# SANTA CRUZ BIOTECHNOLOGY, INC.

# WWC2 (C-16): sc-244666



BACKGROUND

WWC2 (WW and C2 domain containing 2), also known as BOMB (BH-3-only member B), is a 1,192 amino acid protein belonging to the WWC family. Containing one C2 domain and two WW domains, WWC2 exists as seven alternatively spliced isoforms and is encoded by a gene located on human chromosome 4q35.1. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease. Chromosome 4 reportedly contains the largest gene deserts (regions of the genome with no protein encoding genes) and has one of the two lowest recombination frequencies of the human chromosomes.

#### REFERENCES

- Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
- 2. Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. Curr. Top. Dev. Biol. 75: 25-71.
- Chandler, R.J., et al. 2007. Metabolic phenotype of methylmalonic acidemia in mice and humans: the role of skeletal muscle. BMC Med. Genet. 8: 64.
- Cunningham, M.L., et al. 2007. Syndromic craniosynostosis: from history to hydrogen bonds. Orthod. Craniofac. Res. 10: 67-81.
- 5. de Frutos, C.A., et al. 2007. Snail1 is a transcriptional effector of FGFR-3 signaling during chondrogenesis and achondroplasias. Dev. Cell 13: 872-883.
- Ruiz-Perez, V.L., et al. 2007. EVC is a positive mediator of lhh-regulated bone growth that localises at the base of chondrocyte cilia. Development 134: 2903-2912.
- 7. Stack, E.C., et al. 2007. Neuroprotective effects of synaptic modulation in Huntington's disease R6/2 mice. J. Neurosci. 27: 12908-12915.

#### CHROMOSOMAL LOCATION

Genetic locus: WWC2 (human) mapping to 4q35.1; Wwc2 (mouse) mapping to 8 B1.1.

#### SOURCE

WWC2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of WWC2 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-244666 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

WWC2 (C-16) is recommended for detection of WWC2 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); non cross-reactive with WWC3.

WWC2 (C-16) is also recommended for detection of WWC2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for WWC2 siRNA (h): sc-89074, WWC2 siRNA (m): sc-155367, WWC2 shRNA Plasmid (h): sc-89074-SH, WWC2 shRNA Plasmid (m): sc-155367-SH, WWC2 shRNA (h) Lentiviral Particles: sc-89074-V and WWC2 shRNA (m) Lentiviral Particles: sc-155367-V.

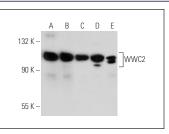
Molecular Weight of WWC2: 134 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (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 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



WWC2 (C-16): sc-244666. Western blot analysis of WWC2 expression in HeLa (A), K-562 (B), Jurkat (C), Hep G2 (D) and NIH/3T3 (E) whole cell lysates.

#### **STORAGE**

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

## **RESEARCH USE**

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