# SANTA CRUZ BIOTECHNOLOGY, INC.

# UBXD1 (L-16): sc-244563



# BACKGROUND

UBX domain-containing protein 1 (UBXD1), also known as UBX domain-containing protein 6 (UBXD6), is a 441 amino acid cofactor of the ATPase complex known as valosin containing protein (VCP). VCP plays a critical role in a multitude of cellular pathways, including membrane fusion, protein folding, protein degradation, DNA repair and ubiquitin-dependent activation of certain membrane-bound transcription factors. These diverse cellular functions appear to be made possible by the association of VCP with various cofactors, one of which includes UBXD1. Localized to the cytoplasm, nucleus and centrosome, with enhanced expression in testis, UBXD1 contains two domains: a PUG domain, which allows interaction with VCP, and an UBX domain. Two named isoforms of UBXD1 exist as a result of alternative splicing events.

## REFERENCES

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- Allen, M.D., et al. 2006. The PUB domain functions as a p97 binding module in human peptide N-glycanase. J. Biol. Chem. 281: 25502-25508.
- Zhao, G., et al. 2007. Studies on peptide: N-glycanase-p97 interaction suggest that p97 phosphorylation modulates endoplasmic reticulum-associated degradation. Proc. Natl. Acad. Sci. USA 104: 8785-8790.
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- Madsen, L., et al. 2008. Ubxd1 is a novel co-factor of the human p97 ATPase. Int. J. Biochem. Cell Biol. 40: 2927-2942.

# CHROMOSOMAL LOCATION

Genetic locus: UBXN6 (human) mapping to 19p13.3; Ubxn6 (mouse) mapping to 17 D.

### SOURCE

UBXD1 (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of UBXD1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244563 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **RESEARCH USE**

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

#### APPLICATIONS

UBXD1 (L-16) is recommended for detection of UBXD1 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); non cross-reactive with other UBXD family members.

UBXD1 (L-16) is also recommended for detection of UBXD1 in additional species, including bovine.

Suitable for use as control antibody for UBXD1 siRNA (h): sc-97428, UBXD1 siRNA (m): sc-154879, UBXD1 shRNA Plasmid (h): sc-97428-SH, UBXD1 shRNA Plasmid (m): sc-154879-SH, UBXD1 shRNA (h) Lentiviral Particles: sc-97428-V and UBXD1 shRNA (m) Lentiviral Particles: sc-154879-V.

Molecular Weight of UBXD1: 50 kDa.

Positive Controls: PC-3 cell lysate: sc-2220 or human skeletal muscle extract: sc-363776.

## **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



UBXD1 (L-16): sc-244563. Western blot analysis of UBXD1 expression in PC-3 whole cell lysate ( $\bf{A}$ ) and human skeletal muscle tissue extract ( $\bf{B}$ ).

#### **STORAGE**

Store at 4° C, \*\*DO 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.