



Hediger et al., Supp. Figure 2

### ***Supplementary Figure 2: VP16 activity and transcriptional effects***

**A.** Schematic representation of tagged Tel 6R<sup>tr</sup> with *lexA* binding sites inserted 1.8kb from the *HXK1* gene and ~12kb from the *TRP1* selective marker. *ADE2* is more than 22kb away from *lexA* sites **B.** Telomeric Position Effect (TPE) was monitored at Tel 6R<sup>tr</sup> (GA-1917) expressing *lexA*, *lexA*-VP16, *lexA*-Reb1N or *lexA*-Tbf1N. Metastable repression of *ADE2* leads to accumulation of a red pigment in colony sectors which are reduced but still detectable in the presence of VP16 targeting. **C.** mRNA level was quantified by northern blot for *HXK1* and *TRP1* genes in GA-3032 (tagged Tel 6R in a S288C background) expressing *lexA* or *lexA*-VP16. mRNA levels are normalized to the *lexA*-expressing strain.

### **Supplementary methods**

#### ***TPE assay***

Cells were streaked on synthetic complete medium containing 3mg/ml adenine. Plates are kept 4-6 days at 4°C to enhance pigment accumulation. Colonies were considered as sectored if they contained more than a quarter of red.

#### ***Northern***

RNA was extracted from 5ml of exponentially growing cells (OD<sub>600</sub>=1) lysed with glass beads, and isolated on silica-gel-based membrane (RNeasy Mini Kit, ® Qiagen). Total RNA was run on a 1% formaldehyde gel and transferred to a Hybond N+ membrane. The membrane was probed successively with a *TRP1* and a *HXK1* radiolabelled probe. Signals were quantified on AIDA software.