PCR protocol

Sheet ID PS_08012
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RBRC 10978 **Strain name** B6NJcl.Cg-Mdga1<tm1.1Tymo>

Primer	primer_name	primer_seq	length		Reference
1	MDGA1 Fwd5	GTTCAGCACCCTCGGTGGAC	20		Depositor's primer
2	Wild Rev5	GAGACCTTACCCCGGCATCC	20		Depositor's primer
3	Mut Rev5	CCAGGGTTTTCCCAGTCACG	20		Depositor's primer

Reaction Components

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

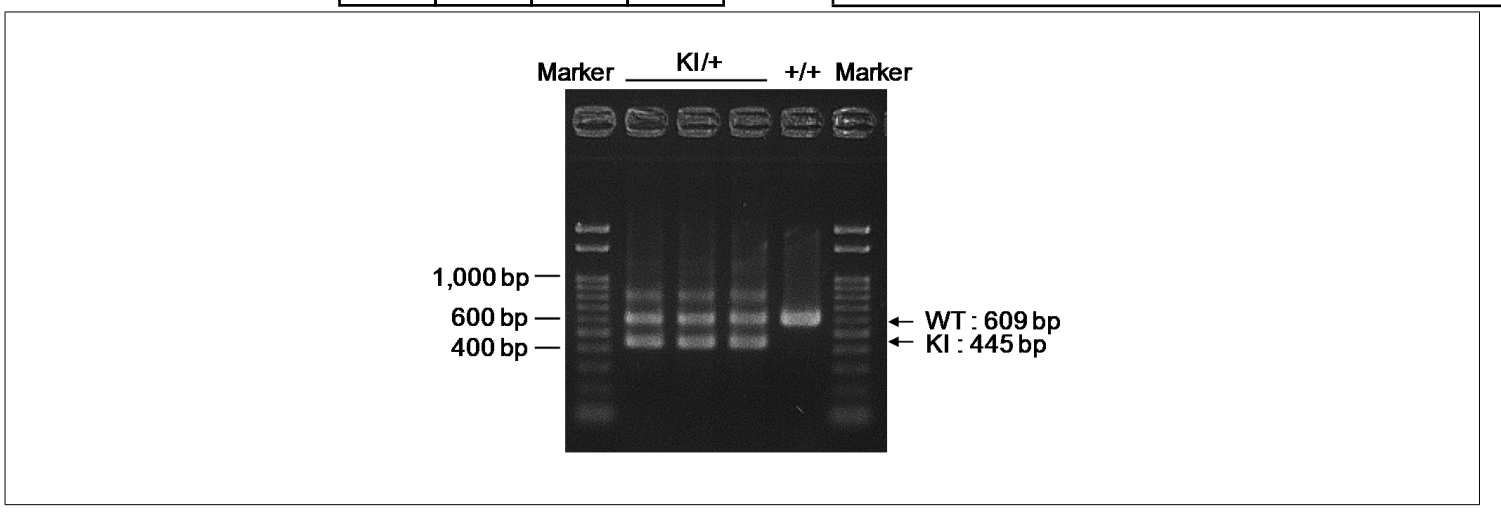
Reagent	Conc	Reaction 1	2	3	4	
H2O		1.8				(μL)
PCR buffer	2 X	10.0				
dNTP	2.0 mM	4.0				
primer 1	10 pmol/μl	1.0				
primer 2	10 pmol/μl	1.0				
primer 3	10 pmol/μl	1.0				
DNA		1.0				
Taq	1 U/μl	0.2				
total		20				

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	609 bp	WT	+/+ (wild-type): 609 bp KI/+ (heterozygous): 609 bp and 445 bp KI/KI (homozygous): 445 bp
primer 1	primer 3	445 bp	KI	

Comment Standard PCR

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