



# Sup35 (yG-19): sc-25917

## BACKGROUND

The *Saccharomyces cerevisiae* genes Sup35 and Sup45 control termination of translation in cytoplasmic ribosomes. The product of the Sup35 gene, the translation termination eRF3 factor, can be converted into a prion-like protein called Sup35. Sup35 in yeast forms fibrillar amyloid assemblies intrinsic to its prion function. The N-terminal region of Sup35 plays a central role in prion induction and propagation. The C-terminal region provides translation termination activity. The function of the highly charged, conformationally flexible middle region (M) is unknown. The Sup35 gene encodes a 76.5 kDa ribosome-associated protein (Sup35p) whose N-terminal domain defines its ability to undergo a heritable prion-like conformational switch, which is manifested as the cytoplasmically inherited [PSI<sup>+</sup>] determinant.

## REFERENCES

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3. Shumov, N.N., Volkov, K.V., and Mironova, L.N. 2000. Interaction of Atp17 gene with Sup45 and Sup35 genes in *Saccharomyces cerevisiae* yeast. *Genetika*. 36: 644-650.
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5. Balbirnie, M., Grothe, R., and Eisenberg, D.S. 2001. An amyloid-forming peptide from the yeast prion Sup35 reveals a dehydrated beta-sheet structure for amyloid. *Proc. Natl. Acad. Sci. USA*. 98: 2375-2380.
6. Liu, J.J., Sondheimer, N., and Lindquist, S.L. 2002. Changes in the middle region of Sup35 profoundly alter the nature of epigenetic inheritance for the yeast prion [PSI<sup>+</sup>]. *Proc. Natl. Acad. Sci. USA*. 99: 16446-16453.

## SOURCE

Sup35 (yG-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sup35 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-25917 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

Sup35 (yG-19) is recommended for detection of Sup35 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).

Molecular Weight of Sup35: 76.5 kDa.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.