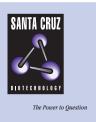
## SANTA CRUZ BIOTECHNOLOGY, INC.

# Rad57 (yN-20): sc-27183



#### BACKGROUND

The process of homologous recombination is a major DNA repair pathway that operates on DNA double-strand breaks to promote error-free repair. Central to the process of homologous recombination are the RAD52 group genes (RAD50, RAD51, RAD52, RAD54, RDH54/TID1, RAD55, RAD57, RAD59, MRE11, and XRS2), most of which were identified by their requirement for the repair of ionizing-radiation-induced DNA damage in *Saccharomyces cerevisiae*. The *Saccharomyces cerevisiae* RAD51, RAD55, and RAD57 genes, required for genetic recombination and DNA double-strand-break repair, encode proteins homologous to one another and to the Escherichia coli RecA protein (sung97). The RAD55 and RAD57 encoded products exist as a stable heterodimer.

#### REFERENCES

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- Gasior, S.L., et al. 1998. Rad52 associates with RPA and functions with rad55 and rad57 to assemble meiotic recombination complexes. Genes. Dev. 12: 2208-2221.
- 3. Glasunov, A.V., et al. 1999. The influence of mutation rad57-1 on the fidelity of DNA double-strand gap repair in *Saccharomyces cerevisiae*. Curr. Genet. 34: 430-437.
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- Rattray, A.J., et al. 2002. The roles of REV3 and RAD57 in double-strandbreak-repair-induced mutagenesis of *Saccharomyces cerevisiae*. Genetics. 162: 1063-1077.
- Fortin, G.S., et al. 2002. Mutations in yeast Rad51 that partially bypass the requirement for Rad55 and Rad57 in DNA repair by increasing the stability of Rad51-DNA complexes. Embo. J. 21: 3160-3170.

## SOURCE

Rad57 (yN-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Rad57 of *Saccharomyces cerevisiae* origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-27183 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

Rad57 (yN-20) is recommended for detection of Rad57 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 antigoat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2033 and Western Blotting Luminol Reagent: sc-2048.

#### **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.