## Chromosome $X$

A


Mean MLProb


Mean MLProb
C


Mean MLProb
D


Mean MLProb

| DGRP_38 | DGRP_832 | DGRP_808 | DGRP_310 | DGRP_365 |
| :---: | :---: | :---: | :---: | :---: |
| DGRP_313 | DGRP_338 | DGRP_379 | DGRP_235 | DGRP_335 |

Chromosome 2L
A
SIP_L1_1
SIP_L1_2
SIP_L1_3
SIP_L1_-4
SIP_L1_5 $^{2}$
SIP_L1-6
SIP_L1_7
SIP_L1_8
SIP_L1_9
SIP_L1_10
$\ln (2 L) t$


Mean MLProb
SIP_L2_1
SIP_L2_2
SIP_L2_3
SIP_L2_4
SIP_L2_5
SIP_L2_6
SIP_L2_7
SIP_L2_8
SIP_L2_10
$\ln (2 L) t$


Mean MLProb
SIP_S1_1
SIP_S1_2
SIP_S1_3
SIP_S1_4
SIP_S1_5
SIP_S1_6
SIP_S1_7
SIP_S1_8
SIP_S1_9
SIP_S1_10
$\operatorname{In}(2 L) t$


Mean MLProb
D

| SIP_S2_1 |
| :---: |
| SIP_S2_2 |
| SIP_S2_3 |
| SIP_S2_4 |
| SIP_S2_5 |
| SIP_S2_6 |
| SIP_S2_7 |
| SIP_S2_8 |
| SIP_S2_9 |
| SIP_S2_10 |
| $\ln (2 L) t$ |

Mean MLProb

$\square$ DGRP_38 ■DGRP_832 ■ DGRP_808 ■ DGRP_310 ■ DGRP_365<br>DGRP_313 DGRP 338 ■DGRP_379 ■DGRP_235 ■DGRP_335

Chromosome 3L
A


Mean MLProb


Mean MLProb
C


Mean MLProb
D


Mean MLProb

## Chromosome 3R



$\ln (3 R) M o / \ln (3 R) K$
Mean MLProb


C


D


File S1. Plot of predicted DGRP founder haplotypes from Hidden Markov Model for Chromosomes $X, 2 L, 3 L$, and $3 R$. In each plot, the predicted founder haplotypes are plotted along the length of the chromosome. Short-sleeping founder genotypes are coded in shades of red per the legend at the bottom of the figure; long-sleeping founder lines are coded in shades of blue. The location of chromosomal inversions is indicated by black bars for inversions that were present in the 10 DGRP founder lines. Underlined DGRP lines listed in the legend are heterozygous for the indicated inversion, and double-underlined DGRP lines are homozygous for the inversion. The average posterior probability is given as a bar underneath the chromosome schematic graded from a probability of 1.0 (black) to 0.0 (white). (A) Lines derived from L1; (B) Lines derived from L2; (C) Lines derived from S1; (D) Lines derived from S2.

