



# Recombinant Protein Technical Manual

**Recombinant Mouse SHP2/PTPN11 Protein (His Tag)(Active)**  
RPES2038

## Product Data:

**Product SKU:** RPES2038

**Size:** 100µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** P35235-2

## Protein Information:

**Molecular Mass:** 69.5 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to dephosphorylate a tyrosine residue in a peptide containing the EGFR Y992 phosphorylation site (Catalog # ES006). The specific activity is > 1 pmoles/min/µg.

**Purity:** > 90 % 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 PBS, pH 7.4

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

**Application:**

**Synonyms:** 2700084A17Rik;AW536184;PTP1D;PTP2C;SAP-2;SH-PTP2;SH-PTP3;SHP-2;Shp2;Syp

## Immunogen Information:

**Sequence:** Met1-Arg593

## Background:

SHP2, also known as PTPN11, belongs to the protein-tyrosine phosphatase(PTP) family, non-receptor class 2 subfamily. PTPs catalyze the removal of phosphate groups from tyrosine residues by the hydrolysis of phosphoric acid monoesters. They dephosphorylate EGFR, JAK2 and TYK2 kinases, promoting oncogenic transformation. SHP2 is widely expressed, with highest levels in heart, brain, and skeletal muscle. SHP2 acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. It also dephosphorylates ROCK2 at Tyr-722 resulting in stimulation of its RhoA binding activity.