abcam

Product datasheet

Recombinant human SHP2 protein ab42578

1 References

製品の概要

製品名	Recombinant human SHP2 protein
タンパク質長	Protein fragment

製品の詳細

由来	Recombinant
由来	Escherichia coli

アミノ酸配列

生物種	Human
配列	AEIESRV RELSKLAETT DKVKQGFWEE FETLQQQECK LLYSRKEGQR QENKNKNRYK NILPFDHTRV VLHDGDPNEP VSDYINANII MPEFETKCNN SKPKKSYIAT QGCLQNTVND FWRMVFQENS RVIVMTTKEV ERGKSKCVKY WPDEYALKEY GVMRVRNVKE SAAHDYTLRE LKLSKVGQAL LQGNTERTVW QYHFRTWPDH GVPSDPGGVL DFLEEVHHKQ ESIMDAGPVV VHCSAGIGRT GTFIVIDILI DIIREKGVDC DIDVPKTIQM VRSQRSGMVQ TEAQYRFIYM AVQHYIETL
分子量	62 kDa including tags
領域	224 to 529
タグ	GST tag N-Terminus

特性

Our Abpromise guarantee covers the use of **ab42578** in the following tested applications.

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

生理活性	Specific Activity: 10 U/ug. One unit will hydrolyze 1 nmol p-nitrophenyl phosphate per minute at pH 7.4 and 30C. Assay buffer: 50 mM HEPES, pH 7.4, 2 mM EDTA, 3 mM DTT, 100 mM NaCl, 50 mM pNPP.
アプリケーション	Phosphatase Activity
精製度	> 95 % SDS-PAGE.

製品の状態	Liquid

前処理および保存

保存方法および安定性	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. Preservative: None Constituents: 50% Glycerol, 0.05% Tween 20, 75mM Sodium chloride, 25mM Tris HCl, 2mM EDTA, 10mM Glutathione, 1mM DTT, pH 8 This product is an active protein and may elicit a biological response in vivo, handle with caution.

関連情報

機能	Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus.
組織特異性	Widely expressed, with highest levels in heart, brain, and skeletal muscle.
関連疾患	Defects in PTPN11 are the cause of LEOPARD syndrome type 1 (LEOPARD1) [MIM:151100]. It is an autosomal dominant disorder allelic with Noonan syndrome. The acronym LEOPARD stands for lentigines, electrocardiographic conduction abnormalities, ocular hypertelorism, pulmonic stenosis, abnormalities of genitalia, retardation of growth, and deafness. Defects in PTPN11 are the cause of Noonan syndrome type 1 (NS1) [MIM:163950]. Noonan syndrome (NS) is a disorder characterized by dysmorphic facial features, short stature, hypertelorism, cardiac anomalies, deafness, motor delay, and a bleeding diathesis. Some patients with Noonan syndrome type 1 develop multiple giant cell lesions of the jaw or other bony or soft tissues, which are classified as pigmented villomoduolar synovitis (PVNS) when occurring in the jaw or joints. Note=Mutations in PTPN11 account for more than 50% of the cases. Rarely, NS is associated with juvenile myelomonocytic leukemia (JMML). NS1 inheritance is autosomal dominant. Defects in PTPN11 are a cause of juvenile myelomonocytic leukemia (JMML) [MIM:607785]. JMML is a pediatric myelodysplastic syndrome that constitutes approximately 30% of childhood cases of myelodysplastic syndrome (MDS) and 2% of leukemia. It is characterized by leukocytosis with tissue infiltration and in vitro hypersensitivity of myeloid progenitors to granulocyte-macrophage colony stimulating factor. Defects in PTPN11 are a cause of metachondromatosis (MC) [MIM:156250]. It is a skeletal disorder with radiologic fetarures of both multiple exostoses and Ollier disease, characterized by the presence of multiple enchondromas and osteochondroma-like lesions.
配列類似性	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily. Contains 2 SH2 domains. Contains 1 tyrosine-protein phosphatase domain.
ドメイン	The SH2 domains repress phosphatase activity. Binding of these domains to phosphotyrosine-containing proteins relieves this auto-inhibition, possibly by inducing a conformational change in the enzyme.
翻訳後修飾	Phosphorylated on Tyr-546 and Tyr-584 upon receptor protein tyrosine kinase activation; which creates a binding site for GRB2 and other SH2-containing proteins.
細胞内局在	Cytoplasm.

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