

## Anti-Shugoshin 1 (*S. pombe*) antibody

# 63-154      100 µl

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 swi6delta cells (3).

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

### Application

Western blot 1,000 fold dilution

### Specification

2) Immunofluorescence staining (100 fold dilution)

Antibody: Recombinant Shugosin 1 was used as immunogen for rabbit and affinity purified with the recombinant Shugosin1.

Form: 0.2 mg/ml affinity purified anti-Shugosin 1 antibody in 1 mg/ml BSA, PBS (pH 7.2), 50% glycerol, filter-sterilized, azide free

Storage: -20°C

### Data Link

UniProtKB/Swiss-Prot [Q9P7A0](#) (SGO1\_SCHPO)

**References** This product was used in references 2 and 3.

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



Fig.1 Detection of shugoshin 1 protein by Western blot. 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.

