



**Figure S4** Analysis of ploidy of *whi3Δ* mutant strain YHUM2152 by genetic crosses. Yeast strain YHUM2152 was mated with haploid strain L6441 (cross 1) or diploid strain L6442 (cross 2), respectively, and resulting strains were subjected to sporulation. For each cross, 20 tetrads were analyzed for spore viability on rich medium. The clear difference in the number of viable spores obtained for the two crosses indicates that cross 1 resulted in a triploid and cross 2 in a tetraploid. This demonstrates that YHUM2152 is a diploid, a conclusion that is supported by the distribution of *TRP1*, *HIS3*, and *LEU2* marker genes within the 4 spore tetrads of cross 2.