SANTA CRUZ BIOTECHNOLOGY, INC.

Uev1A (H-6): sc-390047

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Rothofsky, M.L. and Lin, S.L. 1997. CROC-1 encodes a protein which mediates transcriptional activation of the human FOS promoter. Gene 195: 141-149.
2. Sancho, E., et al. 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.
3. 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.
4. Deng, L., et al. 2000. Activation of the IκB complex by TRAF6 requres a dimeric ubiquitin-conjugatng enzyme complex and a unique polyubiquitin chain. Cell 103: 351-361.

CHROMOSOMAL LOCATION

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

SOURCE

Uev1A (H-6) is a mouse monoclonal antibody raised against a peptide mapping near the C-terminus of Uev1A of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Uev1A (H-6) is available conjugated to agarose (sc-390047 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390047 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390047 PE), fluorescein (sc-390047 FITC), Alexa Fluor® 488 (sc-390047 AF488), Alexa Fluor® 546 (sc-390047 AF546), Alexa Fluor® 594 (sc-390047 AF594) or Alexa Fluor® 647 (sc-390047 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390047 AF680) or Alexa Fluor® 790 (sc-390047 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390047 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Uev1A (H-6) is recommended for detection of Uev1A isoforms 1, 2, 3, 4 and 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

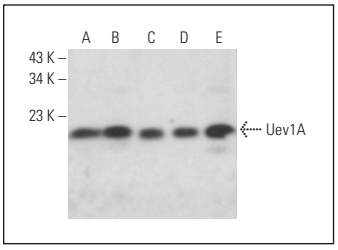
Uev1A (H-6) is also recommended for detection of Uev1A isoforms 1, 2, 3, 4 and 5 in additional species, including equine, canine, bovine, porcine and avian.

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.

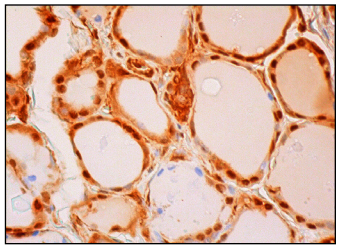
Molecular Weight of Uev1A: 26 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, U-87 MG cell lysate: sc-2411 or KNRK whole cell lysate: sc-2214.

DATA



Uev1A (H-6): sc-390047. Western blot analysis of Uev1A expression in CCRF-CEM (**A**), SK-BR-3 (**B**), U-87 MG (**C**), M1 (**D**) and KNRK (**E**) whole cell lysates.



Uev1A (H-6): sc-390047. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Mulas, F., et al. 2021. The deubiquitinase OTUB1 augments NFκB-dependent immune responses in dendritic cells in infection and inflammation by stabilizing UBC13. Cell. Mol. Immunol. 18: 1512-1527.

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 for detailed protocols and support products.