



# Recombinant Protein Technical Manual

**Recombinant Mouse PTPN6/SH-PTP1 Protein (aa 207-597, His & GST Tag)(Active)**  
RPES1430

## Product Data:

**Product SKU:** RPES1430

**Size:** 20µg

**Species:** Mouse

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** P29351-2

## Protein Information:

**Molecular Mass:** 72.7 kDa

**AP Molecular Mass:** 63 kDa

**Tag:** N-His-GST

**Bio-activity:** 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.

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 70Z-SHP;hcp;Hcph;me;Ptp1C;PTPTY-42;SH-PTP1;SHP

## Immunogen Information:

**Sequence:** Ala207-Lys597

## Background:

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.