SANTA CRUZ BIOTECHNOLOGY, INC.

Sin (M-20): sc-6294

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

A 130 kDa protein, designated Cas p130 (for Crk-associated substrate), represents one of several known substrates for v-Crk encoded p47. Cas p130 exhibits a high level of tyrosine phosphorylation and is tightly associated with v-Crk, suggesting a role in v-Crk-mediated cell signaling. Cas p130 is a novel SH_3-containing signaling molecule with a cluster of multiple putative SH_2-binding motifs for v-Crk. Two Cas p130 related proteins, designated Sin (Src interacting or signal integrating protein) and HEF1 (human enhancer of filamentatin 1), have also been identified. Sin contains SH_2/SH_3 domains and has been shown to activate Src. HEF1 contains an SH_3 domain and has been shown to be a docking protein that serves as a substrate for phosphorylation by several oncogenic tyrosine kinases.

REFERENCES

1. Kanner, S.B., et al. 1991. The SH_2 and SH_3 domains of pp60src direct stable association with tyrosine phosphorylated proteins p130 and p110. EMBO J. 10: 1689-1698.
2. Matusda, M., et at. 1991. Identification of domain of the v-Crk oncogene product sufficient for association with phosphotyrosine-containing proteins. Mol. Cell. Biol. 11: 1607-1613.
3. Birge, R.B., et al. 1992. Tyrosine-phosphorylated epidermal growth factor receptor and cellular p130 provide high-affinity binding substrates to analyze Crk-phosphotyrosine-dependent interactions *in vitro*. J. Biol. Chem. 267: 10588-10595.
4. Matsuda, M., et al. 1992. Two species of human Crk cDNA encode proteins with distinct biological activities. Mol. Cell. Biol. 12: 3482-3489.
5. Sakai, R., et al. 1994. A novel signaling molecule, p130, forms stable complexes *in vivo* with v-Crk and v-Src in a tyrosine phosphorylation-dependent manner. EMBO J. 13: 3748-3756.
6. Alexandropoulos, K. and Baltimore, D. 1996. Coordinate activation of c-Src by SH_3- and SH_2-binding sites on a novel p130 Cas-related protein, Sin. Genes and Dev. 10: 1341-1355.
7. Law, S.F., et al. 1996. Human enhancer of filamentation 1, a novel p130 Cas-like docking protein, associates with focal adhesion kinase and induces pseudohyphal growth in *Saccharomyces cerevisiae*. Mol. Cell. Biol. 16: 3327-3337.

SOURCE

Sin (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Sin of mouse 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-6294 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Sin (M-20) is recommended for detection of Sin of mouse, rat and, to a lesser extent, 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).

Suitable for use as control antibody for Sin siRNA (m): sc-40797, Sin shRNA Plasmid (m): sc-40797-SH and Sin shRNA (m) Lentiviral Particles: sc-40797-V.

Molecular Weight of Sin: 70 kDa.

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.

STORAGE

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

PROTOCOLS

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