

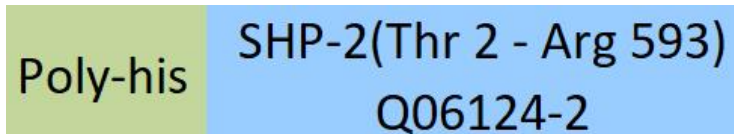
Synonym

SHP-2

Source

Human SHP-2, His Tag(SH2-H5248) is expressed from E. coli cells. It contains AA Thr 2 - Arg 593 (Accession # [Q06124-2](#)).

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 69.7 kDa. The protein migrates as 65-66 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

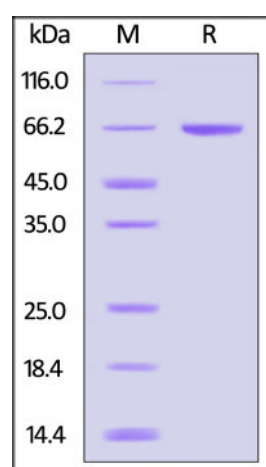
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

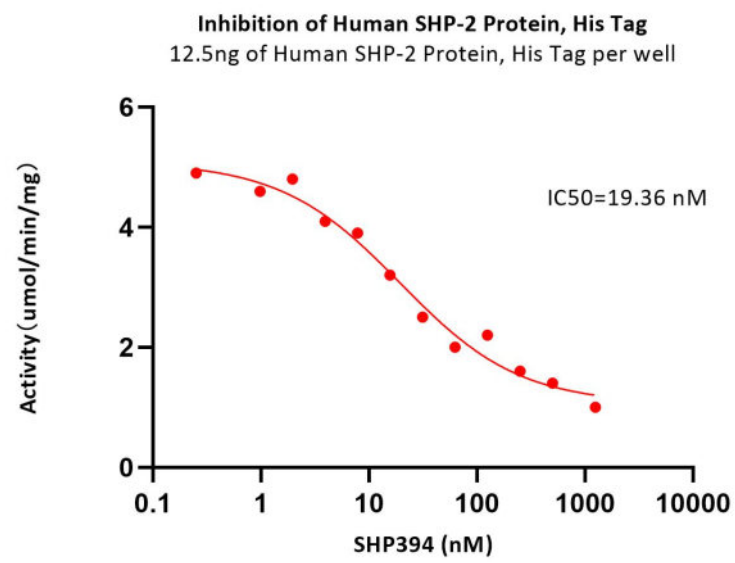
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human SHP-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity

Measured by its ability to dephosphorylate a tyrosine residue in a peptide containing the EGFR Y992 phosphorylation site. The specific activity is >3 µmol/min/mg, measured under the described conditions (QC tested).



Serial dilutions of SHP394 (an orally efficacious inhibitor of protein tyrosine phosphatase SHP2) were added into Human SHP-2 Protein, His Tag(SH2-H5248) enzymatic reactions. The half maximal inhibitory concentration (IC₅₀) is 19.36 nM (Routinely tested).

Background

SHP-2, a cytoplasmic SH2 domain containing protein tyrosine phosphatase, is involved in the signaling pathways of a variety of growth factors and cytokines. SHP-2 takes key role in transducing signal relay from the cell surface to the nucleus, and is a important intracellular regulator in mediating cell proliferation and differentiation.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.