

p130 Cas (S-20): sc-16517

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 Cas p130 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.

REFERENCES

1. Matsuda, M., et al. 1990. Binding of transforming protein, P47gag-Crk, to a broad range of phosphotyrosine-containing proteins. *Science* 248: 1537-1539.
2. Kanner, S.B., et al. 1990. Monoclonal antibodies to individual tyrosine-phosphorylated protein substrates of oncogene-encoded tyrosine kinases. *Proc. Natl. Acad. Sci. USA* 87: 3328-3332.
3. Kanner, S.B., et al. 1991. The SH2 and SH3 domains of pp60src direct stable association with tyrosine phosphorylated proteins p130 and p110. *EMBO J.* 10: 1689-1698.
4. Matsuda, M., et al. 1991. Identification of the v-Crk oncogene product sufficient for association with phosphotyrosine-containing proteins. *Mol. Cell. Biol.* 11: 1607-1613.

CHROMOSOMAL LOCATION

Genetic locus: BCAR1 (human) mapping to 16q23.1; Bcar1 (mouse) mapping to 8 E1.

SOURCE

p130 Cas (S-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-16517 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 (S-20) is recommended for detection of p130 Cas of mouse, rat and human 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).

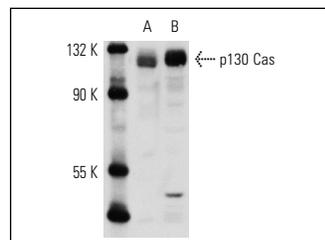
p130 Cas (S-20) is also recommended for detection of p130 Cas in additional species, including equine, canine and bovine.

Suitable for use as control antibody for p130 Cas siRNA (h): sc-36141, p130 Cas siRNA (m): sc-36142, p130 Cas siRNA (r): sc-155989, p130 Cas shRNA Plasmid (h): sc-36141-SH, p130 Cas shRNA Plasmid (m): sc-36142-SH, p130 Cas shRNA Plasmid (r): sc-155989-SHp130 Cas shRNA (h) Lentiviral Particles: sc-36141-V, p130 Cas shRNA (m) Lentiviral Particles: sc-36142-V and p130 Cas shRNA (r) Lentiviral Particles: sc-155989-V.

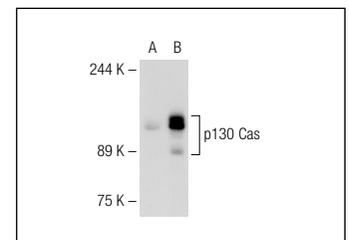
Molecular Weight of p130 Cas: 130 kDa.

Positive Controls: p130 Cas (h): 293T Lysate: sc-177673, IMR-32 cell lysate: sc-2409 or KNRK whole cell lysate: sc-2214.

DATA



p130 Cas (S-20): sc-16517. Western blot analysis of p130 Cas expression in IMR-32 (A) and KNRK (B) whole cell lysates.



p130 Cas (S-20): sc-16517. Western blot analysis of p130 Cas expression in non-transfected: sc-117752 (A) and human p130 Cas transfected: sc-177673 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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