

CLINICAL SPECIFICATIONS

BLASTOCYSTIS HOMINIS

Pathogen Type:

Blastocystis hominis (*B. hominis*) is a unicellular protozoan found in the large intestine of humans. It is commonly acquired through ingestion of contaminated water and food.

Associated With:

Irritable bowels^{1,2}
 Intestinal parasitosis³

Known Cross-Reactions:

Clinical Significance:

The detection of antibodies to *B. hominis* indicates the patient has increased risk of irritable bowel disorders and subsequent fibromyalgia.⁴ Because *B. hominis* is found in both asymptomatic and symptomatic individuals,⁵ it is still unclear whether *B. hominis* is a truly pathogenic organism, or a commensal, or perhaps, is capable of being a pathogen in specific circumstances. Thus, its pathogenesis in humans has been a point of argument among many scientists. Studies reporting its association with irritable bowel syndrome, diarrhea, and other clinical symptoms in both immunocompetent and immunocompromised patients are increasing.⁶ Infection has been noted in immunosuppressed patients with AIDS, poorly managed diabetes, leukemia, and patients on immunosuppressive therapies. Reviewed in 7 This presence of *B. hominis*-specific immunoglobulins in the serum samples suggests that the immune action against this parasite is not limited to the intestinal level. The high titer of IgG in serum as detected in patients suffering from *B. hominis* infection may be due to the inflammatory response associated with the pathologic effects of *B. hominis* infection.

This array tests for IgG immune reactivity associated with *Blastocystis hominis*. This is not a measurement of acute infection. Equivocal or out-of-range results indicate IgG antibody reactivity to the tested antigen. We tested 288 blood donor sera against *B. hominis* antigens at optimal dilution, 11% of these donors were IgG reactive.

References:

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- Cole, et al. Migraine, fibromyalgia, and depression among people with IBS: a prevalence study. *BMC Gastroenterol*, 2006; 6:26.
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