Revision 1

Store at -20C

#3009

Phospho-c-Abl (Tyr204) (C42B5) Rabbit mAb

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	135 (c-Abl); 210 (Bcr-Abl)	Rabbit IgG	#P00519	25

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-c-Abl (Tyr204) (C42B5) Rabbit mAb detects endogenous levels of c-Abl only when phosphorylated at Tyr204. This antibody may weakly cross-react with other tyrosine-phosphorylated proteins. For additional information please visit PhosphoSitePlus®, CST's modification site knowledgebase, at www.phosphosite.org.

Species predicted to react based on 100% sequence homology

Mouse

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr204 of human c-Abl.

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 for 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 at Tyr245 is involved in the activation of c-Abl kinase (5). In addition, phosphorylation at Tyr412, which is located in the kinase activation loop of c-Abl, is required for kinase activity (6).
Phosphorylation of c-Abl on Tyr204 was identified at Cell Signaling Technology (CST) using PhosphoScan®, CST's LC-MS/MS platform for phosphorylation site discovery as well as another publication using MS technology (7).

Background References

1. Wang, J.Y. (2000) *Oncogene* 19, 5643-50.
2. Van Etten, R.A. (1999) *Trends Cell Biol* 9, 179-86.
3. Danial, N.N. and Rothman, P. (2000) *Oncogene* 19, 2523-31.
4. Shaul, Y. (2000) *Cell Death Differ* 7, 10-6.
5. Brasher, B.B. and Van Etten, R.A. (2000) *J Biol Chem* 275, 35631-7.
6. Pluk, H. et al. (2002) *Cell* 108, 247-259.
7. Meyn, M.A. et al. (2006) *J. Biol. Chem.* 281, 30907-30916.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

Trademarks and Patents

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.