Recombinant human SHP-2/PTPN11 protein

Catalog Number: ATGP3943

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
1-593aa

UniProt No.
Q06124

NCBI Accession No.
NP_002825

Alternative Names
Protein tyrosine phosphatase non-receptor type 11, NS1, Noonan syndrome 1, SH2 domain-containing protein tyrosine phosphatase 2, SHP-2, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, PTP2C, SHP2, BPTP3, SH-PTP2

PRODUCT SPECIFICATION

Molecular Weight
69.1kDa (602aa)

Concentration
1mg/ml (determined by Absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol.

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 400 unit/mg, and is defined as the amount of enzyme that hydrolyze 1.0nmole of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

Recombinant human SHP-2/PTPN11 protein

Catalog Number: ATGP3943

BACKGROUND

Description

SHP-2, also known as, tyrosine-protein phospatase non-receptor type 11(PTPN11), is a member of the protein tyrosine phosphatase (PTP) family containing two Src homology 2 domains. This protein dephosphorylates tyrosine residues in proteins. It plays a stimulatory role in activation of the Erk/MAP kinase pathway by receptor tyrosine kinase signaling. Mutations in this protein are a cause of Noonan syndrome as well as acute myeloid leukemia. Recombinant human SHP-2, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

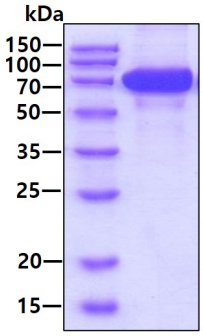
<ADP>MTSRRWF HPNITGVEAE NLLLTRGVDG SFLARPSKSN PGDFTLSVRR NGAVTHIKIQ NTGDYYDLYG GEKFATLAEL VQYYMEHHGQ LKEKNGDVIE LKYPLNCADP TSERWFHGHL SGKEAEKLLT EKGKHGSFLV RESQSHPGDF VLSVRTGDDK GESNDGKSKV THVMIRCQEL KYDVGGGERF DSLTDLVEHY KKNPMVETLG TVLQLKQPLN TTRINAAEIE SRVRELSKLA ETTDKVKQGF WEEFETLQQQ ECKLLYSRKE GQRQENKNKN RYKNILPFDH TRVVLHDGDP NEPVSDYINA NIIMPEFETK CNNSKPKKSY IATQGCLQNT VNDFWRMVFQ ENSRVIVMTT KEVERGKSKC VKYWPDEYAL KEYGVMRVRN VKESAAHDYT LRELKLSKVG QGNTERTVWQ YHFRTWPDHG VPSDPGGVLD FLEEVHHKQE SIMDAGPVVV HCSAGIGRTG TFIVIDILID IIREKGVDCD IDVPKTIQMV RSQRSGMVQT EAQYRFIYMA VQHYIETLQR RIEEEQKSKR KGHEYTNIKY SLADQTSGDQ SPLPPCTPTP PCAEMREDSA RVYENVGLMQ QQKSFR<HHHH HH>

General References

Giorgia R, et al, (2018) Cell Rep. 23:39-49.
Chitranshi N., et al, (2017) Neuroscience. 364:175-189.
Batth TS, et al, (2018) Cell Rep. 22:2784-2796.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain