

VIASURE

Treponema pallidum Real Time PCR Detection Kit

Pathogen and product description

The spirochete *Treponema pallidum* (Tp), the etiologic agent of syphilis, causes a multistage sexually transmitted infection (STI). Pathogenic treponemes cause venereal syphilis, yaws, endemic syphilis, and pinta-multistage, infections that, although similar, can be differentiated based on clinical, epidemiologic, and geographic criteria.

Only venereal syphilis is transmitted by sexual activity. The pathogenic treponemes are uncultivable, slow-growing microorganisms with identical flat-wave morphologies. They poorly tolerate desiccation, elevated temperature, and ambient oxygen tension, traits that explain why efficient transmission requires close personal contact.

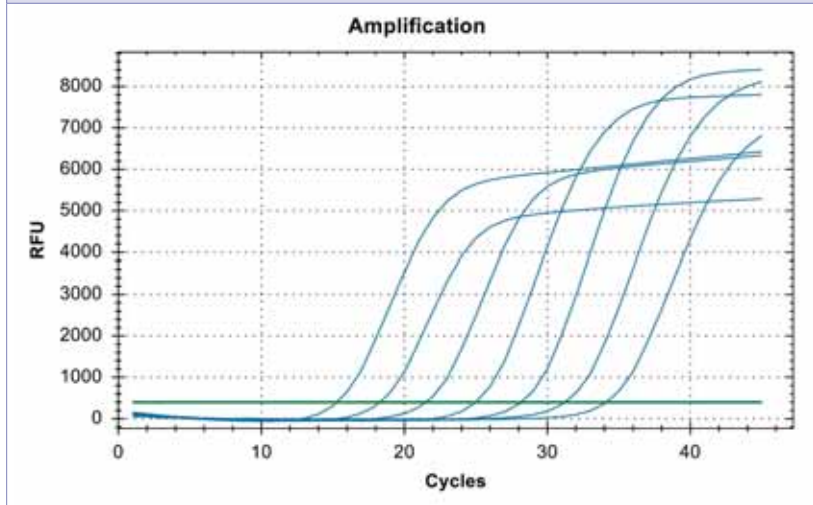
Several types of laboratory test are available for diagnosis of *Treponema pallidum*. Serology, dark field microscopy and PCR are the gold standards to diagnose this pathogen. However, Real Time PCR assays have been shown to be a more sensitive and specific diagnosis tool for its detection.

VIASURE *Treponema pallidum* Real Time PCR Detection Kit is designed for the diagnosis of *Treponema pallidum* in urogenital samples. After DNA isolation, the identification of *Treponema pallidum* is performed by the amplification of a conserved region of the 16S rRNA gene for *Treponema pallidum*, using specific primers and a fluorescent-labelled probe.



Analytical sensitivity

VIASURE *Treponema pallidum* Real Time PCR Detection Kit has a detection limit of ≥ 10 DNA copies per reaction for *Treponema pallidum*.



Dilution series of *Treponema pallidum* (10^7 - 10^1 copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (channel FAM)

Components

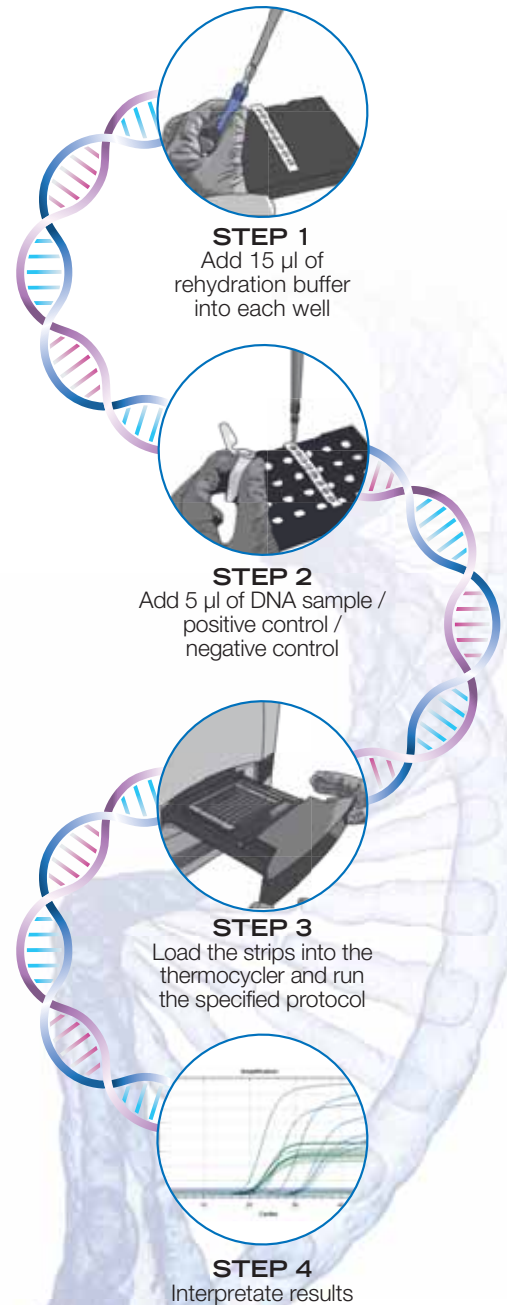
| Reagent/Material | Description | Colour | Quantity |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|---------------------|
| <i>Treponema pallidum</i> 8-well strips | A mix of enzymes, primers-probes, buffer, dNTPs, stabilizers and Internal control in stabilized format | White | 6/12 x 8-well strip |
| Rehydration Buffer | Solution to reconstitute the stabilized product | Blue | 1 vial x 1,8 mL |
| <i>Treponema pallidum</i> Positive Control | Non-infectious synthetic lyophilized cDNA | Red | 1 vial |
| Negative Control | Non template control | Violet | 1 vial x 1 mL |
| Water RNase/DNase free | Water RNase/DNase free | White | 1 vial x 1 mL |
| Tear-off 8-cap strips | Optical caps for sealing Wells during thermal cycling | Transparent | 6/12 x 8-cap strip |

Kit References

| Reference | Description |
|------------|------------------------------------------------------------------------------------------------|
| VS-TPA106L | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 6 x 8-well strips, low profile |
| VS-TPA106H | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 6 x 8-well strips, high profile |
| VS-TPA112L | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 12 x 8-well strips, low profile |
| VS-TPA112H | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 12 x 8-well strips, high profile |
| VS-TPA113L | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 96-well plate, low profile |
| VS-TPA113H | Viasure <i>Treponema pallidum</i> Real Time PCR Detection Kit 96-well plate, high profile |

Work Flow

One-step rehydration of wells and add your extracted DNA



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