

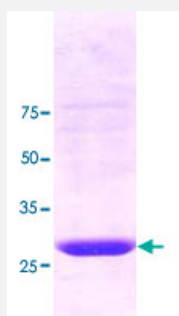
Bioactive

PTPN6 (Human) Recombinant Protein

Catalog # P3445

Size 100 ug

Applications



Specification

Product Description

Human PTPN6 (NP_002822, 243 a.a. - 541 a.a.) partial recombinant protein expressed in *Escherichia coli*.

Sequence

MGFWEEFESLQKQEVKNLHQRLEGQRPENKGKNRYKNILPFDHSRVILQGRDSNIPGSDYINANYI
KNQLLGPDENAKTYIASQGCLEATVNDFWQMAWQENS RVVMTTREV EKG RNKCVPYWPEVGM
QRAYGPYSVTNCGEHD TTEYKLRTLQVSPLDNGDLIREWHYQYLSWPDHGV PSEPGGVLSFLDQ
INQRQESLPHAGPIIVHCSAGIGRTGTIIVIDMLMENISTKGLDCDIDIQKTIQMVRAQRSGMVQTEAQY
KFIYVAIAQFIETTKKKLEVLQSQKGQSEYGNITY

Host

Escherichia coli

Theoretical MW (kDa)

34.3

Form

Liquid

Preparation Method

Escherichia coli expression system

Purification

Conventional Chromatography

Concentration

1 mg/mL

Purity

> 95% by SDS-PAGE

Endotoxin Level

< 1.0 EU per 1 microgram of protein (determined by LAL method)

Activity	>5,000 units/mg of SHP-1
Quality Control Testing	Loading 3 ug protein in 15% SDS-PAGE
Storage Buffer	In 25 mM Tris-HCl, 1 mM EDTA, pH 7.5 (2 mM beta-mercaptoethanol, 1 mM DTT, 20% glycerol).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — PTPN6

Entrez GeneID	5777
Protein Accession#	NP_002822
Gene Name	PTPN6
Gene Alias	HCP, HCPH, HPTP1C, PTP-1C, SH-PTP1, SHP-1, SHP-1L, SHP1
Gene Description	protein tyrosine phosphatase, non-receptor type 6
Omim ID	176883
Gene Ontology	Hyperlink
Gene Summary	<p>The protein encoded by this gene 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. N-terminal part of this PTP contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of this PTP with its substrates. This PTP is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been shown to interact with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling. Multiple alternatively spliced variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq]</p>
Other Designations	hematopoietic cell phosphatase hematopoietic cell protein-tyrosine phosphatase protein-tyrosine phosphatase 1C

Pathway

- [Adherens junction](#)
- [B cell receptor signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [T cell receptor signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Cerebral Amyloid Angiopathy](#)
- [Genetic Predisposition to Disease](#)
- [Lupus Erythematosus](#)
- [Neuroblastoma](#)