

GeneChaser EAST1 Mono

Cat. NO.RDM-1108

General description The RapiGEN GeneChaser EAST1 monotype PCR kit amplifies *ast1* gene of *E. coli* by PCR and detects pathogenic *E. coli* promptly and precisely.

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

Protocol

(Food) Sample 25g + Modified EC Broth 225 mL

(Environment) Swab + Modified EC Broth 10 mL

↓

Incubation 37 $^{\circ}$ C, 2-3 hrs
(1 cell \rightarrow 10² cell)

↓

DNA extraction 1 hr

↓

PCR 1-2 hrs

↓

Electrophoresis 30 min

↓

Date analysis

(PCR condition)

95 $^{\circ}$ C	3 min	1 cycle
94 $^{\circ}$ C	20 sec	
63 $^{\circ}$ C	20 sec	40 cycle
72 $^{\circ}$ C	45 sec	
72 $^{\circ}$ C	5 min	1 cycle

Result

1 Kb →

500 bp →

200 bp →

← 872 bp (control)

Lane M	100bp DNA ladder
Lane 1	<i>E. coli</i> 10 ⁷ cell /Tube
Lane 2	<i>E. coli</i> 10 ⁶ cell /Tube
Lane 3	<i>E. coli</i> 10 ⁵ cell /Tube
Lane 4	<i>E. coli</i> 10 ⁴ cell /Tube
Lane 5	<i>E. coli</i> 10 ³ cell /Tube
Lane 6	<i>E. coli</i> 10 ² cell /Tube
Lane 7	Running control band

Interpretation

- ▶ Detectable strain: Gene
 - *E. coli: ast1* (110bp)
- ▶ Detection limit : 10² cell /Tube

