

Product Information

MemDX™ Membrane Protein Human PTPN1 (Protein tyrosine phosphatase non-receptor type 1) expressed in Sf9 for Antibody Discovery

Cat. No.: **MP0078Q**

This product is for research use only and is not intended for diagnostic use.

This product is a 49.8 kDa Human PTPN1 membrane protein expressed in Sf9. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

PTPN1

Protein Length

Full-length

Protein Class

Druggable Genome, Phosphatase, Transmembrane

Molecular Weight

49.8 kDa

Sequence

MEMEKEFEQIDKSGSWAAIYQDIRHEASDFPCRVAKLPKNKNRNRVSPFDHSRIKLHQEDNDYINASLIKMEEAQRSYILTQGP
VVVHCSAGIGRSGTFCLADTCLLLMDKRKDPSSVDIKKVLLEMRKFRMGLIQTADQLRFSYLAVIEGAKFIMGDSSVQDQWKELSHE
AGAYLCYRFLFNSNT

Product Description

Expression Systems

Sf9

Tag

C-DDK

Form

Powder

Purity

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

Buffer

50mM Tris-HCl, pH8.0, 100mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

Target**Target Protein**

PTPN1

Full Name

Protein tyrosine phosphatase non-receptor type 1

Introduction

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.

Alternative Names

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

Gene ID

[5770](#)

UniProt ID

[P18031](#)