PCR protocol

Sheet ID PS_08304
Release date : 5/6/2022
Print date : 5/6/2022

RBRC 11544

Strain name C57BL/6N-Del(16Pi4ka-Dgcr2)Atai

Primer	primer_name	primer_seq	length		Reference
1	Del1.5Mb-Fw	CTAAGGAATGGTTCCGGCCA	20		Mol. Brain, 14(1):68 (2021).
2	Del1.4Mb-Rv	TGCTAGCCTGCATCGTAAGG	20		Mol. Brain, 14(1):68 (2021).
3	Del1.4Mb-Fw	AACCACAGGGGTGGAAAGTC	20		Mol. Brain, 14(1):68 (2021).

Reaction Components

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

Reagent	Conc	Reaction 1	2	3	4
H2O		1.8			
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			

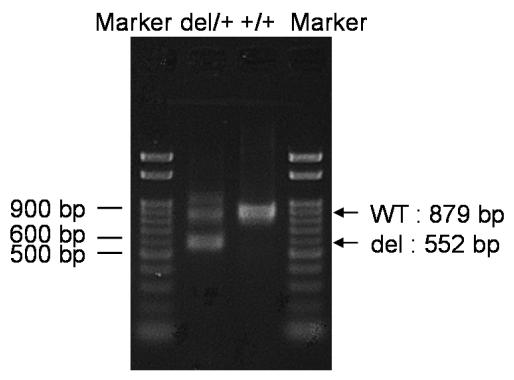
(μL)

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	879 bp	WT
primer 2	primer 3	552 bp	del

+/+ (wild-type): 879 bp
del/+ (heterozygous): 879 bp and 552 bp

Comment Standard PCR

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

PCR protocol

Sheet ID PS_08303
Release date : 3/17/2022
Print date : 5/6/2022

RBRC 11544

Strain name C57BL/6N-Del(16Pi4ka-Dgcr2)Atai

Primer	primer_name	primer_seq	length		Reference
1	Del1.5Mb-Fw	CTAAGGAATGGTTCCGGCCA	20		Mol. Brain, 14(1):68 (2021).
2	Del1.4Mb-Rv	TGCTAGCCTGCATCGTAAGG	20		Mol. Brain, 14(1):68 (2021).
3	Del3.0Mb-Rv	CAAGTAGAGAGGGAGTGGTGC	21		Transl. Psychiatry, 10(1):35 (2020).

Reaction Components

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

Reagent	Conc	Reaction 1	2	3	4
H2O		1.8			
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			

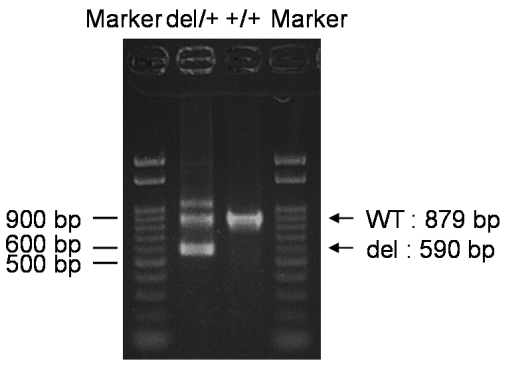
(μL)

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	879 bp	WT
primer 2	primer 3	590 bp	del

+/+ (wild-type): 879 bp
del/+ (heterozygous): 879 bp and 590 bp

Comment Standard PCR

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