



# SERION ELISA *antigen* Candida

SERION ELISA *antigen* Candida is a quantitative and qualitative immunoassay for the detection of Candida antigen in human serum. The assay is recommended for the detection of invasive and systemic candidosis.



Culture of *Candida albicans* on a SABHI Agar-plate (Source: Centers for Disease Control and Prevention, United States Department of Health and Human Services).

## Pathogen

*Candida albicans* is a ubiquitous yeast responsible primarily for superficial infections, but may also cause more serious systemic diseases. *Candida* excrete multiple enzymes that enable the facultative pathogenic microorganism to penetrate blood vessels and mucosa barriers.

## Disease

In general human *Candida ssp.* infection is passed on by smear contamination. Following infestation of the mucosa, invasive mycosis spreads out from the gastro-intestinal tract. The attachment of *Candida ssp.* to various mucosal surfaces is facilitated by adherence proteins and other structures of the outer cytomembrane.



## Diagnosis

The diagnosis of candida infections on the basis of serological methods is not straight forward: On the one hand transient yeast colonisation may induce an antibody response, on the other hand systemic Candida mycosis at immunosuppressed patients may only lead to low antibody activities. Such situations make critical interpretation of serological findings necessary. In addition, systemic candida infections may not cause typical symptoms.

Currently no single technique in isolation allows for a definitive serological diagnosis of Candida. Surveillance of risk patients and therapy control requires the use of a variety of methods including serology and antigen detection.

## Validation of

### SERION ELISA *antigen* Candida

The SERION ELISA *antigen* Candida was evaluated by the analysis of 63 serum samples from blood donors and from patients, who showed signs of candidosis during intensive care treatment. The results were compared to the results of a commercially available assay of a leading European manufacturer. Sera classified as borderline were not included in the calculation.

SERION ELISA <i>antigen</i>	Sensitivity	Specificity
Candida	80,0 %	93,4 %

## Precision

The intra- and interserial precisions were determined by the analysis of serum samples of different reactivities.

### SERION ELISA *antigen* Candida

Sample	Mean value OD	Intraassay CV (%) (n=20)	Mean value OD	Interassay CV (%) (n=10)
positive	0,992	6,3	1,036	8,2
positive	1,609	4,8	1,772	6,4
strong positive	2,665	4,8	2,787	5,0

In another internal study, cross reactivity with the Candida species *Candida (Pichia) guilliermondii*, *Candida glabrata*, *Candida (Issatchenkia) parapsilosis*, *Candida orientalis* und *Candida tropicalis* with the SERION ELISA *antigen* Candida were determined in order to guarantee a comprehensive Candida diagnostic.

Furthermore we tested the cross reactivity with hydroxyethylstarch which is used in plasma expanders for treatment of circulatory failure (hypovolaemic, haemorrhagic and septic shock). Due to a similarity to mannan it is important to know if cross reactivity could occur. Using the SERION ELISA *antigen* Candida assay no cross reaction was measurable for hydroxyethylstarch.

## Order Information

**SERION ELISA *antigen* Candida**

**SERION ELISA *classic* Candida albicans IgA**

**SERION ELISA *classic* Candida albicans IgG**

**SERION ELISA *classic* Candida albicans IgM**

**Reference serum Candida albicans IgA**

**Reference serum Candida albicans IgG**

**Reference serum Candida albicans IgM**

**Order Nr.: A 117**

**Order Nr.: ESR 117 A**

**Order Nr.: ESR 117 G**

**Order Nr.: ESR 117 M**

**Order Nr.: BR 117 A**

**Order Nr.: BR 117 G**

**Order Nr.: BR 117 M**

Please visit our website [www.virion-serion.com](http://www.virion-serion.com) for more information on our SERION ELISA *classic* and *antigen* products.

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