

Sgs1 (yC-17): sc-11995

BACKGROUND

Yeast origin of replication complex (Orc)1 and Orc2 (also designated Rrr1 or Sir5) bind to autonomously replicating sequences (ARS) and serve as an initiator proteins for DNA replication. The minichromosome maintenance (Mcm) proteins bind to chromatin and activate the ORC-ARS complex. Cdc6, involved in limiting DNA replication to once per cell cycle, binds to the ORC and is essential for the assembly of the Mcm proteins. The transcription factor Abf1 (also designated Obf1 or Baf1) also binds to the ARS and plays a role in gene silencing as well as in DNA replication. Replication factor C (Rfc)1–5 are required to load the replication clamp proliferating cell nuclear antigen onto primed DNA. Sag1-related sequence 2 (Srs2) is a DNA helicase involved in the maintenance of genome integrity and is required for the Rad1-dependent removal of long 3' tails. Sgs1 is a homologue of the human Bloom's syndrome and Werner's syndrome genes and interacts both physically and genetically with topoisomerase III. Myosin-like protein (Mlp)1 and 2 are nuclear envelope associated proteins that form nuclear pore-attached intranuclear filaments. Dpb11, an essential BRCT repeat protein, is required for chromosomal DNA replication and the S-phase checkpoint.

REFERENCES

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SOURCE

Sgs1 (yC-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Sgs1 of *Saccharomyces cerevisiae* 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-11995 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sgs1 (yC-17) is recommended for detection of Sgs1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

SELECT PRODUCT CITATIONS

- Liberi, G., et al. 2005. Rad51-dependent DNA structures accumulate at damaged replication forks in Sgs1 mutants defective in the yeast ortholog of BLM RecQ helicase. *Genes Dev.* 19: 339-350.

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 or our catalog for detailed protocols and support products.