

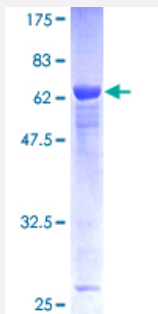
Full-Length

PTPN7 (Human) Recombinant Protein (P01)

Catalog # H00005778-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PTPN7 full-length ORF (AAH01746, 1 a.a. - 360 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MVQAHGGRSRAQPLTSLGAAMTQPPPEKTPAKKHVRLQERRGSNVALMLDVRSLGAVEPICS
VNTPREVTLHFLRTAGHPLTRWALQRQPPSPKQLEEEFLKIPSNFVSPEDLDIPGHASKDRYKTL
PNPQSRVCLGRAQSQEDGDYINANYIRGYDGKEKVYATQGMPMNTVSDFWEMVWQEEVSLVM
LTQLREGKEKCVHYWPTEETYGPFQIRIQDMKECPEYTVRQLTIQYQEERRSVKHILFSAWPDHQ
TPESAGPLLRLVAEVEESPETAHPGPVVHCSAGIGRTGCFIATRIGCQQLKARGEVDILGVCQL
RLDRGGMIQTAEQYQFLHHTLALYAGQLPEEPS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

65.23

Interspecies Antigen Sequence

Mouse (92); Rat (91)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PTPN7

Entrez GeneID[5778](#)**GeneBank Accession#**[BC001746.1](#)**Protein Accession#**[AAH01746](#)**Gene Name**

PTPN7

Gene Alias

BPTP-4, HEPTP, LC-PTP, LPTP, PTPNI

Gene Description

protein tyrosine phosphatase, non-receptor type 7

Omim ID[176889](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

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. This gene is preferentially expressed in a variety of hematopoietic cells, and is an early response gene in lymphokine stimulated cells. The noncatalytic N-terminus of this PTP can interact with MAP kinases and suppress the MAP kinase activities. This PTP was shown to be involved in the regulation of T cell antigen receptor (TCR) signaling, which was thought to function through dephosphorylating the molecules related to MAP kinase pathway. Two alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000034115[dual specificity phosphatase 1]hematopoietic protein-tyrosine phosphatase|protein-tyrosine phosphatase, nonreceptor-type, stress induced

Publication Reference

- [Inhibitor of the Tyrosine Phosphatase STEP Reverses Cognitive Deficits in a Mouse Model of Alzheimer's Disease.](#)

Xu J, Chatterjee M, Baguley TD, Brouillette J, Kurup P, Ghosh D, Kanyo J, Zhang Y, Seyb K, Ononenyi C, Foscue E, Anderson GM, Gresack J, Cuny GD, Glicksman MA, Greengard P, Lam TT, Tautz L, Nairn AC, Ellman JA, Lombroso PJ.

PLoS Biology 2014 Aug; 12(8):e1001923.

Application: Func, Recombinant proteins

Pathway

- [MAPK signaling pathway](#)