
Lab Dept: Other Fluids

Test Name: CEA, CSF

General Information

Lab Order Codes: CEAC

Synonyms: Carcinoembryonic antigen, CSF

CPT Codes: 82378 – Carcinoembryonic antigen (CEA)

Test Includes: CEA CSF value measured in ng/mL.

Logistics

Test Indications: Useful for detecting meningeal carcinomatosis, intradural or extradural infiltration, or brain parenchymal metastasis from adenocarcinoma or squamous-cell carcinoma.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: CEASF)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days; testing performed Monday-Saturday

Special Instructions: N/A

Specimen

Specimen Type: CSF

Container: Screw capped, sterile plastic vial

Draw Volume: 0.5 mL (Minimum: 0.4 mL) CSF

Processed Volume: Same as Draw Volume

Collection: Routine CSF collection

Special Processing: Lab Staff: Aliquot CSF into a plastic, screw-capped sterile vial. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

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

Interpretive

Reference Range: <0.6 ng/mL

Tumor markers are not specific for malignancy and values may vary by method.

Interpretation: Increased values are seen in approximately 60% of patients with meningeal carcinomatosis.

Critical Values: N/A

Limitations: Although the assay appears to be specific for adenocarcinoma and squamous cell carcinoma, increased CEA values in CSF are not seen in all patients with such tumors of the brain.

Mildly elevated CEA values in CSF may be secondary to passive transfer from the serum in individuals with high serum CEA concentrations.

Some patients who have been exposed to animal antigens, either in the environment or a part of treatment or imaging procedure, may have circulating anti-animal antibodies present. These antibodies may interfere with the assay reagents to produce unreliable results.

Methodology: Immunoenzymatic assay

References: [Mayo Medical Laboratories](#) January 2018

Updates: 1/9/2006: Method update previously listed as Chemiluminometric Immunoassay on Bayer Centaur
1/4/2010: Method update, previously listed as Immunoenzymatic Assay. Frozen specimens no longer accepted.
1/23/2018: Updated method