



Human PTPN6 peptide (DAG-P1978)

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

PRODUCT INFORMATION

Antigen Description

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. N-terminal part of this PTP contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of this PTP with its substrates. This PTP is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been shown to interact with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling. Multiple alternatively spliced variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jul 2008]

Specificity

Isoform 1 is expressed in hematopoietic cells. Isoform 2 is expressed in non-hematopoietic cells.

Purity

70 - 90% by HPLC.

Conjugate

Unconjugated

Sequence Similarities

Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily. Contains 2 SH2 domains. Contains 1 tyrosine-protein phosphatase domain.

Format

Liquid

Preservative

None

Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name

[PTPN6 protein tyrosine phosphatase, non-receptor type 6 \[Homo sapiens \(human\) \]](#)

Official Symbol	PTPN6
Synonyms	PTPN6; protein tyrosine phosphatase, non-receptor type 6; HCP; HCPH; SHP1; SHP-1; HPTP1C; PTP-1C; SHP-1L; SH-PTP1; tyrosine-protein phosphatase non-receptor type 6; hematopoietic cell phosphatase; protein-tyrosine phosphatase 1C; protein-tyrosine phosphatase SHP-1; hematopoietic cell protein-tyrosine phosphatase;
Entrez Gene ID	5777
mRNA Refseq	NM_002831.5
Protein Refseq	NP_002822.2
UniProt ID	P29350
Chromosome Location	12p13
Pathway	Adaptive Immune System, organism-specific biosystem; Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; B cell receptor signaling pathway, organism-specific biosystem; B cell receptor signaling pathway, conserved biosystem; BCR signaling pathway, organism-specific biosystem; CXCR4-mediated signaling events, organism-specific biosystem; Cell surface interactions at the vascular wall, organism-spec
Function	SH2 domain binding; SH3 domain binding; phosphotyrosine binding; protein binding; protein kinase binding; protein tyrosine phosphatase activity; transmembrane receptor protein tyrosine phosphatase activity;