



Corynebacterium diphtheriae A and B

SKU: QM2020

Product Categories: [Fabricante](#), [Humana](#), [Kit para Otras Infecciones Bacterianas](#), [PCR](#), [Vivantis](#)

Product Page:

<http://vacunek.com/shop/manufacturer/vivantis/corynebacterium-diphtheriae-a-and-b/>

Product Summary

Description

The ViPrimePLUS Corynebacterium diphtheriae A & B qPCR Kit is a Taqman probe-based real-time PCR assay for the detection of Corynebacterium diphtheriae A & B genomes in clinical samples (e.g. upper respiratory fluids, ulcers and sores samples).

(RUO)

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Corynebacterium diphtheriae (C. diphtheriae) is a Gram negative bacterium, where the toxin-producing strain causes diphtheria in human infection. Toxigenic strain is

formed by the infection of bacteriophages, which encodes tox gene. Respiratory diphtheria is usually presented with sore throat, mild fever and pseudomembrane formation due to bacterial colonization and adhesion to the pharyngeal cells. Complications like myocarditis, polyneuritis, and airway obstruction may develop from respiratory diphtheria, resulting in 5-10% mortality rate. As for cutaneous diphtheria, lesions and ulcers on the skin are present but complication is less often. Diphtheria toxin consists of 2 subunits, i.e. the A fragment that inhibits protein synthesis by inactivating the elongation factor 2 (eEF2), and the B fragment, which binds to the host cell surface receptors. It leads to the internalization of A fragment into the cell via endocytosis. Implementation of diphtheria toxoid vaccine has reduced many cases in developed countries, while epidemic threats in developing nations are still evident.

ViPrimePLUS *Corynebacterium diphtheriae* A & B qPCR Kit is intended for research use only.

Kit Component - *C. diphtheriae* A & B Primers and Probe Mix (*C. diphtheriae* A & B PPM) - Positive Control - Internal Extraction Control Primers and Probe Mix (IEC PPM) - Internal Extraction Control (IEC DNA) - Nuclease Free Water - Template Preparation Buffer **Product Specification**

Technology

Taqman probe-based real-time PCR assay

Type of Nucleic Acid Kit

DNA

Kit Storage

Shipped in room temperature, store at -20°C on arrival

Sample Material

Clinical samples (e.g. upper respiratory fluids, ulcers, sores)

Gene Target

C. diphtheriae toxin subunits A & B genes

Detection Limit

10 to <100 copies per reaction

Sensitivity & Specificity

Ct value 28 ± 3 with probability of 95%

Controls Included

- Internal Extraction Control (IEC) as inhibition control
- Positive control

Channels

- FAM channels detect pathogen amplicons
- VIC/HEX channel detects IEC amplicons

Solicitar Manual

Product Attributes

- Reacciones: 150 rxns