

#3181 Store at -20°C

Phospho-CrkL (Tyr207) Antibody

- Small 100 µl (10 western blots)
- Large 300 µl (30 western blots)



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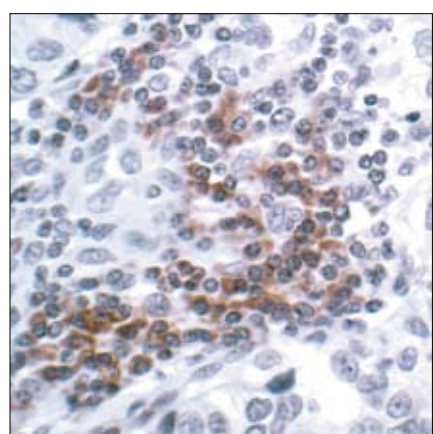
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IHC-P, F Endogenous	H, M, R, Mk	39 kDa	Rabbit

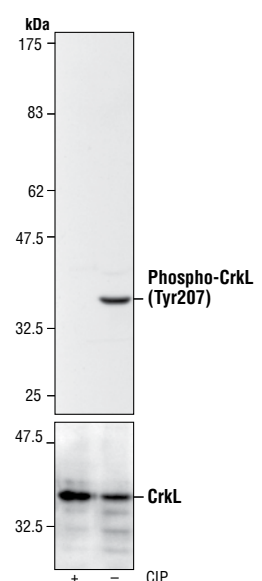
Background: CrkL, a 39 kDa adaptor protein, has a key regulatory role in hematopoietic cells. CrkL has one SH2 and two SH3 domains, with 60% homology to CrkII (1). The amino-terminal SH3 domain of CrkL binds proteins such as C3G, SOS, PI3K, c-Abl and BCR/Abl. The SH2 domain of CrkL can bind to tyrosine-phosphorylated 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).

Specificity/Sensitivity: Phospho-CrkL (Tyr207) Antibody detects endogenous levels of CrkL only when phosphorylated at Tyr207. The antibody cross-reacts with CrkII phosphorylated at Tyr221.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide (KLH-coupled) corresponding to residues surrounding Tyr207 of human CrkL. Antibodies are purified by protein A and peptide affinity chromatography



Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma, showing membrane and cytoplasmic localization using Phospho-CrkL (Tyr207) Antibody.



Western blot analysis of extracts from K562 cells, untreated or calf intestinal phosphatase (CIP)-treated using Phospho-CrkL (Tyr207) Antibody (upper) or CrkL Antibody #3182 (lower).

Entrez-Gene ID #1399
Swiss-Prot Acc. #P46109

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:

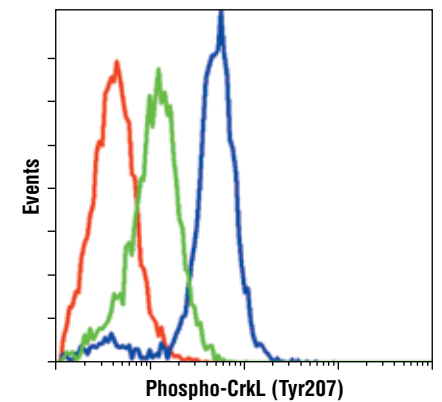
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:200
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS
Flow Cytometry	1:50

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.

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.



Flow cytometric analysis of K562 cells, untreated (blue) or STI571 treated (green) using Phospho-CrkL (Tyr207) Antibody compared to a nonspecific negative control antibody (red).

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.