

Recombinant Mouse PTPN6/SH-PTP1 Protein (aa 207-597, His & GST Tag)

Catalog No. PKSM040450

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

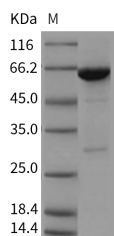
Description

Synonyms	70Z-SHP;hcp;Hcph;me;Ptp1C;PTPTY-42;SH-PTP1;SHP-1
Species	Mouse
Expression Host	Baculovirus-Insect Cells
Sequence	Ala207-Lys597
Accession	P29351-2
Calculated Molecular Weight	72.7 kDa
Observed molecular weight	63 kDa
Tag	N-His-GST
Bioactivity	Measured by its ability to dephosphorylate a phosphotyrosine residue in an EGF receptor 988998 phosphopeptide substrate, R&D Systems, Catalog # ES006. The specific activity is > 4 μmoles/min/μg.

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.0, 10% glycerol Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

PTPN6 is an enzyme which belongs to the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. N-terminal part of PTPN6 contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of PTPN6 with its substrates. PTPN6 is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. It has been shown that PTPN6 interacts with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling.