

# p130 Cas (N-20): sc-16516

## BACKGROUND

p130 represents one of several known substrates for v-Crk encoded p47. p130 Cas (for Crk-associated substrate) exhibits a high level of tyrosine phosphorylation and is tightly associated with v-Crk, suggesting a role in v-Crk-mediated cell signaling. The molecular cloning of p130 Cas has shown it to represent a novel SH3 containing signaling molecule with a cluster of multiple putative SH2-binding motifs for v-Crk. By immunoprecipitation analysis, p130 Cas has been shown to be highly phosphorylated at tyrosine residues subsequent to either v-Src p60 or v-Crk-mediated transformation and to form stable complexes with both of these transforming proteins. p130 Cas behaves as an extremely potent substrate for protein tyrosine kinases and has been reported to relocate from the cytoplasm to cell membrane upon tyrosine phosphorylation. One proposed model is that the SH2 domain of v-Crk functions to activate c-Src kinase, which in turn phosphorylates p130 Cas.

## CHROMOSOMAL LOCATION

Genetic locus: BCAR1 (human) mapping to 16q22.3, LOC646079 (human) mapping to 15q11.1; Bcar1 (mouse) mapping to 8 E1.

## SOURCE

p130 Cas (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of p130 Cas 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-16516 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.

## APPLICATIONS

p130 Cas (N-20) is recommended for detection of p130 Cas and LOC646079 of human origin and p130 Cas of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

p130 Cas (N-20) is also recommended for detection of p130 Cas in additional species, including equine, canine and bovine.

Suitable for use as control antibody for p130 Cas siRNA (m): sc-36142, p130 Cas shRNA Plasmid (m): sc-36142-SH and p130 Cas shRNA (m) Lentiviral Particles: sc-36142-V.

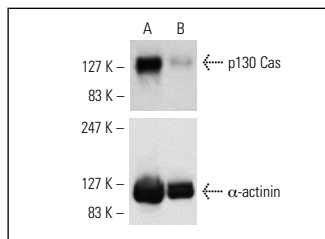
Molecular Weight of p130 Cas: 130 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215, KNRK whole cell lysate: sc-2214 or HeLa whole cell lysate: sc-2200.

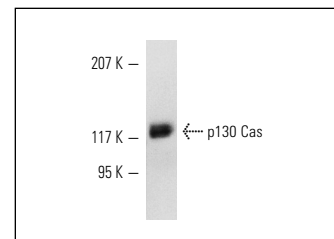
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) 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



p130 Cas siRNA (h): sc-36141. Western blot analysis of p130 Cas expression in non-transfected control (A) and p130 Cas siRNA transfected (B) HeLa cells. Blot probed with p130 Cas (N-20): sc-16516.  $\alpha$ -actinin (H-2): sc-17829 used as specificity and loading control.



p130 Cas (N-20): sc-16516. Western blot analysis of p130 Cas expression in KNRK whole cell lysate.

## SELECT PRODUCT CITATIONS

- Peterson, M.E. and Long, E.O. 2008. Inhibitory receptor signaling via tyrosine phosphorylation of the adaptor Crk. *Immunity* 29: 578-588.

## RESEARCH USE

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

## PROTOCOLS

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


 MONOS  
Satisfaction  
Guaranteed

Try **p130 Cas (35B.1A4): sc-20029** or **p130 Cas (C-4): sc-365200**, our highly recommended monoclonal alternatives to p130 Cas (N-20).