PCR protocol

Sheet ID PS_05176
Release date : 3/19/2019
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RBRC 05705 **Strain name** B6.Cg-Opn5<tm1.1>

Primer	primer_name	primer_seq	length		Reference
1	mOpn5 F	GGTGAACATCTCTCCACTAG	20		iScience, 6:299-305 (2018).
2	mOpn5 R	GGTAGGGCAGTGTGGTTCAA	20		iScience, 6:299-305 (2018).
3	EGFP R	CTGAACTTGTGGCCGTTTAC	20		iScience, 6:299-305 (2018).

Reaction Components

Enzyme TaKaRa Ex Taq (Cat. No. RR001A)

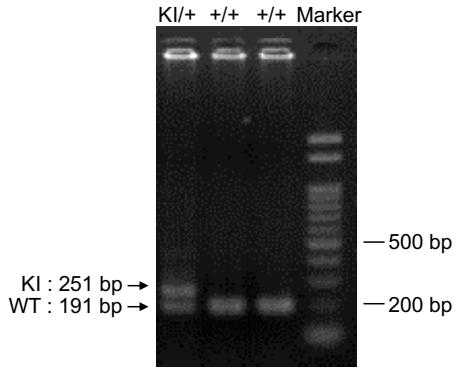
Reagent	Conc	Reaction 1	2	3	4	
H2O		12.3				(μL)
PCR buffer	10 X	2.0				
dNTP	2.5 mM	1.6				
primer 1	10 pmol/μl	1.0				
primer 2	10 pmol/μl	1.0				
primer 3	10 pmol/μl	1.0				
DNA	10 pmol/μl	1.0				
Taq	5 U/μl	0.1				
	total	20				

Reaction Conditions

step	temp (℃)	time (sec)	note
1	94	180	
2	94	30	*
3	57	30	*
4	72	60	* *Repeat for 30 cycles
5	72	300	

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

Gel 2% agarose in 1 X TAE (100 V, 35 min)



primer_set		product_size	product (allele type)
primer 1	primer 2	191 bp	WT
primer 1	primer 3	251 bp	KI

+/+ : 191 bp
KI/+ : 191 bp, 251 bp

Comment