

# Anti-SHP2 (phospho S576) antibody ab17940

画像数 2

### 製品の概要

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製品名	Anti-SHP2 (phospho S576) antibody
製品の詳細	Rabbit polyclonal to SHP2 (phospho S576)
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, ICC/IF
種交差性	<b>交差種:</b> Mouse, Human <b>交差が予測される動物種:</b> Rat 
免疫原	Synthetic peptide corresponding to Human SHP2 (phospho S576).
ポジティブ・コントロール	WB: Hek293 cells treated with PMA, with and without additional treatments. ICC/IF: 70% confluent log phase NIH/3T3 cells.
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### 製品の特性

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製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA  PBS is Ca <sup>2+</sup> and Mg <sup>2+</sup> free
精製度	Immunogen affinity purified
特記事項 (精製)	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated SHP2. The final

product is generated by affinity chromatography using a SHP2-derived peptide that is phosphorylated at serine 576.

ポリ/モノ  
アイソタイプ

ポリクローナル  
IgG

## アプリケーション

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アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 68 kDa (predicted molecular weight: 68 kDa).
ICC/IF		1/250.

## ターゲット情報

**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 lentiginos, 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.

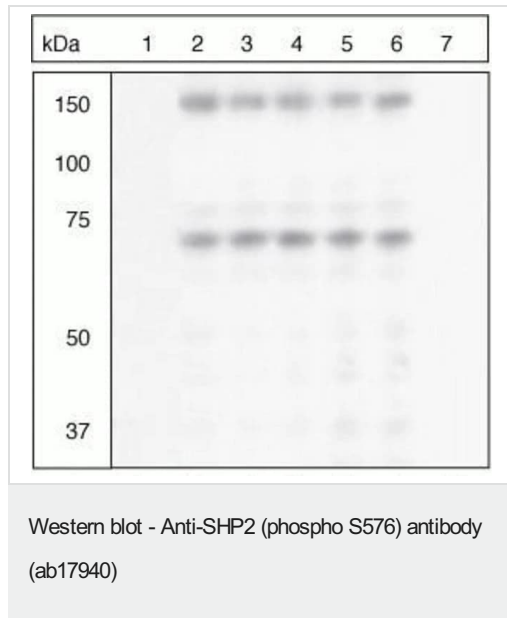
## 翻訳後修飾

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.

## 画像



**All lanes :** Anti-SHP2 (phospho S576) antibody (ab17940) at 1/1000 dilution

**Lane 1 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, treated with lambda phosphatase

**Lane 2 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract

**Lane 3 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, incubated with the non-phosphopeptide corresponding to the phosphopeptide immunogen

**Lane 4 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, incubated with a generic phosphoserine-containing peptide

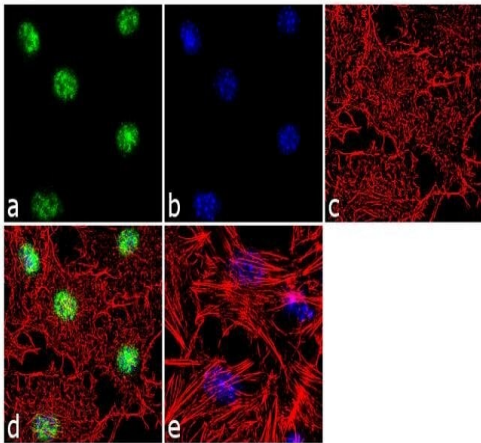
**Lane 5 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, incubated with the phosphopeptide corresponding to SHP2 (phospho S585)

**Lane 6 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, incubated with the phosphopeptide corresponding to SHP2 (phospho S591)

**Lane 7 :** Hek293 treated with 100 ng/mL PMA for 15 minutes cell extract, incubated with the phosphopeptide immunogen

**Predicted band size:** 68 kDa

The membrane was incubated with goat F(ab')<sub>2</sub> anti-rabbit IgG HRP conjugate and signals were detected using the Pierce SuperSignal™ method.



Immunocytochemistry/ Immunofluorescence - Anti-SHP2 (phospho S576) antibody (ab17940)

Immunofluorescence analysis of SHP2 (phospho S576) was done on 70% confluent log phase NIH/3T3 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with SHP2 (phospho S576) Rabbit Polyclonal Antibody (ab17940) at 1/250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at a dilution of 1/2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin (1/300). Panel d is a merged image showing nuclear localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.

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