

## Product datasheet

# Anti-c Abl (phospho Y412) antibody ab47315

★★★★☆ 2 Abreviews 3 References 3 Images

### Overview

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<b>Product name</b>	Anti-c Abl (phospho Y412) antibody
<b>Description</b>	Rabbit polyclonal to c Abl (phospho Y412)
<b>Host species</b>	Rabbit
<b>Specificity</b>	ab47315 detects endogenous levels of c-Abl only when phosphorylated at tyrosine 412.
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB, IHC-P, ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat
<b>Immunogen</b>	The antiserum was produced against synthesized phosphopeptide derived from human c-Abl around the phosphorylation site of tyrosine 412 (D-T-Y <sup>P</sup> -T-A). Note: Two forms of c Abl are generated by alternative splicing. Tyr residue at position 412 is present in isoforms 1b of c Abl. The corresponding phosphorylation site in isoforms 1a is at position 393.
<b>Positive control</b>	Human breast carcinoma tissue

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS, 150mM Sodium chloride, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	The antibody was affinity-purified using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

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Our [Abpromise guarantee](#) covers the use of **ab47315** in the following tested applications.

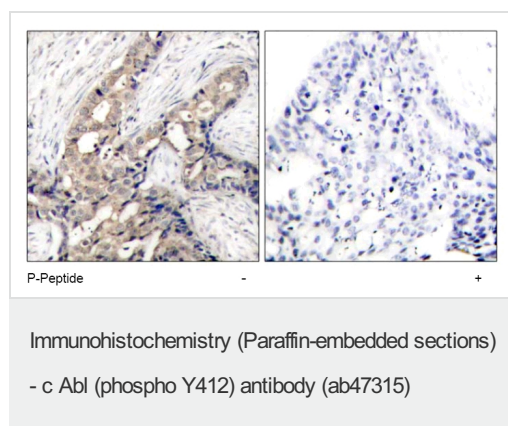
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★☆	1/100.
WB	★★★★☆	Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
ELISA		1/4000.

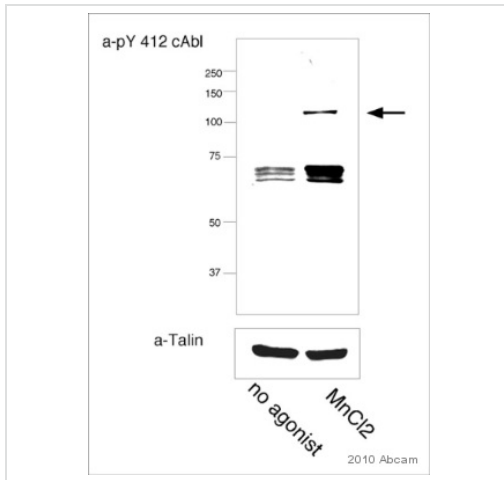
## Target

<b>Function</b>	Protein kinase that regulates key processes linked to cell growth and survival. Regulates cytoskeleton remodeling during cell differentiation, cell division and cell adhesion. Localizes to dynamic actin structures, and phosphorylates CRK and CRKL, DOK1, and other proteins controlling cytoskeleton dynamics. Regulates DNA repair potentially by activating the proapoptotic pathway when the DNA damage is too severe to be repaired. Phosphorylates PSMA7 that leads to an inhibition of proteasomal activity and cell cycle transition blocks.
<b>Tissue specificity</b>	Widely expressed.
<b>Involvement in disease</b>	Note=A chromosomal aberration involving ABL1 is a cause of chronic myeloid leukemia. Translocation t(9;22)(q34;q11) with BCR. The translocation produces a BCR-ABL found also in acute myeloid leukemia (AML) and acute lymphoblastic leukemia (ALL).
<b>Sequence similarities</b>	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.
<b>Post-translational modifications</b>	Phosphorylated by PRKDC (By similarity). DNA damage-induced activation of c-Abl requires the function of ATM and Ser-446 phosphorylation (By similarity). Phosphorylation on Thr-735 is required for binding 14-3-3 proteins for cytoplasmic translocation. Isoform IB is myristoylated on Gly-2.
<b>Cellular localization</b>	Cytoplasm > cytoskeleton. Nucleus. Sequestered into the cytoplasm through interaction with 14-3-3 proteins and Nucleus membrane. The myristoylated c-ABL protein is reported to be nuclear.

## Images

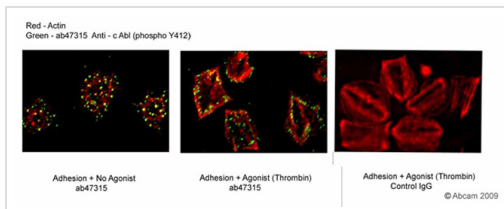


ab47315 staining human breast carcinoma by IHC-P (left hand panel). The right hand panel shows staining in the presence of phosphopeptide.



ab47315 on platelets unstimulated and stimulated with  $MnCl_2$

Western blot - c Abl (phospho Y412) antibody (ab47315)



Immunocytochemistry/ Immunofluorescence - c Abl (phospho Y412) antibody (ab47315)  
This image is a courtesy of Anonymous Abreview

ab47315 staining c Abl (phospho Y412) in human platelets by Immunocytochemistry/ Immunofluorescence. Cells were fixed with formaldehyde and permeabilized with 0.2% Triton x100 before blocking with 10% serum at 20°C for 1 hour. Samples were incubated with primary antibody (1/100: in 10% goat serum) for 1 hour 20 minutes at 20°C. An Alexa Fluor®488-conjugated goat polyclonal to rabbit IgG used at dilution at 1/400 as secondary antibody.

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