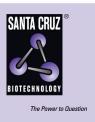
## SANTA CRUZ BIOTECHNOLOGY, INC.

# UBE2L3 (H-62): sc-292775



## 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, NF $\kappa$ B maturation, human papilloma virus-mediated p53 and Myc protein degradation.

## REFERENCES

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- 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.
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- Kuhlbrodt, K., Mouysset, J. and Hoppe, T. 2005. Orchestra for assembly and fate of polyubiquitin chains. Essays Biochem. 41: 1-14.
- Takeuchi, T., Iwahara, S., Saeki, Y., Sasajima, H. and Yokosawa, H. 2006. Link between the Ubiquitin Conjugation system and t ISG15 conjugation to the UbcH6 Ubiquitin E2 enzyme. J. Biochem. 138: 711-719.
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## CHROMOSOMAL LOCATION

Genetic locus: UBE2L3 (human) mapping to 22q11.21; Ube2l3 (mouse) mapping to 16 A3.

#### SOURCE

UBE2L3 (H-62) is a rabbit polyclonal antibody raised against amino acids 1-62 mapping at the N-terminus of UBE2L3 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### APPLICATIONS

UBE2L3 (H-62) is recommended for detection of UBE2L3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

UBE2L3 (H-62) is also recommended for detection of UBE2L3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for UBE2L3 siRNA (h): sc-61746, UBE2L3 siRNA (m): sc-61747, UBE2L3 shRNA Plasmid (h): sc-61746-SH, UBE2L3 shRNA Plasmid (m): sc-61747-SH, UBE2L3 shRNA (h) Lentiviral Particles: sc-61746-V and UBE2L3 shRNA (m) Lentiviral Particles: sc-61747-V.

Molecular Weight of UBE2L3: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.