

Recombinant Mouse SHP2/PTPN11 Protein (His Tag)

Catalog No. PKSM040671

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

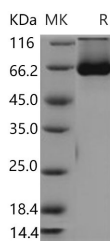
Description

Synonyms	2700084A17Rik;AW536184;PTP1D;PTP2C;SAP-2;SH-PTP2;SH-PTP3;SHP-2;Shp2;Syp
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met1-Arg593
Accession	P35235-2
Calculated Molecular Weight	69.5 kDa
Observed molecular weight	65 kDa
Tag	C-His
Bioactivity	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.

Properties

Purity	> 90 % 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 PBS, pH 7.4 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



> 90 % as determined by reducing SDS-PAGE.

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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.

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