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/8918)
Phone Numbers: 
MIN Lab: 612-813-6280
STP Lab: 651-220-6550
Test Availability: Daily, 24 hours
Turnaround Time: 1 - 2 days; testing performed daily
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

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**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:** Chemiluminometric Immunoassay

**References:** [Mayo Medical Laboratories](https://www.mayoclinic.org/health) March 2013

**Updates:**

1/9/2006: Method update previously listed as Chemiluminometric Immunoassay on Bayer Centaur