

# Crk I/II (E-14): sc-23775

## BACKGROUND

The Crk family of adapter proteins including Crk-II, Crk-I, and Crk-L consist mostly of SH2 and SH3 domains. Through the interactions between SH2 domain and phosphotyrosine residues and/or between SH3 domain and proline-rich motifs, they are involved in a variety of signaling cascades. Crk I and Crk II are encoded by the same gene, which undergoes alternative splicing to yield these two proteins, but differ in their biological activities (2-4). Crk-II has less transforming activity than Crk-I, although both Crk-I and Crk-II bind to many tyrosine-phosphorylated proteins that bind to grb2. In addition, Crk-II becomes rapidly tyrosine-phosphorylated in response to stimulation with Insulin-like growth factor I (IGF-I) and might be involved in the IGF-I receptor signalling pathway. The gene encoding Crk I and II maps to human chromosome 17p13.3, a region which demonstrates frequent deletion or loss of heterozygosity in a wide range of human cancers.

## REFERENCES

1. Matsuda, M., et al. 1992. Two species of human CRK cDNA encode proteins with distinct biological activities. *Mol. Cell. Biol.* 12: 3482-3489.
2. Fioretos, T., et al. 1993. CRK proto-oncogene maps to human chromosome band 17p13. *Oncogene* 10: 2853-2855.
3. Koval, A.P., et al. 1998. Interaction *in vitro* of the product of the c-Crk II proto-oncogene with the Insulin-like growth factor I receptor. *Biochem. J.* 330: 923-932
4. Imaizumi, T., et al. 1999. Mutant mice lacking Crk II caused by the gene trap insertional mutagenesis: Crk II is not essential for embryonic development. *Biochem. Biophys. Res. Commun.* 266: 569-574.
5. SWISS-PROT/TrEMBL (1169096). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>.

## CHROMOSOMAL LOCATION

Genetic locus: CRK (human) mapping to 17p13.3; Crk (mouse) mapping to 11 B5.

## SOURCE

Crk I/II (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Crk I of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23775 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Crk I/II (E-14) is recommended for detection of Crk I and Crk II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Crk I/II (E-14) is also recommended for detection of Crk I and Crk II in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Crk I/II siRNA (h): sc-43704, Crk I/II shRNA Plasmid (h): sc-43704-SH and Crk I/II shRNA (h) Lentiviral Particles: sc-43704-V.

Molecular Weight of Crk I: 23 kDa.

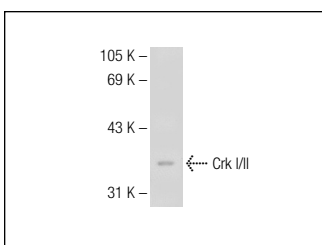
Molecular Weight of Crk II: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Crk I/II (E-14): sc-23775. Western blot analysis of Crk I/II expression in HeLa whole cell lysate.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Crk I/II (D-6): sc-393160** or **Crk II (B-4): sc-390132**, our highly recommended monoclonal alternatives to Crk I/II (E-14).