PCR protocol

RBRC 04787 **Strain name** B6.129P2(FVB)-Capn3<tm1.1Hiso>

Primer

	primer_name	primer_seq	length		
1	Capn3_common	CTGTTGTCTCTACTGAGACCATAG	24		RIKEN BRC
2	Capn3_wild	GCGATGGCTGCAAGAAACCAGGA	23		RIKEN BRC
3	Capn3_mut	GCGATGGCTGCAAGAAACCAGGT	23		RIKEN BRC

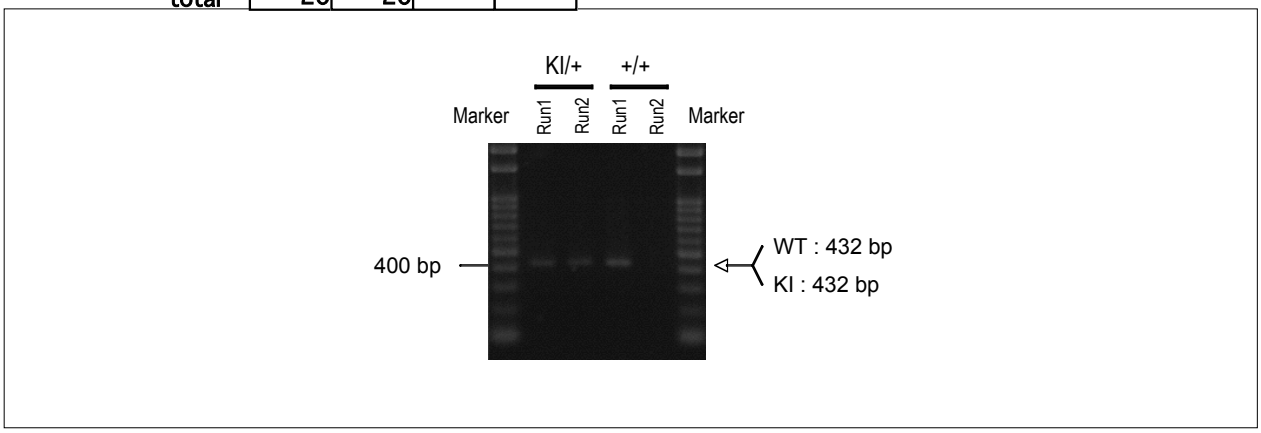
Reaction Components

Enzyme Roche Taq (Cat. No. BM1418432)

	Conc	Run 1	Run 2	Run 3	Run 4
H2O		13.3	13.3		
PCR buffer	10 X	2.0	2.0		
dNTP	2.5 mM	1.6	1.6		
primer 1	10 pmol/μl	1.0	1.0		
primer 2	10 pmol/μl	1.0	0		
primer 3	10 pmol/μl	0	1.0		
DNA		1.0	1.0		
Taq	5U/μl	0.1	0.1		
	total	20	20		

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

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

Gel

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

PCR products

primer_set		product_size	product
primer 1	primer 2	432 bp	WT
primer 1	primer 3	432 bp	KI

Comment