

Product Data:

Product SKU: RPES1704

Size: 100µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: Q06180-1

Protein Information:

Molecular Mass:	38.7 kDa
AP Molecular Mass:	42 kDa
Tag:	N-His
Accession:	Q06180-1
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 > 15 nmoles/min/µg.
Purity:	>90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Lyophilized proteins should be stored at -20°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.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 20mM Tris, 300mM NaCl, 10% Glycerol, 0 5mM TCEP, pH8.0, 5% Trehalose, 5% Mannitol, 0.01% Tween-80
Reconstitution:	We recommend that the vial be centrifuged to opening to bring the contents to the bottom. Do not mix by vortex. It is recommended that sterile water be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV-Vis.
Synonyms:	AI325124;Ptpt;TC-PTP Carcinoma Tumor Antigen 1; PCTA; LGALS8

Immunogen Information:

Sequence: Ser 2-Asn 314

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.

