**BACKGROUND**

Synaptonemal complexes are meiosis-specific nuclear organelles that are involved in chromosome rearrangements, such as chromosome pairing and recombination during meiotic prophase. SCP-2 and SCP-3 are major components of the lateral elements of synaptonemal complexes. SCP-3 is a sister chromatid arm cohesin during mammalian meiosis I. It has a C-terminal coiled-coil domain that promotes homotypic interactions *in vitro*. SCP-3 is expressed in testicular meiotic prophase cells and primordial germ cells. SCP-2 and SCP-3 first appear in leptotene-stage spermatocytes and disappear in late meiotic cells.

**CHROMOSOMAL LOCATION**

Genetic locus: Sycp3 (mouse) mapping to 10 C1.

**SOURCE**

SCP-3 (D-1) is a mouse monoclonal antibody raised against amino acids 1-254 representing full length SCP-3 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. SCP-3 (D-1) is available conjugated to agarose (sc-74569 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74569 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74569 PE), fluorescein (sc-74569 FITC), Alexa Fluor® 488 (sc-74569 AF488), Alexa Fluor® 546 (sc-74569 AF546), Alexa Fluor® 594 (sc-74569 AF594) or Alexa Fluor® 647 (sc-74569 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74569 AF680) or Alexa Fluor® 790 (sc-74569 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

SCP-3 (D-1) is recommended for detection of SCP-3 of mouse and rat 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 SCP-3 siRNA (m): sc-37646, SCP-3 shRNA Plasmid (m): sc-37646-SH and SCP-3 shRNA (m) Lentiviral Particles: sc-37646-V.

Molecular Weight of SCP-3 isoforms: 30/33 kDa.

Positive Controls: rat testis extract: sc-2400, mouse embryo extract: sc-364239 or mouse testis extract: sc-2405.

**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.

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.