# SANTA CRUZ BIOTECHNOLOGY, INC.

# Uev1A (L-14): sc-15269



## BACKGROUND

Uev1A, also designated Uev1, UBE2V1 (for ubiquitin-conjugating enzyme E2 variant 1) and CROC1, shows sequence similarity to other ubiquitin-conjugating enzymes, but lacks the conserved cysteine residue critical for their catalytic activity. Therefore, Uev1A does not have ubiquitin-conjugating activity *in vitro*. However, constitutive expression of exogenous Uev1A in colon carcinoma cells inhibits their capacity to differentiate upon confluence. Studies on recombinant Uev1A show that it localizes to the nucleus, excluding the nucleolar regions. Uev1A functions with TRAF6, a RING domain protein, to catalyze the synthesis of unique polyubiquitin chains linked through Lysine 63 of ubiquitin. The gene encoding Uev1A maps to human chromosome 20q13.13.

## REFERENCES

- Rothofsky, M.L. and Lin, S.L. 1997. CROC1 encodes a protein which mediates transcriptional activation of the human Fos promoter. Gene 195: 141-149.
- Sancho, E., Vila, M.R., Sanchez-Pulido, L., Lozano, J.J., Paciucci, R., Nadal, M., Fox, M., Harvey, C., Bercovich, B., Loukili, N., Ciechanover, A., Lin, S., Sans, F., Estivill, X., Valencia, A. and Thomson, T.M. 1998. Role of Uev-1, an inactive variant of the E2 ubiquitin-conjugating enzymes, in *in vitro* differentiation and cell cycle behavior of HT-29-M6 intestinal mucosecretory cells. Mol. Cell. Biol. 18: 576-589.
- Hofmann, R.M. and Pickart, C.M. 1999. Noncanonical MMS2-encoded ubiquitin-conjugating enzyme functions in assembly of novel polyubiquitin chains for DNA repair. Cell 96: 645-653.
- Deng, L., Wang, C., Spencer, E., Yang, L., Braun, A., You, J., Slaughter, C., Pickart, C. and Chen, Z.J. 2000. Activation of the IκB complex by TRAF6 requires a dimeric ubiquitin-conjugatng enzyme complex and a unique polyubiquitin chain. Cell 103: 351-361.
- 5. LocusLink Report (LocusID: 602995). http://www.ncbi.nlm.nih.gov/Locuslink.

# CHROMOSOMAL LOCATION

Genetic locus: UBE2V1 (human) mapping to 20q13.13; Ube2v1 (mouse) mapping to 2 H3.

#### SOURCE

Uev1A (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Uev1A 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.

Blocking peptide available for competition studies, sc-15269 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

Uev1A (L-14) is recommended for detection of Uev1A isoform 5 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).

Suitable for use as control antibody for Uev1A siRNA (h): sc-38606, Uev1A siRNA (m): sc-45988, Uev1A shRNA Plasmid (h): sc-38606-SH, Uev1A shRNA Plasmid (m): sc-45988-SH, Uev1A shRNA (h) Lentiviral Particles: sc-38606-V and Uev1A shRNA (m) Lentiviral Particles: sc-45988-V.

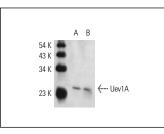
Molecular Weight of Uev1A: 25 kDa.

Positive Controls: mouse liver extract: sc-2256 or mouse brain extract: sc-2253.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



Uev1A (L-14): sc-15269. Western blot analysis of Uev1A expression in mouse liver (A) and mouse brain (B) tissue extracts.

#### **RESEARCH USE**

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



Try Uev1A (H-6): sc-390047 or Uev1A/Mms2 (G-6): sc-514420, our highly recommended monoclonal alternatives to Uev1A (L-14).