



## Sensitivity and Specificity Determinations with Isoelectric Focusing Fractions of *Blastomyces dermatitidis* for Antibody Detection in Serum Specimens from Infected Dogs

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### ABSTRACT

Blastomycosis and histoplasmosis manifest as lung and systemic fungal infections in mammals caused by *Histoplasma capsulatum*, and *Blastomyces dermatitidis*. These infections exhibit cross reactivity of antibodies which makes a correct diagnosis potentially elusive. The purpose of this study was to gain an understanding of which isoelectric focusing fractions (Rotofor™) of *B. dermatitidis* were reactive or cross reactive with serum specimens from dogs infected with *B. dermatitidis*, *H. capsulatum*, and *Cryptococcus neoformans*. Three serum specimens from dogs that were infected with *B. dermatitidis*, two dogs infected with *H. capsulatum*, and one dog infected with *C. neoformans* were assayed against the 20 *B. dermatitidis* Rotofor™ fractions. Reactivity was determined using the indirect enzyme linked immunoassay (ELISA). Reactivity with *B. dermatitidis* was found predominantly in the protein fractions 1 - 6, and cross reactivity with *H. capsulatum*, and *C. neoformans* sera was found within the *B. dermatitidis* protein fractions 15 - 19.

### KEYWORDS

Isoelectric Focusing; ELISA; Blastomycosis; Lysate Antigen; Antibody Detection

### Cite this paper

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