# SANTA CRUZ BIOTECHNOLOGY, INC.

# UBL3 (N-14): sc-84651



# BACKGROUND

Ubiquitin is a 77 amino acid protein that targets proteins for degradation by the 26S Proteasome. Ubiquitin-like proteins are not directly involved in protein degradation, but appear to have many mechanistic similarities with the ubiquitin pathway. UBL3 (ubiquitin-like protein 3), also known as membraneanchored ubiquitin-fold protein (MUB) or PNSC1, is a 117 amino acid membrane protein belonging to the ubiquitin-like family. Highly conserved between species, UBL3 contains two potential N-glycosylation sites, a potential protein kinase C phosphorylation site and a potential C-terminal prenylation site. The gene encoding UBL3 is localized to chromosome 13q12.3.

## REFERENCES

- Olvera, J. and Wool, I.G. 1993. The carboxyl extension of a ubiquitin-like protein is rat ribosomal protein S30. J. Biol. Chem. 268: 17967-17974.
- Hodges, M., Tissot, C. and Freemont, P.S. 1998. Protein regulation: tag wrestling with relatives of ubiquitin. Curr. Biol. 8: 749-752.
- Chadwick, B.P., Kidd, T., Sgouros, J., Ish-Horowicz, D. and Frischauf, A.M. 1999. Cloning, mapping and expression of UBL3, a novel ubiquitin-like gene. Gene 233: 189-195.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 604711. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Leung, A., Geng, F., Daulny, A., Collins, G., Guzzardo, P. and Tansey, W.P. 2008. Transcriptional control and the ubiquitin-proteasome system. Ernst Schering Found. Symp. Proc. 1: 75-97.
- Segref, A. and Hoppe, T. 2009. Think locally: control of ubiquitin-dependent protein degradation in neurons. EMBO Rep. 10: 44-50.
- 7. Okumura, F. 2009. Regulation of immune response by ubiquitin-like molecule ISG15. Seikagaku 81: 223-232.

# CHROMOSOMAL LOCATION

Genetic locus: UBL3 (human) mapping to 13q12.3; Ubl3 (mouse) mapping to 5 G3.

#### SOURCE

UBL3 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of UBL3 of human origin.

# PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84651 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

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

## APPLICATIONS

UBL3 (N-14) is recommended for detection of UBL3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 UBL3 siRNA (h): sc-76794, UBL3 siRNA (m): sc-154863, UBL3 shRNA Plasmid (h): sc-76794-SH, UBL3 shRNA Plasmid (m): sc-154863-SH, UBL3 shRNA (h) Lentiviral Particles: sc-76794-V and UBL3 shRNA (m) Lentiviral Particles: sc-154863-V.

Molecular Weight of UBL3: 13 kDa.

Positive Controls: UBL3 (m): 293T Lysate: sc-124425 or mouse pancreas extract: sc-364244.

### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA





UBL3 (N-14): sc-84651. Western blot analysis of UBL3 expression in non-transfected: sc-117752 (**A**) and mouse UBL3 transfected: sc-124425 (**B**) 293T whole cell lysates.

UBL3 (N-14): sc-84651. Western blot analysis of UBL3 expression in mouse pancreas tissue extract.

## **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.