



# Candida albicans (CDA): sc-51811

## BACKGROUND

*Candida albicans* is a diploid sexual fungus that resides in the human mouth and gastrointestinal tract. An overgrowth of this fungus in the human body results in candidiasis, an opportunistic infection of the skin, gastrointestinal tract, oral cavity and esophagus, vagina and vascular system of humans. Candidiasis does not pose a threat to healthy individuals but is a cause of mortality for immunocompromised individuals, such as patients with HIV. The virulence factors which allow *C. albicans* to adapt to hostile conditions and to infect its host include morphogenesis, secreted aspartyl proteases and phospholipases, host recognition biomolecules and phenotypic switching. The major antigen of *C. albicans* is mannan, a polysaccharide that, along with glucan and chitin, comprises the cell surface of the fungus.

## REFERENCES

1. Oppenheim, F.G., Xu, T., McMillian, F.M., Levitz, S.M., Diamond, R.D., Offner, G.D. and Troxler, R.F. 1988. Histatins, a novel family of histidine-rich proteins in human parotid secretion. Isolation, characterization, primary structure, and fungistatic effects on *Candida albicans*. *J. Biol. Chem.* 263: 7472-7477.
2. Calderone, R.A. and Braun, P.C. 1991. Adherence and receptor relationships of *Candida albicans*. *Microbiol. Rev.* 55: 1-20.
3. Soll, D.R. 1992. High-frequency switching in *Candida albicans*. *Clin. Microbiol. Rev.* 5: 183-203.
4. Cutler, J.E. 1992. Putative virulence factors of *Candida albicans*. *Annu. Rev. Microbiol.* 45: 187-218.
5. Fonzi, W.A. and Irwin, M.Y. 1993. Isogenic strain construction and gene mapping in *Candida albicans*. *Genetics* 134: 717-728.
6. Pujol, C., Reynes, J., Renaud, F., Raymond, M., Tibayrenc, M., Ayala, F.J., Janbon, F., Mallie, M. and Bastide, J.M. 1993. The yeast *Candida albicans* has a clonal mode of reproduction in a population of infected human immunodeficiency virus-positive patients. *Proc. Natl. Acad. Sci. USA* 90: 9456-9459.
7. Ibrahim, A.S., Mirbod, F., Filler, S.G., Banno, Y., Cole, G.T., Kitajima, Y., Edwards, J.E., Nozawa, Y. and Ghannoum, M.A. 1995. Evidence implicating phospholipase as a virulence factor of *Candida albicans*. *Infect. Immun.* 63: 1993-1998.
8. Brown, A.J. and Gow, N.A. 1999. Regulatory networks controlling *Candida albicans* morphogenesis. *Trends Microbiol.* 7: 333-338.
9. Calderone, R.A. and Fonzi, W.A. 2001. Virulence factors of *Candida albicans*. *Trends Microbiol.* 9: 327-335.

## SOURCE

*Candida albicans* (CDA) is a mouse monoclonal antibody raised against *Candida albicans*.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

*Candida albicans* (CDA) is recommended for detection of *Candida albicans* by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

## SELECT PRODUCT CITATIONS

1. Chiriaco, M.S., Primiceri, E., De Feo, F., Montanaro, A., Monteduro, A.G., Tinelli, A., Megha, M., Carati, D. and Maruccio, G. 2016. Simultaneous detection of multiple lower genital tract pathogens by an impedimetric immunochip. *Biosens. Bioelectron.* 79: 9-14.

## 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.