



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

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3. Farr, K.A., et al. 1998. Bub1p kinase activates the *Saccharomyces cerevisiae* spindle assembly checkpoint. *Mol. Cell. Biol.* 18: 2738-2747.
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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.
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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 μ g protein in 200 μ 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 μ 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 for detailed protocols and support products.