



Nishiyama *et al.* Supplementary Figure 2

Supplementary Figure 2

xTRF1 and xTRF2 bind to double-stranded telomeric repeats

(A) EMSA for TTAGGG-repeat binding using *in vitro* translated xTRF1. ³²P-labeled ~200-bp DNA fragments containing an internal (TTAGGG)₂₇ tract were used as probe. In lanes 3-5, the indicated amounts of competitors, the cold probe fragment (lane 3), the circular pT2AG3 plasmid that contains ~1-kb telomeric repeats (lane 4) or the circular pBluescript DNA (lane 5), were added to the binding reactions. Lane 1 contains the mock-translated extracts. Three μg of *E. coli* chromosomal DNA cleaved with *Hae* III was included in all the binding reactions. The position of the protein-DNA complex is indicated by the arrowhead at right.

(B) EMSA for TTAGGG-repeat binding using *in vitro* translated xTRF2. ³²P-labeled ~200-bp DNA fragments containing an internal (TTAGGG)₂₈ tract were used as a probe. In lane 3, the cold probe fragments (15-fold excess) were added to the binding reactions. Lane 1 contains the mock-translated extracts. Three μg of *E. coli* chromosomal DNA cleaved with *Hae* III was included in all the binding reactions. The specific signal of the protein-DNA complex was observed around the well (arrowhead).