# PCR protocol

Sheet ID PS_07726
Release date : 11/16/2018
Print date : 11/16/2018

**RBRC** 05844 **Strain name** C57BL/6-Tg(Pmch-tTA)BAhky

| Primer | primer_name | primer_seq | length | | Reference |
|---|---|---|---|---|---|
| 1 | promoter | CGCAGCTTTACAAAGGCTCTACG | 23 | | RIKEN BRC |
| 2 | exon 1 | CCGCTCTCGTCGTTTTTGTATTGTTC | 26 | | RIKEN BRC |
| 3 | tTA_R | CCAGGGTCTCGTACTGCTTC | 20 | | Depositor's primer |

**Reaction Components**

**Enzyme** TOYOBO KOD FX (Code.No : KFX-101)

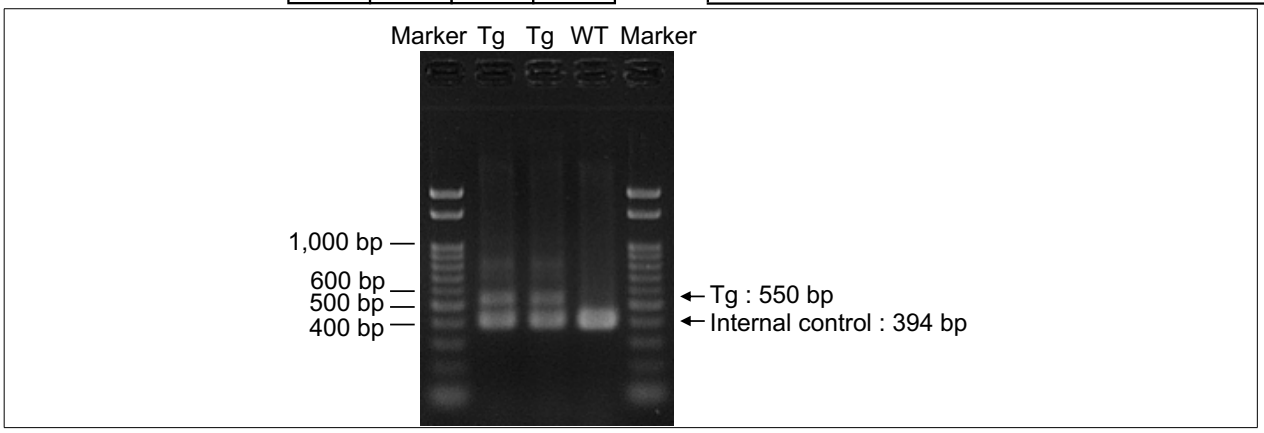
| Reagent | Conc | Reaction 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|---|
| H2O | | 1.8 | | | | (μL) |
| PCR buffer | 2 X | 10.0 | | | | |
| dNTP | 2.0 mM | 4.0 | | | | |
| primer 1 | 10 pmol/μl | 1.0 | | | | |
| primer 2 | 10 pmol/μl | 1.0 | | | | |
| primer 3 | 10 pmol/μl | 1.0 | | | | |
| DNA | | 1.0 | | | | |
| Taq | 1 U/μl | 0.2 | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | total | 20 | | | | |

**Reaction Conditions**

| step | temp (℃) | time (sec) | note |
|---|---|---|---|
| 1 | 94 | 120 | |
| 2 | 98 | 10 | * |
| 3 | 60 | 30 | * |
| 4 | 68 | 60 | * *Repeat for 30 cycles |

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

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




| primer_set | | product_size | product (allele type) |
|---|---|---|---|
| primer 1 | primer 2 | 394 bp | Internal control |
| primer 1 | primer 3 | 550 bp | Tg |
| | | | |
| | | | |
| | | | |
| | | | |

Non-Tg : 394 bp
Tg : 394 bp, 550 bp

**Comment** Standard PCR

Novagen KOD Xtreme™ Hot Start DNA Polymerase can be purchased from EMD.