Lab Dept: Urine/Stool

Test Name: HISTOPLASMA AND BLASTOMYCES ANTIGEN,

**EIA, URINE** 

**General Information** 

Lab Order Codes: UHBAG

Synonyms: Histoplasma capsulatum or Blastomyces dermatitidis Ag, Urine

**CPT Codes:** 87449 - Infectious agent antigen detection by immunoassay technique,

(eg, enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]), qualitative or semiquantitative; multiple-step method, not otherwise specified, each

organism

**Test Includes:** Histoplasma/Blastomyces antigen result reported in ng/mL.

Logistics

**Test Indications:** Diagnosing Histoplasma capsulatum or Blastomyces dermatitidis

infection without differentiation between the organisms

Monitor antigen levels following initiation of antifungal treatment.

This test aids in the diagnosis of histoplasmosis or blastomycosis alongside other routine methods, including culture, molecular testing,

and serology.

**Lab Testing Sections:** Urine/Stool - Sendouts

**Referred to:** Mayo Clinic Laboratories (Test code: UHBAG)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1-3 days, test set up daily

**Special Instructions:** N/A

Specimen

**Specimen Type:** Urine, random

Container: Urine Cup or other leak-proof container

**Draw Volume:** Submit entire random urine specimen

**Processed Volume:** 3 mL (Minimum: 2.5 mL) urine from a random urine collection (no

preservative)

**Collection:** Random or catheterized urine collection

Special Processing: Lab Staff: Do NOT centrifuge. Aliquot urine specimen to plastic aliquot

vial. Store and send refrigerated. Forward promptly. Do not use

preservatives for collection.

Specimen stable refrigerated (preferred) for 14 days, frozen for 28 days,

ambient for 7 days.

Patient Preparation: None

Sample Rejection: Specimens other than urine; mislabeled or unlabeled specimens; gross

hemolysis or turbidity

Interpretive

**Reference Range:** Histoplasma/Blastomyces Antigen Result:

Not Detected

Histoplasma/Blastomyces Antigen Value:

Not Detected: 0.0 ng/mL Detected: <1.3 ng/mL Detected: 1.3-20.0 ng/mL Detected: >20.0 ng/mL

Reference values apply to all ages.

See reference lab's test catalog for further interpretation.

Critical Values: Detected

**Limitations:** Due to significant cross-reactivity between galactomannan antigens

from *Blastomyces* and *Histoplasma*, this assay does not differentiate between these two dimorphic fungal agents. To differentiate, consider

fungal culture, molecular testing, or serology testing.

Positive results should be correlated with other clinical and laboratory

findings (e.g., culture, serology).

Low-level positive antigen levels may persist following resolution of

infection and completion of appropriate treatment regimen.

Sensitivity of this assay to detect antigen from species other

than Blastomyces dermatitidis or Histoplasma capsulatum is unknown.

False-positive results may occur less frequently with other dimorphic

agents (e.g., Coccidioides).

Methodology: Enzyme Immunoassay (EIA)

References: Mayo Clinic Laboratories July 2024

**Updates:** 7/16/2024: Initial entry. Replaces and combines obsolete UHIST and

BAG.