

# SDAD1 (P-18): sc-244090

## BACKGROUND

SDAD1 (SDA1 domain-containing protein 1) is a 687 amino acid protein that belongs to the SDA1 family. The SDAD1 protein is required for 60S pre-ribosomal subunits export to the cytoplasm. Highly expressed in testis, kidney, spleen, brain and fetal tissues, SDAD1 is also expressed at lower levels in heart, lung, liver, small intestine, ovary, uterus, mammary gland and placenta. Variations in SDAD1 may be a cause of susceptibility to seasonal allergic rhinitis (SAR). SAR is a common allergic disorder characterized by episodes of sneezing, rhinorrhea, and swelling of the nasal mucosa. DAZL and Pumilio 2 bind the 3'-UTR mRNA of SDAD1, suggesting that these proteins may regulate translation of SDAD1. Existing as two alternatively spliced isoforms, the SDAD1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito, *C. elegans*, *S. pombe*, *S. cerevisiae*, *K. lactis*, *E. gossypii*, *M. grisea*, *N. crassa*, *A. thaliana* and rice, and maps to human chromosome 4q21.1.

## REFERENCES

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2. Andersen, J.S., et al. 2002. Directed proteomic analysis of the human nucleolus. *Curr. Biol.* 12: 1-11.
3. Babbio, F., et al. 2004. Expression and localization studies of hSDA, the human ortholog of the yeast SDA1 gene. *Cell Cycle* 3: 486-490.
4. Fox, M., et al. 2005. Identification and characterization of RNA sequences to which human PUMILIO-2 (PUM2) and deleted in Azoospermia-like (DAZL) bind. *Genomics* 85: 92-105.
5. Reynolds, N., et al. 2005. Dazl binds *in vivo* to specific transcripts and can regulate the pre-meiotic translation of Mvh in germ cells. *Hum. Mol. Genet.* 14: 3899-3909.
6. Zhang, J., et al. 2005. Association of a haplotype block spanning SDAD1 gene and CXC chemokine genes with allergic rhinitis. *J. Allergy Clin. Immunol.* 115: 548-554.
7. Urano, J., et al. 2005. Interaction of the conserved meiotic regulators, BOULE (BOL) and PUMILIO-2 (PUM2). *Mol. Reprod. Dev.* 71: 290-298.

## CHROMOSOMAL LOCATION

Genetic locus: SDAD1 (human) mapping to 4q21.1; Sdad1 (mouse) mapping to 5 E2.

## SOURCE

SDAD1 (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SDAD1 of human origin.

## STORAGE

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

## 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-244090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SDAD1 (P-18) is recommended for detection of SDAD1 of mouse, rat and 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).

SDAD1 (P-18) is also recommended for detection of SDAD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SDAD1 siRNA (h): sc-89086, SDAD1 siRNA (m): sc-153281, SDAD1 shRNA Plasmid (h): sc-89086-SH, SDAD1 shRNA Plasmid (m): sc-153281-SH, SDAD1 shRNA (h) Lentiviral Particles: sc-89086-V and SDAD1 shRNA (m) Lentiviral Particles: sc-153281-V.

Molecular Weight of SDAD1 isoform 1: 80 kDa.

Molecular Weight of SDAD1 isoform 2: 68 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.