

# VIASURE MULTIPLEX

*C. albicans*, *G. vaginalis* & *T. vaginalis* Real Time PCR Detection Kit

## Pathogen and product description

**T***richomonas vaginalis* infections, *Candida albicans* infections, and bacterial vaginosis (BV) are among the top three causes of abnormal vaginal discharge.

*Candida albicans*, is a common opportunistic fungal pathogen that dwells on human mucosal surfaces, can cause fungal infections, especially in immunocompromised and high-risk surgical patients.

*Gardnerella vaginalis* is a facultative Gram-variable anaerobic bacterium belonging to the family *Bifidobacteriaceae* and is the dominant species involved in bacterial vaginosis (BV). Although BV is a polymicrobial condition with no single causative agent, 100 % of women with BV are colonized with *G. vaginalis*. *G. vaginalis* is also a normal commensal of the vaginal micro flora in healthy women.

*Trichomonas vaginalis* infection is one of the most

common sexually transmitted diseases (STDs) in the world, and it has been associated with vaginitis, cervicitis and urethritis, premature rupture of membranes and premature delivery in pregnant women. *Trichomonas vaginalis* infection has also been associated with an increased risk of HIV acquisition and transmission in women.

VIASURE *C. albicans*, *G. vaginalis* & *T. vaginalis* Real Time PCR Detection Kit is designed for the diagnosis of *Candida albicans*, *Gardnerella vaginalis* and *Trichomonas vaginalis* in clinical samples. After DNA isolation, the identification of *Candida albicans*, *Gardnerella vaginalis* and/or *Trichomonas vaginalis* is performed by the amplification *T. vaginalis*-specific 2-kb repeated sequence for *Trichomonas vaginalis*, a conserved region of 5.8S rRNA gene for *Candida albicans* and 16S rRNA gene for *Gardnerella vaginalis*, using specific primers and a fluorescent-labelled probe.



THE REAL ONE STEP qPCR



**Analytical sensitivity**

VIASURE *C. albicans*, *G. vaginalis* & *T. vaginalis* Real Time PCR Detection Kit has a detection limit of  $\geq 10$  DNA copies per reaction for *Candida albicans*, *Gardnerella vaginalis* and *Trichomonas vaginalis*. (figures 1, 2 and 3).

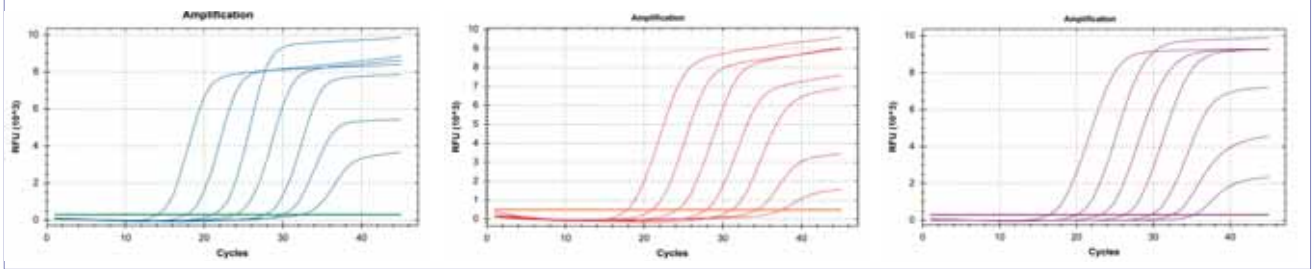


Figure 1. Dilution series of *Trichomonas vaginalis* ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (channel FAM).

Figure 2. Dilution series of *Candida albicans* ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (channel ROX).

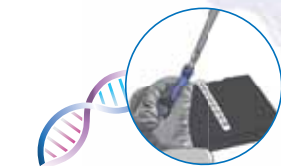
Figure 3. Dilution series of *Gardnerella vaginalis* ( $10^7$ – $10^1$  copies/rxn) template run on the Bio-Rad CFX96™ Real-Time PCR Detection System (channel Cy5).

**Components**

Reagent/Material	Description	Colour	Quantity
<i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</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>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</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	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**

One-step rehydration of wells and add your extracted DNA



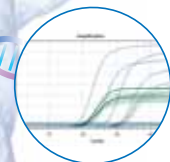
**STEP 1**  
Add 15 µl of rehydration buffer into each well



**STEP 2**  
Add 5 µl of DNA sample / positive control / negative control



**STEP 3**  
Load the strips into the thermocycler and run the specified protocol



**STEP 4**  
Interpretate results

**Kit References**

Reference	Description
VS-CGT106L	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 6 x 8-well strips, low profile
VS-CGT106H	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 6 x 8-well strips, high profile
VS-CGT112L	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 12 x 8-well strips, low profile
VS-CGT112H	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 12 x 8-well strips, high profile
VS-CGT113L	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 96-well plate, low profile
VS-CGT113H	VIASURE <i>C. albicans</i> , <i>G. vaginalis</i> & <i>T. vaginalis</i> Real Time PCR Detection Kit 96-well plate, high profile