

DAZL (E-6): sc-390929

BACKGROUND

DAZL (deleted in azoospermia-like), an RNA-binding protein that influences spermatogenesis, is an autosomal homolog of the Y chromosome DAZ (deleted in azoospermia). The gene encoding human DAZL maps to chromosome locus 3p24.3. DAZL, like other members of the DAZ family, including BOULE and DAZ, contains a highly conserved RNA-binding motif and a unique DAZ repeat. All DAZ family members are exclusively expressed in germ cells in both male and female gonads. A Thr 54-to-Ala mutation within the RNA-recognition domain of DAZL proteins contributes to spermatogenic failure. Infertility in DAZL knockout mice occurs because their germ cells are unable to complete the first meiotic prophase in the first wave of spermatogenesis.

CHROMOSOMAL LOCATION

Genetic locus: DAZL (human) mapping to 3p24.3; Dazl (mouse) mapping to 17 C.

SOURCE

DAZL (E-6) is a mouse monoclonal antibody raised against amino acids 206-295 mapping at the C-terminus of DAZL of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DAZL (E-6) is available conjugated to agarose (sc-390929 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390929 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390929 PE), fluorescein (sc-390929 FITC), Alexa Fluor® 488 (sc-390929 AF488), Alexa Fluor® 546 (sc-390929 AF546), Alexa Fluor® 594 (sc-390929 AF594) or Alexa Fluor® 647 (sc-390929 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390929 AF680) or Alexa Fluor® 790 (sc-390929 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

DAZL (E-6) is recommended for detection of DAZL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for DAZL siRNA (h): sc-63280, DAZL siRNA (m): sc-63281, DAZL shRNA Plasmid (h): sc-63280-SH, DAZL shRNA Plasmid (m): sc-63281-SH, DAZL shRNA (h) Lentiviral Particles: sc-63280-V and DAZL shRNA (m) Lentiviral Particles: sc-63281-V.

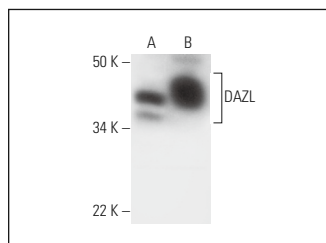
Molecular Weight of DAZL: 38 kDa.

Positive Controls: human testis extract: sc-363781 or mouse testis extract: sc-2405.

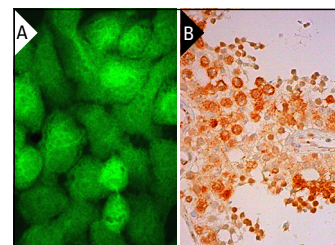
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



DAZL (E-6): sc-390929. Western blot analysis of DAZL expression in human testis (A) and mouse testis (B) tissue extracts.



DAZL (E-6): sc-390929. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts (B).

SELECT PRODUCT CITATIONS

- Williams, P.A., et al. 2016. Phosphorylation of the RNA-binding protein DAZL by MAPKAP kinase 2 regulates spermatogenesis. *Mol. Biol. Cell* 27: 2341-2350.
- Murase, Y., et al. 2020. Long-term expansion with germline potential of human primordial germ cell-like cells *in vitro*. *EMBO J.* 39: e104929.
- Mizuta, K., et al. 2022. *Ex vivo* reconstitution of fetal oocyte development in humans and cynomolgus monkeys. *EMBO J.* 41: e110815.
- Murase, Y., et al. 2024. *In vitro* reconstitution of epigenetic reprogramming in the human germ line. *Nature* 631: 170-178.

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 for detailed protocols and support products.

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