



Orc2 (SB46): sc-56738

BACKGROUND

Orc1 and Orc2 (also designated RRR1 or SIR5) are two of the six subunits that compose the yeast origin of replication complex (Orc). This complex binds to autonomously replicating sequences (ARS) and serves as an initiator protein for DNA replication. The minichromosome maintenance (MCM) proteins also play an essential role in regulating DNA replication by binding to chromatin and activating 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.

REFERENCES

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2. Foss, M., McNally, F.J., Laurenson, P. and Rine, J. 1993. Origin recognition complex (ORC) in transcriptional silencing and DNA replication in *S. cerevisiae*. *Science* 262: 1838-1844.
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6. Donovan, S., Harwood, J., Drury, L.S. and Diffley, J.F.X. 1997. Cdc6p-dependent loading of Mcm proteins onto pre-replicative chromatin in budding yeast. *Proc. Natl. Acad. Sci. USA* 94: 5611-5616.

SOURCE

Orc2 (SB46) is a mouse monoclonal antibody raised against full length recombinant Orc2 of *Saccharomyces cerevisiae* origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Orc2 (SB46) is recommended for detection of ORC2 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Orc2: 70 kDa.

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 for detailed protocols and support products.