PCR protocol

Sheet ID PS_08217
Release date : 11/10/2021
Print date : 11/10/2021

RBRC 10468 **Strain name** B6.129-Scn2a<tm2.1Kzy>

Primer	primer_name	primer_seq	length		Reference
1	2acoKO_dlox_F2	TGTCTCAGATCCCCTATTGCT	21		Commun. Biol., 1, Article number: 96 (2018).
2	2acoKO_dlox_R1	CCAGTAGAACACCATAAAGCTCA	23		Commun. Biol., 1, Article number: 96 (2018).

Reaction Components

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

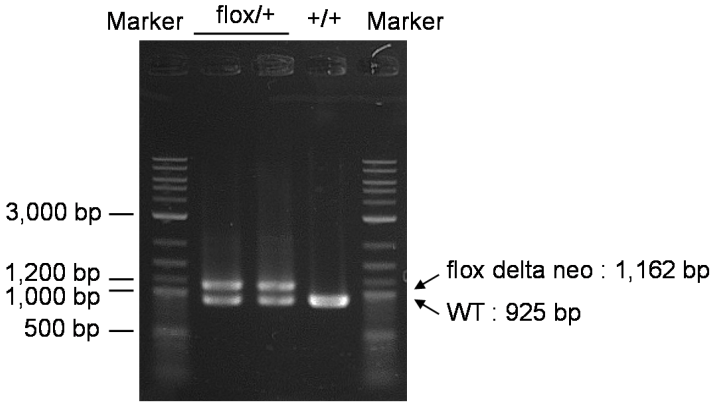
Reagent	Conc	Reaction 1	2	3	4	
H2O		2.8				(μL)
PCR buffer	2 X	10.0				
dNTP	2.0 mM	4.0				
primer 1	10 pmol/μl	1.0				
primer 2	10 pmol/μl	1.0				
DNA		1.0				
Taq	1 U/μl	0.2				
	total	20				

Reaction Conditions

step	temp (℃)	time (sec)	note
1	94	120	
2	98	10*	
3	60	30*	
4	68	90*	*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	925 bp	WT	+/+ (wild-type): 925 bp flox/+ (heterozygous): 925 bp and 1,162 bp
primer 1	primer 2	1,162 bp	flox delta neo	
primer 1	primer 2	284 bp	null (After cre mediated excision)	

Comment Standard PCR

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