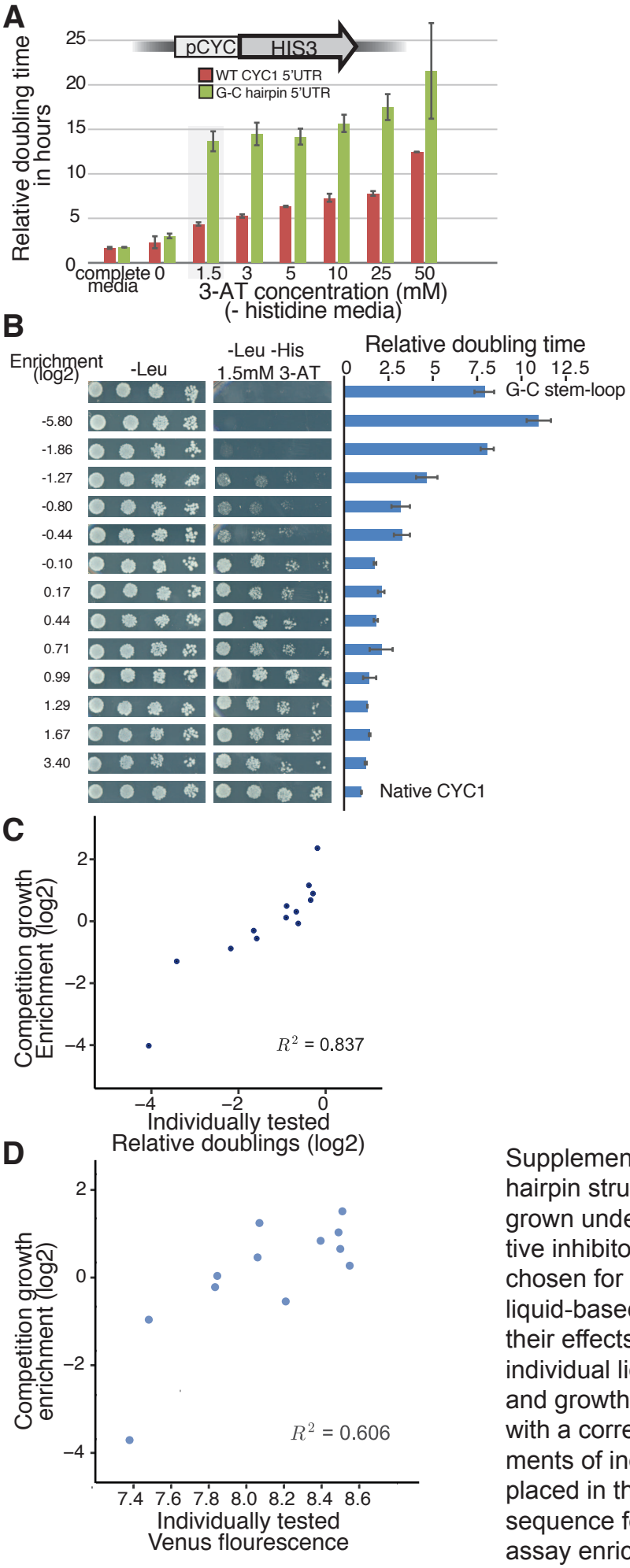

Supplemental Figure 1. (A) Yeast with or without a strong hairpin structure in the 5' UTR of the HIS3 reporter were grown under increasing concentrations of the His3 competitive inhibitor 3-amino-triazole (3-AT). 1.5 mM 3-AT was chosen for further assays. (B) Selected 5' UTRs from the liquid-based growth assay were individually compared for their effects on growth on plates (5-fold dilution series), or individual liquid culture. (C) Individual relative doubling times and growth-assay sequencing enrichment were compared, with a correlation of R2 = 0.837. (D) Fluorescence measurements of individual yeast strains harboring selected 5' UTRs placed in the context of the yellow fluorescent protein coding sequence for Venus in comparison to competitive growth assay enrichment (R2 = 0.606).