# abcam

## Product datasheet

## Anti-SHP2 antibody [M163] ab76285



## 4 References 画像数 2

#### 製品の概要

製品名 Anti-SHP2 antibody [M163]

製品の詳細 Mouse monoclonal [M163] to SHP2

由来種 Mouse

特異性 ab76285 does not cross-react with SHP1.

アプリケーション **適用あり:** WB

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat 4

免疫原 Recombinant fragment corresponding to Human SHP2 (N terminal).

ポジティブ・コントロール Human A431 and Jurkat cells, and adult mouse brain lysates.

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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.

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&As

#### 製品の特性

特記事項

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

パッファー Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 50% Glycerol, PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**ウローン名** M163 **アイソタイプ** IgG1

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**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab76285の使用に適用されます 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 72 kDa (predicted molecular weight: 68 kDa).

#### ターゲット情報

#### 機能

## 組織特異性

#### 関連疾患

Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus.

Widely expressed, with highest levels in heart, brain, and skeletal muscle.

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.

The SH2 domains repress phosphatase activity. Binding of these domains to phosphotyrosinecontaining proteins relieves this auto-inhibition, possibly by inducing a conformational change in

the enzyme.

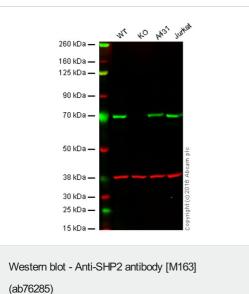
翻訳後修飾 Phosphorylated on Tyr-546 and Tyr-584 upon receptor protein tyrosine kinase activation; which

creates a binding site for GRB2 and other SH2-containing proteins.

細胞内局在 Cytoplasm.

#### 画像

ドメイン







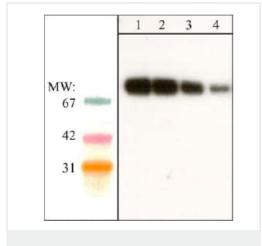
Lane 2: SHP2 knockout HAP1 cell lysate (20 µg)

Lane 3: A431 cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

Lanes 1 to 4: Merged signal (red and green). Green - ab76285 observed at 68 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab76285 was shown to specifically react with SHP2 when SHP2 knockout samples were used. Wild-type and SHP2 knockout samples were subjected to SDS-PAGE. ab76285 and ab8245 (loading control to GAPDH) were both diluted 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-SHP2 antibody [M163] (ab76285)

Lane 1: Anti-SHP2 antibody [M163] (ab76285) at 1/250 dilution

Lane 2: Anti-SHP2 antibody [M163] (ab76285) at 1/500 dilution

Lane 3: Anti-SHP2 antibody [M163] (ab76285) at 1/1000 dilution

Lane 4: Anti-SHP2 antibody [M163] (ab76285) at 1/2000 dilution

All lanes: adult mouse brain lysates

Predicted band size: 68 kDa Observed band size: 72 kDa

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