# TRUPCR® CT/NG Detection Kit

## NEED

Infections due to *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) are among the most common bacterial sexually transmitted infections worldwide, most of which are asymptomatic. According to the World Health Organization (WHO), *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) are extremely common sexually transmitted infections (STIs), with 127 million (95% UI: 95.1–165.9 million) and 86.9 million (95% UI: 58.6–123.4 million) cases respectively worldwide in 2016. In 2012, approximately 90% of STIs occurred in low and middle-income countries (LMICs) and sub-Saharan Africa was identified as the WHO region with highest STI incidence and prevalence.

Women are particularly vulnerable to STIs due to increased susceptibility to genital tract infections compared to men. There is evidence that maternal CT and NG infections are associated with adverse birth and neonatal outcomes including preterm birth and low birth weight, miscarriage and still birth. The risk of vertical transmission of CT and NG during delivery is about 50%. Among infants born to mothers with untreated CT infection, 30–50% develop clinical conjunctivitis and 10–20% develop CT-related pneumonia. Among infants born to mothers with untreated NG infection, the risk of conjunctival infection is up to 48%, which can result in corneal damage and blindness.

Detection of infection using a variety of specimen types in symptomatic and asymptomatic subjects is important to effectively combat CT/NG infections.


## SOLUTION BY TRUPCR®

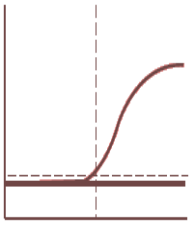
TRUPCR® CT/NG Detection Kit is in vitro nucleic acid amplification assay for the qualitative single tube detection of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) in clinical samples. An endogenous internal control for human nucleic acid is included in this kit. The kit is based on amplification of conserved region of the cryptic plasmid in *Chlamydia trachomatis* and cytosine methyltransferase gene in *Neisseria gonorrhoeae* bacterial genome.

## TARGET PATHOGENS

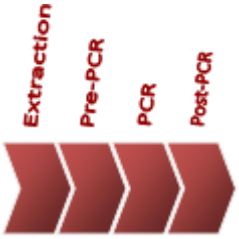
**Primer Probe Mix**

| FAM | HEX | Cy5 |
|---|---|---|
| *Chlamydia trachomatis* | *Neisseria gonorrhoeae* | Endogenous IC |

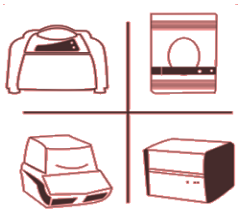
## KEY FEATURES



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 – Extracted Nucleic acid from urine samples, vaginal swabs, cervical swabs, and male urethral swabs of human origin
- 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: CT = 200 IFU/ml, NG = 250 CFU/ml
- Compatible Instruments – Applied Biosystems™ 7500 series, Applied Biosystems™ StepOne series, Applied Biosystems™ QuantStudio® series, Rotor-Gene Q, Bio-Rad CFX96, CFX384, AriaMx Real-Time PCR, Roche - LightCycler® 480 –II, Line gene K real time PCR

## CLINICAL DATA

| | | Reference Method | | |
|---|---|---|---|---|
| | | Positive | Negative | Total |
| TRUPCR Method | Positive | 54 | 2 | 56 |
| | Negative | 1 | 103 | 104 |
| | Total | 55 | 105 | 160 |

| Parameters | Estimate |
|---|---|
| Sensitivity | 98.18% |
| Specificity | 98.09% |
| Positive Predictive Value | 96.43% |
| Negative Predictive Value | 99.04% |


## ORDERING INFORMATION

| Cat. No. | Description | Size |
|---|---|---|
| 3B281 | TRUPCR® CT/NG Detection Kit | 48 Reactions |
| 3B282 | TRUPCR® CT/NG Detection Kit | 96 Reactions |