PCR protocol

Sheet ID PS_08205
Release date : 8/31/2021
Print date : 8/31/2021

RBRC 03075 **Strain name** C57BL/6J-Tg(Myh6-NCX1.1*F223E)1

Primer	primer_name	primer_seq	length		Reference
1	intron 2	CACATAGAAGCCTAGCCCACA	21		Proc. Natl. Acad. Sci. USA, 93(19):10483-10488 (1996)
2	R1NheI	GGTCTCCAATGAAAGCTGTCAGTAT	25		Depositor's primer
3	oIMR0042	CTAGGCCACAGAATTGAAAGATCT	24		JAX Genotyping Protocol
4	oIMR0043	GTAGGTGGAAATTCTAGCATCATCC	25		JAX Genotyping Protocol

Reaction Components

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

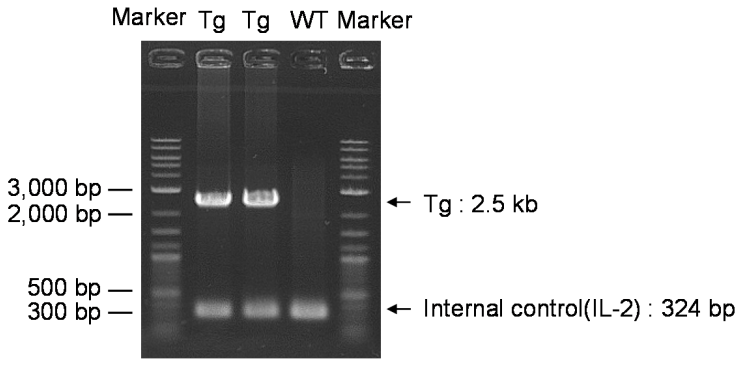
Reagent	Conc	Reaction 1	2	3	4	
H2O		0.8				(μL)
PCR buffer	2 X	10.0				
dNTP	2.0 mM	4.0				
primer 1	10 pmol/μl	1.0				
primer 2	10 pmol/μl	1.0				
primer 3	10 pmol/μl	1.0				
primer 4	10 pmol/μl	1.0				
DNA		1.0				
Taq	1 U/μl	0.2				
	total	20				

Reaction Conditions

step	temp (℃)	time (sec)	note
1	94	120	
2	98	10*	
3	60	30*	
4	68	240*	*Repeat for 30 cycles

Marker 2-Log DNA Ladder (NEB, Cat. N3200)

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



primer_set		product_size	product (allele type)
primer 1	primer 2	2.5 kb	Tg
primer 3	primer 4	324 bp	Internal control (IL-2)

Non-Tg : 324 bp
Tg : 324 bp, 2.5 kb

Comment Standard PCR

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

PCR protocol

Sheet ID PS_02347
Release date : 01/12/2010
Print date : 8/31/2021

RBRC 03075 **Strain name** C57BL/6J-Tg(Myh6-NCX1.1*F223E)1

Primer	primer_name	primer_seq	length		Reference
1	F12	AGGTGAAGGTATTGCGAACATCTGGA	26		Depositor's primer
2	R1NheI	GGTCTCCAATGAAAGCTGTCAGTAT	25		Depositor's primer
3	oIMR0042	CTAGGCCACAGAATTGAAAGATCT	24		JAX Genotyping Protocol
4	oIMR0043	GTAGGTGGAAATTCTAGCATCATCC	25		JAX Genotyping Protocol

Reaction Components

Enzyme TaKaRa Ex Taq (Cat. No. RR001A)

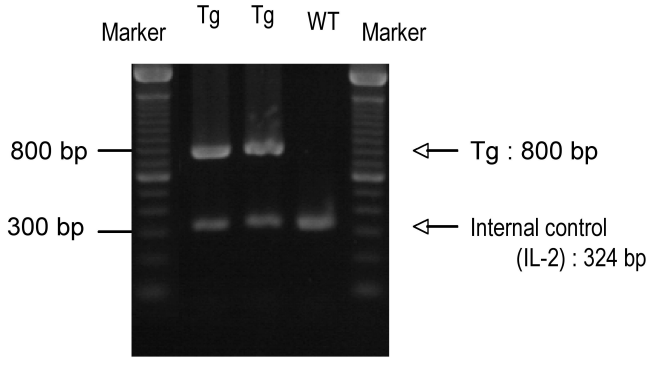
Reagent	Conc	Reaction 1	2	3	4	
H2O		15.3				(μL)
PCR buffer	10 X	2.5				
dNTP	2.5 mM	2.0				
primer 1	10 pmol/μl	1.0				
primer 2	10 pmol/μl	1.0				
primer 3	10 pmol/μl	1.0				
primer 4	10 pmol/μl	1.0				
DNA		1.0				
Taq		0.2				
total		25				

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	

Marker 100 bp ladder (Invitrogen, Cat. 15628-050)

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



primer_set		product_size	product (allele type)
primer 1	primer 2	800 bp	Tg
primer 3	primer 4	324 bp	Internal control (IL-2)

Comment