BACKGROUND

Spermatogenesis represents the intricate developmental process of mitotic and meiotic cell divisions that ultimately leads to the production of haploid spermatozoa. BOULE, a member of the human deleted in azoospermia (DAZ) family, functions as a key conserved switch that regulates the progression of germ cells through meiosis in man. BOULE is an RNA-binding protein that regulates the expression of twine, a Cdc25 phosphatase, which promotes progression through meiosis. BOULE is expressed not only in the testis, but also in the nervous system, where it may play a role in neural communication. Mutations in the BOULE gene are associated with male infertility, and the relative proportions of the three BOULE isoforms (B1, B2 and B3) may function as predictive markers for meiotic efficiency.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: BOLL (human) mapping to 2q33.1; Boll (mouse) mapping to 1 C1.2.

SOURCE

BOULE (B-2) is a mouse monoclonal antibody raised against amino acids 111-199 mapping within an internal region of BOULE of human origin.

PRODUCT

Each vial contains 200 µg IgG2b kappa lightchain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

BOULE (B-2) is recommended for detection of BOULE 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BOULE siRNA (h): sc-60280, BOULE siRNA (m): sc-60281, BOULE shRNA Plasmid (h): sc-60280-SH, BOULE shRNA Plasmid (m): sc-60281-SH, BOULE shRNA (h) Lentiviral Particles: sc-60280-V and BOULE shRNA (m) Lentiviral Particles: sc-60281-V.

Molecular Weight of BOULE: 31 kDa.

Positive Controls: SW-13 cell lysate: sc-24778, AS49 cell lysate: sc-2413 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS


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.