

Product datasheet

Recombinant human SHP1 protein ab51289

1 Image

Description

Product name	Recombinant human SHP1 protein
Biological activity	Specific activity: > 5,000 units/mg of SHP-1. [Unit Definition : One unit will hydrolyze 1 nanomole of p-nitrophenylphosphatate per minute at pH 7.5 at 37°C using 10mM of substrate.]
Purity	> 95 % SDS-PAGE. ab51289 was purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a redox buffer.
Expression system	Escherichia coli
Accession	P29350
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	M-GFWEEFES LQKQEVKNLH QRLEGQRPEN KGKNRYKNIL PFDHSRVILQ GRDSNIPGSD YINANYIKNQ LLGPDENAKT YIASQGCLEA TVNDFWQMAW QENSRVIVMT TREVEKGRNK CVPYWPEVGM QRAYGPYSVT NCGEHD TTEY KLRTLQVSPL DNGDLIREW HYQYLSWPDH GVPSEPGGVL SFLDQINQRQ ESLPHAGPII VHCSAGIGRT GTIMIDMLM ENISTKGLDC DIDIQKTIQM VRAQRSGMVQ TEAQYKFIYV AIAQFIETTK KKLEVLQSQK GQESEYGNIT Y
Amino acids	243 to 541

Specifications

Our [Abpromise guarantee](#) covers the use of **ab51289** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Phosphatase Activity SDS-PAGE
Form	Liquid

Additional notes

The catalytic domain of SHP-1 was overexpressed as insoluble protein aggregates (inclusion bodies).

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0156% Beta mercaptoethanol, 0.0154% DTT, 0.395% Tris HCl, 0.0292% EDTA, 20% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

Plays a key role in hematopoiesis. This PTPase activity may directly link growth factor receptors and other signaling proteins through protein-tyrosine phosphorylation. The SH2 regions may interact with other cellular components to modulate its own phosphatase activity against interacting substrates. Together with MTUS1, induces UBE2V2 expression upon angiotensin II stimulation.

Tissue specificity

Isoform 1 is expressed in hematopoietic cells. Isoform 2 is expressed in non-hematopoietic cells.

Sequence similarities

Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.

Contains 2 SH2 domains.

Contains 1 tyrosine-protein phosphatase domain.

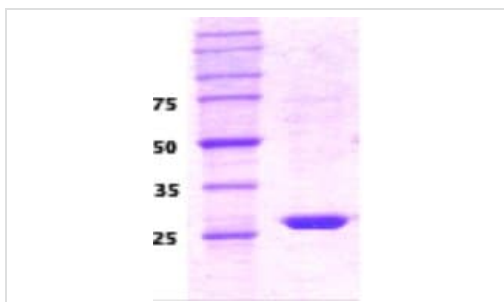
Post-translational modifications

Phosphorylated on serine and tyrosine residues.

Cellular localization

Cytoplasm. Nucleus. In neurons, translocates into the nucleus after treatment with angiotensin II.

Images



SDS-PAGE - Recombinant human SHP1 protein
(ab51289)

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