

# CrkII Antibody

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rev. 01/11/16

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

Applications W Endogenous	Species Cross-Reactivity*		Molecular Wt. 42 kDa	Source Rabbit**
	H, M			

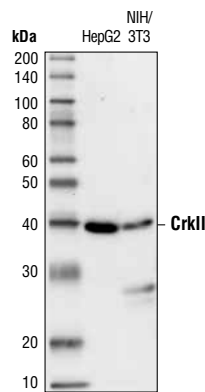
**Background:** CrkII, a cellular homologue of v-Crk, belongs to a family of adaptor proteins with an SH2-SH3-SH3 domain structure that transmits signals from tyrosine kinases (1). The primary function of Crk is to recruit cytoplasmic proteins in the vicinity of tyrosine kinases through SH2-phospho-tyrosine interaction. Thus, the output from Crk depends on the SH3-binding proteins, which include the C3G and Sos guanine nucleotide exchange proteins, Abl tyrosine kinase, DOCK180 and some STE20-related kinases. The variety of Crk-binding proteins indicates the pleiotropic function of Crk (2). The two CrkII SH3 domains are separated by a 54 amino acid linker region, which is highly conserved in *Xenopus*, chicken and mammalian CrkII proteins (3). Tyr221 in this region is phosphorylated by the Abl tyrosine kinase (4), IGF-1 receptor (5) and EGF receptor (6). Once Tyr221 is phosphorylated, CrkII undergoes a change in intramolecular folding and SH2-pTyr interaction, which causes rapid dissociation of CrkII from the tyrosine kinase complex (3).

**Specificity/Sensitivity:** CrkII Antibody detects endogenous levels of CrkII protein. This antibody does not cross-react with related proteins.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Trp169 of human CrkII protein. Antibodies are purified by protein A and peptide affinity chromatography.

#### Background References:

- (1) Zvara, A. et al. (2001) *Oncogene* 20, 951–961.
- (2) Kiyokawa, E. et al. (1997) *Crit. Rev. Oncog.* 8, 329–342.
- (3) Rosen, S.K. et al. (1995) *Nature* 374, 477–479.
- (4) Amoui, M. and Miller, W.T. (2000) *Cell. Signal.* 12, 637–643.
- (5) Koval, A.P. et al. (1998) *Biochem. J.* 330, 923–932.
- (6) Hashimoto, Y. et al. (1998) *J. Biol. Chem.* 273, 17186–17191.



Western blot analysis of extracts from HepG2 cells (human hepatocellular carcinoma) and NIH/3T3 cells (mouse fibroblasts) using CrkII Antibody.

Entrez-Gene ID # 1398  
Swiss-Prot Acc. # P46108

**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](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://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.