SANTA CRUZ BIOTECHNOLOGY, INC.

UEV3 (E-14): sc-169749

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The Power to Question

BACKGROUND

UEV3 (Ubiquitin-conjugating enzyme E2 variant 3), also known as EV and lactate/malate dehydrogenase domain-containing protein, is a 471 amino acid protein that contains one UEV (ubiquitin E2 variant) domain, which typically interacts with ubiquitin. UEV3 is thought to be a paralogue of tsg 101, a protein that exerts regulatory effects on E2 activity in cellular ubiquitination processes. With amino-terminal homology to the catalytic domain of ubiquitin-conjugating enzymes, it is thought that UEV3 may function as a negative regulator of polyubiquitination. UEV3 is expressed in various colon carcinoma cell lines, carcinomas of the uterine cervix and peripheral blood leukocytes as well as normal colon and cervical epithelium.

REFERENCES

1. Sancho, E., Vilá, M.R., Sánchez-Pulido, L., Lozano, J.J., Paciucci, R., Nadal, M., Fox, M., Harvey, C., Bercovich, B., Loukili, N., Ciechanover, A., Lin, S.L., Sanz, 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.
2. Kloor, M., Bork, P., Duwe, A., Klaes, R., von Knebel Doeberitz, M. and Ridder, R. 2002. Identification and characterization of UEV3, a human cDNA with similarities to inactive E2 ubiquitin-conjugating enzymes. Biochim. Biophys. Acta 1579: 219-224.
3. Sundquist, W.I., Schubert, H.L., Kelly, B.N., Hill, G.C., Holton, J.M. and Hill, C.P. 2004. Ubiquitin recognition by the human TSG101 protein. Mol. Cell 13: 783-789.
4. Andersen, K.M., Hofmann, K. and Hartmann-Petersen, R. 2005. Ubiquitin-binding proteins: similar, but different. Essays Biochem. 41: 49-67.
5. Palencia, A., Martinez, J.C., Mateo, P.L., Luque, I. and Camara-Artigas, A. 2006. Structure of human TSG101 UEV domain. Acta Crystallogr. D Biol. Crystallogr. 62: 458-464.
6. Hurley, J.H., Lee, S. and Prag, G. 2006. Ubiquitin-binding domains. Biochem. J. 399: 361-372.
7. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610985. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: UEVLD (human) mapping to 11p15.1; Uevld (mouse) mapping to 7 B4.

SOURCE

UEV3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UEV3 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-169749 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UEV3 (E-14) is recommended for detection of UEV3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

UEV3 (E-14) is also recommended for detection of UEV3 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for UEV3 siRNA (h): sc-96539, UEV3 siRNA (m): sc-154889, UEV3 shRNA Plasmid (h): sc-96539-SH, UEV3 shRNA Plasmid (m): sc-154889-SH, UEV3 shRNA (h) Lentiviral Particles: sc-96539-V and UEV3 shRNA (m) Lentiviral Particles: sc-154889-V.

Molecular Weight of UEV3: 42 kDa.

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) 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.

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.