



**Supplementary Figure 2. Spermatogenesis expression classes.** There are 13 possible gene expression classes by combining pairwise comparison between the three spermatogenic phases: mitosis, meiosis and post-meiosis (Vibranovski et al. 2009). For analyses described in Figs. 1 and 4, we grouped genes as mitotic, meiotic and post-meiotic, which encompassed classes 6, 8 and 10; 4, 7 and 12; 1-3, respectively red, blue and green boxes. For analyses described in Fig. 2, the haploid set grouped meiotic and post-meiotic genes as well as genes from class 5.