abcam

Product datasheet

Alexa Fluor® 594 Anti-SHP2 antibody [Y478] ab210616



ועלטעבעו RabMAb

画像数3

製品の概要

特記事項

製品名 Alexa Fluor® 594 Anti-SHP2 antibody [Y478]

製品の詳細 Alexa Fluor® 594 Rabbit monoclonal [Y478] to SHP2

由来種 Rabbit

標識 Alexa Fluor® 594. Ex: 590nm, Em: 617nm

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra)

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール ICC/IF: MCF-7 cells, Flow Cyt (intra): HAP1-WT cells.

> Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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outlicensing@thermofisher.com.

製品の特性

製品の状態

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

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バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

精製度 Protein A purified

ポリ/モノ モノクローナル

ウローン名 Y478 アイソタイプ IgG

アプリケーション

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ab210616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
ICC/IF		1/50. This product gave a positive signal in MCF-7 cells fixed with 4% formaldehyde (10 min)
Flow Cyt (Intra)		Use a concentration of 0.1 µg/ml.

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 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

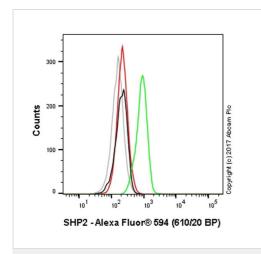
the enzyme.

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.

画像

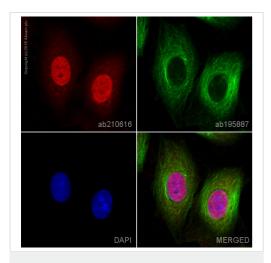


Flow Cytometry (Intracellular) - Alexa Fluor® 594 Anti-SHP2 antibody [Y478] (ab210616) Overlay histogram showing HAP1 wildtype (green line) and HAP1-PTPN11 knockout cells (red line) stained with ab210616. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab210616, 0.1 μ g/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (<u>ab208568</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-PTPN11 knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

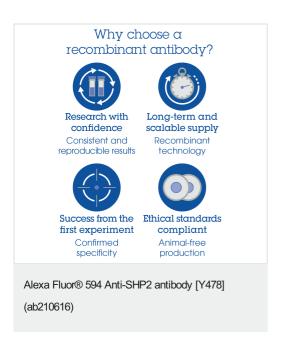
Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm)and 610/20 bandpass filter.

This antibody can also be used in HAP1 cells fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-SHP2 antibody [Y478] (ab210616)

ab210616 staining SHP2 in MCF7 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab210616 at 1/50 dilution (pseudocolored in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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