

**SSU72 (D3I2D) Rabbit mAb**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, eCLIP	H M R Mk	Endogenous	27	Rabbit IgG	#Q9NP77	29101

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
eCLIP

**Dilution**

1:1000  
1:50  
1:200

For more information about the RBP-eCLIP service please visit Eclipsebio.

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

SSU72 (D3I2D) Rabbit mAb recognizes endogenous levels of total SSU72 protein.

**Species predicted to react based on 100% sequence homology**

Hamster, Chicken, Bovine, Dog, Pig, Guinea Pig

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro93 of human SSU72 protein.

**Background**

SSU72 is a protein phosphatase originally identified through its interaction with TFIIB as a factor required for transcription and RNA processing (1,2). While SSU72 has been known as a phosphatase of the RNA polymerase II carboxy-terminal domain at Ser5 of the heptapeptide repeat, additional studies suggest a role for SSU72 as a phosphatase for Ser7 of the heptapeptide repeat as well (3-9). The activities of SSU72 are thought to play a critical role in coupling transcription with pre-mRNA 3' end processing (10-12). SSU72 is required for gene looping that connects the gene promoter with the terminator region, leading to proper initiation of transcription and enforcement of transcriptional directionality on promoters that may otherwise act as bidirectional promoters (13-14). In addition to a role in transcription, SSU72 acts as a cohesin binding protein that regulates cohesion between sister chromatid arms during mitosis or meiosis (15).

**Background References**

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11. Steinmetz, E.J. and Brow, D.A. (2003) *Mol Cell Biol* 23, 6339-49.
12. Xiang, K. et al. (2010) *Nature* 467, 729-33.
13. Wang, Y. et al. (2010) *Curr Biol* 20, 548-53.
14. Tan-Wong, S.M. et al. (2012) *Science* 338, 671-5.
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**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **eCLIP:** eCLIP

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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