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UBE2G2 (m): 293T Lysate: sc-124414

BACKGROUND

UBE2G2 (ubiquitin-conjugating enzyme E2 G2), also known as UBC7, is a 165 amino acid protein involved in ubiquitin-mediated protein degradation. Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). UBE2G2 is an E2 ubiquitin-conjugating enzyme that acts to catalyze the covalent attachment of ubiquitins to various proteins. Expressed throughout the body, UBE2G2 shares 100% sequence identity with its mouse counterpart and is thought to be involved in endoplasmic reticulum-associated degradation (ERAD). Two isoforms of UBE2G2 exist due to alternative splicing events.

REFERENCES

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5. Chen, B., Mariano, J., Tsai, Y.C., Chan, A.H., Cohen, M. and Weissman, A.M. 2006. The activity of a human endoplasmic reticulum-associated degradation E3, gp78, requires its Cue domain, RING finger, and an E2-binding site. *Proc. Natl. Acad. Sci. USA* 103: 341-346.
6. Arai, R., Yoshikawa, S., Murayama, K., Imai, Y., Takahashi, R., Shirouzu, M. and Yokoyama, S. 2006. Structure of human ubiquitin-conjugating enzyme E2 G2 (UBE2G2/UBC7). *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* 62: 330-334.
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CHROMOSOMAL LOCATION

Genetic locus: Ube2g2 (mouse) mapping to 10 C1.

PRODUCT

UBE2G2 (m): 293T Lysate represents a lysate of mouse UBE2G2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

UBE2G2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive UBE2G2 antibodies. Recommended use: 10-20 µl per lane.

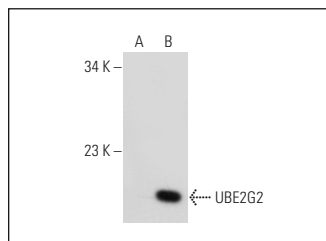
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

UBE2G2 (2E6): sc-100613 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse UBE2G2 expression in UBE2G2 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® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



UBE2G2 (2E6): sc-100613. Western blot analysis of UBE2G2 expression in non-transfected: sc-117752 (A) and mouse UBE2G2 transfected: sc-124414 (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.

RESEARCH USE

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

PROTOCOLS

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