

Reporting Title: Alzheimer's Disease Evaluation, CSF

Performing Location: Rochester

Specimen Requirements:

**Patient Preparation:** For 12 hours before specimen collection do not take multivitamins or dietary supplements containing biotin (vitamin B7), which is commonly found in hair, skin, and nail supplements and multivitamins.

**Supplies:** Alzheimer's Disease Evaluation (ADEVL) Collection Kit (T836)

Container/Tube:

**Preferred:** Sarstedt CSF False Bottom Tube 63.614.625 (2.5 mL)

**Acceptable:** Sarstedt 72.703.600 (1.5 mL) or Sarstedt 72.694.600 (2 mL)

**Specimen Volume:** 1.5 to 2.5 mL

Collection Instructions:

1. Perform lumbar puncture and discard the first 1 to 2 mL of cerebrospinal fluid (CSF).
2. Collect CSF directly into one of the listed collection tubes until the tube is at least 50% full.\*
3. Send CSF specimen in original collection tube. Do **not aliquot**.

**Note: Polystyrene collection tubes are not acceptable.** Exposure of CSF to polystyrene tubes may result in falsely low Abeta42 concentrations. For more information see Cautions.

\*The Alzheimer's Association consensus protocol for handling of CSF for clinical measurements of Abeta42 and tau recommends using the drip method for CSF collection and directly collecting into a low bind polypropylene tube. Although some clinicians prefer the syringe pull method due to speed of collection, the drip method reduces the risk of Abeta42 binding to the plastic of any syringe used.

4. Collection instructions can also be found on [Spinal Fluid Specimen Collection Instructions for Alzheimer Disease Evaluation](#) (T967).

Forms:

If not ordering electronically, complete, print, and send a [Neurology Specialty Testing Client Test Request](#) (T732) with the specimen.

| Specimen Type | Temperature              | Time     | Special Container |
|---------------|--------------------------|----------|-------------------|
| CSF           | Refrigerated (preferred) | 14 days  | BlueTop SARSTEDT  |
|               | Frozen                   | 60 days  | BlueTop SARSTEDT  |
|               | Ambient                  | 12 hours | BlueTop SARSTEDT  |

Result Codes:

| Result ID | Reporting Name    | Type         | Unit  | LOINC®  |
|-----------|-------------------|--------------|-------|---------|
| PTABR     | p-Tau/Abeta42     | Numeric      | ratio | 41027-4 |
| ADINT     | AD Interpretation | Alphanumeric |       | 69048-7 |
| AB42P     | Abeta42           | Numeric      | pg/mL | 33203-1 |
| PTAUP     | Phospho-Tau(181P) | Numeric      | pg/mL | 72260-3 |
| TTAUP     | Total-Tau         | Numeric      | pg/mL | 30160-6 |

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

83520 x 3

Reference Values:

Beta-amyloid (1-42) (Abeta42): >834 pg/mL

Total-Tau: < or =238 pg/mL

Phosphorylated-Tau 181: < or =21.6 pg/mL

p-Tau/Abeta42: < or =0.028