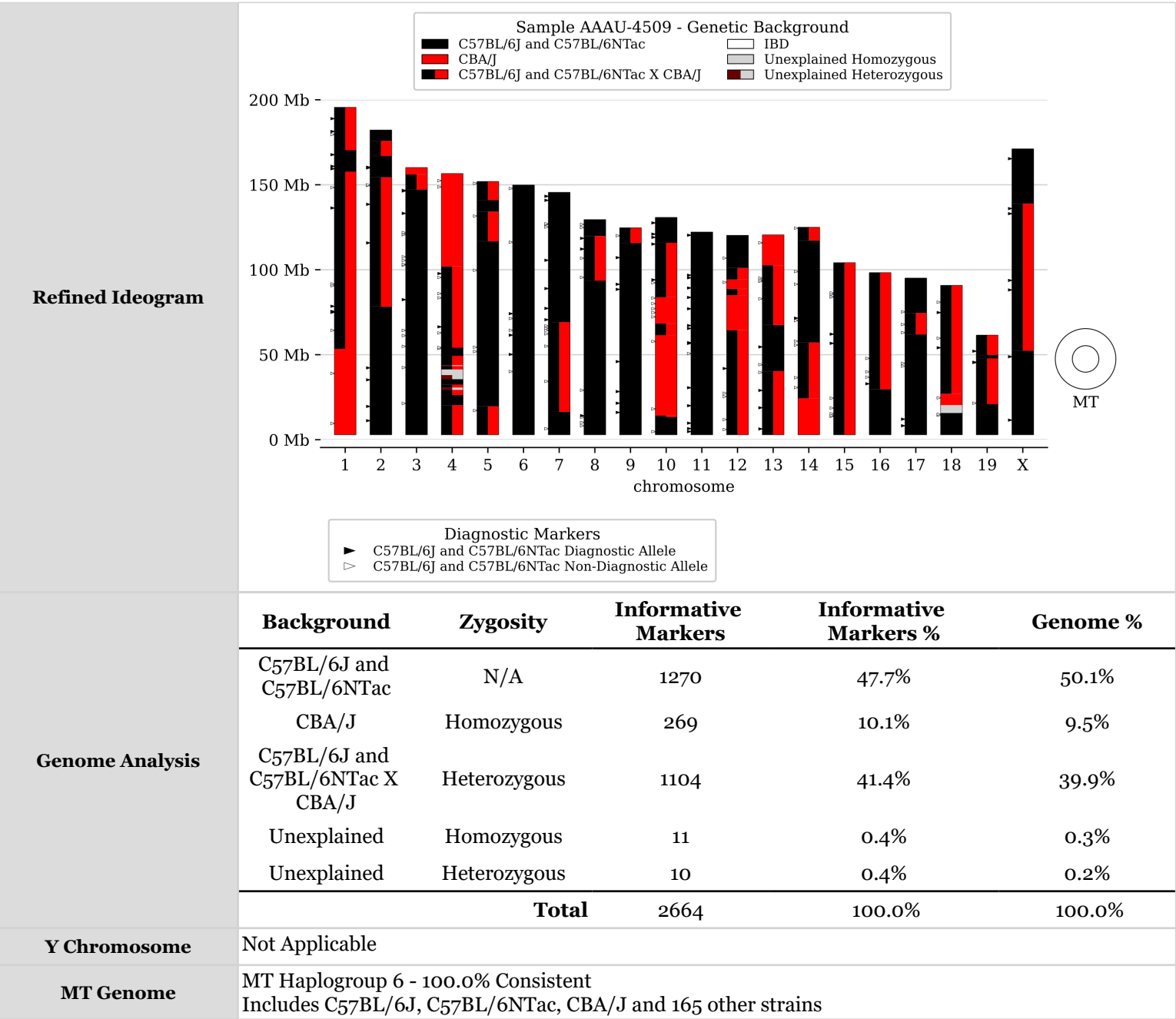


Sample ID	W530
Neogen ID	AAAU-4509
Summary	The genotype of this sample is of excellent quality. It is female and outbred , and likely a mix of C57BL/6J and C57BL/6NTac and CBA/J . Clustering of unexplained markers is evidence of an additional background strain.
	Diagnostic SNPs are likely explained by the presence of the background strains <ul style="list-style-type: none">Solution 1: 129S5/SvEvBrd and C57BL/6J and C57BL/6NRj<ul style="list-style-type: none">C57BL/6J: 68 / 163 (41.7%)C57BL/6NRj: 18 / 39 (46.2%)129S5/SvEvBrd: 1 / 5 (20.0%)Solution 2: 129S5/SvEvBrd and C57BL/6JRj and C57BL/6NRj<ul style="list-style-type: none">C57BL/6JRj: 68 / 163 (41.7%)C57BL/6NRj: 18 / 39 (46.2%)129S5/SvEvBrd: 1 / 5 (20.0%)
	NOTE: There is a discrepancy between the diagnostic backgrounds detected and the primary and secondary background analysis (CBA/J, C57BL/6J, C57BL/6NTac). This is uncommon and should be investigated further.
	No genetic constructs were detected in this sample.
	WARNING: <ul style="list-style-type: none">There is a discrepancy between the diagnostic backgrounds detected ((129S5/SvEvBrd and C57BL/6J and C57BL/6NRj) or (129S5/SvEvBrd and C57BL/6JRj and C57BL/6NRj)) and the primary background (C57BL/6J and C57BL/6NTac) and secondary background (CBA/J). This is uncommon and should be investigated further.The presence of a single diagnostic heterozygous call for a single inbred strain should be treated with caution.This sample likely has more than 2 genetic backgrounds (unexplained regions and/or fractured ideogram). The strain selected for secondary background may be incorrect. The estimation of the contribution of primary and secondary background are likely incorrect. This can potentially be addressed with input from the user.
Genotyping Quality	Excellent (2 N calls) All reported results are dependent on genotyping quality.
Chromosomal Sex	XX
Inbreeding Estimate	59.9% Inbred (Percentage of the genome (autosomal and X chromosomes) that is homozygous or hemizygous for primary, secondary, and unknown backgrounds. See Genome Analysis)
Constructs Detected	BlastRbpA Cas9 chlorcHS4 Cre DTA Flpg_FP hCMV_a hCMV_b hTK_priCre IRES Luc r_FPrTA SV40 tTA
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MiniMUGA Background Analysis v2.3.1



MiniMUGA Background Analysis v2.3.1

Backgrounds Detected (Diagnostic Alleles)	Diagnostic Alleles Observed			
	Diagnostic Class	Homozygous	Heterozygous	Potential % Observed
	C57BL/6J, C57BL/6JJicTac, C57BL/6JRj	3	40	102 42.2%
	C57BL/6J, C57BL/6JEiJ, C57BL/6JJicTac, C57BL/6JRj	2	9	21 52.4%
	C57BL/6J, C57BL/6JRj	3	7	31 32.3%
	C57BL/6NRj, C57BL/6NTac	2	7	15 60.0%
	C57BL/6NJ, C57BL/6NRj, C57BL/6NTac	2	3	10 50.0%
	B6N-Tyr<c-Brd>/BrdCrCrl, C57BL/6NCrl, C57BL/6NHsd, C57BL/6NJ, C57BL/6NRj, C57BL/6NTac	1	0	2 50.0%
	C57BL/6NCrl, C57BL/6NHsd, C57BL/6NJ, C57BL/6NRj, C57BL/6NTac	0	2	2 100.0%
	129S5/SvEvBrd	0	1	5 20.0%
	B6N-Tyr<c-Brd>/BrdCrCrl, C57BL/6J, C57BL/6JEiJ, C57BL/6JJicTac, C57BL/6JRj	0	1	1 100.0%
	B6N-Tyr<c-Brd>/BrdCrCrl, C57BL/6J, C57BL/6JJicTac, C57BL/6JRj	0	1	5 20.0%
	C57BL/6J, C57BL/6JBomTac, C57BL/6JEiJ, C57BL/6JJicTac, C57BL/6JolaHsd, C57BL/6JRj	0	1	2 50.0%
	C57BL/6J, C57BL/6JEiJ, C57BL/6JJicTac, C57BL/6JolaHsd, C57BL/6JRj	0	1	1 100.0%
	C57BL/6NRj	0	1	10 10.0%
Minimal Strain Sets Explaining All Diagnostic Classes (Number of Markers Explained):				
• Solution 1: 129S5/SvEvBrd and C57BL/6J and C57BL/6NRj				
◦ C57BL/6J: 68 / 163 (41.7%)				
◦ C57BL/6NRj: 18 / 39 (46.2%)				
◦ 129S5/SvEvBrd: 1 / 5 (20.0%)				
• Solution 2: 129S5/SvEvBrd and C57BL/6JRj and C57BL/6NRj				
◦ C57BL/6JRj: 68 / 163 (41.7%)				
◦ C57BL/6NRj: 18 / 39 (46.2%)				
◦ 129S5/SvEvBrd: 1 / 5 (20.0%)				
	Chromosome	Start (Mb)	Stop (Mb)	Background Zygosity
	1	3000000	53457225	CBA/J Homozygous
	1	53457225	157713559	C57BL/6J and C57BL/6NTac and CBA/J Heterozygous
	1	157713559	170316822	C57BL/6J and C57BL/6NTac N/A
	1	170316822	195471971	C57BL/6J and C57BL/6NTac and CBA/J Heterozygous
	2	3000000	78267191	C57BL/6J and C57BL/6NTac N/A
	2	78267191	154349372	C57BL/6J and C57BL/6NTac and CBA/J Heterozygous
	2	154349372	166963888	C57BL/6J and C57BL/6NTac N/A
	2	166963888	175780822	C57BL/6J and C57BL/6NTac and CBA/J Heterozygous
	2	175780822	182113224	C57BL/6J and C57BL/6NTac N/A
	3	3000000	147169673	C57BL/6J and C57BL/6NTac N/A

MiniMUGA Background Analysis v2.3.1

Diplotype Intervals	3	147169673	156090101	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	3	156090101	160039680	CBA/J	Homozygous
	4	30000000	20258658	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	20258658	26280383	C57BL/6J and C57BL/6NTac	N/A
	4	26280383	29346519	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	29346519	30650814	Unexplained	Heterozygous
	4	30650814	32327128	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	32327128	35563307	C57BL/6J and C57BL/6NTac	N/A
	4	35563307	37995481	Unexplained	Heterozygous
	4	37995481	41348396	Unexplained	Homozygous
	4	41348396	43372387	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	43372387	43819249	Unexplained	Heterozygous
	4	43819249	49280860	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	49280860	54114833	C57BL/6J and C57BL/6NTac	N/A
	4	54114833	101914190	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	4	101914190	156508116	CBA/J	Homozygous
	5	30000000	19550453	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	5	19550453	116795433	C57BL/6J and C57BL/6NTac	N/A
	5	116795433	134172373	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	5	134172373	140985717	C57BL/6J and C57BL/6NTac	N/A
	5	140985717	151834684	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	6	30000000	149736546	C57BL/6J and C57BL/6NTac	N/A
	7	30000000	16360273	C57BL/6J and C57BL/6NTac	N/A
	7	16360273	69096424	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	7	69096424	145441459	C57BL/6J and C57BL/6NTac	N/A
	8	30000000	93626178	C57BL/6J and C57BL/6NTac	N/A
	8	93626178	119835722	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	8	119835722	129401213	C57BL/6J and C57BL/6NTac	N/A
	9	30000000	115715944	C57BL/6J and C57BL/6NTac	N/A
	9	115715944	124595110	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	10	30000000	13392478	C57BL/6J and C57BL/6NTac	N/A

MiniMUGA Background Analysis v2.3.1

	10	13392478	14185354	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	10	14185354	61450853	CBA/J	Homozygous
	10	61450853	68332199	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	10	68332199	83779430	CBA/J	Homozygous
	10	83779430	115781736	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	10	115781736	130694993	C57BL/6J and C57BL/6NTac	N/A
	11	30000000	122082543	C57BL/6J and C57BL/6NTac	N/A
	12	30000000	64411355	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	12	64411355	85015902	CBA/J	Homozygous
	12	85015902	88650858	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	12	88650858	94246475	CBA/J	Homozygous
	12	94246475	101027932	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	12	101027932	120129022	C57BL/6J and C57BL/6NTac	N/A
	13	30000000	40278277	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	13	40278277	67442927	C57BL/6J and C57BL/6NTac	N/A
	13	67442927	102595519	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	13	102595519	120421639	CBA/J	Homozygous
	14	30000000	24355636	CBA/J	Homozygous
	14	24355636	57122837	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	14	57122837	117206934	C57BL/6J and C57BL/6NTac	N/A
	14	117206934	124902244	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	15	30000000	104043685	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	16	30000000	29701002	C57BL/6J and C57BL/6NTac	N/A
	16	29701002	98207768	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	17	30000000	61991666	C57BL/6J and C57BL/6NTac	N/A
	17	61991666	74502727	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	17	74502727	94987271	C57BL/6J and C57BL/6NTac	N/A
	18	30000000	15685654	C57BL/6J and C57BL/6NTac	N/A
	18	15685654	20363699	Unexplained	Homozygous
	18	20363699	27036500	CBA/J	Homozygous
	18	27036500	90702639	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	19	30000000	20955280	C57BL/6J and C57BL/6NTac	N/A

MiniMUGA Background Analysis v2.3.1

	19	20955280	47746251	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	19	47746251	49870985	C57BL/6J and C57BL/6NTac	N/A
	19	49870985	61431566	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	X	3000000	52416633	C57BL/6J and C57BL/6NTac	N/A
	X	52416633	138881041	C57BL/6J and C57BL/6NTac and CBA/J	Heterozygous
	X	138881041	171031299	C57BL/6J and C57BL/6NTac	N/A
	MT	0	0	IBD	Hemizygous