

MiniMUGA Background Analysis v0008

Sample ID	Shiota/GCGRSR CR.58																																																	
Neogen ID	AAAA-6021																																																	
Summary	The genotype of this sample is of excellent quality. It is male and close to inbred, and likely a mix of multiple C57BL/6 substrains and 129S6/SvEvTac.																																																	
	Diagnostic SNPs indicate the presence of the background strain groups C57BL/6 and the substrains C57BL/6J.																																																	
	The sample contains the following genetic constructs: Bovine growth hormone poly A signal sequence, Cre recombinase, hCMV enhancer version a, hCMV enhancer version b, "Reddish" fluorescent protein (tdTomato, mCherry)																																																	
Genotyping Quality	Excellent (2 N calls) All reported results are dependent on genotyping quality.																																																	
Chromosomal Sex	XY																																																	
Inbreeding Estimate	Close to Inbred (66 H calls at autosomal, X, and PAR chromosome markers)																																																	
Inbreeding and Genotyping Quality (Plot)																																																		
Constructs Detected	<table><tr><td>BlastR</td><td>bpA</td><td>Cas9</td><td>chlor</td><td>Cre</td><td>DTA</td><td>g_FP</td><td>hCMV_a</td><td>hCMV_b</td><td>hTK_pr</td><td>iCre</td><td>IRES</td><td>Luc</td><td>r_FP</td><td>rtTA</td><td>SV40</td><td>tTA</td></tr><tr><td>-</td><td>+</td><td>-</td><td>-</td><td>+</td><td>-</td><td>-</td><td>+</td><td>+</td><td>-</td><td>-</td><td>-</td><td>-</td><td>+</td><td>-</td><td>-</td><td>-</td></tr></table>																BlastR	bpA	Cas9	chlor	Cre	DTA	g_FP	hCMV_a	hCMV_b	hTK_pr	iCre	IRES	Luc	r_FP	rtTA	SV40	tTA	-	+	-	-	+	-	-	+	+	-	-	-	-	+	-	-	-
BlastR	bpA	Cas9	chlor	Cre	DTA	g_FP	hCMV_a	hCMV_b	hTK_pr	iCre	IRES	Luc	r_FP	rtTA	SV40	tTA																																		
-	+	-	-	+	-	-	+	+	-	-	-	-	+	-	-	-																																		
Primary Background (Autosomes, X Chromosome)	<table><tr><td>Strain</td><td>Total</td><td>Consistent</td><td>Inconsistent</td><td>Heterozygous</td><td>Excluded</td></tr><tr><td>multiple C57BL/6 substrains</td><td>9721</td><td>9245 (99.4%)</td><td>1 (0.0%)</td><td>56 (0.6%)</td><td>419</td></tr></table>																Strain	Total	Consistent	Inconsistent	Heterozygous	Excluded	multiple C57BL/6 substrains	9721	9245 (99.4%)	1 (0.0%)	56 (0.6%)	419																						
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Secondary Background (Autosomes, X Chromosome)	<table><tr><td>Strain</td><td>Total</td><td>Explained</td><td>Unexplained</td><td>Excluded</td></tr><tr><td>129S6/SvEvTac</td><td>57</td><td>55 (0.6%)</td><td>2 (0.0%)</td><td>0 (0.0%)</td></tr><tr><td></td><td>55 Clustered</td><td>55 Clustered</td><td>0 Clustered</td><td></td></tr></table>																Strain	Total	Explained	Unexplained	Excluded	129S6/SvEvTac	57	55 (0.6%)	2 (0.0%)	0 (0.0%)		55 Clustered	55 Clustered	0 Clustered																				
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Background Ideogram																																																		
Backgrounds Detected (Diagnostic Alleles)	<table><tr><td rowspan="2">Substrain</td><td colspan="4">Diagnostic Alleles Observed</td></tr><tr><td>Homozygous</td><td>Heterozygous</td><td>Potential</td><td>% Observed</td></tr><tr><td>C57BL/6J</td><td>144</td><td>7</td><td>156</td><td>96.8%</td></tr><tr><td>Strain Group</td><td>Homozygous</td><td>Heterozygous</td><td>Potential</td><td>% Observed</td></tr><tr><td>C57BL/6</td><td>5</td><td>1</td><td>21</td><td>28.6%</td></tr><tr><td colspan="5">(B6N-Tyr/BrdCrCrI, C57BL/6J, C57BL/6JBomTac,</td></tr></table>																Substrain	Diagnostic Alleles Observed				Homozygous	Heterozygous	Potential	% Observed	C57BL/6J	144	7	156	96.8%	Strain Group	Homozygous	Heterozygous	Potential	% Observed	C57BL/6	5	1	21	28.6%	(B6N-Tyr/BrdCrCrI, C57BL/6J, C57BL/6JBomTac,									
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MiniMUGA Background Analysis v0008

Sample ID	Shiota/GCGRSR CR.59																																																	
Neogen ID	AAAA-6022																																																	
Summary	The genotype of this sample is of excellent quality. It is male and inbred, and likely a mix of multiple C57BL/6 substrains and 129S6/SvEvTac.																																																	
	Diagnostic SNPs indicate the presence of the background strain groups C57BL/6 and the substrains C57BL/6J.																																																	
	The sample contains the following genetic constructs: Cre recombinase																																																	
Genotyping Quality	Excellent (3 N calls) All reported results are dependent on genotyping quality.																																																	
Chromosomal Sex	XY																																																	
Inbreeding Estimate	Inbred (23 H calls at autosomal, X, and PAR chromosome markers)																																																	
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Primary Background (Autosomes, X Chromosome)	Strain		Total		Consistent		Inconsistent		Heterozygous		Excluded																																							
	multiple C57BL/6 substrains		9721		9289 (99.9%)		1 (0.0%)		11 (0.1%)		420																																							
Secondary Background (Autosomes, X Chromosome)	Strain		Total		Explained		Unexplained		Excluded																																									
	129S6/SvEvTac		12		11 (0.1%)		1 (0.0%)		0 (0.0%)																																									
			11 Clustered		11 Clustered		0 Clustered																																											
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