

Recombinant Human Protein Tyrosine Phosphatase, Receptor Type, N, GST-tagged

Cat. No. PTPRN-1307H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinanthuman PTPRN is expressed in E. coli; it contains the catalyticdomain of PTPRN (residues 693-979), with aN-terminal GST tag, and has a molecular weight of 58.8 kDa.
Species	Human
Source	E.coli
ProteinLength	693-979 a.a.
Description	PTPRN (proteintyrosine phosphatase-1A2; also known as ICA-512), together with PTP-IAR,belongs to a subgroup of receptor-like protein tyrosine phosphatases. PTPRNwas found to be an autoantigen that is reactive with insulin-dependentdiabetes mellitus (IDDM) patient sera, and thus may be a potential target ofautoimmunity in diabetes mellitus. It is highly expressed in neuroendocrinetissues. Human PTPRN is a receptor protein tyrosine phosphatase containing979 amino acids.
Form	25 mMTris-HCl (pH 8.0), 75 mM NaCl, 0.05% Tween-20, 2 mM EDTA, 1 mM DTT and 50%glycerol. Liquid at -20°C.
Purity	Greaterthan 95% as determined by Coomassie-stained SDS-PAGE gel.
Specific Activity	1.4U/ug. One unit will hydrolyze 1 pmol of 6, 8-difluoro-4-methyl

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	umbelliferylphosphate (DiFMUP) per minute at pH 6.3 and 30°C. Assay buffer: 50 mM Bis-Tris (pH 6.3), 2 mM EDTA, 2 mM DTT and 100 mM DiFMUP.
Applications	Removal of phosphates from target substrates. Useful for the study of enzyme kinetics, regulation and for inhibitors screening.
Storage	3 months at -20°C.
Official Symbol	PTPRN
Pathways	Type I diabetes mellitus
GENE INFORMATION	
Gene Name	PTPRN protein tyrosine phosphatase, receptor type, N [Homo sapiens]
Synonyms	PTPRN; protein tyrosine phosphatase, receptor type, N; IA2; IA-2; ICA512; R-PTP-N; IA-2/PTP; receptor-type tyrosine-protein phosphatase-like N; ICA 512; PTP IA-2; OTTHUMP00000164170; OTTHUMP00000205824; islet cell antigen 2; islet cell antigen 512; islet cell autoantigen 3; protein tyrosine phosphatase-like N
Gene ID	5798
mRNA Refseq	NM_001199763
Protein Refseq	NP_001186692
MIM	601773
UniProt ID	Q16849

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Chromosome Location	2q35-q36.1
Function	GTPase binding;hydrolase activity; phosphatase activity; protein binding; protein tyrosinephosphatase activity; receptor activity; transmembrane receptor proteintyrosine phosphatase activity
PDB renderingbased on 2i1y.	

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