



**Figure S3** **A.** Majority [*PSI*<sup>+</sup>] isolates obtained by co-production of Sup35NMGFP and Swi1 (Swi1 ↑), Ure2<sub>1-65</sub>-GFP (Ure2 ↑) or polyQ103-GFP (Q103↑) remained [*pin*-]. As shown, Rnq1CFP remained diffused in stabilized [*PSI*<sup>+</sup>] cells obtained under the indicated co-overproduction conditions. **B.** Heritable Rnq1CFP aggregates (indicative of [*PIN*<sup>+</sup>]) were analyzed after eliminating the plasmid *pRS413CUP1-NMGFP* and *p426GPD-SWI1*. Numbers shown are [*PIN*<sup>+</sup>] isolates versus total examined isolates. **C.** A [*PSI*<sup>+</sup>] isolate acquired by co-overproduction of Sup35NMYFP and Swi1 was compared with an isogenic [*pin*-][*psi*<sup>-</sup>] strain for their ability in promoting spontaneous [*PIN*<sup>+</sup>] conversion after incubation at 4°C for the indicated days. The method used in this study is similar to that described in an earlier paper (Derkatch *et al.*, 2001, cell 106: 171-182). Shown are Rnq1CFP signals. **D.** The acquired Rnq1CFP aggregate-containing [*PSI*<sup>+</sup>] cells (20 days in panel C) were further stabilized by passages and compared with the initial [*PSI*<sup>+</sup>] strain (0 day cells) using a centrifugation assay. T, total lysate; S, supernatant; P, pellet. An anti-Rnq1 polyclonal antibody was used in the Western Blotting. Note: all results shown in this figure were obtained using cells carry an integrated copy of *TEF1-RNQ1CFP*.