



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# BUB3 (m): 293T Lysate: sc-126518

## BACKGROUND

BUB3 (budding uninhibited by benzimidazoles 3 homolog), also known as BUB3L or hBUB3, is a conserved component of the mitotic spindle assembly complex (MCC). It contains five WD repeat domains and forms cell cycle constitutive complexes with BUB1 and BUBR1. BUB3 is essential for the kinetochore localization of BUB1 and BUBR1. As a component of the MCC, BUB3 is involved in the essential spindle checkpoint pathway that operates during early embryogenesis. The spindle checkpoint pathway functions to postpone the initiation of anaphase until chromosomes are properly attached to the spindle. This acts to ensure accurate chromosome segregation. In addition, BUB3 plays a role in regulating the establishment of correct kinetochore-microtubule attachments. BUB3 is also thought to bind Tctex1L (or DYNLT3), a dynein light chain.

## REFERENCES

1. Roberts, B.T., et al. 1994. The *Saccharomyces cerevisiae* checkpoint gene BUB1 encodes a novel protein kinase. *Mol. Cell. Biol.* 14: 8282-8291.
2. Guenette, S., et al. 1995. Suppression of a conditional mutation in  $\alpha$ -Tubulin by overexpression of two checkpoint genes. *J. Cell Sci.* 108: 1195-1204.
3. Farr, K.A., et al. 1998. Bub1p kinase activates the *Saccharomyces cerevisiae* spindle assembly checkpoint. *Mol. Cell. Biol.* 18: 2738-2747.
4. Martinez-Exposito, M.J., et al. 1999. Retention of the BUB3 checkpoint protein on lagging chromosomes. *Proc. Natl. Acad. Sci. USA* 96: 8493-8498.
5. Ru, H.Y., et al. 2002. hBUB1 defects in leukemia and lymphoma cells. *Oncogene* 21: 4673-4679.
6. Warren, C.D., et al. 2002. Distinct chromosome segregation roles for spindle checkpoint proteins. *Mol. Biol. Cell* 13: 3029-3041.
7. Lo, K.W., et al. 2007. The DYNLT3 light chain directly links cytoplasmic dynein to a spindle checkpoint protein, Bub3. *J. Biol. Chem.* 282: 11205-11212.
8. Braunstein, I., et al. 2007. Inhibitory factors associated with anaphase-promoting complex/cylosome in mitotic checkpoint. *Proc. Natl. Acad. Sci. USA* 104: 4870-4875.
9. Logarinho, E., et al. 2008. The human spindle assembly checkpoint protein Bub3 is required for the establishment of efficient kinetochore-microtubule attachments. *Mol. Biol. Cell* 19: 1798-1813.

## CHROMOSOMAL LOCATION

Genetic locus: Bub3 (mouse) mapping to 7 F3.

## PRODUCT

BUB3 (m): 293T Lysate represents a lysate of mouse BUB3 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## RESEARCH USE

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

## APPLICATIONS

BUB3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BUB3 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

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