

**Table S1** Primers used for genotyping.

| <b><i>Dnaaf1</i><sup>m4Bei</sup> genotyping primers</b> |                                   |                             |                                                  |
|---------------------------------------------------------|-----------------------------------|-----------------------------|--------------------------------------------------|
| Primer pair                                             | Primer 1                          | Primer 2                    | Product size <sup>a</sup>                        |
| D8Mit132                                                | ATTTGTTTTGCTTACTTCTCAGTGT         | AGAATGAAGATATCCAGAGATGCC    | 84 bp/100 bp (WT <sup>b</sup> /MU <sup>c</sup> ) |
| D8Mit242                                                | TGTGCAACCAATTTCTTCCA              | CCCATGATTTATTCCAGACTGAGG    | 166 bp/190 bp (WT/MU)                            |
| D8Mit280                                                | CATGCAATTCCAATGTCAGTG             | TAGCACTCAATCAAACCCCC        | 108 bp/160 bp (WT/MU)                            |
| <i>Dnaaf1</i> e4-5                                      | TGGCATCCAGAGGATCGAGA              | CTCAATGTCAGCCACCGTCT        | 342 bp (160th T>C)                               |
| <b><i>Lrrc48</i><sup>m6Bei</sup> genotyping primers</b> |                                   |                             |                                                  |
| Primer pair                                             | Primer 1                          | Primer 2                    | Product size                                     |
| D11Mit20                                                | CCTGTCCAGGTTTGAGAGGA              | CTTGGGAGCCTCTTCGGT          | 116 bp/150 bp (WT/MU)                            |
| D11Mit310                                               | GTGCACTTTCATGCCTGTA               | GAGTAGAAAGAGACAGAGAAAGACACA | 126 bp/132 bp (WT/MU)                            |
| D11Mit298                                               | AAACAAACAAAATGCACCTCA             | GTACCACCATGCCTAGCCTC        | 195 bp/221 bp (WT/MU)                            |
| <i>Lrrc48</i> e4-i4                                     | ACATCCTCCGCATCGATAAC <sup>d</sup> | CGTGAACCCAGAAGCCTCTT        | 494 bp (106th T>C)                               |

a. Product sizes are found from MGI database.

b. WT (wild-type) indicates C57BL/6 allele.

c. MU (mutant) indicates A/J allele.

d. Used for sequencing.