

UBC2 (2782C5): sc-81419

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 proteasome 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 in the error-free DNA postreplication repair (PRR) pathway.

REFERENCES

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7. Gong, L. and Yeh, E.T. 1999. Identification of the activating and conjugating enzymes of the NEDD8 conjugation pathway. *J. Biol. Chem.* 274: 12036-12042.
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CHROMOSOMAL LOCATION

Genetic locus: UBE2A (human) mapping to Xq24; Ube2a (mouse) mapping to X A3.3.

RESEARCH USE

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

SOURCE

UBC2 (2782C5) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of UBC2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

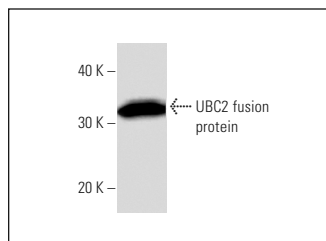
UBC2 (2782C5) is recommended for detection of UBC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for UBC2 siRNA (h): sc-41677, UBC2 siRNA (m): sc-41678, UBC2 shRNA Plasmid (h): sc-41677-SH, UBC2 shRNA Plasmid (m): sc-41678-SH, UBC2 shRNA (h) Lentiviral Particles: sc-41677-V and UBC2 shRNA (m) Lentiviral Particles: sc-41678-V.

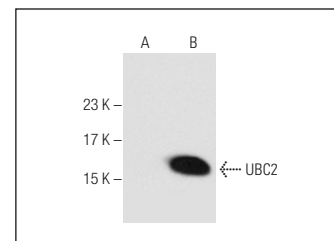
Molecular Weight of UBC2: 17 kDa.

Positive Controls: UBC2 (m): 293T Lysate: sc-124403.

DATA



UBC2 (2782C5): sc-81419. Western Blot analysis of human recombinant UBC2 fusion protein.



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.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.