

# **Product Datasheet**

# Anti-c-Abl (Tyr-412), Phosphospecific Antibody

Overview	
Catalog #	AP1271
Size	100 μL
Host Species	Rabbit Polyclonal
Format	Antigen Affinity Purified
Applications	WB 1:1000
Species Tested	Human, Mouse, and Rat
Immunogen	Phospho-c-Abl (Tyr-412) synthetic peptide (coupled to KLH) corresponding to amino acid residues around tyrosine 412 of human c-Abl. This peptide sequence has high homology to the conserved site in rat and mouse c-Abl, as well as in viral Abl and BCR-Abl fusion protein.
Molecular Weight	145 kDa
Cite this Antibody	PhosphoSolutions Cat# AP1271, RRID:AB_2220976

#### Images



Western blot analysis of K-562 cells treated with pervanadate (1 mM) for 30 minutes (lanes 1, 3, & 5). Some lanes were treated with alkaline phosphatase to remove phosphorylation on c-Abl (lanes 2, 4, & 6), then the blots were probed with anti-c-Abl (lanes 1 & 2), anti-c-Abl (Tyr-412) (AP1271; lanes 3 & 4), or antic-Abl (Tyr-245) (AP1251; lanes 5 & 6).

### Details

Target Description	The c-Abl proto-oncogene encodes a nonreceptor type protein tyrosine kinase that is widely expressed and is distributed in both the nucleus and the cytoplasm of cells. It has been implicated in regulation of cell proliferation, differentiation, apoptosis, cell adhesion, and stress response. A variety of stimuli activate c-Abl kinase including integrin activation, PDGF stimulation, and binding to proteins, such as c-Jun. Tyrosine phosphorylation is important for the regulation of c-Abl kinase activity. Tyrosine 245 is located in the linker region between the SH2 and catalytic domains. Phosphorylation of Tyr-245 is involved in activation of c-Abl kinase activity. Tyrosine 412 is located in the kinase activation loop of c-Abl, and phosphorylation of this residue is required for kinase activity. Thus, phosphorylation of Tyr-245 and Tyr-412 may be critical for activation of c-Abl in a variety of cell signaling pathways
Specificity	This antibody was cross-adsorbed to phospho-tyrosine coupled to agarose and to phospho-c-Abl (Tyr-245) peptide before affinity purification using phospho-c-Abl (Tyr-412) peptide. On SDS-PAGE immunoblots of K-562 treated with pervanadate the antibody detects a 145 kDa* protein corresponding to c-Abl and a 210 kDa band corresponding to BCR-Abl.
Quality Control	Western blots performed on each lot.
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability	After date of receipt, stable for at least 1 year at -20°C.

## **Significant Citations**

Yang, Y.-W., Marrufo, A., Chase, J., Woodard, G.A., Jablons, D.M. and Lemjabbar-Alaoui, H. (2020). Ponatinib is a potential therapeutic approach for malignant pleural mesothelioma. *Experimental Lung Research*, 47(1), pp.9–25.

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