

Product datasheet

Anti-SHP2 antibody, prediluted ab31114

1 Image

Overview

Product name	Anti-SHP2 antibody, prediluted
Description	Rabbit polyclonal to SHP2, prediluted
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Chicken, Zebrafish 
Immunogen	Synthetic peptide within Human SHP2 aa 550-650. The exact sequence is proprietary.
Positive control	Jurkat cells, NIH3T3 cells and bone marrow.

Properties

Form	Prediluted
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: 0.605% Tris, 1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab31114** 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
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IHC-P

Application notes	IHC-P: Ready to use for 30 min at room temperature. Requires boiling of tissue sections in 10mM citrate buffer, pH 6.0 for 10 minutes followed by cooling at room temperature for 20
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minutes.

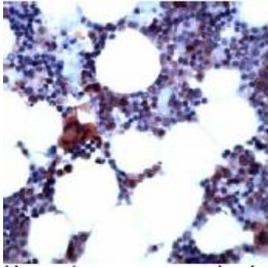
Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

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 lentigines, 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.

Images



Ab31114, prediluted, staining SHP2 in formalin fixed, paraffin embedded human bone marrow tissue by Immunohistochemistry.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SHP2 antibody, prediluted (ab31114)

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