen at -20 degree C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for PTPN1 active protein	Description: Protein Tyrosine Phosphatase Non Receptor Type-1 Human Recombinant produced in E Coli is a single, non-glycosylated polypeptide chain containing 321 amino acids and having a molecular mass of 37.3 kDa. Introduction: Protein Tyrosine Phosphatase 1B is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. 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. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation.
Product Categories/Family for PTPN1 active protein	Protein Kinases; Enzymes; Phosphatase

NCBI AND UNIPROT INFORMATION

NCBI GI #	519666804
NCBI GeneID	5770
NCBI Accession #	NP_001265547.1
NCBI GenBank Nucleotide #	NM_001278618.1
UniProt Accession #	P18031; Q5TGD8; Q9BQV9; Q9NQQ4
Molecular Weight	49,967 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 1 isoform 2
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 1
NCBI Official Symbol	PTPN1
NCBI Official Synonym Symbols	PTP1B
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 1; protein tyrosine phosphatase, placental; protein-tyrosine phosphatase 1B
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 1
UniProt Gene Name	PTPN1
UniProt Synonym Gene Names	PTP1B; PTP-1B
UniProt Entry Name	PTN1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-ptpn1-active-protein/tyrosine-phosphatase-non-receptor-type-1/38391>