

Supplementary Figure S2. A multidimensional scaling plot of *Dictyostelium* strains based on their developmental morphology. We plotted the morphological distance between the parental strains (AX4 and $tgrB1^{AX4}tgrC1^{QS38}$) and 23 chemically mutagenized strains carrying suppression mutations of the tgrB1-C1 mismatch phenotype. We also measured the size of sori in fruiting bodies of individual strains as indicated by the increasing radius of the circles in the legend. We plotted $tgrB1^{AX4}tgrC1^{QS38}$ as an empty circle (no fruiting bodies). The top 13 candidate genes in the screen for suppression of the tgrB1-C1 mismatch are listed in Figure 3 and Supplementary Table 1. The colors indicate whether the individual strains carry chemically induced mutations in rapgapB (red), tgrB1 (blue), any of the other 11 candidate genes (green), or none of them (grey). AX4 and $tgrB1^{AX4}tgrC1^{QS38}$ are shown in black. Numbers in the circles represent strain numbers of individual mutants.