

Syphilis diagnostics

General:

Diagnostic procedure: TPHA is considered a screening test; if negative, there is no sign of recent or postacute *Treponema pallidum* infection. If TPHA is positive, TP Western blot IgG or IgM is recommended; VDRL should be tested only as therapy monitoring or in case of suspicious reactivation. It is not specific and represents an activity marker only.

The following tests are available:

- **TPHA (Treponema Pallidum Heme Agglutination Assay) in serum**

Indication: Screening test for the recognition of antibodies against *Treponema pallidum* (both IgG and IgM)

Material: 1 ml serum

sTABILITY: 7 days at 2 to 8°C

TAT: same day, FML

Method: TPHA

Units: Titer

Ref.- range: <1:80

Note: The TPHA titer is usually persisting over many years (sometimes lifelong); possible cross-reactions with *Borrelia* antibodies possible, therefore an exclusion of *borrelia* infection is recommended. False positive results are observed in patients with immune disorders.

- **TPHA in CSF**

Material: 1 ml CSF

TAT: 3 - 6 days*

Method: HA

Units: Titer

Ref.- range: <1:2

- **Treponema pallidum IgM antibodies, BLOT**

Indication: Suspicion of fresh, acute infection

Material: 2 ml serum

TAT: 7-10 days*

Method: Western blot

Ref.- range: see reports

- **Treponema pallidum IgG antibodies, BLOT**

Indication: clarifying positive Treponema pallidum abs (screening test)

Material: 2 ml serum

TAT: 7-10 days*

Method: Western blot

Ref.- range: see reports

- **VDRL / Venereal disease of research laboratory test[^]**

General:

With VDRL testing (synonym: Cardiolipin Microflocculation Test, CMT), antibodies are made visible through cardiolipin aggregation. Cardiolipin is a phospholipid and is sometimes released as endogenous antigen (autoantigen) during certain infections, such as lues. The reaction is therefore not lues-specific. The reaction is positive in the second phase of a primary syphilis (regional lymphadenitis). It can be false negative in the tertiary stage. An isolated positive result does not confirm a lues infection.

Temporary or persisting positive non-specific results are observed in autoimmune disorders, acute and chronic infections, collagenosis, neoplasmas, in pregnancy, with different drugs. VDRL always reacts positive in infections with treponema species (T. pertenuue/Framboesia, T. carateum/Pinta). VDRL is suitable only for therapy monitoring during lues treatment.

- **VDRL in blood, qualitative/quantitative**

Indication: Activity marker, course monitoring

Material: 1 ml serum

Stability: 7 days at 2 to 8°C

TAT: same day, FML

Method: AGGL

Units: Qualitative, Titer

Ref.- range: negative

- **VDRL in CSF, quantitative**

Material: 0.3 ml CSF

TAT: 5 -7 days*

Method: PA

Units: Titer

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit
<http://www.fml-dubai.com/parameter-listings/>