

Phospho-c-Abl (Tyr245) Antibody



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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W Endogenous	Species Cross-Reactivity* H, (M)	Molecular Wt. 135 kDa (c-Abl), 210 kDa (Bcr-Abl)	Source Rabbit**
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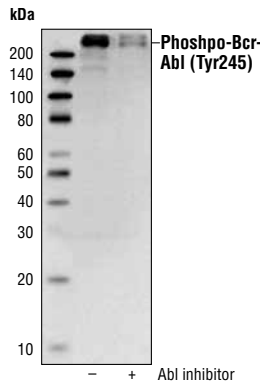
Background: The c-Abl proto-oncogene encodes a nonreceptor protein tyrosine kinase that is ubiquitously expressed and highly conserved in metazoan evolution. c-Abl protein is distributed in both the nucleus and the cytoplasm of cells. It is implicated in regulating cell proliferation, differentiation, apoptosis, cell adhesion and stress responses (1-3). c-Abl kinase activity is increased *in vivo* by diverse physiological stimuli including integrin activation, PDGF stimulation and binding to c-Jun, Nck and RFX1 (2,4). The *in vivo* mechanism of regulation of c-Abl kinase activity is not completely understood. Tyr245 is located in the linker region between the SH2 and catalytic domains. This positioning is conserved among Abl family members. Phosphorylation of Tyr245 is involved in the activation of c-Abl kinase (5). In addition, phosphorylation of Tyr412, which is located in the kinase activation loop of c-Abl, is required for kinase activity (6).

Specificity/Sensitivity: Phospho-c-Abl (Tyr245) Antibody detects endogenous levels of c-Abl only when phosphorylated at Tyr245. The antibody cross-reacts with activated EGF receptors and PDGF receptors.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr245 of human c-Abl.

Background References:

- (1) Wang, J.Y. et al. (2000) *Oncogene* 19, 5643–5650.
- (2) Van Etten, R.A. et al. (1999) *Trends Cell. Biol.* 9, 179–182.
- (3) Danial, N.N. et al. (2000) *Oncogene* 19, 2523–2531.
- (4) Shaul, Y. et al. (2000) *Cell Death Differ.* 7, 10–16.
- (5) Brasher, B.B. et al. (2000) *J. Biol. Chem.* 275, 35631–35637.
- (6) Pluk, H. et al. (2002) *Cell* 108, 247–259.



Western blot analysis of extracts from K562 cells, untreated or treated with an Abl inhibitor, using Phospho-c-Abl (Tyr245) Antibody.

Entrez-Gene ID #25
Swiss-Prot Acc. #P00519-2

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western Blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.