

# Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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#### SANTA CRUZ BIOTECHNOLOGY, INC.

## UBC2 (m): 293T Lysate: sc-124403



#### BACKGROUND

Ubiquitin is an abundant, highly conserved protein found in all eukaryotic cells either free or covalently attached to cellular proteins. The primary function of ubiquitin in mammalian systems is to clear abnormal, foreign and improperly folded proteins by targeting them for proteosome degradation. In *Saccharomyces cerevisiae*, ubiquitin-like proteins include Rub1, Ula1, Uba3, Smt3, Ubc2, Ubc12 and Ubc9. Rub1 shares 53% homology with ubiquitin and requires activation via Ula1, Uba3 and Ubc12 in order to conjugate to substrates directed to different proteolytic systems. Smt3, which is similar to mammalian SUMO-1, requires Ubc9 for conjugation to other proteins. Skp1 connects cell cycle regulators to the ubiquitin proteolysis machinery. Hrt1 is an essential subunit of Skp1p-cullin-F-box (SCF) complexes, which are necessary for the degradation of various regulatory proteins. Ubc13 forms a complex with Mms2 that is involved the error-free DNA postreplication repair (PRR) pathway.

#### REFERENCES

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- Ciechanover, A., et al. 1994. The ubiquitin-mediated proteolytic pathway: mechanisms of recognition of the proteolytic substrate and involvement in the degradation of native cellular proteins. FASEB J. 8: 182-191.
- Hochstrasser, M. 1995. Ubiquitin, proteasomes and the regulation of intracellular protein degradation. Curr. Opin. Cell Biol. 7: 215-223.
- Bai, C., et al. 1996. Skp1 connects cell cycle regulators to the ubiquitin proteolysis machinery through a novel motif, the F-box. Cell 86: 263-274.
- 5. Liakopoulos, D., et al. 1998. A novel protein modification pathway related to the ubiquitin system. EMBO J. 17: 2208-2214.
- Schwarz, S.E., et al. 1998. The ubiquitin-like proteins SMT3 and SUMO-1 are conjugated by the UBC9 E2 enzyme. Proc. Natl. Acad. Sci. USA 95: 560-564.
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- Raboy, B., et al. 1999. Heat-induced cell cycle arrest of *Saccharomyces cerevisiae*: involvement of the RAD6/UBC2 and WSC2 genes in its reversal. Mol. Microbiol. 32: 729-739.
- 9. Blondel, M., et al. 2000. Isolation and characterization of HRT1 using a genetic screen for mutants unable to degrade Gic2p in *Saccharomyces cerevisiae*. Genetics. 155: 1033-1044.

#### CHROMOSOMAL LOCATION

Genetic locus: Ube2a (mouse) mapping to X A3.2.

#### PRODUCT

UBC2 (m): 293T Lysate represents a lysate of mouse UBC2 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

UBC2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive UBC2 antibodies. Recommended use:  $10-20 \mu$  per lane.

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

UBC2 (2782C5): sc-81419 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse UBC2 expression in UBC2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### DATA





UBC2 (2782C5): sc-81419. Western blot analysis of UBC2 expression in non-transfected: sc-117752 (**A**) and mouse UBC2 transfected: sc-124403 (**B**) 293T whole cell lysates.

UBE2A/B (G-9): sc-365507. Western blot analysis of UBC2 expression in non-transfected: sc-117752 (**A**) and mouse UBC2 transfected: sc-124403 (**B**) 293T whole cell lysates.

#### **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.