Datasheet for ABIN7197594

PTPN2 Protein

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Overview

Quantity:	100 µg
Target:	PTPN2
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Purpose:	Recombinant Human PTPN2/PTPT Protein (Active)
Sequence:	Met 1-Asn 314
Characteristics:	A DNA sequence encoding the human PTPN2 (?P17706-1) (Met 1-Asn 314) was expressed and purified with two additional amino acids (Gly & Pro) at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to dephosphorylate a phosphotyrosine residue in an EGF receptor 988-998 phosphopeptide substrate, R&D Systems, Catalog # ES006.The specific activity is > 30 µ moles/min/mg.

Target Details

Target:	PTPN2
Alternative Name:	PTPN2/PTPT (PTPN2 Products)

Target Details

Background:	Background: Tyrosine-protein phosphatase non-receptor type 2; also known as T-cell protein-tyrosine phosphatase; PTPN2 and PTPT; is a cytoplasm protein which belongs to the protein-tyrosine phosphatase family and Non-receptor class 1 subfamily. Members of the protein tyrosine phosphatase (PTP) family share a highly conserved catalytic motif; which is essential for the catalytic activity. TC-PTP / PTPN2 is a cytosolic tyrosine phosphatase that functions as a negative regulator of a variety of tyrosine kinases and other signaling proteins. The expression of TC-PTP / PTPN2 plays a role of tumor suppressor and may modulate response to treatment. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth; differentiation; mitotic cycle; and oncogenic transformation. Epidermal growth factor receptor and the adaptor protein Shc were reported to be substrates of this PTP; which suggested the roles in growth factor mediated cell signaling. TC-PTP / PTPN2 is an enzyme that is essential for the proper functioning of the immune system and that participates in the control of cell proliferation; and inflammation. TC-PTP / PTPN2 was identified as a negative regulator of NUP214-ABL1 kinase activity. Synonym: PTN2;PTPT;TC-PTP;TCELLPTP;TCPTP
Molecular Weight:	36.8 kDa
Pathways:	EGFR Signaling Pathway, Carbohydrate Homeostasis, Regulation of Carbohydrate Metabolic Process, Platelet-derived growth Factor Receptor Signaling

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.