**Supplementary Table 3:** **Complete genotypes of transgenic flies used in this study.**

|  |  |
| --- | --- |
| **Figure** | **Genotype** |
| Figure 1C | w; +; GMR57C10-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 1C | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 1D | w; +; GMR57C10-Gal4 (attp2)/UAS-NPTTANP-GFP (attp2) |
| Figure 2A | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 2B | w; +; GMR20C11-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 2F1 | w; UAS-TNT; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 2F2 | w; UAS-TNTimp; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 3A | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRdTK (attp2) |
| Figure 3B | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRdTK-GFP (attp2) |
| Figure 3D | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRdTK (attp2) |
| Figure 4B | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRdTK (attp2) |
| Figure 4C | w; +; GMR20C11-Gal4 (attp2)/ UAS-GCaMP6s (su(Hw)attp1) |
| Figure 4D | w; +; GMR19H07-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 4E | w; +; GMR19H07-Gal4 (attp2)/UAS-NPRRdTK (attp2) |
| Figure 4F | w; +; GMR19H07-Gal4 (attp2)/ UAS-GCaMP6s (su(Hw)attp1) |
| Figure 1—figure supplement 2A | w; +; GMR57C10-Gal4 (attp2)/UAS-mCD8::GFP (attp2) |
| Figure 1—figure supplement 2B | w; +; GMR57C10-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 1—figure supplement 2C | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 1—figure supplement 3A | w; +; GMR20C11-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 1—figure supplement 3B | w; +; GMR20C11-Gal4 (attp2)/UAS-mCD8::GFP (attp2) |
| Figure 1—figure supplement 3C | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRdTK (attp2) |
| Figure 1—figure supplement 3D | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 1—figure supplement 4A | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 1—figure supplement 4B | w; +; GMR57C10-Gal4 (attp2)/UAS-NPRRANP-GFP (attp2) |
| Figure 2—figure supplement 1 | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 2—figure supplement 2C1 | w; UAS-TNTimp; GMR20C11-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 2—figure supplement 2C2 | w; UAS-TNT; GMR20C11-Gal4 (attp2)/UAS-GCaMP6s (su(Hw)attp1) |
| Figure 4—figure supplement 1 | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRANP (attp2) |
| Figure 4—figure supplement 1 | w; +; GMR20C11-Gal4 (attp2)/UAS-NPRRdTK (attp2) |