

## TRUPCR® STD Panel Kit

### NEED

Sexually Transmitted Diseases (STDs) are among the most common Contagious diseases. Each year, 20 million new cases are reported; half of these infections are among people ages 15 to 24 and they can have long-term consequences. In 2019, 1,808,703 cases of Chlamydia trachomatis & 616,392 cases of gonorrhoea were reported to CDC. More than 30 different bacteria, viruses and parasites can be transmitted through sexual activity. STD causes HIV, Herpes, Hepatitis B, Pelvic inflammatory disease, Ectopic pregnancy, Chronic pelvic pain and can damage reproductive organs (rendering infertility). STD may weaken the immune system, leaving individual more vulnerable to other infections.



Image Source: <https://healthera.co.uk/wp-content/uploads/2022/09/Understanding-Sexually-Transmitted-Infections.png>

### SOLUTION BY TRUPCR®

TRUPCR® STD Panel Kit is a Real-Time Amplification test for the qualitative detection & differentiation of nine STD causing pathogens from human clinical samples. It includes three tubes assay based on oligonucleotide hydrolysis principle which allows higher specificity and sensitivity.

The different targets are detected with the help of three different dyes (FAM/Green, HEX/VIC/Yellow & Texas Red/ROX/Orange). It is fairly common for a person to be infected with more than one STD causing pathogens at the same time. Thus TRUPCR® STD Panel Kit provides detection of multiple STDs at once.

### TARGET PATHOGENS

#### STD Primer Probe Mix 1

FAM	HEX	TEXAS	Cy5
<i>Chlamydia trachomatis</i>	<i>Neisseria gonorrhoeae</i>	<i>Mycoplasma genitalium</i>	Endogenous IC

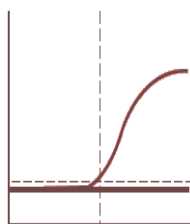
#### STD Primer Probe Mix 2

FAM	HEX	Cy5
Herpes simplex virus1	Herpes simplex virus2	Endogenous IC

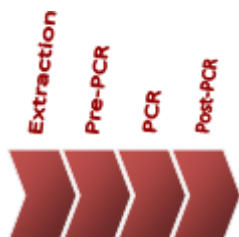
#### STD Primer Probe Mix 3

FAM	HEX	TEXAS	Cy5
Ureaplasma urealyticum/parvum	<i>Gardnerella vaginalis</i>	<i>Trichomonas vaginalis</i>	Endogenous IC

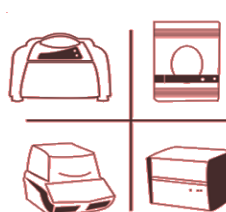
## KEY FEATURES



Endogenous Internal Control incorporated within the kit to ensure reliable results



Complete workflow solution available from Extraction of sample to Post-PCR analysis



Platform agnostic as compatible with various platforms



Rapid and reliable results within 90-100 minutes after PCR Start

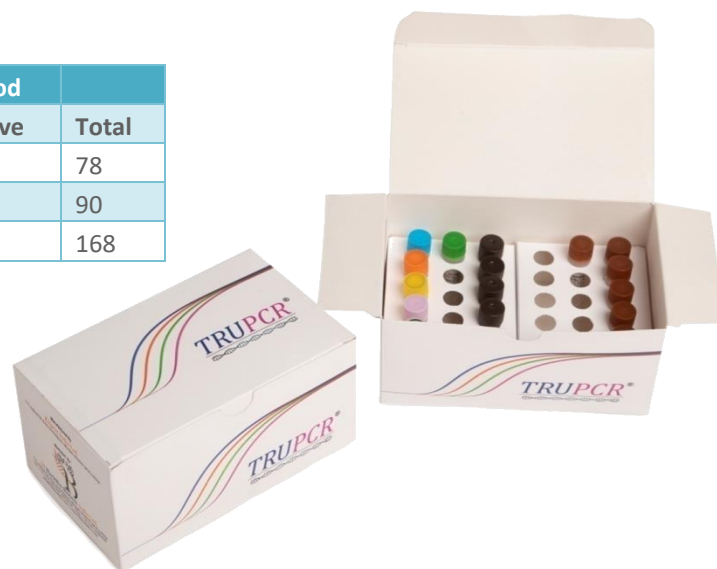
## TECHNICAL SPECIFICATIONS

- Sample Type – Rectal & Genital Swab Specimen, Urine Specimen
- Clinical Validation – Validated on more than 500 clinical samples
- Target Regions – Conserved regions of the genome of each pathogen
- Reaction Volume – 25 µl in each tube
- LOD Data: *Chlamydia trachomatis* = 2x10<sup>2</sup> IFU/ml, *Neisseria gonorrhoeae* = 2.5x10<sup>2</sup> CFU/ml, HSV 1 = 5X10<sup>2</sup> copies/ml, HSV 2 = 5X10<sup>2</sup> copies/ml, *Mycoplasma genitalium* = 5x10<sup>2</sup> copies/ml, *Trichomonas vaginalis* = 4X10<sup>2</sup> copies/ml, *Gardnerella vaginalis* = 1x10<sup>3</sup> copies/ml, *Ureaplasma urealyticum/parvum* = 1x10<sup>3</sup> copies/ml
- Compatible Instruments – Applied Biosystems™ 7500 series, Applied Biosystems™ StepOne series, Applied Biosystems™ QuantStudio® 5, Rotor-Gene Q, Bio-Rad CFX96

## CLINICAL DATA

		Reference Method		
		Positive	Negative	Total
TRUPCR Method	Positive	77	1	78
	Negative	2	88	90
Total		79	89	168

Parameters	Estimate
Sensitivity	97.47%
Specificity	98.88%
Positive Predictive Value	98.72%
Negative Predictive Value	97.78%



## ORDERING INFORMATION

Cat. No.	Description	Size
3B291	TRUPCR® STD Panel Kit	48 Reactions
3B292	TRUPCR® STD Panel Kit	96 Reactions

