

RBRC 01195

Strain name C57BL/6J-Grin2a tm

Primer	primer_name	primer_seq	length	
1	NR2A-F	CTCCCCATGGGCCTTCTTTT	20	Depositor's primer
2	NR2A-R	AGTCACTTGGTCCACAAACTC	21	Depositor's primer
3	Neo-R	ACCTGCGTGCAATCCATCTT	20	Depositor's primer

### Reaction Components

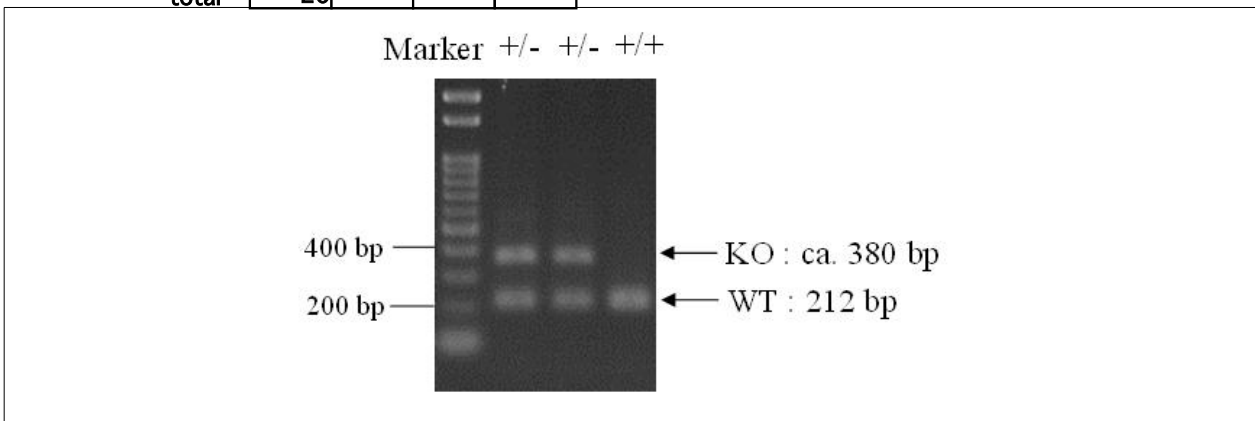
Enzyme TOYOBO KOD FX (Code.No : KFX-101)

### Reaction Conditions

	Conc	Run 1	Run 2	Run 3	Run 4
H2O		1.8			
PCR buffer	2 X	10.0			
dNTP	2.0 mM	4.0			
primer 1	10 pmol/ $\mu$ l	1.0			
primer 2	10 pmol/ $\mu$ l	1.0			
primer 3	10 pmol/ $\mu$ l	1.0			
DNA		1.0			
Taq	1 U/ $\mu$ l	0.2			
<b>total</b>		<b>20</b>			

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

### Standard PCR



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

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

PCR products		product_size	product
primer 1	primer 2		
primer 1	primer 2	212 bp	WT
primer 3	primer 2	ca. 380 bp	KO

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

RBRC 01195

Strain name C57BL/6J-Grin2a<sup>tm</sup>

Primer	primer_name	primer_seq	length	
1	NR2A-F	CTCCCCATGGGCCTTCTTTT	20	Depositor's primer
2	NR2A-R	AGTCACTTGGTCCACAAACTC	21	Depositor's primer
3	Neo-R	ACCTGCGTGCAATCCATCTT	20	Depositor's primer

**Reaction Components**

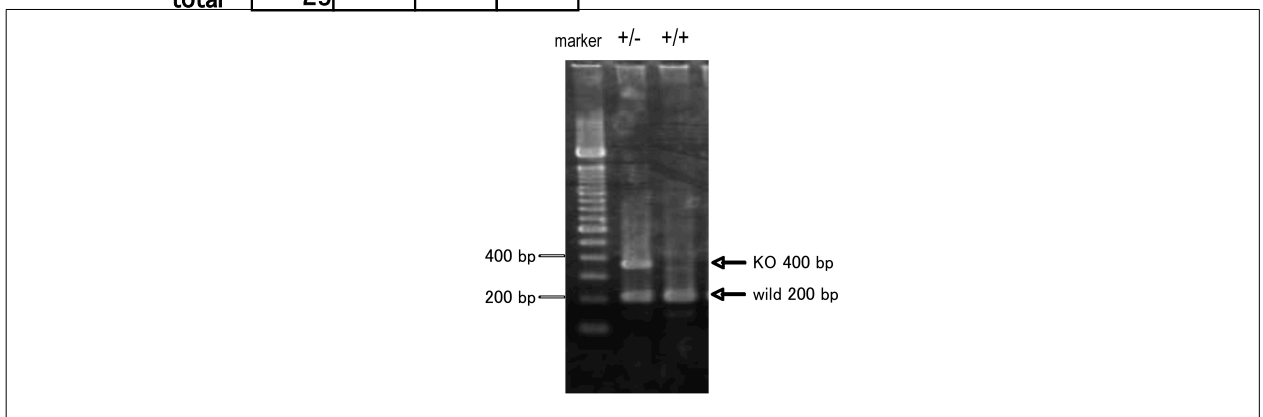
Enzyme	TaKaRa Ex Taq (Cat. No. RR001A)
--------	---------------------------------

**Reaction Conditions**

step	temp (°C)	time (sec)	note
1	94	300	
2	94	30*	
3	55	30*	
4	72	60*	*Repeat for 32 cycles
5	72	300	

	Conc	Run 1	Run 2	Run 3	Run 4
H2O		16.3			
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			
DNA		1.0			
Taq		0.2			
<b>total</b>		<b>25</b>			

Standard PCR



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

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

PCR products			
	primer_set	product_size	product
primer 1	primer 2	200 bp	WT
primer 3	primer 2	400 bp	KO

Comment