# PCR protocol

Sheet ID PS_06145
Release date : 11/21/2014
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**RBRC** 05911 **Strain name** B6.129S6-Cd109<tm1Mat>

| Primer | primer_name | primer_seq | length | | |
|---|---|---|---|---|---|
| 1 | | CTGCTTATTCACTCCGGGCATC | 22 | | RIKEN BRC |
| 2 | 0847_3mCD109_11305 | GTGTGACTGTTAGACAGTGCAG | 22 | | Depositor's primer |
| 3 | lacZas | CGCGTAAAAATGCGCTCAGG | 20 | | PLoS One, 4, e6869 (2009). |

## Reaction Components

**Enzyme** TaKaRa LA Taq with GC buffer (Cat. No. RR02AG)

| | Conc | Run 1 | Run 2 | Run 3 | Run 4 |
|---|---|---|---|---|---|
| H2O | | 3.9 | | | |
| PCR buffer | 2 X GC I | 10.0 | | | |
| dNTP | 2.5 mM | 2.0 | | | |
| primer 1 | 10 pmol/μl | 1.0 | | | |
| primer 2 | 10 pmol/μl | 1.0 | | | |
| primer 3 | 10 pmol/μl | 1.0 | | | |
| DNA | | 1.0 | | | |
| Taq | 5U/μl | 0.1 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | total | 20 | | | |

## Reaction Conditions

| step | temp (℃) | time (sec) | note |
|---|---|---|---|
| 1 | 94 | 180 | |
| 2 | 94 | 30 | * |
| 3 | 60 | 30 | * |
| 4 | 72 | 120 | * *Repeat for 30 cycles |
| 5 | 72 | 300 | |
| | | | |
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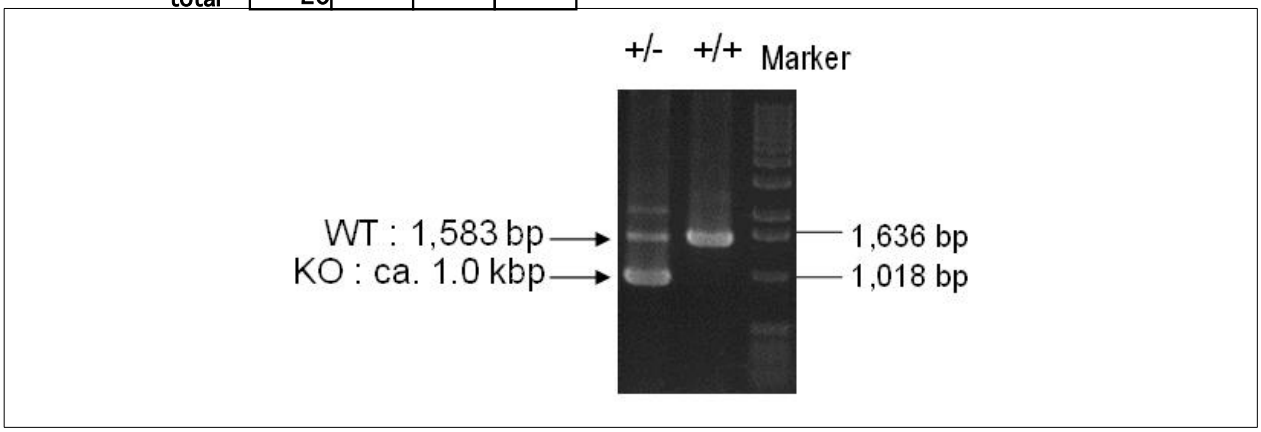


**Marker**

1 kb DNA ladder (Invitrogen, Cat. 15615-024)

**Gel**

1% agarose in 1 X TAE (100 V, 30 min)

**PCR products**

| primer_set | | product_size | product |
|---|---|---|---|
| primer 1 | primer 2 | 1,583 bp | WT |
| primer 1 | primer 3 | ca. 1.0 kbp | KO |
| | | | |
| | | | |
| | | | |

**Comment**