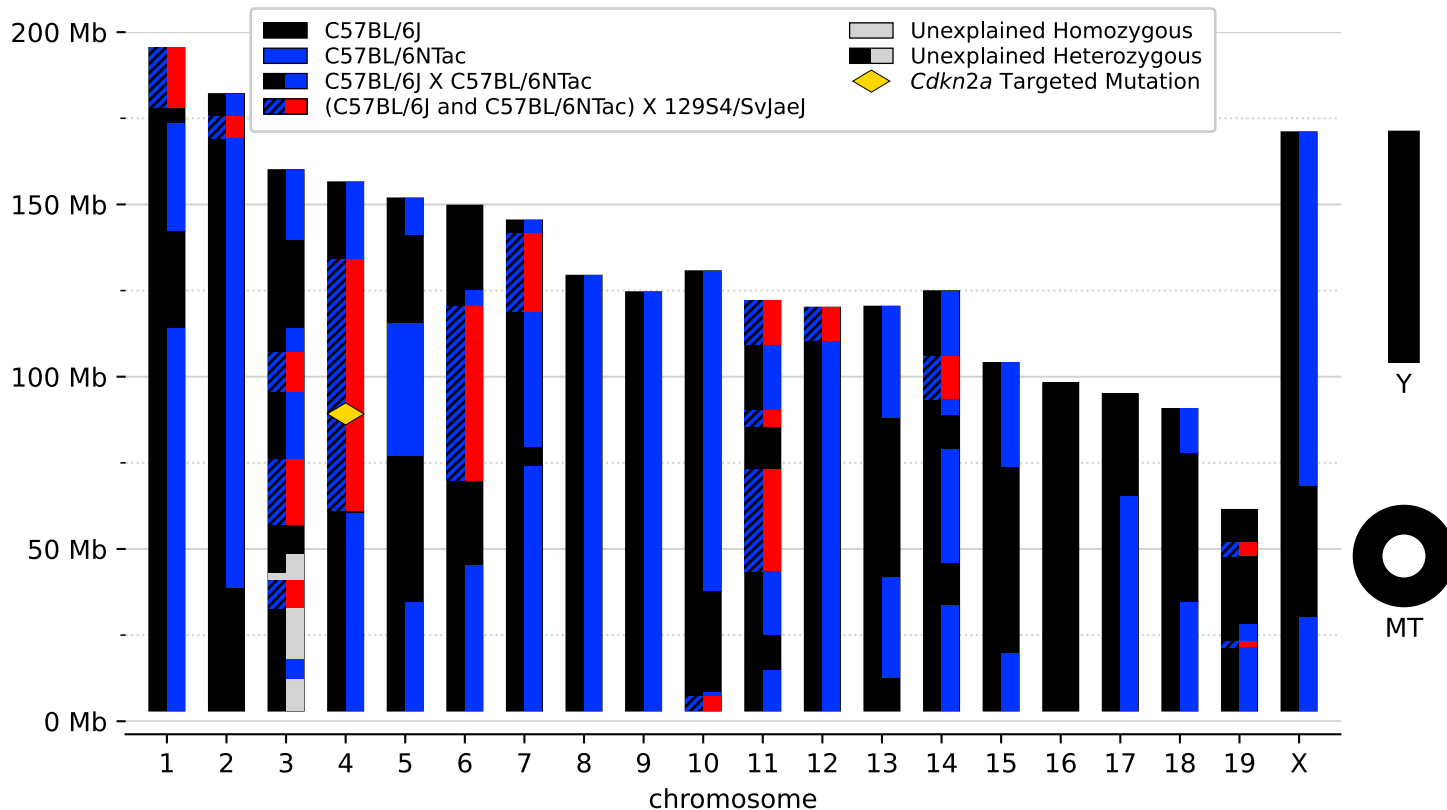


Summary: Incipient congenic strain carrying the *tm4Nesh* allele of the *Cdkn2a* gene on C57BL/6 and 129 mixed background. The allele of interest present on chromosome 4 is on the donor background (129S4/SvJaeJ). The donor background is also present in other chromosomes. At least one additional unexplained genetic background was detected. 129S4/SvJaeJ, 129S6/SvEvTac, C57BL/6J, and C57BL/6NTac were detected with diagnostic alleles. The genome of this strain is not fully replicable because up to 11.2% of the genome is segregating for the donor background, at least 60.9% of the genome is segregating for the substrains of the primary background, and at least 1.1% of the genome is segregating for the unexplained background. This strain carries a potentially active allele of red (or similar) fluorescent protein with unknown zygosity. This GQC report is based on the MiniMUGA G3 2024 pipeline using 2 samples genotyped in 2019.



Genetic Background	Zygosity	Genome %	Estimated # Segregating SNPs
C57BL/6J and C57BL/6NTac	N/A	87.5%	N/A
C57BL/6J	Homozygous	25.1%	N/A
C57BL/6NTac	Homozygous	1.5%	N/A
C57BL/6J X C57BL/6NTac	Heterozygous	60.9%	7,700
(mixed C57BL/6) X 129S4/SvJaeJ	Heterozygous	11.2%	330,200
Unexplained	Homozygous	0.1%	N/A
Unexplained	Heterozygous	1.1%	N/A
Total		100.0%	337,900

Substrain Detected	# present in WW1510	# present in NA6730	Total SNPs Annotated
C57BL/6J	156	151	168
129S4/SvJaeJ	4	1	51
C57BL/6NTac	2	18	30
129S6/SvEvTac	0	1	40
129S4/SvJaeJ or 129S6/SvEvTac	0	1	1

Constructs Detected
hTK_pr, r_FP