

# SID-1 (M-95): sc-67264

## BACKGROUND

SID-1 and SID-2 belong to the systemic RNA interference defective-1 (SID1) family of transmembrane proteins. SID-1, originally identified in *C. elegans*, is an 827 amino acid protein. It localizes to the cell membrane and contains eleven transmembrane domains. This suggests that SID-1 possibly functions as a channel protein. The overexpression of SID-1 enhances double stranded RNA (dsRNA) uptake in pancreatic ductal adenocarcinoma cells. SID-2, also first identified in *C. elegans*, is an 832 amino acid protein with multiple transmembrane domains. At least two isoforms exist for SID-2 due to alternative splicing. Isoform 2 contains an additional 21 amino acids after residue 387 and has an alternate sequence that is 8 amino acids shorter for residues 814 to 832 of isoform 1.

## REFERENCES

1. Winston, W.M., Molodowitch, C. and Hunter, C.P. 2002. Systemic RNAi in *C. elegans* requires the putative transmembrane protein SID-1. *Science* 295: 2456-2459.
2. Feinberg, E.H. and Hunter, C.P. 2003. Transport of dsRNA into cells by the transmembrane protein SID-1. *Science* 301: 1545-1547.

## CHROMOSOMAL LOCATION

Genetic locus: SIDT1 (human) mapping to 3q13.2; Sidt1 (mouse) mapping to 16 B4.

## SOURCE

SID-1 (M-95) is a rabbit polyclonal antibody raised against amino acids 1-95 mapping within an N-terminal extracellular domain of SID-1 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.

## RESEARCH USE

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

## APPLICATIONS

SID-1 (M-95) is recommended for detection of SID-1 of mouse, rat and, to a lesser extent, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with isoform 2.

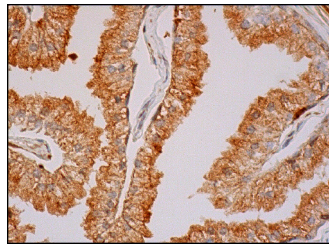
Suitable for use as control antibody for SID-1 siRNA (h): sc-72280, SID-1 siRNA (m): sc-72281, SID-1 shRNA Plasmid (h): sc-72280-SH, SID-1 shRNA Plasmid (m): sc-72281-SH, SID-1 shRNA (h) Lentiviral Particles: sc-72280-V and SID-1 shRNA (m) Lentiviral Particles: sc-72281-V.

Molecular Weight of SID-1: 103 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



SID-1 (M-95): sc-67264. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic staining of glandular cells.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **SID-1 (F-12): sc-390015**, our highly recommended monoclonal alternative to SID-1 (M-95).