Product datasheet

Anti-SHP2 (phospho Y542) antibody [EP508(2)Y] - BSA and Azide free ab225574

重组 RabMAb

3 References 3 图像

概述

产品名称	Anti-SHP2 (phospho Y542)抗体[EP508(2)Y] - BSA and Azide free
描述	兔单克隆抗体[EP508(2)Y] to SHP2 (phospho Y542) - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** WB, IP, ICC/IF **不适用于:** Flow Cyt
种属反应性	**与反应:** Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	Treated NIH/3T3 cell lysate.
常规说明	ab225574 is the carrier-free version of **ab62322**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EP508(2)Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab225574于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 68 kDa).
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt.

靶标

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

组织特异性 Widely expressed, with highest levels in heart, brain, and skeletal muscle.

疾病相关 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.

序列相似性

Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.
Contains 2 SH2 domains.
Contains 1 tyrosine-protein phosphatase domain.

结构域

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.

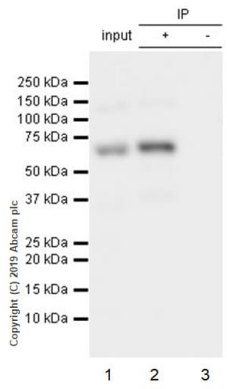
翻译后修饰

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.

细胞定位

Cytoplasm.

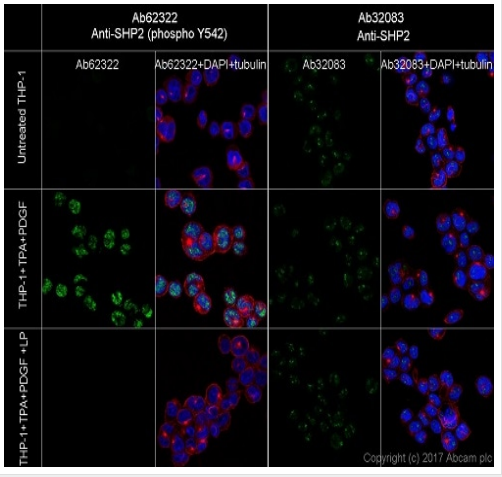
图片



Immunoprecipitation - Anti-SHP2 (phospho Y542) antibody [EP508(2)Y] - BSA and Azide free (ab225574)

This ICC/IF data was generated using the same anti-SHP2 (phospho Y542) antibody clone [EP608(2)Y] in a different buffer formulation (cat# **ab62322**).

ab62322 (purified) at 1:30 dilution (2µg) immunoprecipitating SHP2 in NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate.
Lane 1 (input): NIH/3T3 (Mouse embryonic fibroblast) treated with 50ng/ml PDGF for 40min whole cell lysate 10µg
Lane 2 (+): **ab62322** & NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab62322** in NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-SHP2 (phospho Y542) antibody [EP508(2)Y] - BSA and Azide free (ab225574)

This ICC/IF data was generated using the same anti-SHP2 (phospho Y542) antibody clone [EP608(2)Y] in a different buffer formulation (cat# **ab62322**).

Ab62322 staining SHP2 in THP-1 cells (Human monocytic leukaemia cell line) by ICC/IF (immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with purified **ab62322** at 8.8 µg/ml. Secondary antibody used was AlexaFluor®488 Goat anti-Rabbit (**ab150077**) at 2 µg/ml. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)(**ab195889**) used as counterstain at 2.5 µg/ml . DAPI was used as nuclear counterstain. Confocal image showing the expression was increased after treatment with TPA 200nM for 24h and PDGF 50ng/ml for 30min, the signal decreased after treatment with Lambda Protein Phosphatase 31 for 2h.

This image was generated using the unpurified version of the product.

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