

Anti-SPRED1 antibody ab77079

[7 References](#) [4 Images](#)

Overview

Product name	Anti-SPRED1 antibody
Description	Rabbit polyclonal to SPRED1
Host species	Rabbit
Specificity	ab77079 is predicted to have no cross-reactivity to SPRED2 or SPRED3.
Tested applications	Suitable for: WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic 14 amino acid peptide from near the center of human SPRED1 (NP_689807).
Positive control	Human brain tissue lysate. This antibody gave a positive result in IF in the following Formaldehyde fixed cell line: A549.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab77079 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 - 2 µg/ml. Predicted molecular weight: 50 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Tyrosine kinase substrate that inhibits growth-factor-mediated activation of MAP kinase. Negatively regulates hematopoiesis of bone marrow.

Tissue specificity

Weakly expressed in embryonic cell line (HEK-293).

Involvement in disease

Defects in SPRED1 are the cause of Legius syndrome (LEGIUSS) [MIM:611431]. It is a disorder characterized mainly by cafe au lait macules without neurofibromas or other tumor manifestations of neurofibromatosis type 1, axillary freckling, and macrocephaly. Additional clinical manifestations include Noonan-like facial dysmorphism, lipomas, learning disabilities and attention deficit-hyperactivity.

Sequence similarities

Contains 1 KBD domain.
Contains 1 SPR (sprouty) domain.
Contains 1 WH1 domain.

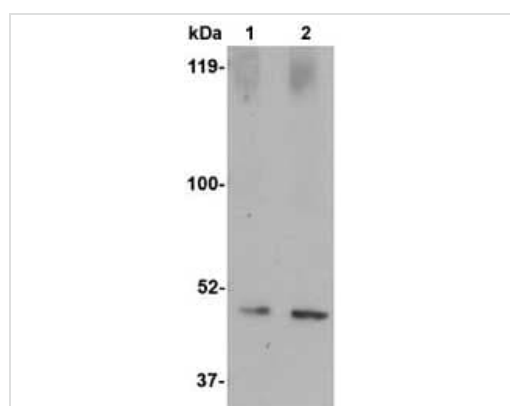
Post-translational modifications

Phosphorylated on tyrosine.

Cellular localization

Cell membrane. Membrane > caveola. Nucleus. Localized in cholesterol-rich membrane raft/caveola fractions.

Images



Western blot - Anti-SPRED1 antibody (ab77079)

Lane 1 : Anti-SPRED1 antibody (ab77079) at 1 µg/ml

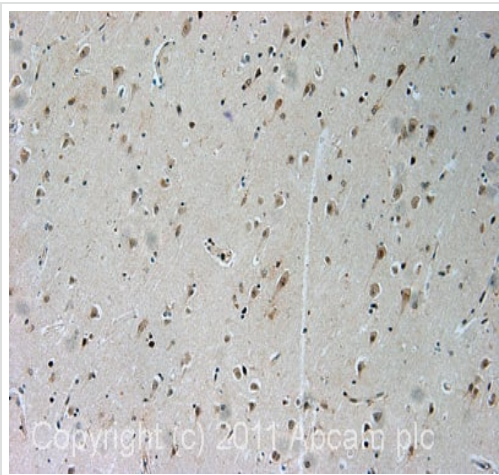
Lane 2 : Anti-SPRED1 antibody (ab77079) at 2 µg/ml

All lanes : Human brain tissue lysate

Lysates/proteins at 15 µg per lane.

Predicted band size: 50 kDa

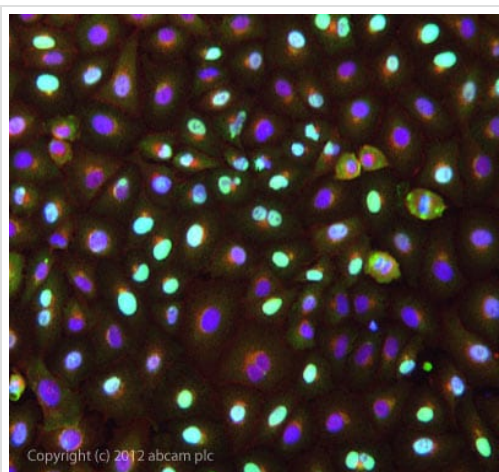
Observed band size: 50 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPRED1 antibody (ab77079)

IHC image of ab77079 staining in human cerebral cortex formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab77079, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-SPRED1 antibody (ab77079)

ab77079 stained A549 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab77079 at 5µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti-rabbit ([ab96899](#)) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunocytochemistry/ Immunofluorescence - Anti-SPRED1 antibody (ab77079)

Immunofluorescence of Spred1 in Human Brain cells using ab77079 at 20 ug/ml.

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