### Lab Dept: Serology

### Test Name: HEPATITIS Bs ANTIGEN (HBsAg) NEUTRALIZATION (CONFIRMATION)

#### General Information

**Lab Order Codes:** HBNE  
**Synonyms:** Hepatitis B Surface Antigen Neutralization  
**CPT Codes:** 87341 – HbsAg neutralization (confirmation)  
**Test Includes:** Neutralization of Hepatitis B Surface Antigen. This test is not orderable separately. It will automatically be performed as a reflex on all positive HbsAg tests.

#### Logistics

**Test Indications:** Orderable only by laboratory staff based on positive result.  
**Lab Testing Sections:** Serology - Sendouts  
**Referred to:** Mayo Medical Laboratories (MMLTest: HBGNT)  
**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:** Whole blood  
**Container:** Additional specimen is not required. [See Hepatitis Bs Antigen (HbsAg) Reflex](#).  
**Draw Volume:** Additional specimen is not required. [See Hepatitis Bs Antigen (HbsAg) Reflex](#).  
**Processed Volume:** Additional specimen is not required. [See Hepatitis Bs Antigen (HbsAg) Reflex](#).
| **Collection:**  | N/A |
| **Special Processing:**  | N/A |
| **Patient Preparation:**  | None |
| **Sample Rejection:**  | N/A |

**Interpretive**

| **Reference Range:**  | Negative (reported as positive or negative) |
| **Critical Values:**  | N/A |
| **Limitations:**  | N/A |

**Methodology:**
The HbsAg confirmatory assay uses the principle of specific antibody neutralization to confirm the presence of HbsAg. The confirmatory reagent (human antibody to HbsAg) is incubated with the specimen in solution. If HbsAg is present in the specimen it will be bound by the confirmatory reagent. The neutralized HbsAg is subsequently blocked from binding to the antibody-coated bead. This results in a reduction of signal when compared to the non-neutralized specimen in which the negative control is used in place of the confirmatory reagent. By definition, a specimen is confirmed as positive if the reduction in signal of the neutralized specimen is at least 50% and the non-neutralized control generates a signal greater than or equal to the assay cut-off. (Package insert: Antibody to Hepatitis B Surface Antigen [Human] – HBsAg Confirmatory Assay. Abbott Laboratories, Diagnostics Division, Abbott Park, IL)

**References:**
Mayo Medical Laboratories

**Updates:**
4/6/2004: Test moved from Memorial Blood Center of Minneapolis to Mayo Medical Laboratories.