

# DAZAP1 (E-20): sc-55084

## BACKGROUND

DAZAP1 (deleted in azoospermia-associated protein 1) is a 407 amino acid RNA-binding protein that interacts with DAZ (deleted in azoospermia), a gene with multiple protein products that are deleted in infertile men. Localized to the nucleus of round spermatids and to the cytoplasm of elongated spermatids, DAZAP1 contains two RNP motifs and is thought to be essential for normal spermatogenesis. Binding of DAZAP1 to DAZ mRNA induces translation of DAZ proteins that are required for germ cell development. When DAZAP1 is phosphorylated, it dissociates from DAZ mRNA and prevents proper protein translation, thereby regulating the expression of DAZ proteins. Additionally, DAZAP1 can fuse to the DNA-binding protein MEF-2D, a fusion that disrupts proper signaling pathways and may, therefore, be involved in leukemogenesis. DAZAP1 is expressed predominately in the testis, with weak expression observed in the thymus, heart, liver, brain and pancreas. Two isoforms of DAZAP1 exist due to alternative splicing events.

## REFERENCES

1. Tsui, S., et al. 2000. Identification of two novel proteins that interact with germ-cell-specific RNA-binding proteins DAZ and DAZL1. *Genomics* 65: 266-273.
2. Vera, Y., et al. 2002. Deleted in azoospermia associated protein 1 shuttles between nucleus and cytoplasm during normal germ cell maturation. *J. Androl.* 23: 622-628.
3. Dai, T., et al. 2003. Characterization of the mouse *Dazap1* gene encoding an RNA-binding protein that interacts with infertility factors DAZ and DAZL. *BMC Genomics* 2: 6.
4. Prima, V., et al. 2005. Cloning and functional characterization of MEF2D/DAZAP1 and DAZAP1/MEF2D fusion proteins created by a variant t(1;19)(q23;p13.3) in acute lymphoblastic leukemia. *Leukemia* 19: 806-813.
5. Pan, H.A., et al. 2005. Expression patterns of the DAZ-associated protein DAZAP1 in rat and human ovaries. *Fertil. Steril.* 2: 1089-1094.
6. Yang, Y., et al. 2006. DAZ1/DAZ2 cluster deletion mediated by gr/gr recombination *per se* may not be sufficient for spermatogenesis impairment: a study of Chinese normozoospermic men. *Asian J. Androl.* 8: 183-187.

## CHROMOSOMAL LOCATION

Genetic locus: DAZAP1 (human) mapping to 19p13.3; *Dazap1* (mouse) mapping to 10 C1.

## SOURCE

DAZAP1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DAZAP1 of human 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-55084 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DAZAP1 (E-20) is recommended for detection of DAZAP1 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

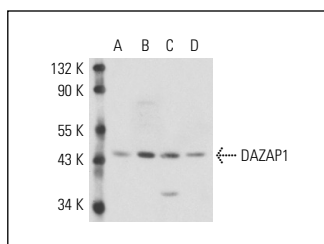
DAZAP1 (E-20) is also recommended for detection of DAZAP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DAZAP1 siRNA (h): sc-62194, DAZAP1 siRNA (m): sc-62195, DAZAP1 shRNA Plasmid (h): sc-62194-SH, DAZAP1 shRNA Plasmid (m): sc-62195-SH, DAZAP1 shRNA (h) Lentiviral Particles: sc-62194-V and DAZAP1 shRNA (m) Lentiviral Particles: sc-62195-V.

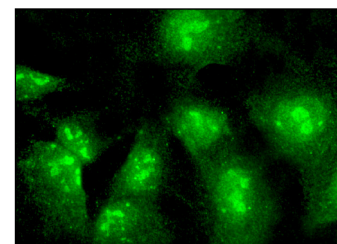
Molecular Weight of DAZAP1: 45 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or IMR-32 cell lysate: sc-2409.

## DATA



DAZAP1 (E-20): sc-55084. Western blot analysis of DAZAP1 expression in Hep G2 (A), Jurkat (B) and IMR-32 (C) nuclear extracts and rat testis (D) and mouse testis (E) tissue extracts.



DAZAP1 (E-20): sc-55084. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization.

## STORAGE

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

## 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.



Try **DAZAP1 (D-9): sc-373987** or **DAZAP1 (F-5): sc-376208**, our highly recommended monoclonal alternatives to DAZAP1 (E-20).