

Product datasheet

Anti-ABL2 antibody - N-terminal ab198718

2 Images

Overview

Product name	Anti-ABL2 antibody - N-terminal
Description	Rabbit polyclonal to ABL2 - N-terminal
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide corresponding to Human ABL2 (N terminal). NP_001129472. Database link: P42684
Positive control	HeLa and Jurkat cell lysate. Human liver cancer tissue.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: 49% PBS, 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab198718** 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
IHC-P		1/25 - 1/100.
WB		1/500 - 1/2000. Predicted molecular weight: 116 kDa.

Target

Function

Non-receptor tyrosine-protein kinase that plays an ABL1-overlapping role in key processes linked to cell growth and survival such as cytoskeleton remodeling in response to extracellular stimuli, cell motility and adhesion and receptor endocytosis. Coordinates actin remodeling through tyrosine phosphorylation of proteins controlling cytoskeleton dynamics like MYH10 (involved in movement); CTTN (involved in signaling); or TUBA1 and TUBB (microtubule subunits). Binds directly F-actin and regulates actin cytoskeletal structure through its F-actin-bundling activity. Involved in the regulation of cell adhesion and motility through phosphorylation of key regulators of these processes such as CRK, CRKL, DOK1 or ARHGAP35. Adhesion-dependent phosphorylation of ARHGAP35 promotes its association with RASA1, resulting in recruitment of ARHGAP35 to the cell periphery where it inhibits RHO. Phosphorylates multiple receptor tyrosine kinases like PDGFRB and other substrates which are involved in endocytosis regulation such as RIN1. In brain, may regulate neurotransmission by phosphorylating proteins at the synapse. ABL2 acts also as a regulator of multiple pathological signaling cascades during infection. Pathogens can hijack ABL2 kinase signaling to reorganize the host actin cytoskeleton for multiple purposes, like facilitating intracellular movement and host cell exit. Finally, functions as its own regulator through autocatalytic activity as well as through phosphorylation of its inhibitor, ABI1.

Tissue specificity

Widely expressed.

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. ABL subfamily.
Contains 1 protein kinase domain.
Contains 1 SH2 domain.
Contains 1 SH3 domain.

Domain

Contains two distinct classes of F-actin-binding domains. Although both can bind F-actin, the 2 are required to bundle actin filaments.

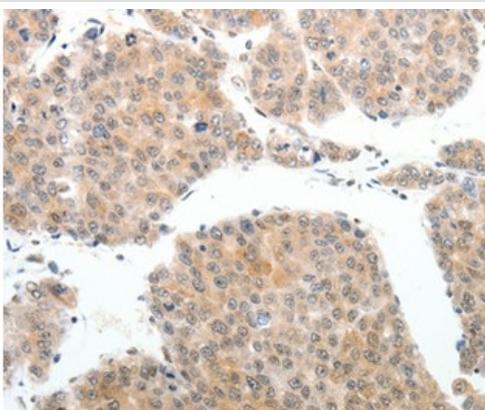
Post-translational modifications

Phosphorylated at Tyr-261 by ABL1 in response to oxidative stress. Phosphorylated by PDGFRB. Polyubiquitinated. Polyubiquitination of ABL2 leads to degradation.

Cellular localization

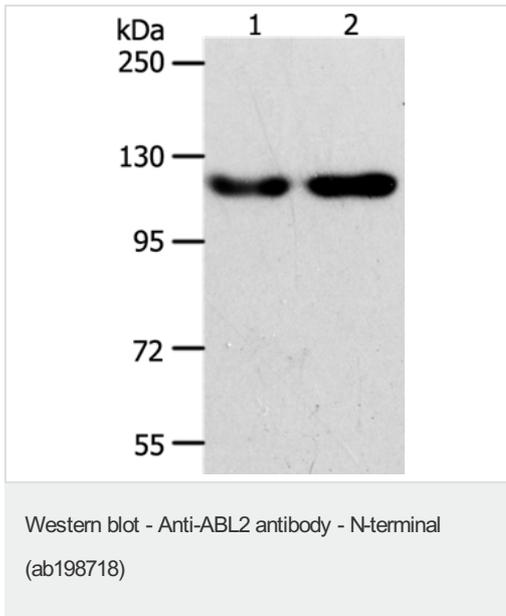
Cytoplasm, cytoskeleton.

Images



Immunohistochemical analysis of paraffin-embedded Human liver cancer tissue labeling ABL2 with ab198718 at 1/25 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABL2 antibody - N-terminal (ab198718)



All lanes : Anti-ABL2 antibody - N-terminal (ab198718) at 1/400 dilution

Lane 1 : HeLa cell lysate

Lane 2 : Jurkat cell lysate

Lysates/proteins at 40 µg per lane.

Predicted band size: 116 kDa

Exposure time: 2 minutes

Gel: 8% SDS-PAGE

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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 <https://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