
Lab Dept: Other Fluids

Test Name: BETA-2 TRANSFERRIN, BODY FLUID

General Information

Lab Order Codes: B2T

Synonyms: B2 Transferrin; Cerebrospinal fluid leakage; Otorhea, Spinal fluid; Transferrin, Spinal fluid

CPT Codes: 86335 – Immunoelectrophoresis, other fluids

Test Includes: Positive or negative result for beta-2 transferrin

Logistics

Test Indications: Beta-2 transferrin is a spinal fluid-specific variant of transferrin and can be used as an endogenous marker of spinal fluid leakage. Useful for the detection of spinal fluid in other body fluids.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo Test: BETA2)

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 Monday – Friday

Special Instructions: If specimens are collected from multiple sites on the body (i.e., left and right), each specimen must be sent under a separate order.

Specimen

Specimen Type: Body fluid (specify specimen type)

Container: Screw capped, sterile vial

Draw Volume: Submit entire specimen

Processed Volume: 0.5 mL (Minimum: 0.5) fluid

Collection: Direct collections may be done with a pipette, syringe, test tube, or microcollection device. Although results may be obtainable on smaller specimens, reliable results are best obtained with an adequate specimen volume. If direct collection is not feasible, specimens may be collected using cotton swabs.

Special Processing: Lab Staff: Send at least 0.5 mL of fluid sent to the lab in a pipette, syringe, test tube or microcollection device. Send the specimen in the plastic container making sure it is well sealed to prevent leakage. If submitting a syringe, remove needle. Add cap to end of syringe.
For swab samples: DO NOT add any additional fluid to swab including, but not limited to, saline or microcollection fluids. Tightly seal container to prevent leakage. Immediately freeze.

Indicate specimen type. Send specimen frozen in plastic vial. Forward promptly.

Note: Although results may be obtainable on smaller specimens (perhaps as little as 0.05 mL, depending on the protein concentrations and percentage of spinal fluid in the specimen), reliable results are best obtained with an adequate specimen volume.

Patient Preparation: Dependent on fluid type

Sample Rejection: Reject specimens other than body fluids; mislabeled or unlabeled specimens; specimens with additive or media

Interpretive

Reference Range: Negative, no beta-2 transferrin (spinal fluid) detected (reported as positive or negative)

Critical Values: N/A

Limitations: Although results may be obtainable on smaller specimens (perhaps as little as 0.05 mL, depending on the protein concentrations and percentage of spinal fluid in the specimen), reliable results are best obtained with an adequate specimen volume.

Beta-2 Transferrin is also found in aqueous humor and in serum of patients with rare metabolic glycoprotein disorders of genetic variants of transferrin.

Beta-2 Transferrin may be undetectable if the specimen is diluted by saliva and not frozen after collection.

Methodology: Electrophoresis/Immunofixation-Peroxidase Antisera/Dimethylformamide Visualization

References: [Mayo Clinic Laboratories](#) June 2023

Updates:

3/22/2005: Revised specimen collection info, change in method previously listed as Electrophoresis/Immunofixation/Silver Stain. Critical value as positive removed.

6/17/2013: Can no longer add saline to small sample volumes.

6/12/2023: Clarified handling of syringe specimen and added special instructions.