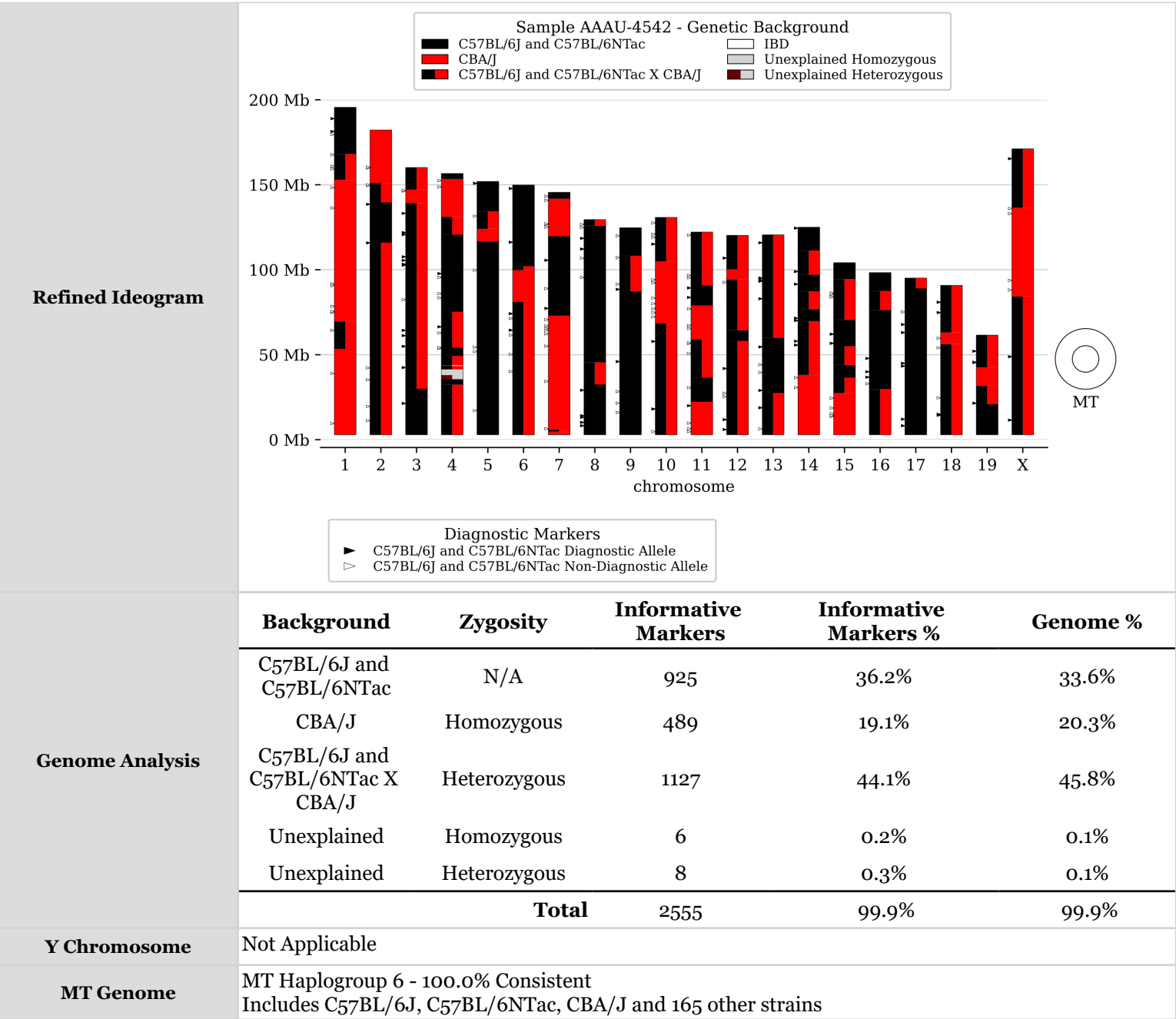


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| | |
|---------------------|--|
| Sample ID | B835 |
| Neogen ID | AAAU-4542 |
| Summary | The genotype of this sample is of good quality. Errors in sample background determination are more frequent with this level of genotyping quality, particularly in samples from standard commercial inbred strains. Please consult the Report Guide and Neogen if reported results are unexpected. |
| | 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: 70 / 155 (45.2%)C57BL/6NRj: 14 / 35 (40.0%)129S5/SvEvBrd: 1 / 5 (20.0%)Solution 2: 129S5/SvEvBrd and C57BL/6JRj and C57BL/6NRj<ul style="list-style-type: none">C57BL/6JRj: 70 / 155 (45.2%)C57BL/6NRj: 14 / 35 (40.0%)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 | Good (117 N calls) All reported results are dependent on genotyping quality. |
| Chromosomal Sex | XX |
| Inbreeding Estimate | 54.0% 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 | <div><div><div>BlastR</div><div>bpA</div><div>Cas9</div><div>chlor</div><div>cHS4</div><div>Cre</div><div>DTA</div><div>Flp</div><div>g_FP</div><div>hCMV_a</div><div>hCMV_b</div><div>hTK_pr</div><div>iCre</div><div>IRES</div><div>Luc</div><div>r_FP</div><div>rtTA</div><div>SV4o</div><div>tTA</div></div></div> |
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| Backgrounds Detected (Diagnostic Alleles) | Diagnostic Alleles Observed | | | | |
|---|--|------------|--------------|------------------------------------|--------------|
| | Diagnostic Class | Homozygous | Heterozygous | Potential | % Observed |
| | C57BL/6J, C57BL/6JJicTac, C57BL/6JRj | 10 | 35 | 102 | 44.1% |
| | C57BL/6J, C57BL/6JEiJ, C57BL/6JJicTac, C57BL/6JRj | 2 | 12 | 21 | 66.7% |
| | C57BL/6J, C57BL/6JRj | 2 | 8 | 31 | 32.3% |
| | C57BL/6NRj, C57BL/6NTac | 3 | 4 | 15 | 46.7% |
| | C57BL/6NJ, C57BL/6NRj, C57BL/6NTac | 1 | 4 | 10 | 50.0% |
| | C57BL/6NRj | 1 | 1 | 10 | 20.0% |
| | 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% |
| Minimal Strain Sets Explaining All Diagnostic Classes (Number of Markers Explained): <ul style="list-style-type: none">Solution 1: 129S5/SvEvBrd and C57BL/6J and C57BL/6NRj<ul style="list-style-type: none">C57BL/6J: 70 / 155 (45.2%)C57BL/6NRj: 14 / 35 (40.0%)129S5/SvEvBrd: 1 / 5 (20.0%)Solution 2: 129S5/SvEvBrd and C57BL/6JRj and C57BL/6NRj<ul style="list-style-type: none">C57BL/6JRj: 70 / 155 (45.2%)C57BL/6NRj: 14 / 35 (40.0%)129S5/SvEvBrd: 1 / 5 (20.0%) | | | | | |
| Diplotype Intervals | Chromosome | Start (Mb) | Stop (Mb) | Background | Zygosity |
| | 1 | 3000000 | 53457225 | CBA/J | Homozygous |
| | 1 | 53457225 | 69700765 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 1 | 69700765 | 152801739 | CBA/J | Homozygous |
| | 1 | 152801739 | 168019536 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 1 | 168019536 | 195471971 | C57BL/6J and C57BL/6NTac | N/A |
| | 2 | 3000000 | 115970567 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 2 | 115970567 | 139631657 | C57BL/6J and C57BL/6NTac | N/A |
| | 2 | 139631657 | 151062687 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 2 | 151062687 | 182113224 | CBA/J | Homozygous |
| | 3 | 3000000 | 30013882 | C57BL/6J and C57BL/6NTac | N/A |
| | 3 | 30013882 | 139297311 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 3 | 139297311 | 147169673 | CBA/J | Homozygous |
| | 3 | 147169673 | 160039680 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 4 | 3000000 | 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 |

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|--|---|-----------|-----------|------------------------------------|--------------|
| | 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 | 75318594 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 4 | 75318594 | 120738488 | C57BL/6J and C57BL/6NTac | N/A |
| | 4 | 120738488 | 131104093 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 4 | 131104093 | 153356388 | CBA/J | Homozygous |
| | 4 | 153356388 | 156508116 | C57BL/6J and C57BL/6NTac | N/A |
| | 5 | 30000000 | 116795433 | C57BL/6J and C57BL/6NTac | N/A |
| | 5 | 116795433 | 124011933 | CBA/J | Homozygous |
| | 5 | 124011933 | 134172373 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 5 | 134172373 | 151834684 | C57BL/6J and C57BL/6NTac | N/A |
| | 6 | 30000000 | 81074930 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 6 | 81074930 | 99727922 | CBA/J | Homozygous |
| | 6 | 99727922 | 101966063 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 6 | 101966063 | 149736546 | C57BL/6J and C57BL/6NTac | N/A |
| | 7 | 30000000 | 3194086 | CBA/J | Homozygous |
| | 7 | 3194086 | 3211215 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 7 | 3211215 | 4418092 | CBA/J | Homozygous |
| | 7 | 4418092 | 4504539 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 7 | 4504539 | 4847141 | CBA/J | Homozygous |
| | 7 | 4847141 | 5883380 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 7 | 5883380 | 72944748 | CBA/J | Homozygous |
| | 7 | 72944748 | 119823617 | C57BL/6J and C57BL/6NTac | N/A |
| | 7 | 119823617 | 141749783 | CBA/J | Homozygous |
| | 7 | 141749783 | 145441459 | C57BL/6J and C57BL/6NTac | N/A |
| | 8 | 30000000 | 32467133 | C57BL/6J and C57BL/6NTac | N/A |
| | 8 | 32467133 | 45403996 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 8 | 45403996 | 125832225 | C57BL/6J and C57BL/6NTac | N/A |
| | 8 | 125832225 | 129401213 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 9 | 30000000 | 87286420 | C57BL/6J and C57BL/6NTac | N/A |

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|--|----|-----------|-----------|---------------------------------------|--------------|
| | 9 | 87286420 | 108206968 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 9 | 108206968 | 124595110 | C57BL/6J and C57BL/6NTac | N/A |
| | 10 | 30000000 | 68444097 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 10 | 68444097 | 104861956 | CBA/J | Homozygous |
| | 10 | 104861956 | 130694993 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 11 | 30000000 | 22302070 | CBA/J | Homozygous |
| | 11 | 22302070 | 36618681 | C57BL/6J and C57BL/6NTac | N/A |
| | 11 | 36618681 | 58994880 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 11 | 58994880 | 78913943 | CBA/J | Homozygous |
| | 11 | 78913943 | 90803561 | C57BL/6J and C57BL/6NTac | N/A |
| | 11 | 90803561 | 122082543 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 12 | 30000000 | 58069123 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 12 | 58069123 | 64411355 | C57BL/6J and C57BL/6NTac | N/A |
| | 12 | 64411355 | 94246475 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 12 | 94246475 | 100284662 | CBA/J | Homozygous |
| | 12 | 100284662 | 120129022 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 13 | 30000000 | 27430346 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 13 | 27430346 | 60016573 | C57BL/6J and C57BL/6NTac | N/A |
| | 13 | 60016573 | 120421639 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 14 | 30000000 | 38092288 | CBA/J | Homozygous |
| | 14 | 38092288 | 69660428 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 14 | 69660428 | 76773671 | C57BL/6J and C57BL/6NTac | N/A |
| | 14 | 76773671 | 87213383 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 14 | 87213383 | 97106405 | C57BL/6J and C57BL/6NTac | N/A |
| | 14 | 97106405 | 111185375 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 14 | 111185375 | 124902244 | C57BL/6J and C57BL/6NTac | N/A |
| | 15 | 30000000 | 27443955 | CBA/J | Homozygous |
| | 15 | 27443955 | 36473640 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 15 | 36473640 | 44010563 | C57BL/6J and C57BL/6NTac | N/A |
| | 15 | 44010563 | 55016741 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 15 | 55016741 | 70554147 | C57BL/6J and C57BL/6NTac | N/A |

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|--|----|-----------|-----------|---------------------------------------|--------------|
| | 15 | 70554147 | 94412127 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 15 | 94412127 | 104043685 | C57BL/6J and C57BL/6NTac | N/A |
| | 16 | 30000000 | 29701002 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 16 | 29701002 | 76315797 | C57BL/6J and C57BL/6NTac | N/A |
| | 16 | 76315797 | 87403166 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 16 | 87403166 | 98207768 | C57BL/6J and C57BL/6NTac | N/A |
| | 17 | 30000000 | 89028083 | C57BL/6J and C57BL/6NTac | N/A |
| | 17 | 89028083 | 94987271 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 18 | 30000000 | 56215244 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 18 | 56215244 | 63069205 | CBA/J | Homozygous |
| | 18 | 63069205 | 90702639 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 19 | 30000000 | 20955280 | C57BL/6J and C57BL/6NTac | N/A |
| | 19 | 20955280 | 31636352 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | 19 | 31636352 | 42582533 | CBA/J | Homozygous |
| | 19 | 42582533 | 61431566 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | X | 30000000 | 84237192 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | X | 84237192 | 136441962 | CBA/J | Homozygous |
| | X | 136441962 | 171031299 | C57BL/6J and C57BL/6NTac and CBA/J | Heterozygous |
| | MT | o | o | IBD | Hemizygous |