# SANTA CRUZ BIOTECHNOLOGY, INC.

# SH2D4A (S-16): sc-98126



#### BACKGROUND

SH2D4A (SH2 domain containing protein 4A), also known as SH2A, is a ubiquitously expressed 454 amino acid docking protein that belongs to the SH2 signaling protein family. Members of this family typically participate in intracellular signaling. Localizing to the cytoplasm, SH2D4A contains one Src homology 2 (SH2) domain. SH2 domains bind to tyrosine-phosphorylated regions of target proteins, frequently linking activated growth factors to putative signal transduction proteins. This suggests that SH2D4A, via its SH2 domain, may play an important function in cellular signal transduction. More specifically, SH2D4A is believed to function as an inhibiting factor in PKC signal transduction. In addition, SH2D4A exhibits abnormal expression in various cancers, implying that it may be involved in tumorigenesis.

# CHROMOSOMAL LOCATION

Genetic locus: SH2D4A (human) mapping to 8p21.3; Sh2d4a (mouse) mapping to 8 B3.3.

#### SOURCE

SH2D4A (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SH2D4A of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-98126 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# APPLICATIONS

SH2D4A (S-16) is recommended for detection of SH2D4A 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).

SH2D4A (S-16) is also recommended for detection of SH2D4A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SH2D4A siRNA (h): sc-77685, SH2D4A siRNA (m): sc-153429, SH2D4A shRNA Plasmid (h): sc-77685-SH, SH2D4A shRNA Plasmid (m): sc-153429-SH, SH2D4A shRNA (h) Lentiviral Particles: sc-77685-V and SH2D4A shRNA (m) Lentiviral Particles: sc-153429-V.

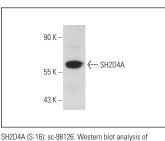
Molecular Weight of SH2D4A: 53 kDa.

Positive Controls: KNRK nuclear extract: sc-2141 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



SH2D4A expression in KNRK nuclear extract.

#### **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.

# MONOS Satisfation Guaranteed

Try SH2D4A (F-5): sc-514170 or SH2D4A (63-J): sc-100288, our highly recommended monoclonal alternatives to SH2D4A (S-16).