# SANTA CRUZ BIOTECHNOLOGY, INC.

# Sin (A-19): sc-6295



# BACKGROUND

A protein designated p130 Cas (for Crk-associated substrate), represents one of several known substrates for v-Crk encoded p47. p130 Cas (also designated breast cancer anti-estrogen resistance protein 1 or Cas scaffolding protein family member 1), exhibits a high level of tyrosine phosphorylation and is tightly associated with v-Crk, suggesting a role in v-Crk-mediated cell signaling. p130 Cas is a novel SH3-containing signaling molecule with a cluster of multiple putative SH2-binding motifs for v-Crk. Two p130 Cas related proteins, designated Sin (Src interacting or signal integrating protein, also designated Cas3 or HEFS) and Cas-L (human enhancer of filamentatin 1, HEF1 or Cas3), have also been identified. Sin contains SH2/SH3 domains and has been shown to activate Src. Cas-L contains an SH3 domain and has been shown to be a docking protein that serves as a substrate for phosphorylation by several oncogenic tyrosine kinases.

#### REFERENCES

- 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.
- 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.
- 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.
- Matsuda, M., et al. 1992. Two species of human Crk cDNA encode proteins with distinct biological activities. Mol. Cell. Biol. 12: 3482-3489.
- 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.

#### CHROMOSOMAL LOCATION

Genetic locus: EFS (human) mapping to 14q11.2; Efs (mouse) mapping to 14 C3.

# SOURCE

Sin (A-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Sin of mouse origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6295 P, (100  $\mu$ g 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

Sin (A-19) is recommended for detection of Sin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Sin (A-19) is also recommended for detection of Sin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sin siRNA (h): sc-40796, Sin siRNA (m): sc-40797, Sin shRNA Plasmid (h): sc-40796-SH, Sin shRNA Plasmid (m): sc-40797-SH, Sin shRNA (h) Lentiviral Particles: sc-40796-V and Sin shRNA (m) Lentiviral Particles: sc-40797-V.

Molecular Weight of Sin: 70 kDa.

Positive Controls: Sin (m): 293T Lysate: sc-123554.

## **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



Sin (A-19): sc-6295. Western blot analysis of Sin expression in non-transfected: sc-11752 (A) and mouse Sin transfected: sc-123554 (B) 293T whole cell lysates

#### **RESEARCH USE**

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

