

VIASURE MULTIPLEX

Herpes virus 1, Herpes virus 2 & Treponema pallidum
Real Time PCR Detection Kit

Pathogen and product description

T*reponema pallidum* and herpes simplex virus types 1 or 2 (HSV-1/2) are the most common sexually transmitted pathogens that cause ulcers of the genital, anal and oropharyngeal region. Genital ulcers are a significant risk factor for transmission and acquisition of human immunodeficiency virus (HIV). Identification of ulcer-causing pathogens is a prerequisite for an effective therapy and reducing the risk of HIV infection.

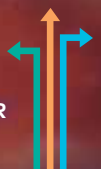
Genital herpes can be caused by two very similar viruses, herpes simplex virus HSV-1 or HSV-2, being the infections caused by first one more often. HSV-1 and HSV-2 infection occurs via inoculation of virus particles into susceptible mucosal surfaces. The same treatment is used for both HSV-1 and HSV-2 infections, the location of the lesions and the chronicity of the infection (primary or recurrent) determine dosage and frequency.

The spirochete *Treponema pallidum*, the etiologic agent of syphilis, causes a multistage sexually transmitted infection. 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.

VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit is designed for the diagnosis of Herpes virus 1, Herpes virus 2 and *Treponema pallidum* in clinical samples. After DNA isolation, the identification of Herpes virus 1, Herpes virus 2 and/or *Treponema pallidum* is performed by the amplification of a conserved region of the *US4* gene for Herpes virus 1, *US6* gene for Herpes virus 2 and 16S rRNA gene for *Treponema pallidum*, using specific primers and a fluorescent-labelled probe.

VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit contains in each well all the components necessary for real time PCR assay (specific primers/probes, dNTPS, buffer, polymerase) in an stabilized format.



Analytical sensitivity

VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit has a detection limit of ≥ 10 DNA copies per reaction for Herpes virus 1, Herpes virus 2 and Treponema pallidum. (Figures 1, 2 and 3).

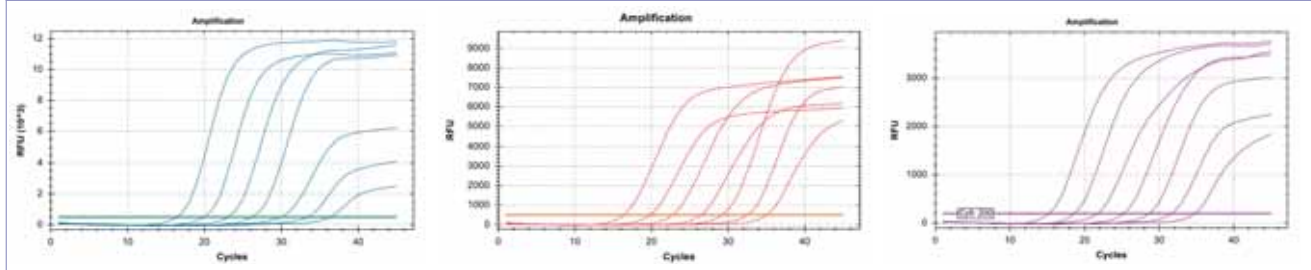


Figure 1. Dilution series of Herpes virus 1 (10^7 - 10^1 copies/rxn) template run on the Bio-Rad CFX96TM Real-Time PCR Detection System (channel FAM).

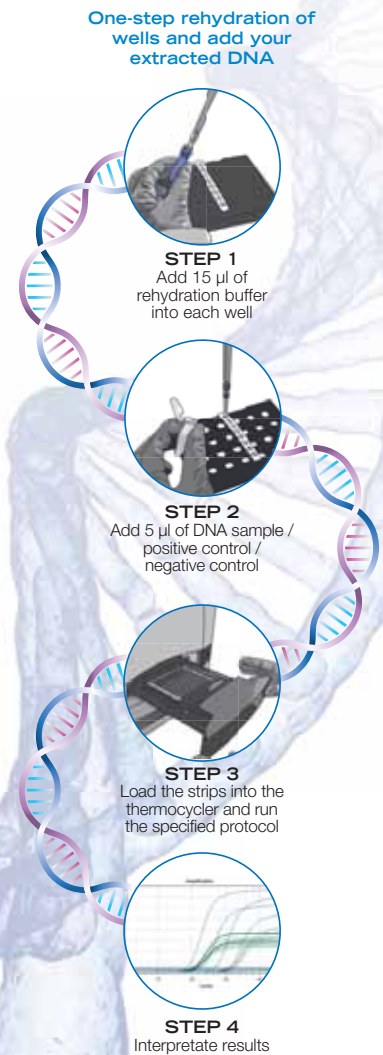
Figure 2. Dilution series of Herpes virus 2 (10^7 - 10^1 copies/rxn) template run on the Bio-Rad CFX96TM Real-Time PCR Detection System (channel ROX).

Figure 3. Dilution series of Treponema pallidum (10^7 - 10^1 copies/rxn) template run on the Bio-Rad CFX96TM Real-Time PCR Detection System (channel Cy5).

Components

Reagent/Material	Description	Colour	Quantity
Herpes virus 1, Herpes virus 2 & Treponema pallidum 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
Herpes virus 1, Herpes virus 2 & Treponema pallidum 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	RNase/DNAse free water	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

Work Flow



Kit References

Reference	Description
VS-HHT106L	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-HHT106H	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-HHT112L	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-HHT112H	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-HHT113L	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 96-well plate, low profile
VS-HHT113H	VIASURE Herpes virus 1, Herpes virus 2 & Treponema pallidum Real Time PCR Detection Kit 96-well plate, high profile



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