**Table S6.** Observed vs predicted genotype calls in (C57BL/6JxCAST/EiJ)F1 by OTV position.

| | F1 Genotype Calls | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Concordant** | | **Expected AA** | | | **Expected AB** | | | **CAST = AB** | | | | **CAST = V** | | | | | |
| **OTV Position** | **AA** | **AB** | **BB** | **AB** | **V** | **AA** | **BB** | **V** | **AA** | **BB** | **AB** | **V** | **AA** | **BB** | **AB** | **V** | **N** | **Margins** |
| **No OTV** | 227,016 | 151,501 | 1 | 29 | 66 | 5,532 | 8,400 | 161 | 4,575 | 4 | 5,613 | 36 | 5,865 | 16 | 1,510 | 441 | 61,726 | 472,492 |
| **0** | 1,774 | 1,356 | 0 | 1 | | 138 | 77 | 5 | 61 | 0 | 66 | 1 | 116 | 2 | 13 | 10 | 603 | 4,223 |
| **1** | 2,817 | 2,100 | 0 | 0 | 0 | 261 | 125 | 3 | 117 | 0 | 90 | 3 | 236 | 0 | 37 | 16 | 1,107 | 6,912 |
| **2** | 1,531 | 1,047 | 0 | 0 | 1 | 259 | 48 | 2 | 119 | 0 | 44 | 1 | 309 | 0 | 21 | 30 | 890 | 4,302 |
| **3** | 778 | 504 | 0 | 0 | 0 | 283 | 21 | 6 | 99 | 0 | 30 | 3 | 488 | 0 | 22 | 42 | 723 | 2,999 |
| **4** | 408 | 223 | 0 | 0 | 2 | 255 | 8 | 2 | 115 | 0 | 15 | 1 | 600 | 0 | 5 | 44 | 616 | 2,294 |
| **5** | 232 | 85 | 0 | 0 | 0 | 215 | 10 | 5 | 118 | 0 | 12 | 1 | 616 | 0 | 8 | 60 | 501 | 1,863 |
| **6** | 158 | 86 | 0 | 0 | 0 | 205 | 4 | 4 | 76 | 0 | 8 | 1 | 669 | 0 | 3 | 61 | 460 | 1,735 |
| **7** | 153 | 84 | 0 | 0 | 0 | 218 | 2 | 2 | 110 | 0 | 10 | 3 | 785 | 0 | 4 | 77 | 483 | 1,931 |
| **8** | 117 | 61 | 0 | 0 | 1 | 181 | 1 | 0 | 75 | 0 | 1 | 0 | 580 | 0 | 5 | 73 | 400 | 1,495 |
| **9** | 97 | 35 | 0 | 1 | 1 | 199 | 2 | 0 | 67 | 0 | 8 | 2 | 543 | 0 | 4 | 64 | 369 | 1,392 |
| **10** | 94 | 50 | 0 | 0 | 1 | 171 | 1 | 2 | 70 | 0 | 3 | 1 | 494 | 0 | 3 | 60 | 342 | 1,292 |
| **11** | 76 | 25 | 0 | 0 | 0 | 129 | 3 | 1 | 44 | 0 | 1 | 2 | 345 | 0 | 2 | 31 | 223 | 882 |
| **12** | 34 | 17 | 0 | 0 | 0 | 35 | 0 | 0 | 14 | 0 | 1 | 0 | 153 | 0 | 3 | 17 | 86 | 360 |
| | 235,285 | 157,174 | 1 | 31 | 72 | 8,081 | 8,702 | 193 | 5,660 | 4 | 5,902 | 55 | 11,799 | 18 | 1,640 | 1,026 | 68,529 | 504,172 |
| | | | | | | | | | | | | | | | | | **Excluded** | 22,191 |
| | | | | | | | | | | | | | | | | | | 526,363 |