



**Figure 1-figure supplement 2. X chromosome median gene expression is up-regulated in *Guy1* transgenic females from line *nGuy1\_1*.** Violin plots show gene expression as  $\log_2(\text{FPKM}+1)$  from the X chromosome and autosomes from the four genotypes. Transcripts under a relatively low expression level ( $\text{FPKM} < 1$ ) are excluded. The width of the violin plots shows the density of transcripts at different expression values. The white dot denotes the median of each group, while the yellow horizontal bar denotes the mean. The bottom and top of the vertical thick black bars represent the first and third quartiles, respectively. In the transgenic females the median expression level of the X chromosome is statistically higher than the autosomes according to the two-tailed Wilcoxon tests (44.7 vs. 31.6,  $p = 5.4e^{-12}$ ). However, in the other three genotypes, there is no significant difference in the median expression levels between the X chromosome and the autosomes. All median FPKM expression value comparisons with statistical significance can be found in Supplementary File S2.