

Reagent kit

C. diphtheriae Tox

Detection of *Corynebacterium diphtheriae* DNA with the differentiation between toxigenic and non-toxigenic strains by real-time PCR

! Can be used as an additional tool to improve diagnostics and prevention of diphtheria



Detection of the
C. diphtheriae toxin gene



Multiplex format



Possibility
of automation



Automatic analysis
of study results



Human biomaterial
and bacterial cultures



From **1.5** hours

High speed of the
study conduction

Interpretation of the study results

+ *C. diphtheriae*
+ *tox*

DNA of toxigenic *C. diphtheriae*
strains is detected
(the *tox* gene is detected) *

+ *C. diphtheriae*
- *tox*

DNA of non-toxigenic
C. diphtheriae strains is detected
(the *tox* gene is not detected)

*In all cases, true toxigenicity must be confirmed by phenotypic tests

Biomaterial	<ul style="list-style-type: none"> • Swabs/scrapes from mucous membranes of nasopharynx and oropharynx • Swabs from affected skin areas • Bacterial cultures 	
Transport media	<ul style="list-style-type: none"> • STOR-F • STOR-M 	
DNA extraction kits	<ul style="list-style-type: none"> • PREP-NA • PREP-GS • PREP-MB RAPID • PREP-Optima (suitable for bacterial cultures) 	
Variants of package	<ul style="list-style-type: none"> • Standard package (Package S, strips) • Standard package (Package S, tubes) • Package for manual and automatic dosing (Package U) 	
Devices	Detecting thermocyclers <ul style="list-style-type: none"> • DTprime • DTlite • DT-96 • DTprime *X* (384-well microplate) 	Dosing devices <ul style="list-style-type: none"> • DTstream 12M1 • DTstream 15M1
Analytical sensitivity	10 ³ copies/mL of DNA sample	
Time of analysis	From 1.5 hours (without sample preparation and DNA extraction)	
Number of samples	<ul style="list-style-type: none"> • 48 tests for package S, including control samples • 96 tests for package U, including control samples 	



Biomaterial sampling



DNA extraction



Real-Time PCR conduction

C. diphtheriae Tox

Date:
 Number of tube:
 Patient name:
 Sex:
 Age:
 Organization:
 Clinician name:
 Comments:

Sample ID:



Information about laboratory

Nº	Name of research	Result
1	C. diphtheriae (tox+)	not detected
2	C. diphtheriae	DETECTED

Study was carried out by

Date:
 Signature:

Automatic creation of a result form

Specialized software – Automatic result calculation and generation of the report

RealTime_PCR software



+2°C +8°C
 -18°C -22°C
 12 months

www.dna-technology.com

