

# WSCD1 (H-5): sc-515191

## 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

1. Verna, J., et al. 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.
2. Lodder, A.L., et al. 1999. Characterization of the Wsc1 protein, a putative receptor in the stress response of *Saccharomyces cerevisiae*. *Genetics* 152: 1487-1499.
3. Ketela, T., et al. 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., et al. 2001. Molecular cloning and characterization of Kremen, a novel kringle-containing transmembrane protein. *Biochim. Biophys. Acta* 1518: 63-72.

## CHROMOSOMAL LOCATION

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

## SOURCE

WSCD1 (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 486-507 within an internal region of WSCD1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

WSCD1 (H-5) is available conjugated to agarose (sc-515191 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515191 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515191 PE), fluorescein (sc-515191 FITC), Alexa Fluor® 488 (sc-515191 AF488), Alexa Fluor® 546 (sc-515191 AF546), Alexa Fluor® 594 (sc-515191 AF594) or Alexa Fluor® 647 (sc-515191 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515191 AF680) or Alexa Fluor® 790 (sc-515191 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515191 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

WSCD1 (H-5) is recommended for detection of WSCD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

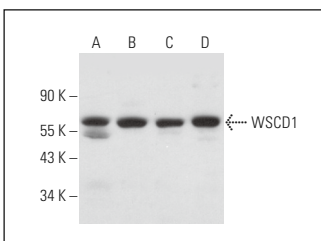
Positive Controls: Hs 181 Tes whole cell lysate: sc-364779, NTERA-2 cl.D1 whole cell lysate: sc-364181 or PC-3 cell lysate: sc-2220.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



WSCD1 (H-5): sc-515191. Western blot analysis of WSCD1 expression in HeLa (A), PC-3 (B), NTERA-2 cl.D1 (C) and Hs 181 Tes (D) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.