MAYO CLINIC LABORATORIES

Test Definition: VDSF

VDRL, Spinal Fluid

Overview

Useful For

Aiding in the diagnosis of neurosyphilis

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
VDSFQ	VDRL Titer, CSF	No	No

Testing Algorithm

If this test is positive, a VDRL titer will be performed at an additional charge.

Method Name

Flocculation/Agglutination

NY State Available

No

Specimen

Specimen Type

CSF

Ordering Guidance

For assessment of intrathecally synthesized *Treponema pallidum* antibodies in spinal fluid (CSF) (ie, the method corrects for any passive diffusion of antibodies from serum into the CSF), order NSAIP / Neurosyphilis IgG Antibody Index with VDRL, Serum and Spinal Fluid.

Specimen Required

Collection Container/Tube: Sterile vial
Submission Container/Tube: Plastic vial
Specimen Volume: 0.5 mL
Collection Instructions: Submit specimen collected in vial 2, if possible. If not, note from which vial the aliquot was obtained.

Specimen Minimum Volume

0.2 mL

Reject Due To

Gross	Reject

hemolysis	
Gross lipemia	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
CSF	Frozen (preferred)	14 days	
	Refrigerated	14 days	

Clinical & Interpretive

Clinical Information

The VDRL assay is a nontreponemal serologic test for diagnosis of neurosyphilis that uses a cardiolipin-cholesterol-lecithin antigen to detect reaginic antibodies. The VDRL test performed on cerebrospinal fluid can be used to diagnose neurosyphilis in patients with a prior history of syphilis infection.

The presence of neurosyphilis in untreated patients can be detected by the presence of pleocytosis, elevated protein, and a positive VDRL result.

Reference Values

Negative
Reference values apply to all ages.

Interpretation

A positive VDRL result on spinal fluid is highly specific for neurosyphilis.

A single negative VDRL result should not be used to exclude neurosyphilis and repeat testing on a new specimen may be necessary.

Positive results will be titered.

Cautions

The VDRL test using spinal fluid has a high percentage of false-negative results.

Clinical Reference

1. Miller JN. Value and limitations of nontreponemal and treponemal tests in the laboratory diagnosis of syphilis. Clin Obstet Gynecol. 1975;18(1):191-203
2. Radolf JD, Tramont EC, Salazar JC. Syphilis *(Treponema pallidum*). In: Bennett JE, Dolin R, Blaser MJ, eds. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 9th ed. Elsevier; 2020:2865-2892
3. Tuddenham S, Katz SS, Ghanem KG. Syphilis Laboratory Guidelines: Performance Characteristics of Nontreponemal Antibody Tests. Clin Infect Dis. 2020;71(Suppl 1):S21-S42. doi:10.1093/cid/ciaa306

Performance

Method Description

The VDRL antigen and spinal fluid are mixed on a 180 RPM rotator. The antigen, a cardiolipin-lecithin coated cholesterol particle, flocculates in the presence of reagin.(US Department of Health, Education and Welfare, National Communicable Diseases Center, Venereal Disease Program: Manual of Tests for Syphilis, Centers for Disease Control, Atlanta, GA, 1969; Bennett JE, Dolin R, Blaser MJ, eds. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases. 9th ed. Elsevier; 2020)

PDF Report

No

Day(s) Performed

Monday through Saturday

Report Available

1 to 4 days

Specimen Retention Time

14 days

Performing Laboratory Location

Mayo Clinic Jacksonville Clinical Lab

Fees & Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information

86592

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
VDSF	VDRL, CSF	5290-2

Result ID	Test Result Name	Result LOINC® Value
9028	VDRL, CSF	5290-2