# SANTA CRUZ BIOTECHNOLOGY, INC.

# WSCD2 (N-12): sc-132498



# BACKGROUND

WSC domain-containing protein 2 (WSCD2) is a 565 amino acid, single-pass membrane protein that contains 2 WSC domains. The WSC domain is named after the yeast WSC1-WSC4 (cell wall integrity and stress response components 1-4) proteins, which each contain a WSC domain, and is a putative carbohydrate binding domain that spans about 90 amino acids. Containing eight conserved cysteine residues, which are predicted to form disulfide bridges, WSC domains are often found with other domains, such as LDLreceptor class A, PKD and C-type lectin. Two isoforms of WSCD2 exist as a result of alternative splicing events.

#### REFERENCES

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- 2. Lodder, A.L., Lee, T.K. and Ballester, R. 1999. Characterization of the Wsc1 protein, a putative receptor in the stress response of Saccharomyces cerevisiae. Genetics 152: 1487-1499.
- 3. Ketela, T., Green, R. and Bussey, H. 1999. Saccharomyces cerevisiae mid2p is a potential cell wall stress sensor and upstream activator of the PKC1-MPK1 cell integrity pathway. J. Bacteriol. 181: 3330-3340.
- 4. Nakamura, T., Aoki, S., Kitajima, K., Takahashi, T., Matsumoto, K. and Nakamura, T. 2001. Molecular cloning and characterization of Kremen, a novel kringle-containing transmembrane protein. Biochim. Biophys. Acta 1518: 63-72.
- 5. Zu, T., Verna, J. and Ballester, R. 2001. Mutations in WSC genes for putative stress receptors result in sensitivity to multiple stress conditions and impairment of RIm1-dependent gene expression in Saccharomyces cerevisiae. Mol. Genet. Genomics 266: 142-155.
- 6. Vay, H.A., Philip, B. and Levin, D.E. 2004. Mutational analysis of the cytoplasmic domain of the Wsc1 cell wall stress sensor. Microbiology 150: 3281-3288.
- 7. Serrano, R., Martín, H., Casamayor, A. and Ariño, J. 2006. Signaling alkaline pH stress in the yeast Saccharomyces cerevisiae through the Wsc1 cell surface sensor and the SIt2 MAPK pathway. J. Biol. Chem. 281: 39785-39795.

### CHROMOSOMAL LOCATION

Genetic locus: WSCD2 (human) mapping to 12q23.3; Wscd2 (mouse) mapping to 5 F.

#### SOURCE

WSCD2 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WSCD2 of human origin.

#### **RESEARCH USE**

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

# PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132498 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

WSCD2 (N-12) is recommended for detection of WSCD2 isoforms 1 and 2 of mouse and human 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 WSCD1.

WSCD2 (N-12) is also recommended for detection of WSCD2 isoforms 1 and 2 in additional species, including canine.

Suitable for use as control antibody for WSCD2 siRNA (h): sc-96013, WSCD2 siRNA (m): sc-155364, WSCD2 shRNA Plasmid (h): sc-96013-SH, WSCD2 shRNA Plasmid (m): sc-155364-SH, WSCD2 shRNA (h) Lentiviral Particles: sc-96013-V and WSCD2 shRNA (m) Lentiviral Particles: sc-155364-V.

Molecular Weight of WSCD2: 64 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

# **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) 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.

# **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.