

**TEST CHANGE**

**Alzheimer's Disease Markers, CSF**

3017653, ADMRKS CSF

**Specimen Requirements:**

**Patient Preparation:**

**Collect:** CSF

**Specimen Preparation:** Tube type: Preferred: 2.5 ml low-bind polypropylene false bottom CSF tube (Sarstedt, 63.614.625), available in orderable collection kit, ARUP Supply # 58810. Acceptable: Sarstedt 72.703.600 (1.5 ml) or Sarstedt 72.694.600 (2 ml) low-bind screw cap polypropylene microtube. Unacceptable: Standard CSF polystyrene collection tubes are not acceptable as exposing CSF to polystyrene tubes may decrease Abeta42 concentrations. Collection instructions: 1. Perform lumbar puncture and discard the first 1 to 2 ml of CSF 2. Using the drip method, collect CSF directly into low-bind polypropylene false bottom CSF tube (ARUP Supply #58810) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at 800-522-2787. Avoid use of syringes or extension tubing. Fill tube at least 50% full. 3. Freeze and send specimen in original polypropylene collection tube (do not aliquot).

**Transport Temperature:** -20 Degrees C: Critical frozen

**Unacceptable Conditions:** Specimen types other than those listed and hemolyzed CSF. Specimens too viscous to be aspirated by instrument.

**Remarks:**

**Stability:** Frozen: 8 weeks

**Methodology:** Quantitative Electrochemiluminescent Immunoassay (ECLIA)

**Performed:** Mon

**Reported:** 1-7 days

**Note:**

**CPT Codes:** 83520 x3

**New York DOH Approval Status:** This test is New York DOH approved.

**Interpretive Data:**

Interpretive information: The Alzheimer's Disease Markers, CSF panel is intended for use in adult patients aged 55 years and older being evaluated for Alzheimer's disease (AD) and other causes of cognitive impairment. The pTau181/Abeta42 and tTau/Abeta42 ratios provide better concordance with amyloid positron emission tomography (PET) imaging when compared to Abeta42, pTau181, and tTau individually.

Limitations: Failure to adhere to the sample collection instructions provided in the Laboratory Test Directory may result in falsely reduced Abeta42 concentrations and therefore false elevations in the reported ratios. The ratios reported have not been established for predicting development of dementia or other neurologic conditions or for monitoring responses to therapies. Results of this test must always be interpreted in the context other clinical diagnostic evaluations and should not be used alone to establish a diagnosis of AD or other cognitive disorder.

Methodology: Roche Diagnostics Inc. electrochemiluminescence assay was used. Results obtained with different assay methods or kits may be different and cannot be used interchangeably.

Phospho-Tau (181P) CSF/ $\beta$ -Amyloid (1-42) CSF ratio	Interpretation
$\leq 0.023$	A negative result, defined as pTau181/Abeta42 ratio value below cutoff, is consistent with a negative amyloid positron emission tomography (PET) scan result. A negative result reduces the likelihood that a patient's cognitive impairment is due to AD.
$> 0.023$	A positive result, defined as pTau181/Abeta42 ratio value above cutoff, is consistent with a positive amyloid PET scan result. A positive result does not establish a diagnosis of AD or other cognitive disorder.
Total Tau CSF/ $\beta$ -Amyloid (1-42) CSF ratio	Interpretation
$\leq 0.28$	A negative result,

<p>&gt; 0.28</p>	<p>defined as tTau/Abeta42 ratio value below cutoff, is consistent with a negative amyloid positron emission tomography (PET) scan result. A negative result reduces the likelihood that a patient's cognitive impairment is due to AD.</p> <p>A positive result, defined as tTau/Abeta42 ratio value above cutoff, is consistent with a positive amyloid PET scan result. A positive result does not establish a diagnosis of AD or other cognitive disorder.</p>	
------------------	--	--

Reference Interval:

Test Number	Components	Reference Interval
	Phospho-Tau(181)/Abeta42 Ratio, CSF	<= 0.023
	Total-Tau/Abeta42 Ratio, CSF	<= 0.28

**HOTLINE NOTE:** There is a price change associated with this test. Please contact ARUP Client Services at (800) 522-2787 for additional information.