**Supplementary Materials**

**Advancing 3Rs: The Mouse Estrus Detector (MED) as a Low-Stress, Painless, and Efficient Tool for Estrus Determination in Mice**

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**Supplementary Fig. 1.** Ratio Between Vaginal Opening and Estrous Cycle Determination.

The percentages of animals per strain exhibiting vaginal opening at each stage of the estrous cycle, as determined by vaginal smear cytology, are shown. The total of 110 observations were performed for each strain.



**Supplementary Fig. 2**. Ratio Between Vaginal Active Resistance (AR) measurements and Estrous Cycle Determination.

The percentages of animals per strain exhibiting AR > 6 kOm at each stage of the estrous cycle, as determined by vaginal smear cytology, are shown. The total of 110 measurements were performed for each strain.

**Supplementary Table 1.** Observational assessments of vaginal opening, AR measurements, and vaginal smear samples cytology (daily evaluations).

*Notations:*

PE - proestrus; E - estrus; M - Metestrus (Diestrus I); D - diestrus (Diestrus II)

o - open vagina; c - closed vagina.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strain | Mouse ID | DAY | STAGE (lavage) | AR (kOm)(MEDPro) | Vagina |
| CD-1 | 11 | 1 | M | 2.8 | o |
| CD-1 | 11 | 2 | M | 2.2 | o |
| CD-1 | 11 | 3 | P | 2.2 | c |
| CD-1 | 11 | 4 | P | 1.6 | c |
| CD-1 | 11 | 5 | P | 1.7 | c |
| CD-1 | 11 | 6 | P | 1.5 | c |
| CD-1 | 11 | 7 | P | 1.5 | c |
| CD-1 | 11 | 8 | P | 1.8 | c |
| CD-1 | 11 | 9 | E | 9.4 | o |
| CD-1 | 11 | 10 | M | 2 | c |
| CD-1 | 11 | 11 | D | 3.7 | o |
| CD-1 | 12 | 1 | E | 24.5 | o |
| CD-1 | 12 | 2 | M | 2.5 | o |
| CD-1 | 12 | 3 | D | 2.7 | c |
| CD-1 | 12 | 4 | P | 9 | o |
| CD-1 | 12 | 5 | E | 10.9 | o |
| CD-1 | 12 | 6 | E | 24 | c |
| CD-1 | 12 | 7 | M | 3 | c |
| CD-1 | 12 | 8 | D | 2.4 | c |
| CD-1 | 12 | 9 | P | 4.7 | c |
| CD-1 | 12 | 10 | E | 8.4 | c |
| CD-1 | 12 | 11 | M | 5.6 | o |
| CD-1 | 13 | 1 | M | 2.4 | c |
| CD-1 | 13 | 2 | M | 2.4 | c |
| CD-1 | 13 | 3 | P | 3.4 | c |
| CD-1 | 13 | 4 | P | 13.9 | o |
| CD-1 | 13 | 5 | E | 8.2 | c |
| CD-1 | 13 | 6 | M | 2.5 | c |
| CD-1 | 13 | 7 | D | 2.8 | c |
| CD-1 | 13 | 8 | D | 2.8 | c |
| CD-1 | 13 | 9 | D | 2.2 | c |
| CD-1 | 13 | 10 | D | 1.4 | c |
| CD-1 | 13 | 11 | D | 1.4 | o |
| CD-1 | 14 | 1 | E | 11.5 | c |
| CD-1 | 14 | 2 | M | 2.2 | c |
| CD-1 | 14 | 3 | D | 3.8 | c |
| CD-1 | 14 | 4 | M | 2.5 | o |
| CD-1 | 14 | 5 | M | 2 | c |
| CD-1 | 14 | 6 | P | 1.8 | c |
| CD-1 | 14 | 7 | D | 1.7 | c |
| CD-1 | 14 | 8 | D | 2.1 | c |
| CD-1 | 14 | 9 | D | 1.4 | c |
| CD-1 | 14 | 10 | D | 0.9 | c |
| CD-1 | 14 | 11 | P | 3 | o |
| CD-1 | 15 | 1 | D | 3.4 | c |
| CD-1 | 15 | 2 | D | 2.1 | o |
| CD-1 | 15 | 3 | P | 2.6 | c |
| CD-1 | 15 | 4 | E | 10 | o |
| CD-1 | 15 | 5 | M | 1.7 | c |
| CD-1 | 15 | 6 | D | 3.2 | o |
| CD-1 | 15 | 7 | D | 3 | o |
| CD-1 | 15 | 8 | P | 4.9 | c |
| CD-1 | 15 | 9 | P | 4.4 | c |
| CD-1 | 15 | 10 | E | 19.5 | o |
| CD-1 | 15 | 11 | M | 2 | o |
| CD-1 | 21 | 1 | P | 2.3 | o |
| CD-1 | 21 | 2 | E | 10.8 | o |
| CD-1 | 21 | 3 | M | 9.8 | c |
| CD-1 | 21 | 4 | D | 2.5 | o |
| CD-1 | 21 | 5 | D | 3.3 | c |
| CD-1 | 21 | 6 | P | 4.5 | o |
| CD-1 | 21 | 7 | E | 16.8 | c |
| CD-1 | 21 | 8 | M | 5.1 | c |
| CD-1 | 21 | 9 | D | 3.1 | c |
| CD-1 | 21 | 10 | D | 2.8 | c |
| CD-1 | 21 | 11 | P | 1.9 | o |
| CD-1 | 22 | 1 | P | 5.6 | o |
| CD-1 | 22 | 2 | E | 20.5 | o |
| CD-1 | 22 | 3 | M | 2.5 | o |
| CD-1 | 22 | 4 | D | 2.5 | c |
| CD-1 | 22 | 5 | D | 2.3 | o |
| CD-1 | 22 | 6 | P | 4.7 | c |
| CD-1 | 22 | 7 | E | 17 | o |
| CD-1 | 22 | 8 | M | 2.2 | c |
| CD-1 | 22 | 9 | D | 2.6 | c |
| CD-1 | 22 | 10 | D | 2.5 | c |
| CD-1 | 22 | 11 | P | 2.4 | c |
| CD-1 | 23 | 1 | P | 2.1 | o |
| CD-1 | 23 | 2 | E | 15.3 | o |
| CD-1 | 23 | 3 | E | 6.5 | o |
| CD-1 | 23 | 4 | M | 3.4 | o |
| CD-1 | 23 | 5 | D | 2.3 | c |
| CD-1 | 23 | 6 | D | 1.5 | c |
| CD-1 | 23 | 7 | P | 5.2 | c |
| CD-1 | 23 | 8 | E | 8.6 | o |
| CD-1 | 23 | 9 | M | 3.5 | c |
| CD-1 | 23 | 10 | M | 2.2 | c |
| CD-1 | 23 | 11 | D | 2.1 | c |
| CD-1 | 24 | 1 | P | 2.5 | o |
| CD-1 | 24 | 2 | E | 19 | o |
| CD-1 | 24 | 3 | M | 1.3 | c |
| CD-1 | 24 | 4 | D | 1.3 | c |
| CD-1 | 24 | 5 | D | 1.1 | c |
| CD-1 | 24 | 6 | P | 0.9 | c |
| CD-1 | 24 | 7 | E | 16 | c |
| CD-1 | 24 | 8 | M | 5.6 | c |
| CD-1 | 24 | 9 | D | 2.3 | c |
| CD-1 | 24 | 10 | D | 2.2 | c |
| CD-1 | 24 | 11 | D | 1.8 | o |
| CD-1 | 25 | 1 | D | 2.2 | c |
| CD-1 | 25 | 2 | D | 1.9 | c |
| CD-1 | 25 | 3 | P | 1.5 | c |
| CD-1 | 25 | 4 | P | 1.1 | c |
| CD-1 | 25 | 5 | D | 1 | c |
| CD-1 | 25 | 6 | D | 2.2 | c |
| CD-1 | 25 | 7 | P | 2.5 | c |
| CD-1 | 25 | 8 | E | 12.9 | c |
| CD-1 | 25 | 9 | M | 1.7 | c |
| CD-1 | 25 | 10 | D | 2.9 | o |
| CD-1 | 25 | 11 | D | 2.6 | o |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strain | Mouse ID | DAY | STAGE (lavage) | AR (kOm) (MEDPro) | Vagina |
| FVB/N | 31 | 1 | D | 3.8 | c |
| FVB/N | 31 | 2 | D | 3.2 | c |
| FVB/N | 31 | 3 | D | 2.5 | c |
| FVB/N | 31 | 4 | P | 1.7 | c |
| FVB/N | 31 | 5 | P | 1.8 | c |
| FVB/N | 31 | 6 | D | 1.8 | c |
| FVB/N | 31 | 7 | D | 1.7 | c |
| FVB/N | 31 | 8 | P | 2.6 | c |
| FVB/N | 31 | 9 | M | 2.7 | c |
| FVB/N | 31 | 10 | D | 5.4 | c |
| FVB/N | 31 | 11 | P | 2 | c |
| FVB/N | 32 | 1 | D | 3 | c |
| FVB/N | 32 | 2 | P | 3.7 | c |
| FVB/N | 32 | 3 | E | 9.4 | o |
| FVB/N | 32 | 4 | E | 6.6 | c |
| FVB/N | 32 | 5 | M | 6.2 | c |
| FVB/N | 32 | 6 | D | 4.5 | c |
| FVB/N | 32 | 7 | D | 2 | c |
| FVB/N | 32 | 8 | P | 9.2 | c |
| FVB/N | 32 | 9 | E | 20.3 | c |
| FVB/N | 32 | 10 | D | 3.7 | c |
| FVB/N | 32 | 11 | D | 3.2 | o |
| FVB/N | 33 | 1 | E | 29 | o |
| FVB/N | 33 | 2 | M | 2.6 | o |
| FVB/N | 33 | 3 | D | 2.3 | c |
| FVB/N | 33 | 4 | D | 3.5 | c |
| FVB/N | 33 | 5 | P | 13.2 | o |
| FVB/N | 33 | 6 | E | 28.5 | c |
| FVB/N | 33 | 7 | M | 3.8 | o |
| FVB/N | 33 | 8 | D | 4.7 | c |
| FVB/N | 33 | 9 | P | 2.7 | c |
| FVB/N | 33 | 10 | E | 14.6 | c |
| FVB/N | 33 | 11 | E | 10 | o |
| FVB/N | 34 | 1 | P | 8.8 | o |
| FVB/N | 34 | 2 | E | 30 | c |
| FVB/N | 34 | 3 | M | 5.2 | o |
| FVB/N | 34 | 4 | D | 5.2 | c |
| FVB/N | 34 | 5 | D | 4.1 | c |
| FVB/N | 34 | 6 | P | 14.5 | o |
| FVB/N | 34 | 7 | E | 20 | c |
| FVB/N | 34 | 8 | E | 28 | o |
| FVB/N | 34 | 9 | M | 2.6 | c |
| FVB/N | 34 | 10 | D | 3.5 | c |
| FVB/N | 34 | 11 | P | 4.1 | o |
| FVB/N | 35 | 1 | P | 4.5 | o |
| FVB/N | 35 | 2 | P | 21.6 | o |
| FVB/N | 35 | 3 | E | 30 | o |
| FVB/N | 35 | 4 | M | 3.5 | c |
| FVB/N | 35 | 5 | D | 3 | c |
| FVB/N | 35 | 6 | D | 2.9 | c |
| FVB/N | 35 | 7 | P | 4.8 | o |
| FVB/N | 35 | 8 | E | 10.7 | c |
| FVB/N | 35 | 9 | E | 22.5 | c |
| FVB/N | 35 | 10 | M | 4.5 | c |
| FVB/N | 35 | 11 | D | 4.4 | c |
| FVB/N | 41 | 1 | E | 24.7 | c |
| FVB/N | 41 | 2 | M | 6.7 | o |
| FVB/N | 41 | 3 | D | 4.9 | c |
| FVB/N | 41 | 4 | D | 3.3 | c |
| FVB/N | 41 | 5 | D | 2.1 | c |
| FVB/N | 41 | 6 | P | 3.6 | c |
| FVB/N | 41 | 7 | E | 18.3 | o |
| FVB/N | 41 | 8 | M | 2.7 | c |
| FVB/N | 41 | 9 | D | 2 | c |
| FVB/N | 41 | 10 | D | 2.9 | c |
| FVB/N | 41 | 11 | D | 2.9 | c |
| FVB/N | 42 | 1 | P | 16.9 | o |
| FVB/N | 42 | 2 | E | 28.5 | c |
| FVB/N | 42 | 3 | M | 5.4 | c |
| FVB/N | 42 | 4 | D | 3.4 | c |
| FVB/N | 42 | 5 | P | 9.9 | c |
| FVB/N | 42 | 6 | P | 12.9 | c |
| FVB/N | 42 | 7 | E | 23.2 | o |
| FVB/N | 42 | 8 | E | 7.4 | c |
| FVB/N | 42 | 9 | M | 6.7 | c |
| FVB/N | 42 | 10 | D | 3.7 | c |
| FVB/N | 42 | 11 | P | 5.5 | o |
| FVB/N | 43 | 1 | D | 3.3 | c |
| FVB/N | 43 | 2 | D | 2.4 | c |
| FVB/N | 43 | 3 | P | 3.4 | c |
| FVB/N | 43 | 4 | E | 22.8 | c |
| FVB/N | 43 | 5 | E | 9.8 | o |
| FVB/N | 43 | 6 | M | 2.3 | c |
| FVB/N | 43 | 7 | D | 2.4 | o |
| FVB/N | 43 | 8 | D | 2.1 | c |
| FVB/N | 43 | 9 | P | 6 | c |
| FVB/N | 43 | 10 | E | 26.2 | c |
| FVB/N | 43 | 11 | E | 11.2 | o |
| FVB/N | 44 | 1 | D | 3.6 | c |
| FVB/N | 44 | 2 | P | 9.5 | c |
| FVB/N | 44 | 3 | E | 18.2 | o |
| FVB/N | 44 | 4 | E | 5.3 | c |
| FVB/N | 44 | 5 | M | 4.5 | c |
| FVB/N | 44 | 6 | D | 2.8 | c |
| FVB/N | 44 | 7 | P | 2.5 | c |
| FVB/N | 44 | 8 | P | 26.8 | c |
| FVB/N | 44 | 9 | E | 28.4 | o |
| FVB/N | 44 | 10 | M | 4.8 | c |
| FVB/N | 44 | 11 | D | 3.3 | o |
| FVB/N | 45 | 1 | D | 4.7 | c |
| FVB/N | 45 | 2 | P | 2.6 | c |
| FVB/N | 45 | 3 | P | 9.6 | o |
| FVB/N | 45 | 4 | E | 20 | c |
| FVB/N | 45 | 5 | M | 5.7 | o |
| FVB/N | 45 | 6 | D | 2.6 | c |
| FVB/N | 45 | 7 | P | 4.8 | o |
| FVB/N | 45 | 8 | E | 19.5 | c |
| FVB/N | 45 | 9 | E | 23.9 | c |
| FVB/N | 45 | 10 | M | 5.6 | o |
| FVB/N | 45 | 11 | D | 3.2 | c |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Strain | Mouse ID | DAY | STAGE (lavage) | AR (kOm) (MEDPro) | Vagina |
| C57Bl6/J | 51 | 1 | M | 4.1 | o |
| C57Bl6/J | 51 | 2 | M | 6 | c |
| C57Bl6/J | 51 | 3 | M | 2.9 | c |
| C57Bl6/J | 51 | 4 | D | 2.8 | c |
| C57Bl6/J | 51 | 5 | D | 2.8 | c |
| C57Bl6/J | 51 | 6 | D | 2.9 | c |
| C57Bl6/J | 51 | 7 | D | 5.5 | c |
| C57Bl6/J | 51 | 8 | P | 14.2 | c |
| C57Bl6/J | 51 | 9 | P | 5.7 | o |
| C57Bl6/J | 51 | 10 | E | 20.4 | c |
| C57Bl6/J | 51 | 11 | E | 22 | c |
| C57Bl6/J | 52 | 1 | E | 23.2 | o |
| C57Bl6/J | 52 | 2 | E | 18.4 | o |
| C57Bl6/J | 52 | 3 | M | 3.8 | c |
| C57Bl6/J | 52 | 4 | D | 2.6 | c |
| C57Bl6/J | 52 | 5 | D | 3.5 | c |
| C57Bl6/J | 52 | 6 | D | 5.9 | c |
| C57Bl6/J | 52 | 7 | E | 16 | c |
| C57Bl6/J | 52 | 8 | E | 28.2 | c |
| C57Bl6/J | 52 | 9 | E | 18.8 | o |
| C57Bl6/J | 52 | 10 | M | 5.5 | c |
| C57Bl6/J | 52 | 11 | D | 2.7 | c |
| C57Bl6/J | 53 | 1 | P | 6.3 | c |
| C57Bl6/J | 53 | 2 | E | 20.1 | c |
| C57Bl6/J | 53 | 3 | E | 18.4 | c |
| C57Bl6/J | 53 | 4 | M | 4.9 | c |
| C57Bl6/J | 53 | 5 | D | 5.3 | c |
| C57Bl6/J | 53 | 6 | P | 2.7 | c |
| C57Bl6/J | 53 | 7 | E | 17.8 | o |
| C57Bl6/J | 53 | 8 | E | 21.4 | c |
| C57Bl6/J | 53 | 9 | E | 8.4 | o |
| C57Bl6/J | 53 | 10 | E | 8.2 | c |
| C57Bl6/J | 53 | 11 | M | 4.6 | c |
| C57Bl6/J | 54 | 1 | P | 7.5 | c |
| C57Bl6/J | 54 | 2 | E | 16.8 | c |
| C57Bl6/J | 54 | 3 | M | 9.8 | c |
| C57Bl6/J | 54 | 4 | D | 5.2 | c |
| C57Bl6/J | 54 | 5 | D | 3.7 | c |
| C57Bl6/J | 54 | 6 | P | 3 | c |
| C57Bl6/J | 54 | 7 | P | 13.9 | o |
| C57Bl6/J | 54 | 8 | E | 19.3 | c |
| C57Bl6/J | 54 | 9 | E | 17.8 | c |
| C57Bl6/J | 54 | 10 | E | 19.9 | c |
| C57Bl6/J | 54 | 11 | M | 5.1 | c |
| C57Bl6/J | 55 | 1 | E | 17 | c |
| C57Bl6/J | 55 | 2 | E | 26.3 | o |
| C57Bl6/J | 55 | 3 | E | 20.3 | c |
| C57Bl6/J | 55 | 4 | M | 6.1 | c |
| C57Bl6/J | 55 | 5 | D | 2.8 | c |
| C57Bl6/J | 55 | 6 | D | 1.8 | c |
| C57Bl6/J | 55 | 7 | P | 4.3 | o |
| C57Bl6/J | 55 | 8 | E | 28.1 | c |
| C57Bl6/J | 55 | 9 | E | 21.9 | o |
| C57Bl6/J | 55 | 10 | E | 15.1 | c |
| C57Bl6/J | 55 | 11 | M | 7.2 | c |
| C57Bl6/J | 61 | 1 | P | 1.6 | c |
| C57Bl6/J | 61 | 2 | P | 1.5 | c |
| C57Bl6/J | 61 | 3 | D | 1.6 | c |
| C57Bl6/J | 61 | 4 | D | 1.8 | c |
| C57Bl6/J | 61 | 5 | D | 2.1 | c |
| C57Bl6/J | 61 | 6 | D | 2 | c |
| C57Bl6/J | 61 | 7 | D | 2.2 | c |
| C57Bl6/J | 61 | 8 | D | 1.9 | c |
| C57Bl6/J | 61 | 9 | D | 2.1 | c |
| C57Bl6/J | 61 | 10 | D | 1.8 | c |
| C57Bl6/J | 61 | 11 | D | 1.7 | c |
| C57Bl6/J | 62 | 1 | M | 3.4 | c |
| C57Bl6/J | 62 | 2 | M | 4.2 | o |
| C57Bl6/J | 62 | 3 | D | 3.9 | c |
| C57Bl6/J | 62 | 4 | D | 4.7 | c |
| C57Bl6/J | 62 | 5 | D | 5.5 | c |
| C57Bl6/J | 62 | 6 | D | 2.9 | c |
| C57Bl6/J | 62 | 7 | E | 15 | o |
| C57Bl6/J | 62 | 8 | E | 12.1 | c |
| C57Bl6/J | 62 | 9 | E | 7.3 | o |
| C57Bl6/J | 62 | 10 | E | 11.3 | c |
| C57Bl6/J | 62 | 11 | M | 1.7 | c |
| C57Bl6/J | 63 | 1 | M | 6.8 | c |
| C57Bl6/J | 63 | 2 | M | 5.7 | c |
| C57Bl6/J | 63 | 3 | M | 5.4 | c |
| C57Bl6/J | 63 | 4 | D | 3.9 | c |
| C57Bl6/J | 63 | 5 | D | 4.9 | c |
| C57Bl6/J | 63 | 6 | P | 3.8 | o |
| C57Bl6/J | 63 | 7 | E | 9.8 | o |
| C57Bl6/J | 63 | 8 | E | 30.8 | o |
| C57Bl6/J | 63 | 9 | E | 25.5 | c |
| C57Bl6/J | 63 | 10 | E | 13.4 | c |
| C57Bl6/J | 63 | 11 | E | 28.3 | c |
| C57Bl6/J | 64 | 1 | M | 5.3 | c |
| C57Bl6/J | 64 | 2 | M | 8.1 | c |
| C57Bl6/J | 64 | 3 | D | 3.6 | c |
| C57Bl6/J | 64 | 4 | D | 4.5 | c |
| C57Bl6/J | 64 | 5 | P | 15 | c |
| C57Bl6/J | 64 | 6 | E | 11.8 | o |
| C57Bl6/J | 64 | 7 | E | 9.8 | o |
| C57Bl6/J | 64 | 8 | E | 28.4 | o |
| C57Bl6/J | 64 | 9 | E | 10.7 | o |
| C57Bl6/J | 64 | 10 | E | 14.5 | c |
| C57Bl6/J | 64 | 11 | M | 10.4 | c |
| C57Bl6/J | 65 | 1 | M | 10.1 | c |
| C57Bl6/J | 65 | 2 | M | 7.6 | c |
| C57Bl6/J | 65 | 3 | M | 5.2 | c |
| C57Bl6/J | 65 | 4 | D | 4.2 | c |
| C57Bl6/J | 65 | 5 | D | 3.3 | c |
| C57Bl6/J | 65 | 6 | P | 2.7 | c |
| C57Bl6/J | 65 | 7 | E | 14.9 | c |
| C57Bl6/J | 65 | 8 | E | 22.5 | o |
| C57Bl6/J | 65 | 9 | E | 13.6 | c |
| C57Bl6/J | 65 | 10 | E | 8 | c |
| C57Bl6/J | 65 | 11 | M | 5.9 | c |

**Supplementary Table 2.** The test results for locomotor activity and "emotionality" of Swiss female mice. The tests were conducted on intact female Swiss mice (n=21 - Table S2a) and 30 minutes after either vaginal AR measurements (n=21 - Table S2b) or vaginal lavage collection (n=14 - Table S2c).

*Notations:*

VER - vertical activity count; HOR - horizontal activity count; AMB - ambulations.

Table S2a

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | GROUP | Weight | Locomotor activity | fecal boli |
| VER | HOR | AMB |
| 1 | intact | 36 | 114 | 892 | 442 | 8 |
| 2 | intact | 36 | 70 | 803 | 357 | 6 |
| 3 | intact | 29,1 | 39 | 807 | 494 | 4 |
| 4 | intact | 39,9 | 36 | 570 | 338 | 11 |
| 5 | intact | 34,2 | 60 | 813 | 531 | 3 |
| 6 | intact | 38,7 | 17 | 436 | 283 | 12 |
| 7 | intact | 40,6 | 153 | 627 | 373 | 7 |
| 8 | intact | 43,6 | 86 | 453 | 257 | 16 |
| 9 | intact | 34,3 | 78 | 533 | 304 | 7 |
| 10 | intact | 29,6 | 72 | 840 | 166 | 13 |
| 11 | intact | 31,1 | 129 | 670 | 428 | 15 |
| 12 | intact | 31,9 | 162 | 584 | 314 | 14 |
| 13 | intact | 33,9 | 95 | 565 | 334 | 18 |
| 14 | intact | 34,7 | 83 | 638 | 338 | 12 |
| 15 | intact | 38,1 | 10 | 387 | 221 | 6 |
| 16 | intact | 35,7 | 50 | 672 | 318 | 11 |
| 17 | intact | 40,4 | 162 | 757 | 434 | 9 |
| 18 | intact | 31,8 | 75 | 427 | 209 | 6 |
| 19 | intact | 34,3 | 41 | 534 | 313 | 14 |
| 20 | intact | 29,8 | 54 | 520 | 305 | 6 |
| 21 | intact | 39,2 | 64 | 696 | 410 | 9 |

Table S2b

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | GROUP | Weight | Locomotor activity | fecal boli |
| VER | HOR | AMB |
| 101 | MEDPro | 41,1 | 136 | 348 | 199 | 11 |
| 102 | MEDPro | 47,2 | 132 | 528 | 241 | 7 |
| 103 | MEDPro | 34,3 | 58 | 496 | 266 | 11 |
| 104 | MEDPro | 33 | 58 | 1175 | 813 | 9 |
| 105 | MEDPro | 32,7 | 71 | 653 | 356 | 7 |
| 106 | MEDPro | 27 | 121 | 1010 | 647 | 5 |
| 107 | MEDPro | 34,6 | 79 | 444 | 237 | 13 |
| 108 | MEDPro | 32,4 | 55 | 446 | 260 | 6 |
| 109 | MEDPro | 35,2 | 210 | 466 | 251 | 7 |
| 110 | MEDPro | 36,3 | 222 | 432 | 253 | 9 |
| 111 | MEDPro | 40,7 | 28 | 352 | 225 | 4 |
| 112 | MEDPro | 33,7 | 147 | 710 | 489 | 12 |
| 113 | MEDPro | 26.9 | 16 | 390 | 229 | 6 |
| 114 | MEDPro | 30.9 | 81 | 379 | 205 | 9 |
| 115 | MEDPro | 37,9 | 89 | 435 | 238 | 6 |
| 116 | MEDPro | 38,2 | 88 | 660 | 273 | 4 |
| 117 | MEDPro | 32 | 75 | 526 | 293 | 15 |
| 118 | MEDPro | 37,3 | 79 | 526 | 237 | 10 |
| 119 | MEDPro | 36,3 | 100 | 476 | 259 | 4 |
| 120 | MEDPro | 35,3 | 188 | 479 | 269 | 7 |
| 121 | MEDPro | 35,5 | 198 | 438 | 265 | 6 |

Table S2c

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | GROUP | Weight | Locomotor activity | fecal boli |
| VER | HOR | AMB |
| 201 | lavage | 45,6 | 85 | 310 | 157 | 11 |
| 202 | lavage | 47,1 | 155 | 754 | 432 | 13 |
| 203 | lavage | 44 | 6 | 237 | 98 | 13 |
| 204 | lavage | 46,1 | 122 | 450 | 259 | 10 |
| 205 | lavage | 32,6 | 72 | 464 | 248 | 13 |
| 206 | lavage | 33,2 | 69 | 650 | 398 | 10 |
| 207 | lavage | 34 | 30 | 376 | 203 | 8 |
| 208 | lavage | 36,6 | 46 | 365 | 173 | 11 |
| 209 | lavage | 29,8 | 103 | 722 | 395 | 12 |
| 210 | lavage | 33,8 | 17 | 470 | 267 | 16 |
| 211 | lavage | 30,4 | 19 | 445 | 236 | 3 |
| 212 | lavage | 33,3 | 15 | 446 | 243 | 12 |
| 213 | lavage | 37,8 | 89 | 611 | 364 | 7 |
| 214 | lavage | 37,3 | 2 | 176 | 78 | 11 |