

WSCD1 (V-16): sc-249351

BACKGROUND

WSC domain-containing protein 1 (WSCD1) is a 575 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 LDL-receptor class A, PKD and C-type lectin. WSCD1 is encoded by a gene located on human chromosome 17p13.2.

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.

CHROMOSOMAL LOCATION

Genetic locus: WSCD1 (human) mapping to 17p13.2; Wscd1 (mouse) mapping to 11 B4.

SOURCE

WSCD1 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WSCD1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-249351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WSCD1 (V-16) is recommended for detection of WSCD1 of mouse, rat and human 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)], 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 WSCD2.

WSCD1 (V-16) is also recommended for detection of WSCD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WSCD1 siRNA (h): sc-93995, WSCD1 siRNA (m): sc-155363, WSCD1 shRNA Plasmid (h): sc-93995-SH, WSCD1 shRNA Plasmid (m): sc-155363-SH, WSCD1 shRNA (h) Lentiviral Particles: sc-93995-V and WSCD1 shRNA (m) Lentiviral Particles: sc-155363-V.

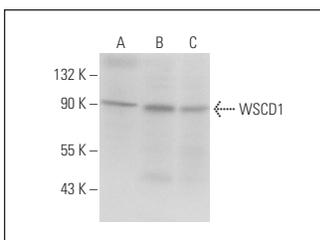
Molecular Weight of WSCD1: 66 kDa.

Positive Controls: Mouse stomach extract: sc-394628, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

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) 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™ Mounting Medium: sc-24941.

DATA



WSCD1 (V-16): sc-249351. Western blot analysis of WSCD1 expression in mouse stomach tissue extract (A) and HeLa (B) and K-562 (C) 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.