

Product datasheet

Anti-SHP2 antibody ab17753

★★★★☆ 1 Abreviews

Overview

| | |
|----------------------------|---|
| Product name | Anti-SHP2 antibody |
| Description | Rabbit polyclonal to SHP2 |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, IP, ICC, Neutralising |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Fusion protein, corresponding to amino acids 2-216 of Mouse SHP2. |
| Positive control | Non stimulated A431 cell lysate. |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | 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. |
| Storage buffer | Preservative: 0.05% Sodium Azide Constituents: 0.1M Tris glycine. pH 7.0. |
| Purity | Protein A purified |
| Purification notes | Purified by affinity chromatography. |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab17753** in the following tested applications.

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

| Application | Abreviews | Notes |
|-------------|-----------|---|
| WB | ★★★★☆ | Use a concentration of 1 - 4 µg/ml. Detects a band of approximately 64 kDa. Apparent size increases to approximately 70kDa upon tyrosine phosphorylation. |
| IP | | Use at an assay dependent dilution. |

| Application | Abreviews | Notes |
|--------------|-----------|--|
| ICC | | Use a concentration of 10 µg/ml. |
| Neutralising | | Use at an assay dependent dilution. Does not inhibit phosphotyrosine phosphatase activity. |

Target

| | |
|---|--|
| Function | Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus. |
| Tissue specificity | Widely expressed, with highest levels in heart, brain, and skeletal muscle. |
| Involvement in disease | <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> |
| Sequence similarities | <p>Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.</p> <p>Contains 2 SH2 domains.</p> <p>Contains 1 tyrosine-protein phosphatase domain.</p> |
| Domain | 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. |
| Post-translational modifications | 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. |
| Cellular localization | Cytoplasm. |

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors