SANTA CRUZ BIOTECHNOLOGY, INC.

UBE2L3 (m2): 293T Lysate: sc-124408

BACKGROUND

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. The first step requires the ATP-dependent activation of the Ub C-terminus and the assembly of multi-Ub chains by the Ub-activating enzyme known as the E1 component. The Ub chain is then conjugated to the Ub-conjugating enzyme (E2) to generate an intermediate Ub-E2 complex. The Ub-ligase (E3) then catalyzes the transfer of Ub from E2 to the appropriate protein substrate. UBE2E1 and UBE2L3, also designated UBCH6 and UBCH7 respectively in human, are E2 conjugating enzymes that interact with various proteins. Specifically, UBE2E1 interacts with the tumor suppressor protein TSSC5. UBE2L3 has been shown to mediate c-Fos degradation, NFκB maturation, human papilloma virus-mediated p53 and Myc protein degradation.

REFERENCES

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2. Ardley, H.C., Moynihan, T.P., Markham, A.F. and Robinson, P.A. 2000. Promoter analysis of the human ubiquitin-conjugating enzyme including UBE2L3 which encodes UbcH7. Biochim. Biophys. Acta 1491: 57-64.
3. Ardley, H.C., Tan, N.G., Rose, S.A., Markham, A.F. and Robinson, P.A. 2001. Features of the Parkin/ariadne-like ubiquitin ligase, its interaction with the ubiquitin-conjugating enzyme, Ubch7. J. Biol. Chem. 276: 19640-19647.
4. Passmore, L.A. and Barford, D. 2004. Getting into position: the catalytic mechanisms of protein ubiquitylation. Biochem. J. 379: 513-525.
5. Kuhlbrodt, K., Mouysset, J. and Hoppe, T. 2005. Orchestra for assembly and fate of polyubiquitin chains. Essays Biochem. 41: 1-14.
6. Takeuchi, T., Iwahara, S., Saeki, Y., Sasajima, H. and Yokosawa, H. 2005. Link between the ubiquitin conjugation system and the ISG15 conjugation system: ISG15 conjugation to the UbcH6 ubiquitin E2 enzyme. J. Biochem. 138: 711-719.
7. Yamada, H.Y. and Gorbsky, G.J. 2006. Tumor suppressor candidate TSSC5 is regulated by UBCH6 and a novel ubiquitin ligase RING105. Oncogene 25: 1330-1339.

CHROMOSOMAL LOCATION

Genetic locus: Ube2l3 (mouse) mapping to 16 A3.

PRODUCT

UBE2L3 (m2): 293T Lysate represents a lysate of mouse UBE2L3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

UBE2L3 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive UBE2L3 antibodies. Recommended use: 10-20 µl per lane.

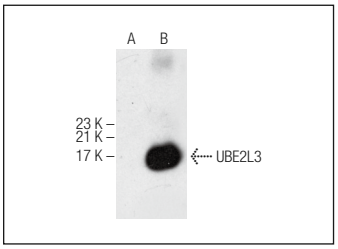
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

UBE2L3 (B-11): sc-390032 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse UBE2L3 expression in UBE2L3 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



UBE2L3 (B-11): sc-390032. Western blot analysis of UBE2L3 expression in non-transfected: sc-117752 (**A**) and mouse UBE2L3 transfected: sc-124408 (**B**) 293T whole cell lysates.

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.