

Recombinant Human PTPN1 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. PTPN1-1914H Lot. No. (See product label)

SPECIFICATION

Product Overview PTPN1 MS Standard C13 and N15-labeled recombinant protein (NP_002818) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

Species Human

Source HEK293

Description The protein encoded by this gene 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. Two transcript variants encoding different isoforms have been found for this gene.

Molecular Mass 50 kDa

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AA Sequence

MEMEKEFEQIDKSGSWAAIYQDIRHEASDFPCRVAKLPKNKNNRYRDVSPFDHSR
 IKLHQEDNDYINASLIKMEEAQRSYILTQGPLNPTCGHFWEMVWEQKSRGVVMLNR
 VMEKGSCLKCAQYWPQKEEKEMIFEDTNLKLTLISEDIKSYTTRQLELENLTTQETRE
 ILHFHYTTWPDFGVPESPASFLNFLFKVRESGSLSPEHGPVVVHCSAGIGRSGTFCL
 ADTCLLLMDKRKDPSSVDIKKVLLEMRFMRGLIQTADQLRFSYLAVIEGAKFIMGDS
 SVQDQWKELSHEDLEPPPEHIPPPRPPKRILEPHNGKCREFFPNHQWVKEETQED
 KDCPIKEEKGSPLNAAPYGIESMSQDTEVRSRVVGGSLRGAQAASPAKGEPSLPEK
 DEDHALSYWKPFLVNMCVATVLTAGAYLCYRFLFNSNTRTRPLEQKLISEEDLAAN
 DILDYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Stability Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name [PTPN1 protein tyrosine phosphatase non-receptor type 1 \[Homo sapiens \(human\) \]](#)

Official Symbol [PTPN1](#)

Synonyms PTPN1; protein tyrosine phosphatase, non-receptor type 1; PTP1B; tyrosine-protein phosphatase non-receptor type 1; protein tyrosine phosphatase 1B; protein-tyrosine phosphatase 1B; protein tyrosine phosphatase, placental;

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Gene ID 5770

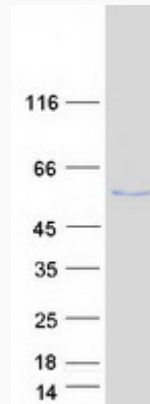
mRNA Refseq NM_002827

Protein Refseq NP_002818

MIM 176885

UniProt ID P18031

SDS-PAGE



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