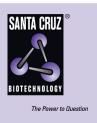
# SANTA CRUZ BIOTECHNOLOGY, INC.

# UBQLNL (Q-17): sc-249206



# BACKGROUND

Ubiquitin is a 77 amino acid protein that targets proteins for degradation by the 26S proteasome. Ubiquitin-like (UBL) proteins are not directly involved in protein degradation, but appear to have many mechanistic similarities with the ubiquitin pathway. UBQLNL (ubiquilin-like protein) is a 475 amino acid protein that contains a ubiquitin-like domain. There are two different isoforms of UBQLNL that are produced as a result of alternative splicing events. UBOLNL shares significant sequence similarity with PLIC-1, also known as ubiquilin-1, a protein that associates with proteasomes and two different E3 ubiquitin ligase enzymes. These associations suggest that PLIC-1 may link ubiquitination machinery and proteasomes for *in vivo* protein degradation. PLIC-1 is a cytoplasmic protein that associates with the DAN gene product and may play a critical role in cell cycle regulation. It also interacts with two proteins linked to early-onset Alzheimer's disease, presenilin-1 and presenilin-2, and promotes accumulation of the presenilin proteins. PLIC-1 is abundant in neurons of healthy brain, neurofibrillary tangles in Alzheimer'sdiseased brain and Lewy bodies of Parkinson-diseased brain.

# REFERENCES

- 1. Ozaki, T., et al. 1997. Identification of a new cellular protein that can interact specifically with DAN. DNA Cell Biol. 16: 985-991.
- Wu, A.L., et al. 1999. Ubiquitin-related proteins regulate interaction of vimentin intermediate filaments with the plasma membrane. Mol. Cell 4: 619-625.
- Kaye, F.J., et al. 2000. A family of ubiquitin-like proteins binds the ATPase domain of Hsp70-like Stch. FEBS Lett. 467: 348-355.
- Mah, A.L., et al. 2000. Identification of ubiquilin, a novel presenilin interactor that increases presenilin protein accumulation. J. Cell Biol. 151: 847-862.
- Hanaoka, E., et al. 2000. Molecular cloning and expression analysis of the human DA41 gene and its mapping to chromosome 9q21.2-q21.3. J. Hum. Genet. 45: 188-191.
- Kleijnen, M.F., et al. 2000. The hPLIC proteins may provide a link between the ubiquitination machinery and the proteasome. Mol. Cell 6: 409-419.
- Hayes, M.G., et al. 2007. Identification of type 2 diabetes genes in Mexican Americans through genome-wide association studies. Diabetes 56: 3033-3044.

#### CHROMOSOMAL LOCATION

Genetic locus: UbqInI (mouse) mapping to 7 E3.

#### SOURCE

UBQLNL (Q-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of UBQLNL of mouse origin.

#### **STORAGE**

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

# PRODUCT

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

Blocking peptide available for competition studies, sc-249206 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

UBQLNL (Q-17) is recommended for detection of UBQLNL of mouse and rat 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); non cross-reactive with UBQLN3.

Suitable for use as control antibody for UBQLNL siRNA (m): sc-154873, UBQLNL shRNA Plasmid (m): sc-154873-SH and UBQLNL shRNA (m) Lentiviral Particles: sc-154873-V.

Molecular Weight of UBQLNL isoform 1/2: 52/29 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) Immunofluo-rescence: 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.