Lab Dept: Serology

Test Name: INNER EAR ANTIGEN

General Information

Lab Order Codes: IEA

Synonyms: Anti-68kD (hsp-70) antibodies; 68kD (hsp-70); Heat Shock Protein 70;

Anti-cochlear antibody

CPT Codes: 84182 – Protein; Western blot, with interpretation and report, blood or

other body fluid, immunological probe for band identification

Test Includes: 68kD (hsp-70) reported as positive or negative.

Logistics

Test Indications: Sensorineural hearing loss (SNHL), commonly referred to as nerve

deafness, may be caused by genetic factors, acquired factors (ie, infections) or can be immunologically mediated. In the majority of cases, no cause of SNHL is apparent. Such cases are referred to as idiopathic SNHL. A subgroup of idiopathic SNHL cases is treatable with immunosuppressive therapy. The laboratory studies used to identify these cases should include serum antibody tests to 68kD (hsp-70) inner ear antigen. Twenty-two percent of patients with bilateral rapidly progressive SNHL have antibodes that react with the 68kD antigen. Anti-68kD(hsp-70) antibodies also occur in approximately 60% of patients with bilateral Meniere's disease, 35% of patients with unilateral Meniere's disease and 37% of patients with contralateral delayed

endolymphatic hydrops.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: F68KD) forward to Immco

Diagnostics, Inc (Immco Test: 340)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 3 to 18 days; performed twice per week

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 9 mL (Minimum: 6 mL) blood

Processed Volume: 3 mL (Minimum: 2 mL) serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove aliquot and store and ship at

frozen temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

Interpretive

Reference Range: Qualitative test: Positive or Negative

Antibodies to inner ear antigen (68kD) occur in approximately 70% of patients with autoimmune hearing loss. The antibody tests to this 68kD antigen parallel with disease activity. In addition, a majority of patients positive for antibodies to 68kD are responsive to corticosteroid

treatment. (Hirose et al: The Laryngoscope 109: 1769 – 1999)

Critical Values: N/A

Limitations: N/A

Methodology: Line Blot

References: Immco Diagnostics December 2017

Mayo Medical Laboratories Web Page December 2017

Updates: 12/9/2013: Updated method and reference range. Method previously

listed as Western Blot.

12/20/2017: Collection container update