



POLYCLONAL ANTIBODY

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Catalog No. BAM-63-154-EX

## Anti- Shugoshin 1 (S. pombe)

### BACKGROUND

**Shugoshin 1 (Sgo1)**, a meiosis-specific protein, protects centromeric Rec8 from degradation during first meiotic division (meiosis I) in fission yeast *Schizosaccharomyces pombe* (1, 2). This protein appears at late prophase of meiosis I and is degraded at anaphase I. Heterochromatin protein Swi6 associates directly with Sgo1. A point mutation of Sgo1 (V242E), which abolishes the interaction with Swi6, impairs the centromeric localization and function of Sgo1. The forced centromeric localization of Sgo1 restores proper meiotic chromosome segregation in *swi6* cells (3).

Using this antibody in Western blotting, the band of 37 kD was observed in wild type *S. pombe* MP111 extract (Fig 1).

Product type	Primary antibodies
Antigen	Recombinant Shugosin 1
Host	Rabbit
Clone	-
Isotype	-
Source	Serum
Form	Affinity purified anti-Shugosin 1 antibody with the recombinant Shugosin1. 1 mg/ml BSA, PBS (pH 7.2), 50% glycerol, filter-sterilized, azide free
Concentration	0.2 mg/ml
Volume	100 µl
Label	-
Specificity	Nup98 protein
Cross reactivity	ヒト、マウス、ラット
Storage	Shipped at 4℃. Upon arrival aliquot and store at -20℃ or -80℃(長期)
Other	Data Link UniProtKB/Swiss-Prot <a href="#">Q9P7A0</a> (SGO1_SCHPO)

**Application notes**

- 1) Western blotting (1,000 fold dilution)
- 2) Immunofluorescence staining (100 fold dilution)

Other applications have not been tested.  
Optimal dilutions/concentrations should be determined by the end user.

**References**

- 1) Watanabe Y and Kitajima TS "Shugoshin protects cohesion complexes at centromeres". *Philos Trans R Soc Lond B Biol Sci* 360: 515-521 (2005) Review PMID: [15897177](#)
- 2) Kitajima TS et al "The conserved kinetochore protein shugoshin protects centromeric cohesion during meiosis." *Nature* 427: 510-517 (2004) PMID: [14730319](#)
- 3) Yamagishi Y et al "Heterochromatin links to centromeric protection by recruiting shugoshin." *Nature* 455: 251-255 (2008) PMID: [18716626](#)

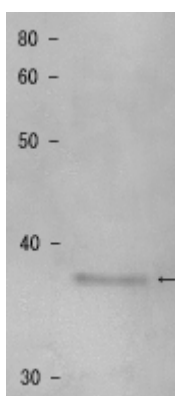


Fig.1 Detection of shugoshin 1 protein by Western blotting.  
Sample: Extract of MP111 cells.  
The antiserum was diluted 1000 fold before use.

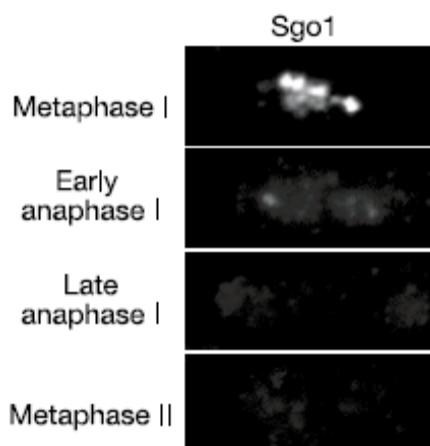


Fig.2 Immunostaining of Shugoshin 1 in synchronized diploid fission yeast.  
Sgo 1 protein was detected with this antibody and Alexa-488-conjugated anti-rabbit antibody.

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