

**GeneChaser Gram Posi Multi**

Cat. NO.RDM-1116

**General description** Gram positive bacteria that cause food poisoning are *Staphylococcus*, *Bacillus*, *Listeria* and *Clostridium*. The RapiGEN GeneChaser Gram Posi Multi kit amplifies specific DNA targets of gram positives such as *Staphylococcus*, *Campylobacter*, *Bacillus*, *listeria* and *Clostridium* at a time by multiplex PCR.

Content	Quantity
Positive size marker(5µl per test)	110µl
Primer mixture(10µl per test)	260µl
Premixture(1 tube per test)	96 tubes
DNA extraction buffer(100µl per test)	10 ml

**Protocol**

**(Food)** Sample 25g + Tryptic Soy Broth 225 mL

**(Environment)** Swab + Tryptic Soy Broth 10 mL

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**Incubation** 37°C, 4-45hr  
(1 cell → 10<sup>5</sup> cell)

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**DNA extraction** 1 hr

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**PCR** 1-2 hrs

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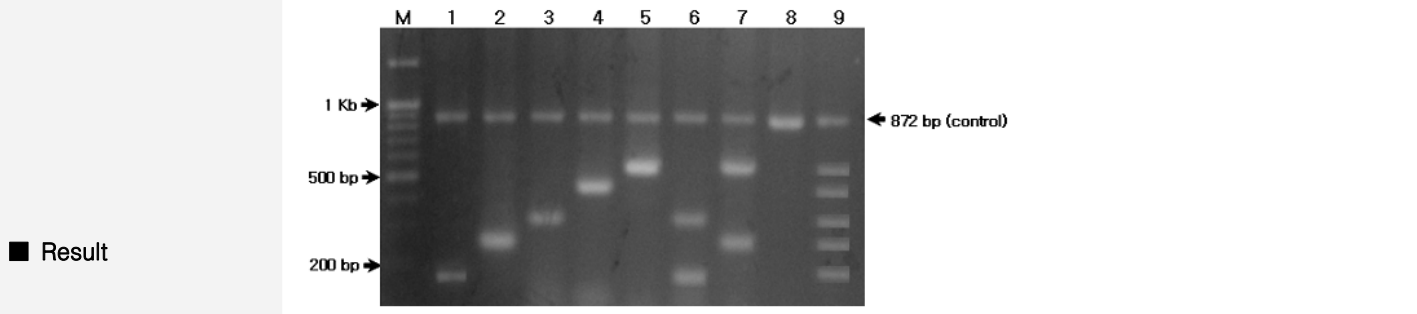
**Electrophoresis** 30 min

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**Date analysis**

**(PCR condition)**

95°C	3 min	1 cycle
94°C	20 sec	
63°C	20 sec	40 cycle
72°C	45 sec	
72°C	5 min	1 cycle



M	100bp DNA ladder	-	5	<i>Listeria monocytogenes</i>	539bp
1	<i>Staphylococcus aureus</i> 16S rRNA	158bp	6	1+3	-
2	<i>Campylobacter jejuni</i>	257bp	7	2+5	-
3	<i>Bacillus cereus</i> 16S rRNA	335bp	8	Running control band	872bp
4	<i>Clostridium perfringens</i>	445bp	9	Positive size marker	-

**Interpretation**

- ▶ Detectable strain: Gene
  - *Staphylococcus aureus*: 158bp
  - *Bacillus cereus*: 335bp
  - *Campylobacter jejuni/ coli*: 257bp
  - *Clostridium perfringens*: 445bp
  - *Listeria monocytogenes*: 539bp
- ▶ Detection limit: 10<sup>5</sup> cell /Tube

