



Candida albicans



Candida albicans is a diploid asexual fungus (a form of yeast) and a causal agent of opportunistic oral and vaginal infections in humans. It is among the gut flora, the many organisms that live in the human mouth and gastrointestinal tract. *Candida* infections must therefore be considered endogenous.

Under normal circumstances, *Candida albicans* lives in 80% of the human population with no harmful effects, although overgrowth results in candidiasis. Candidiasis usually develops in persons whose immunity is compromised (such as HIV-positive patients), most frequently in the presence of disturbed cellular immunity. Diabetes, pregnancy, progesterone therapy and intensive antibiotic treatment that eliminate the normal bacterial flora are among the predisposing factors. The mucosa is affected most often, less frequently the outer skin and inner organs (deep candidiasis). In oral cavity infections, a white, stubbornly adherent coating is seen on the cheek mucosa and tongue. Skin is mainly infected on the moist, warm parts of the body. Pathomorphologically similar to oral soor is vulvovaginitis.

Candida can spread to cause secondary infections of the lungs, kidneys and other organs. Chronic mucocutaneous candidiasis is observed as a sequel to damage of the cellular immune system.

Systemic fungal infections have emerged as important causes of morbidity and mortality in immunocompromised patients. In addition, hospital-related infections in patients not previously considered at risk (e.g. patients on an intensive care unit) have become a cause of major health concern.

Species	Symptoms	Complications	Mechanism of infection
<i>Candida albicans</i>	Depend on the place of infection Oral cavity infections lead to a white coating on the cheek mucosa and tongue. Bronchitis causes cough.	Sepsis	Endogenous: Candidiasis usually develop because of an increased spread of fungi of the normal mucosa. Exogenous: transmission among human beings. Newborn children can be infected during birth by unsterile medical devices.

Infections may be diagnosed by:

- Microscopy: Determination of fungi in dermal smears
- Serology: Determination of specific antibodies based on the ELISA-technique

NovaLisa™ *Candida albicans* IgA/IgG/IgM ELISA:

The NovaLisa™ *Candida albicans* IgA/IgG/IgM ELISA is intended for the qualitative determination of IgA-/IgG-/IgM-class antibodies against *Candida albicans* in serum or plasma (citrate).

Antigens:

Purified antigens from *Candida albicans*

Specific performance characteristics:

	Interassay			Intraassay			Sensitivity %	Specificity %
	n	Mean	CV %	n	Mean	CV %		
IgA	33	17.8	9.0	10	1.0	6.6	>95	>95
IgG	20	18	5.1	8	1.0	4.3	93	>95
IgM	38	20.8	5.1	6	1.2	4.5	>95	>95

Order information:

ELISA	Number of determinations	Product number
Candida albicans IgA	96	CANA0060
Candida albicans IgG	96	CANG0060
Candida albicans IgM	96	CANM0060