



Gene Editing Rat Resource Center

Genotyping Your Model



Date:	04/06/2020		
Mutant Strain:	LE- <i>Nrxn1</i> ^{em1Mcowi}	Mutant Strain RGD ID:	25330089
Gene Targeted:	<i>Nrxn1</i>	RGD Gene ID:	628659
Parental Strain:	Long Evans	RGD Parental Strain ID:	2308852
Mutation Description:	4 bp del in exon 1		
Deletion:	CAGTTCCGCAACACCACT ctct ACATCGACCGCGCTGAGGCCAAGTGGGT (deletion in red)		
Insertion	None		
Mutation Region:	(RGSC 4.0/rn4) chr6:15,352,831-15,352,834		
Target Site:	AGCGCGGTCGATGTAGAGAG		

Genotyping Primers:

Forward:	GACGAGGGCTTCTGCGACTT
Reverse:	CAGGGTGAGCTTGAGCGCAG
WT PCR Size:	300 bp
Mutant Size:	296 bp

Derivation Information:

This strain was produced by injecting a Crispr targeting the sequence [AGCGCGGTCGATGTAGAGAG](#) into Long Evans rat embryos. This allele was made by Crispr mutagenesis. The resulting mutation is a 4 bp deletion in exon 1.

Suggested Genotyping:

Fluorescent genotyping or direct sequencing.

Funding Source:

Questions? Send an email to: mcwcustomrats@mcw.edu

PCR

5.0 μ l of template (approximately 200ng)

12.5 μ l of Accuprime Supermix II (Invitrogen, Carlsbad, CA)

1.0 μ l of primer set at 10 μ M

8.5 μ l of water

25 μ L / rxn

PCR cycling parameters:

95°C- 5 min

35 cycles of:

95°C- 30 sec

60°C- 30 sec

68°C- 45 sec