
Lab Dept: Other Fluids

Test Name: LACTATE, CSF

General Information

Lab Order Codes: LACS

Synonyms: Lactic Acid, Cerebrospinal Fluid

CPT Codes: 83605 - Lactate

Test Includes: CSF lactic acid in mmol/L

Logistics

Test Indications: Aid in differentiating between bacterial and viral meningitis.

Aid in identifying increased glycolysis or hypoxia associated with bacterial meningitis, cerebral infarction, cerebral arteriosclerosis, intracranial hemorrhage, hydrocephalus, traumatic brain injury, cerebral edema, epilepsy, and inborn errors of metabolism.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: LASF1)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 2 days

Special Instructions: N/A

Specimen

Specimen Type: CSF

Container: Screw capped, sterile vial

Draw Volume: 1 mL (Minimum: 0.5 mL) CSF

Processed Volume: Same as Draw Volume

Collection:	Routine CSF collection. Transport to the laboratory immediately.
Special Processing:	Lab Staff: Centrifuge specimen immediately. Remove aliquot. Store and ship frozen. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens

Interpretive

Reference Range:	Age:	Reference range (mmol/L)
	0 – 2 days:	1.1 – 6.7 mmol/L
	3 – 10 days:	1.1 – 4.4 mmol/L
	11 days – 17 years:	1.1 – 2.8 mmol/L
	>17 years:	1.1 – 2.4 mmol/L

Critical Values: N/A

Limitations: Cerebrospinal fluid (CSF) lactate concentrations should be interpreted in conjunction with clinical findings and other laboratory results.

CSF lactate concentrations decrease after treatment with antibiotics; therefore, specimens should be collected prior to initiation of antibiotics in order to differentiate bacterial from aseptic meningitis.

Methodology: Calorimetric

References: [Mayo Medical Laboratories Web Page](#) May 2018

Updates: 6/16/2004: Test moved from Fairview University Diagnostic Laboratories to Mayo Medical Laboratories.
5/4/2018: Method and reference range update.