

## ○ Bacteria

● Macrolide-resistant *Bordetella pertussis*

A gene associated with macrolide resistance in *Bordetella pertussis* (23S rRNA mutation : A2047G) was detected by ultra-rapid real-time PCR.

## ○ Instruments and reagents

- GeneSoC® mini R
- GeneSoC® mini PCR chips
- CyclecleavePCRTM Reaction Mix (CY505A, Takara Bio Inc.)

## ○ Primers and Probes

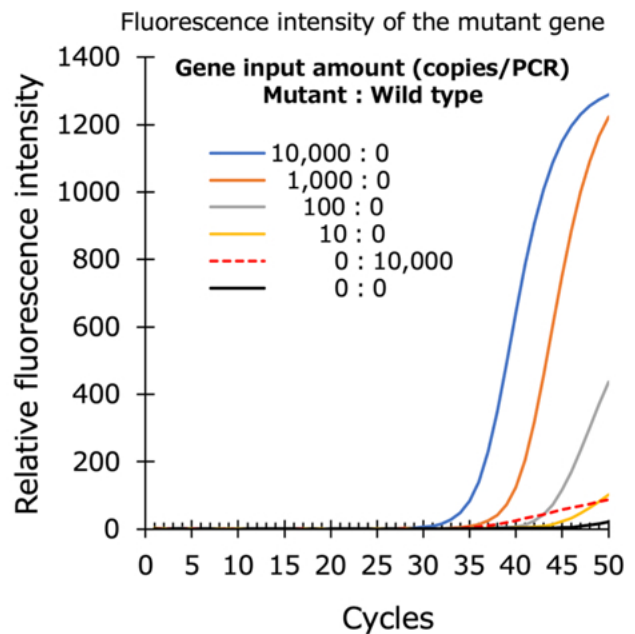
Pathogen Detection Manual: Pertussis (Version 4.0) Source: National Institute for Health Crisis Management – Infectious Disease Information Website Section (3)-9: Detection of Macrolide-Resistant Strains Refer to the A2047G Cyclecleave PCR Method.

## ○ Template

An aqueous solution containing DNA fragments of the mutant (A2047G) and wild type (A2047).

## Related Product

- Ultra-rapid real-time PCR system GeneSoC® mini R
- GeneSoC® mini PCR chips
- GeneSoC® PCR Master Mix



## ○ PCR Protocol

	Temp.(°C)	Time(sec)	Cycle
HS	98	10	1
DN	98	3	50
AE	57	9	

(Time required: approx. 13 minutes)

- HS : Hot Start
- DN : Denature
- AE : Annealing / Extension

※ For more detailed experimental conditions, please contact our representative.



Ultra-rapid real-time PCR system

GeneSoC® mini R

<https://genesoc.jp/en/application-note/>



Palm-sized PCR device

