# SANTA CRUZ BIOTECHNOLOGY, INC.

# SYCE2 (S-13): sc-240935



# BACKGROUND

SYCE2 (synaptonemal complex central element protein 2), also known as CESC1 (central element synaptonemal complex protein 1), is a 218 amino acid protein and component of the transverse central element of synaptonemal complexes (SC). The SC is a tripartite structure that links homologous chromosomes during prophase I. SYCE2 is responsible for synaptonemal complex recombination, assembly and stabilization. Localized to nucleus, SYCE2 associates with chromatin and has been found to colocalize with SYCE1 in the central elements. SYCE2 is highly expressed in testis but is also found at lower levels in a variety of other tissues. The gene encoding SYCE2 maps to human chromosome 19p13.2 and mouse chromosome 8 C3.

#### REFERENCES

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- 6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611487. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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#### CHROMOSOMAL LOCATION

Genetic locus: SYCE2 (human) mapping to 19p13.2; Syce2 (mouse) mapping to 8 C3.

#### SOURCE

SYCE2 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SYCE2 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240935 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

SYCE2 (S-13) is recommended for detection of SYCE2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with SYCE1.

Suitable for use as control antibody for SYCE2 siRNA (h): sc-106961, SYCE2 siRNA (m): sc-153968, SYCE2 shRNA Plasmid (h): sc-106961-SH, SYCE2 shRNA Plasmid (m): sc-153968-SH, SYCE2 shRNA (h) Lentiviral Particles: sc-106961-V and SYCE2 shRNA (m) Lentiviral Particles: sc-153968-V.

Molecular Weight of SYCE2: 25 kDa.

Positive Controls: human liver extract: sc-363766.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.





SYCE2 (S-13): sc-240935. Western blot analysis of SYCE2 expression in human liver tissue extract.

#### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.