

RMRC Genotyping Protocol-PCR

No.	RMRC13388	Strain Name	129/Sv- <i>Fgfr3</i> ^{tm1.1(FGFR3*)Ytc} /Narl
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A. Primer

	Primer name	Sequence
1	<i>mfgfr3-F</i>	5'-CCT CCG GAG TAA CTC AGT GC-3'
2	<i>mfgfr3-R</i>	5'-ACA ACT TAC CGA GCG AAA GC-3'
3	<i>hFGFR3-R</i>	5'-GCA CAC TGA AGT GGC ACA GT-3'

B. Genomic extraction :

- ☐ Phenol-Chloroform extraction
 ☐ commercial extraction kit _____

☒ Lysis buffer 0.3mg/ml Proteinase K in 0.1% PBST
☐ other

C. Reaction Conditions

Component	Concentration		Volume		Step	Temperature, °C	Time, sec	Number of Cycles
H ₂ O	--		8	μl	1	95	5:00	1
PCR buffer (GoTaq® Green Master Mix)	2x		10	μl	2	95	0:45	35
dNTP		mM		μl	3	53	0:45	
Primer 1	0.2	μM(ρmol/μl)	0.5	μl	4	72	1:30	
Primer 2	0.2	μM(ρmol/μl)	0.5	μl	5	72	7:00	1
DNA	--		1	μl	6	4	∞	
Taq		U/μl		μl	7			
Mg ²⁺		mM		μl	8			
Total			20	μl	9			

The information of Taq, including company name and catalog number :

GoTaq Green Master Mix (Promega, Cat. M7122)

D. PCR Product

	Primer set		Product size	Target region
1	mFGFR3-F	mFGFR3-R	1067 bp	CCCCCTGTCCTCCGGAGTAACTCAGTGCCTCTCCTCTGTAGT CTCCACAGAGGCGTTCTCCCACCGGCGCCGGAGCCGGGCGTGG GGGGTTGCAGCATGCCCCGCGCGCTGCTTGAGGACGCCGCGG CCCCCGCTCTGGAGCCATGGTAGTCCCGGCCTGCGTGCTAGTG TTCTGCGTGGCGGTCTGGCTGGAGCTACTTCGAGCCTCCTG GTCCAGAGCAGCGAGTTGTGCGGAGAGCGGCAGGTAAGGACTG ACCCAAGGTGTTCTTCTGGGGGCCGGCCCTGAATCACAGGGGC TTTGGCAATGGTGAACAGCCCTTGGGTGAGGAAGGGGCGTCGG GTTGATTAGCACACAGGGGCTAGTGCGCCGAGGTTTGTCCCC TGCCCCGCGAGATCGCTGTCAGCTCGGACGCGGCAGTTTATAGG GGTGTCTGTAGGCTGGGAGCCACCACCAAGTGCGAGGCGTCA CGTGGAACCGGTGCCCCGTGACGGTGGTCCCAGGCAGAGGGGCGT TGGGAAGGCGCGGAGCTGACTTCCCACGATTCTATTGTTGC TTCTCGAATTTGAGAGGAGGAAAAATGCCTGTTATTGATTGAG CCGTTCTCCCGGAACAGTTCTTCTCTGCTTCAGCTAAAGGAA GGCTGGACGTTGCGGGGTGGATAGTAGTATCCCAGCCAAAGCT CAGCTTCAGGGTTTCGCATGACAAGGTGACAGCTTCAGTGCGG CTGCTCCCCCTCTTATCCTGTAGGCGGCCTGAGGGGTTCGGTTCC CAGGGGCGCGCACAGACTGCCCTTCAGGCCGACGCTGGGAGA TGAGGGGCGGTTGTCCCAGGATCTTGCGCCGCTAGGTAGTC CCGCTGGCCACCAAAGTCCGATGGGACACTTGAATGCCCTCAA ACGGGGCCCCGAGGCCAAGGATGCGAAAGGGAGCCACGGTCCG CTCTGCGTCCCTTGGTTGCCCGGAGGTGCGACGCGCGGGCCC CCGGCTGTGCCCCGGTGGCAGCGTGCCAAAGCAGAGCAGCGGTC TGGCGGGAGGCCGCGCAAGGGAGGCTTTCGCTCGGTAAAGTTG TCGCC
2	mFGFR3-F	hFGFR3-R	506 bp	CCCCCTGTCCTCCGGAGTAACTCAGTGCCTCTCCTCTGTAGT CTCCACAGAGGCGTTCTCCCACCGGCGCCGGAGCCGGGCGTGG GGGGTTGCAGCATGCCCCGCGCGCTGCTTGAGGACGCCGCGG

				CCCCCGCTCTGGAGCCATGGGCGCCCCCTGCCTGCGCCCTCGCG CTCTGCGTGGCCGTGGCCATCGTGGCCGGCGCCTCCTCGGAGT CCTTGGGGACGGAGCAGCGCGTCGTGGGGCGAGCGGCAGAAAGT CCCGGGCCCAGAGCCCCGGCCAGCAGGAGCAGTTGGTCTTCGGC AGCGGGGATGCTGTGGAGCTGAGCTGTCCCCCGCCGGGGGTG GTCCCATGGGGCCCCTGTCTGGGTCAAGGATGGCACAGGGCT GGTGCCCTCGGAGCGTGTCTGGTGGGGCCCCAGCGGCTGCAG GTGCTGAATGCCTCCCACGAGGACTCCGGGGCCTACAGCTGCC GGCAGCGGCTCACGCAGCGCGTACTGTGCCACTTCAGTGTGC
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E. Gel Photo

