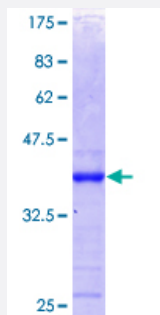


PTPN12 (Human) Recombinant Protein (Q01)

Catalog # H00005782-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human PTPN12 partial ORF (NP_002826.2, 682 a.a. - 779 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	PESFVLASEHNTPVRSWSELQSQRSEQKKSEGLITSENEKCDHPAGGIHYEMCIECPPTFSDK REQISENPTEATDIGFGNRCGKPKGPRDPPSEW
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.52
Interspecies Antigen Sequence	Mouse (67); Rat (66)
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 — PTPN12

Entrez GeneID [5782](#)

GeneBank Accession# [NM_002835](#)

Protein Accession# [NP_002826.2](#)

Gene Name PTPN12

Gene Alias PTP-PEST, PTPG1

Gene Description protein tyrosine phosphatase, non-receptor type 12

Omim ID [600079](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains a C-terminal PEST motif, which serves as a protein-protein interaction domain, and may regulate protein intracellular half-life. This PTP was found to bind and dephosphorylate the product of the oncogene c-ABL and thus may play a role in oncogenesis. This PTP was also shown to interact with, and dephosphorylate, various products related to cytoskeletal structure and cell adhesion, such as p130 (Cas), CAK beta/PTK2B, PSTPIP1, and paxillin. This suggests it has a regulatory role in controlling cell shape and mobility. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq]

Other Designations OTTHUMP00000025119|protein-tyrosine phosphatase G1|tyrosine-protein phosphatase non-receptor type 12

Disease

- [Genetic Predisposition to Disease](#)
- [Graves Disease](#)
- [Graves Ophthalmopathy](#)
- [Kidney Failure](#)