



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

Phospho-c-Abl (Tyr412) (247C7) Rabbit mAb

Store at -20C
#2865

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

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

Product Usage Information	Application Western Blotting	Dilution 1:1000
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 (Tyr412) (247C7) Rabbit mAb detects endogenous Abl proteins only when phosphorylated at tyrosine 412. The antibody does not cross-react with other phosphorylated tyrosine kinases.	
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 Tyr412 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 <i>in vivo</i> by diverse physiological stimuli including integrin activation; PDGF stimulation; and binding to c-Jun, Nck, and RFX1 (2,4). The <i>in vivo</i> 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).	
Background References	<ol style="list-style-type: none"> 1. Wang, J.Y. (2000) <i>Oncogene</i> 19, 5643-50. 2. Van Etten, R.A. (1999) <i>Trends Cell Biol</i> 9, 179-86. 3. Danial, N.N. and Rothman, P. (2000) <i>Oncogene</i> 19, 2523-31. 4. Shaul, Y. (2000) <i>Cell Death Differ</i> 7, 10-6. 5. Brasher, B.B. and Van Etten, R.A. (2000) <i>J Biol Chem</i> 275, 35631-7. 6. Pluk, H. et al. (2002) <i>Cell</i> 108, 247-259. 	
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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.	
Applications Key	W: Western Blotting	
Cross-Reactivity Key	H: Human	
Trademarks and Patents	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.	
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.