

PTPN2 recombinant protein

Recombinant PTPN2 protein

CATALOG #
AAA59770

HOST
E Coli

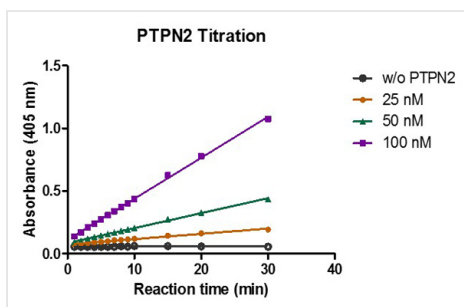
PRODUCT SYNONYMS

PTPN2; Recombinant PTPN2 protein; Protein Tyrosine Phosphatase; Non-Receptor Type 2; T-Cell Protein Tyrosine Phosphatase; TCPTP; PTPN2 recombinant protein

PRODUCT SPECIFICATIONS

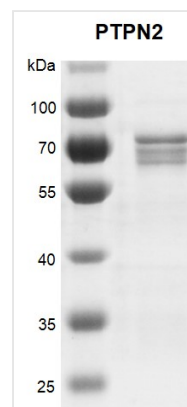
Host	E Coli
Form/Format	Recombinant PTPN2 protein is supplied in 25mM Tris pH8.0, 300mM NaCl, 10% glycerol, and 0.5mM TCEP.
Protein Species	Human
Tag	GST-Tag
Notes	This protein is useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling. Activity Assay Conditions: 1mM pNPP was incubated with different concentrations of PTPN2 protein in reaction buffer including 50mM HEPES pH 7.5, 2mM EDTA, 3mM DTT, 100mM NaCl at room temperature. The absorbance at 405nm was continuously monitored for 30 minutes.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

Recombinant PTPN2 protein activity assay. 1 mM pNPP was incubated with different concentrations of PTPN2 protein in a 100 µl reaction with buffer including 50 mM HEPES pH 7.5, 2 mM EDTA, 3 mM DTT, 100 mM NaCl at RT. The absorbance at 405 nm was continuously monitored for 30 minutes.



SDS-PAGE

Recombinant PTPN2 protein gel. Recombinant PTPN2 protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue. MW: 75.7 kDa Purity: > 50%

ADDITIONAL INFORMATION

Related Product Information for PTPN2 recombinant protein	Short Description: Recombinant PTPN2 was expressed in E Coli as the full-length protein (accession number NP_002819.2) with an N-terminal GST-Tag. The molecular weight of the protein is 75.7 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: PTPN2 (Protein Tyrosine Phosphatase, Non-Receptor Type 2, also known as TCELLPTP, TCPTP, TC- PTP, PTPT, PTN2) is a member of the protein tyrosine phosphatase (PTP) family. Members of the PTP family have a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation as signaling molecules. Epidermal growth factor receptor (EGFR) and the adaptor protein Shc were reported to be substrates of this PTP, which suggested the roles in growth factor mediated cell signaling. PTPN2 dephosphorylates multiple substrates including receptor protein tyrosine kinases INSR, EGFR, CSF1R, PDGFR and non-receptor protein tyrosine kinases like JAK1, JAK2, JAK3, Src family kinases, STAT1, STAT3, STAT5A, STAT5B and STAT6 either in the nucleus or the cytoplasm.
Product Categories/Family for PTPN2 recombinant protein	Recombinant Proteins

NCBI AND UNIPROT INFORMATION

NCBI GI #	333108231
NCBI GeneID	5771
NCBI Accession #	NP_002819.2
NCBI GenBank Nucleotide #	NM_002828.3
UniProt Accession #	P17706; Q96AU5; Q96HR2; A8K955; A8MXU3
Molecular Weight	48,473 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 2 isoform 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 2
NCBI Official Symbol	PTPN2
NCBI Official Synonym Symbols	PTN2; PTPT; TCPTP; TC-PTP; TCELLPTP
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 2; T-cell protein tyrosine phosphatase
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 2
UniProt Gene Name	PTPN2
UniProt Synonym Gene Names	PTPT; TCPTP
UniProt Entry Name	PTN2_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.