



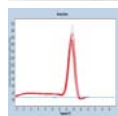
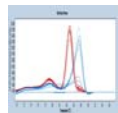
Welcome to The Genotyping Protocol System

**Master Protocol**

**Strain Name:** C57BL/6NJ-*Rfc2*<sup>em1J</sup>J  
**Stock Number:** 029029  
**Allele:** *Rfc2*<sup>em1J</sup>  
**Protocol Name:** *Rfc2*<sup>em1J</sup>  
**Method:** SEPARATED MELT  
**Created:** 03-May -2016 (ESCHAAB) **Updated:** 22-July -2016 (ESCHAAB)

**Notes**

Expected Results: Mutant = 299 bp  
 Heterozygote = 190 bp and 299 bp  
 Wild type = 190 bp

**Attachments**View [Rfc2-29029 Gel.jpg](#)View [Rfc WT Melt.jpg](#)View [Rfc MUT Melt.jpg](#)

- View [29029 Rfc2em1JMolDesAprl2016.docx](#)
- View [29029 Rfc2 genomic.gcs](#)

**Protocol Primers**

Primer	5' Label	Sequence 5' --> 3'	3' Label	Description	Reaction
27863	-	TCT TGG TTC TGG GGT TTG AG	-	Common	A + B
27864	-	GTG GAG CTG TGA TGC CAA C	-	Wild type Reverse	A
27865	-	GTG TGG TGG TGG TGG ATA TG	-	Mutant Reverse	B

Number Of Reactions 

Reaction A (2 Primer)		Cycling (TouchDown 65-60_12-12-11)			
Component	Final Concentration	Step #	Temp°C	Time	Note
ddH2O		1	94	2 min	-
Kapa 2G HS buffer	1.3 X	2	94	20sec	-
MgCl2	2.6 mM	3	65	15sec	-0.5 C per cycle decrease
dNTPS-kapa	.26 mM	4	68	10sec	-
27863	.5 uM	5	-	-	repeat steps 2-4 for 10 cycles (Touchdown)
		6	94	15sec	-

Reaction A (2 Primer)		Cycling (TouchDown 65-60_12-12-11)			
27864	.5 uM	7	60	15sec	-
Glycerol	6.5 %	8	72	10sec	-
Dye	1 X	9	-	-	repeat steps 6-8 for 28 cycles
Kapa 2G HS taq polymerase	.03 U/ul	10	72	2 min	-
DNA		11	10	-	hold

Reaction B (2 Primer)		Cycling (TouchDown 65-60_12-12-11)			
Component	Final Concentration	Step #	Temp°C	Time	Note
ddH2O		1	94	2 min	-
Kapa 2G HS buffer	1.3 X	2	94	20sec	-
MgCl2	2.6 mM	3	65	15sec	-0.5 C per cycle decrease
dNTPS-kapa	.26 mM	4	68	10sec	-
27863	.5 uM	5	-	-	repeat steps 2-4 for 10 cycles (Touchdown)
27865	.5 uM	6	94	15sec	-
Glycerol	6.5 %	7	60	15sec	-
Dye	1 X	8	72	10sec	-
Kapa 2G HS taq polymerase	.03 U/ul	9	-	-	repeat steps 6-8 for 28 cycles
DNA		10	72	2 min	-
		11	10	-	hold

Version 3.2