SANTA CRUZ BIOTECHNOLOGY, INC.

# Ski2 (yS-17): sc-28472

## BACKGROUND

The processes of DNA replication, repair, recombination, transcription, RNA splicing, and translation all involve one or more helicase to unwind DNA or RNA, making them essential enzymes. The yeast RNA helicase Ski2 interacts with Ski3 and Ski8 to facilitate the normal degradation of mRNA and repression of translation of poly (A) minus RNA. Mutation in Ski2 or any of the interacting proteins in the complex results in viral sensitivity, a consequence which lead to the original discovery of this "superkiller" (SKI) gene family.

## REFERENCES


1. Widner W.R., et al. 1993. Evidence that the SKI antiviral system of *Saccharomyces cerevisiae* acts by blocking expression of viral mRNA. Mol. Cell. Biol.13: 4331-41.
2. Johnson A.W., et al. 1995. Synthetic lethality of sep1 (xrn1) ski2 and sep1 (xrn1) ski3 mutants of *Saccharomyces cerevisiae* is independent of killer virus and suggests a general role for these genes in translation control. Mol. Cell. Biol.15: 2719-27.
3. Dangel A.W., et al. 1995. Human helicase gene SKI2W in the HLA class III region exhibits striking structural similarities to the yeast antiviral gene SKI2 and to the human gene KIAA0052: emergence of a new gene family. Nucleic. Acids. Res. 23: 2120-2126.
4. Brown. J.T., et al. 2000. The yeast antiviral proteins Ski2p, Ski3p, and Ski8p exist as a complex *in vivo*. RNA. 6: 449-457.
5. van Hoof A., et al. 2000. Function of the ski4p (Csl4p) and Ski7p proteins in 3'-to-5' degradation of mRNA. Mol. Cell. Biol. 20: 8230-43.
6. Searfoss A.Mm, 2000. 3' poly(A) is dispensable for translation. Proc. Natl. Acad. Sci. USA. 97: 9133-7.
7. Searfoss A., et al. 2001. Linking the 3' poly(A) tail to the subunit joining step of translation initiation: relations of Pab1p, eukaryotic translation initiation factor 5b (Fun12p), and Ski2p-Slh1p. Mol. Cell. Biol. 21: 4900-8.
8. Mitchell P., et al. 2003. An NMD pathway in yeast involving accelerated deadenylation and exosome-mediated 3'->5' degradation. Mol. Cell.11: 1405-13.


## SOURCE

Ski2 (yS-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Antiviral protein Ski2 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-28472 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Ski2 (yS-17) is recommended for detection of Ski2 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.

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.