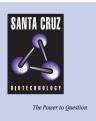
SANTA CRUZ BIOTECHNOLOGY, INC.

UBTD1 (C-16): sc-130287



BACKGROUND

Ubiquitin (Ub) is among the most phylogenetically conserved proteins known. The primary function of this small, 76 amino acid protein is to clear abnormal, foreign and improperly folded proteins by targeting them for degradation by the 26S proteosome. Many ubiquitin-like proteins function as post-translational protein modifiers, such as members of the SUMO protein family, however some ubiquitin-like proteins regulate protein-protein interactions and cell cycle events, thereby functioning outside of the traditional ubiquitination pathway. UBTD1 (ubiquitin domain-containing protein 1) is a 227 amino acid protein containing one C-terminal ubiquitin-like (UBQ) domain. With only one UBQ domain, it is likely that UBTD1 is capable of conjugation to other proteins and mostly functions in similar ways to ubiquitin in the modification of post-translational proteins.

REFERENCES

- Hochstrasser, M. 1996. Ubiquitin-dependent protein degradation. Annu. Rev. Genet. 30: 405-439.
- Ciechanover, A. and Schwartz, A.L. 1998. The ubiquitin-proteasome pathway: the complexity and myriad functions of proteins death. Proc. Natl. Acad. Sci. USA 95: 2727-2730.
- Conklin, D., et al. 2000. Molecular cloning, chromosome mapping and characterization of UBQLN3 a testis-specific gene that contains an ubiquitin-like domain. Gene 249: 91-98.
- 4. Su, H.L. and Li, S.S. 2002. Molecular features of human ubiquitin-like SUMO genes and their encoded proteins. Gene 296: 65-73.
- Glickman, M.H. and Ciechanover, A. 2002. The ubiquitin-proteasome proteolytic pathway: destruction for the sake of construction. Physiol. Rev. 82: 373-428.
- Hjerpe, R. and Rodríguez, M.S. 2008. Efficient approaches for characterizing ubiquitinated proteins. Biochem. Soc. Trans. 36: 823-827.
- Edelmann, M.J. and Kessler, B.M. 2008. Ubiquitin and ubiquitin-like specific proteases targeted by infectious pathogens: Emerging patterns and molecular principles. Biochim. Biophys. Acta E-published.

CHROMOSOMAL LOCATION

Genetic locus: UBTD1 (human) mapping to 10q24.1.

SOURCE

UBTD1 (C-16) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of UBTD1 of human origin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

UBTD1 (C-16) is recommended for detection of UBTD1 of 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), 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).

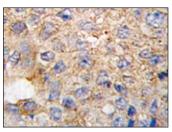
Suitable for use as control antibody for UBTD1 siRNA (h): sc-90329, UBTD1 shRNA Plasmid (h): sc-90329-SH and UBTD1 shRNA (h) Lentiviral Particles: sc-90329-V.

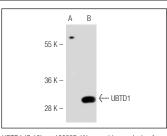
Molecular Weight of UBTD1: 26 kDa.

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) Immunopre-cipitation: 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. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





UBTD1 (C-16): sc-130287. Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic staining.

UBTD1 (C-16): sc-130287. Western blot analysis of UBTD1 expression in 293 showing nontransfected (A) and transfected (B) whole cell lysates.

RESEARCH USE

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