Revision 1

Phospho-CrkL (Tyr207) Antibody

#3181 Store at -20C

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, IHC-P	H M R Mk	Endogenous	39	Rabbit	#P46109	1399

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:200

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.

Specificity/Sensitivity

Phospho-CrkL (Tyr207) Antibody detects endogenous levels of CrkL only when phosphorylated at tyrosine 207. The antibody cross-reacts with CrkII phosphorylated at tyrosine 221.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr207 of human CrkL. Antibodies are purified by protein A and peptide affinity chromatography

Background

CrkL, a 39 kDa adaptor protein, has a key regulatory role in hematopoietic cells. CrkL has one SH2 and two SH3 domains, with 60% homology to CrkII (1). The amino-terminal SH3 domain of CrkL binds proteins, such as C3G, SOS, PI3K, c-Abl, and BCR/Abl. The SH2 domain of CrkL can bind to tyrosine-phosphorylated proteins, such as Cbl, HEF1, CAS, and paxillin (2,3). CrkL is involved in various signaling cascades initiated by different cytokines and growth factors. The biological outcomes of the Crk-activated signal transduction include the modulation of cell adhesion, cell migration, and immune cell responses (4). CrkL is a prominent substrate of the BCR/Abl oncoprotein in chronic myelogenous leukemia and binds to both BCR/Abl and c-Abl (5). CrkL is prominently and constitutively tyrosine phosphorylated in CML neutrophils and is not phosphorylated in normal neutrophils. Moreover, stimulation of normal neutrophils with cytokines and agonists does not induce tyrosine phosphorylation of this protein (6), indicating that it may be a useful target for therapeutic intervention or as a disease marker. Tyr207 in CrkL is the BCR/Abl phosphorylation site (7).

Background References

1. Satter, M. and Salgia, R. (1998) *Leukemia* 12, 637-644.
2. Feller, S. M. et al. (1998) *J. Cell. Physiol.* 177, 535-552.
3. Kiyokawa, E. et al. (1997) *Crit. Rev. Oncog.* 8, 329-342.
4. Feller, S. M. et al. (2001) *Oncogene* 20, 6348-6371.
5. Grumbach, I. M. et al. (2001) *Br. J. Haematol.* 112, 327-336.
6. Nicholas, G. L. et al. (1994) *Blood* 84, 2912-2918.
7. de Jong, R. et al. (1997) *Oncogene* 14, 507-513.

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 **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

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.