

The legends for Supplementary Data:

Supplementary Data 1. The genotypes and behavior-analytical sample sizes used in each Figure

Supplementary Data 2. The sequence of the knock-in cassette is displayed and coloured as specified to indicate the different segments.

Supplementary Data 3. DNA sequence synthesized for *LexAop-wake^{mir}* generation. *KpnI* restriction sites are indicated using boxes.

Supplementary Data 4. DNA sequence synthesized for *UAS-wake-RG_{HA}* generation. *KpnI* restriction sites are indicated using boxes. The HA epitope tag coding region is underlined, and the start and stop codons are indicated in bold.

The legends for Supplementary Video:

Supplementary Movie 1. This movie shows examples of a *wake³²⁰⁹⁹* male courting a wild type 2U male, as referred to in [Figure 1b](#).

Supplementary Movie 2. This movie shows examples of *wake³²⁰⁹⁹* males forming courtship chains, as referred to in [Figure 1c](#).

Supplementary Movie 3. This movie shows examples of *wake³²⁰⁹⁹/wake^{GS17103}* trans-heterozygous males forming courtship chains, as referred to in [Figure 1c](#).