# PCR protocol

Sheet ID PS_03985
Release date : 2/25/2016
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**RBRC** 04503 **Strain name** B6.129P2-Smad7<tm1Tojo>

| Primer | primer_name | primer_seq | length | | |
|---|---|---|---|---|---|
| 1 | sm7g-wt-1-r | TTCAGAGGCAGACCGAACCTCCAA | 24 | | J Biochem., 151 (6): 621-631 (2012). |
| 2 | sm7g-neo-1-f | TCTCACCTTGCTCCTGCCGAGAAAGTA | 27 | | J Biochem., 151 (6): 621-631 (2012). |
| 3 | sm7g-wt-1b-f | AGGATTGGGTCAGGGACAGAAGAGCA | 26 | | J Biochem., 151 (6): 621-631 (2012). |

## Reaction Components

**Enzyme** TaKaRa Ex Taq (Cat. No. RR001A)

| | Conc | Run 1 | Run 2 | Run 3 | Run 4 |
|---|---|---|---|---|---|
| H2O | | 12.3 | | | |
| PCR buffer | 10 X | 2.0 | | | |
| dNTP | 2.5 mM | 1.6 | | | |
| 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 | | 0.1 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | total | 20 | | | |

## Reaction Conditions

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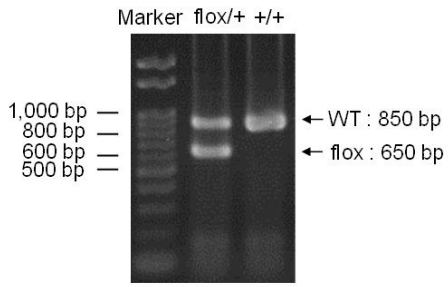


**Marker**

Gene Ladder 100 (Wako, Cat. 316-06951)

**Gel**

2% agarose in 1 X TAE (100 V, 30 min)

**PCR products**

| primer_set | | product_size | product |
|---|---|---|---|
| primer 1 | primer 2 | 650 bp | flox |
| primer 1 | primer 3 | 850 bp | WT |
| | | | |
| | | | |
| | | | |

**Comment**