

Recombinant Human PTPN2/PTPT Protein (His & GST Tag)

Catalog Number: PKSH031519

Note: Centrifuge before opening to ensure complete recovery of vial contents.

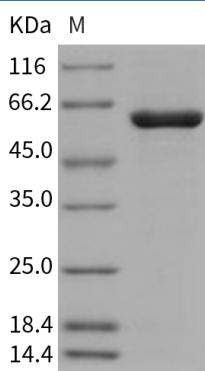
Description

Species	Human
Source	Baculovirus-Insect Cells-derived Human PTPN2/PTPT protein Met 1-Asn 314, with an N-terminal His & GST
Calculated MW	64.4 kDa
Observed MW	60 kDa
Accession	P17706-1
Bio-activity	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 > 20 nmoles/min/μg.

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 300mM NaCl, 10% glycerol, pH 8.0

Data



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.