SANTA CRUZ BIOTECHNOLOGY, INC.

# URE-B1 (H-300): sc-134821

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*The Power to Question*

## 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. A wide range of enzymes facilitate in the proteolytic Ub pathway, including upstream regulatory element binding protein 1 (URE-B1), which functions as a suppressor element in the regulation of dynorphin and macrophage inflammatory protein 1 β gene transcription. URE-B1 is also a negative regulator of p53 during the colorectal carcinoma progression through the ubiquitination pathway mediated by its HECT domain.

## REFERENCES


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2. Gu, J., et al. 1995. URE-B1, a tyrosine phosphorylated nuclear protein, inhibits p53 transactivation. Oncogene 11: 2175-2178.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 191170. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Solomon, S.S., et al. 2005. Proteome of H-411E (liver) cells exposed to Insulin and tumor necrosis factor α: analysis of proteins involved in Insulin resistance. J. Lab. Clin. Med. 145: 275-283.
5. Yoon, S.Y. et al. 2005. Over-expression of human UREB1 in colorectal cancer: HECT domain of human UREB1 inhibits the activity of tumor suppressor p53 protein. Biochem. Biophys. Res. Commun. 326: 7-17.
6. Chen, D., et al. 2006. ARF-BP1 as a potential thera-peutic target. British J. Cancer 94: 1555-1558.
7. Ndisang, D., et al. 2006. Differential regulation of different human papilloma virus variants by the POU family transcription factor Brn-3a. Oncogene 25: 51-60.


## CHROMOSOMAL LOCATION

Genetic locus: HUWE1 (human) mapping to Xp11.22; Huwe1 (mouse) mapping to X F3.

## SOURCE

URE-B1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of URE-B1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

URE-B1 (H-300) is recommended for detection of isoforms 1-3 of URE-B1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

URE-B1 (H-300) is also recommended for detection of isoforms 1-3 of URE-B1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for URE-B1 siRNA (h): sc-61758, URE-B1 siRNA (m): sc-61759, URE-B1 shRNA Plasmid (h): sc-61758-SH, URE-B1 shRNA Plasmid (m): sc-61759-SH, URE-B1 shRNA (h) Lentiviral Particles: sc-61758-V and URE-B1 shRNA (m) Lentiviral Particles: sc-61759-V.

Molecular Weight of URE-B1: 482.7 kDa.

## 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ 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.