

GeneChaser LAEC

(Localized adhesion *E. coli*) Mono

Cat. NO.RDM-1127

General description The RapiGEN GeneChaser LAEC (localized adhesion *E. coli*) monotype PCR kit amplifies specific *eaeA* and *bfp* gene of *E. coli* by PCR.

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

(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

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

Result

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*: *eaeA* (303bp)
 - *E. coli*: *bfp* (390bp)
- ▶ Detection limit: 10² cell /Tube