

Microbial DNA qPCR Multi-Assay Kit

Clostridium perfringens Pathogenicity

Cat. no. 330043 BBID-1507ZR-3

For real-time PCR-based, application-specific microbial identification or profiling

The Clostridium perfringens Pathogenicity Microbial qPCR DNA Multi-Assay Kit is a research tool used for the detection of virulence factors from C. perfringens. This multi-assay kit provides microbiology researchers with a convenient way to quickly detect virulence factor genes from C. perfringens in isolated bacterial colonies, metagenomic samples, and other sample types. Virulence factors facilitate development of disease from infectious bacteria by allowing a microorganism to establish itself on the host, in part by subverting or eluding host defenses, allowing attachment to the host, production of toxins, etc. The kit contains assays for detecting C. perfringens itself and the virulence factor gene cloSI. The assays use PCR amplification primers and hydrolysis-probe detection, increasing their specificity. The kit also contains Microbial qPCR Mastermix, Microbial DNA-Free Water, Microbial DNA Positive Control, and Positive PCR Control. The Positive PCR Control assay is included to test for the presence of PCR inhibitors and the efficiency of the polymerase chain reaction. Identification of whether pathogenic C. perfringens is present in a sample is accomplished using data analysis software with imported CT values generated by the PCR instrument software. The simplicity of the product format and operating procedure allow routine and reliable screening of pathogenic C. perfringens from samples in any research laboratory with access to a real-time PCR instrument.

For further details, consult the *Microbial DNA qPCR Handbook*.

Microbial DNA qPCR Multi-Assay Kits contents

Number of reactions	20 (25 µl PCR reactions)
Microbial DNA qPCR Assay BPID00112A	1 tube (20 µl)
Microbial DNA qPCR Assay BPVF00465A	1 tube (20 µl)
Positive PCR Control (PPC)	1 tube (20 µl)
Microbial DNA Positive Control	1 tube (50 µl)
Microbial DNA-Free Water	1 or 2 tubes (1.35 ml each), depending on number of assays
Microbial qPCR Mastermix	1 or 2 tubes (1.35 ml each), depending on number of assays



Sample & Assay Technologies

Quality control data

Assay BPID00112A name	C. perfringens
Assay BPID00112A No Template Control CT>35	Pass
Assay BPID00112A DNA Positive Control Template CT<34	Pass
Positive PCR Control CT = 22 ± 2	Pass
Microbial DNA Positive Control, CT<34	Pass
Microbial DNA-Free Water, free of contaminating DNA	Pass

Assay BPVF00465A name	cloSI
Assay BPVF00465A No Template Control CT>35	Pass
Assay BPVF00465A DNA Positive Control Template CT<34	Pass
Positive PCR Control CT = 22 ± 2	Pass
Microbial DNA Positive Control, CT<34	Pass
Microbial DNA-Free Water, free of contaminating DNA	Pass

Shipping and storage

Microbial DNA qPCR Multi-Assay Kits are shipped on blue ice packs. For long-term storage, keep Microbial DNA qPCR Multi-Assay Kits at –20°C. Microbial qPCR Mastermixes are shipped on blue ice packs. For long-term storage, keep Microbial qPCR Mastermixes at –20°C. Microbial DNA-Free Water is shipped at ambient temperature or on blue ice packs. If unopened, Microbial DNA-Free Water can be stored at room temperature or at –20°C. If tube is opened, store Microbial DNA-Free Water at –20°C. Discard tube of Microbial DNA-Free Water if opened three times and use fresh tube of Microbial DNA-Free Water for future experiments.

Note: Ensure that you have the correct Microbial qPCR Mastermixes, with the correct reference dye if required, for your instrument.

Note: Open the package and store the products appropriately immediately upon receipt.

Assay Table

Assay #	Species (NCBI Tax ID)/Gene	NCBI Tax ID	Antibiotic classification / Gene Description	May detect (species) / Also detect (antibiotic resistance genes) / Associated species (virulence factor genes)	Sensitivity	Assay Catalog #
1	Clostridium perfringens	1502			100	BPID00112A
2	cloSI		alpha-clostripain	Clostridium perfringens	20	BPVF00465A

PCR plate loading sequence

Position	Species/gene	Template
A1	Clostridium perfringens	NTC
A2	Clostridium perfringens	Microbial DNA Positive Control
A3	Clostridium perfringens	Sample 1
A4	cloSI	NTC
A5	cloSI	Microbial DNA Positive Control
A6	cloSI	Sample 1
A7	Clostridium perfringens	NTC
A8	Clostridium perfringens	Microbial DNA Positive Control
A9	Clostridium perfringens	Sample 2
A10	cloSI	NTC
A11	cloSI	Microbial DNA Positive Control
A12	cloSI	Sample 2
B1	Clostridium perfringens	NTC
B2	Clostridium perfringens	Microbial DNA Positive Control
B3	Clostridium perfringens	Sample 3
B4	cloSI	NTC
B5	cloSI	Microbial DNA Positive Control
B6	cloSI	Sample 3
B7	Clostridium perfringens	NTC
B8	Clostridium perfringens	Microbial DNA Positive Control
B9	Clostridium perfringens	Sample 4
B10	cloSI	NTC
B11	cloSI	Microbial DNA Positive Control
B12	cloSI	Sample 4
C1	Clostridium perfringens	NTC
C2	Clostridium perfringens	Microbial DNA Positive Control
C3	Clostridium perfringens	Sample 5
C4	cloSI	NTC
C5	cloSI	Microbial DNA Positive Control
C6	cloSI	Sample 5
C7	Clostridium perfringens	NTC
C8	Clostridium perfringens	Microbial DNA Positive Control
C9	Clostridium perfringens	Sample 6
C10	cloSI	NTC
C11	cloSI	Microbial DNA Positive Control
C12	cloSI	Sample 6
D1	Clostridium perfringens	NTC
D2	Clostridium perfringens	Microbial DNA Positive Control
D3	Clostridium perfringens	Sample 7
D4	cloSI	NTC
D5	cloSI	Microbial DNA Positive Control
D6	cloSI	Sample 7
D7	Clostridium perfringens	NTC
D8	Clostridium perfringens	Microbial DNA Positive Control
D9	Clostridium perfringens	Sample 8
D10	cloSI	NTC
D11	cloSI	Microbial DNA Positive Control
D12	cloSI	Sample 8
E1	Clostridium perfringens	NTC
E2	Clostridium perfringens	Microbial DNA Positive Control
E3	Clostridium perfringens	Sample 9
E4	cloSI	NTC
E5	cloSI	Microbial DNA Positive Control
E6	cloSI	Sample 9
E7	Clostridium perfringens	NTC
E8	Clostridium perfringens	Microbial DNA Positive Control
E9	Clostridium perfringens	Sample 10
E10	cloSI	NTC
E11	cloSI	Microbial DNA Positive Control

Position	Species/gene	Template
E12	cloSI	Sample 10
F1	Clostridium perfringens	NTC
F2	Clostridium perfringens	Microbial DNA Positive Control
F3	Clostridium perfringens	Sample 11
F4	cloSI	NTC
F5	cloSI	Microbial DNA Positive Control
F6	cloSI	Sample 11
F7	Clostridium perfringens	NTC
F8	Clostridium perfringens	Microbial DNA Positive Control
F9	Clostridium perfringens	Sample 12
F10	cloSI	NTC
F11	cloSI	Microbial DNA Positive Control
F12	cloSI	Sample 12
G1	Empty	Empty
G2	Empty	Empty
G3	Empty	Empty
G4	Empty	Empty
G5	Empty	Empty
G6	Empty	Empty
G7	Empty	Empty
G8	Empty	Empty
G9	Empty	Empty
G10	Empty	Empty
G11	Empty	Empty
G12	Empty	Empty
H1	PPC	Sample1
H2	PPC	Sample2
H3	PPC	Sample3
H4	PPC	Sample4
H5	PPC	Sample5
H6	PPC	Sample6
H7	PPC	Sample7
H8	PPC	Sample8
H9	PPC	Sample9
H10	PPC	Sample10
H11	PPC	Sample11
H12	PPC	Sample12

Ordering Information

Product	Contents	Cat. no.
Microbial DNA qPCR Multi-Assay Kit	One 20 μ l tube for each Microbial DNA qPCR Assay, 1 tube Positive PCR Control (20 μ l), 1 tube Microbial DNA Positive Control (20 μ l), 1 or 2 tubes Microbial DNA-Free Water (1.35 ml each), 1 or 2 tubes Microbial qPCR Mastermix (1.35 ml each)	330043

Microbial DNA qPCR Multi-Assay Kits are intended for molecular biology use only. These products are not intended for the diagnosis, prevention, or treatment of a disease.

Learn more at www.qiagen.com!

Trademarks: QIAGEN®; ROX™ (Life Technologies Corp.)
1078169 07/2013 © 2013 QIAGEN, all rights reserved.

www.qiagen.com

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Brazil ■ 0800-557779

Canada ■ 800-572-9613

China ■ 8621-3865-3865

Denmark ■ 80-885945

Finland ■ 0800-914416

France ■ 01-60-920-930

Germany ■ 02103-29-12000

Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049

Italy ■ 800-787980

Japan ■ 03-6890-7300

Korea (South) ■ 080-000-7145

Luxembourg ■ 8002 2076

Mexico ■ 01-800-7742-436

The Netherlands ■ 0800 0229592

Norway ■ 800-18859

Singapore ■ 1800-742-4368

Spain ■ 91-630-7050

Sweden ■ 020-790282

Switzerland ■ 055-254-22-11

UK ■ 01293-422-911

USA ■ 800-426-8157



Sample & Assay Technologies