



## WSCD2 (E-20): sc-102158

### BACKGROUND

WSC domain-containing protein 2 (WSCD2) is a 565 amino acid, single-pass membrane protein that contains two 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 LDL-receptor class A, PKD and C-type lectin. Two isoforms of WSCD2 exist as a result of alternative splicing events.

### REFERENCES

- Verna, J., Lodder, A., Lee, K., Vagts, A. and Ballester, R. 1997. A family of genes required for maintenance of cell wall integrity and for the stress response in *Saccharomyces cerevisiae*. Proc. Natl. Acad. Sci. USA 94: 13804-13809.
- 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.
- 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.
- 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.
- 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 Rlm1-dependent gene expression in *Saccharomyces cerevisiae*. Mol. Genet. Genomics 266: 142-155.
- 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.
- 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.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

### SOURCE

WSCD2 (E-20) is a purified rabbit polyclonal antibody raised against WSCD2 of human origin.

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

### APPLICATIONS

WSCD2 (E-20) is recommended for detection of WSCD2 of human and dog 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

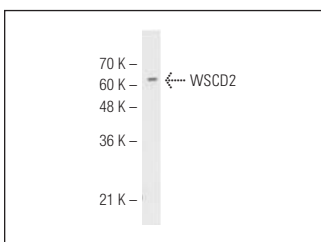
Molecular Weight of WSCD2: 64 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

### DATA



WSCD2 (E-20): sc-102158. Western blot analysis of WSCD2 expression in Hep G2 whole cell lysate.

### RESEARCH USE

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