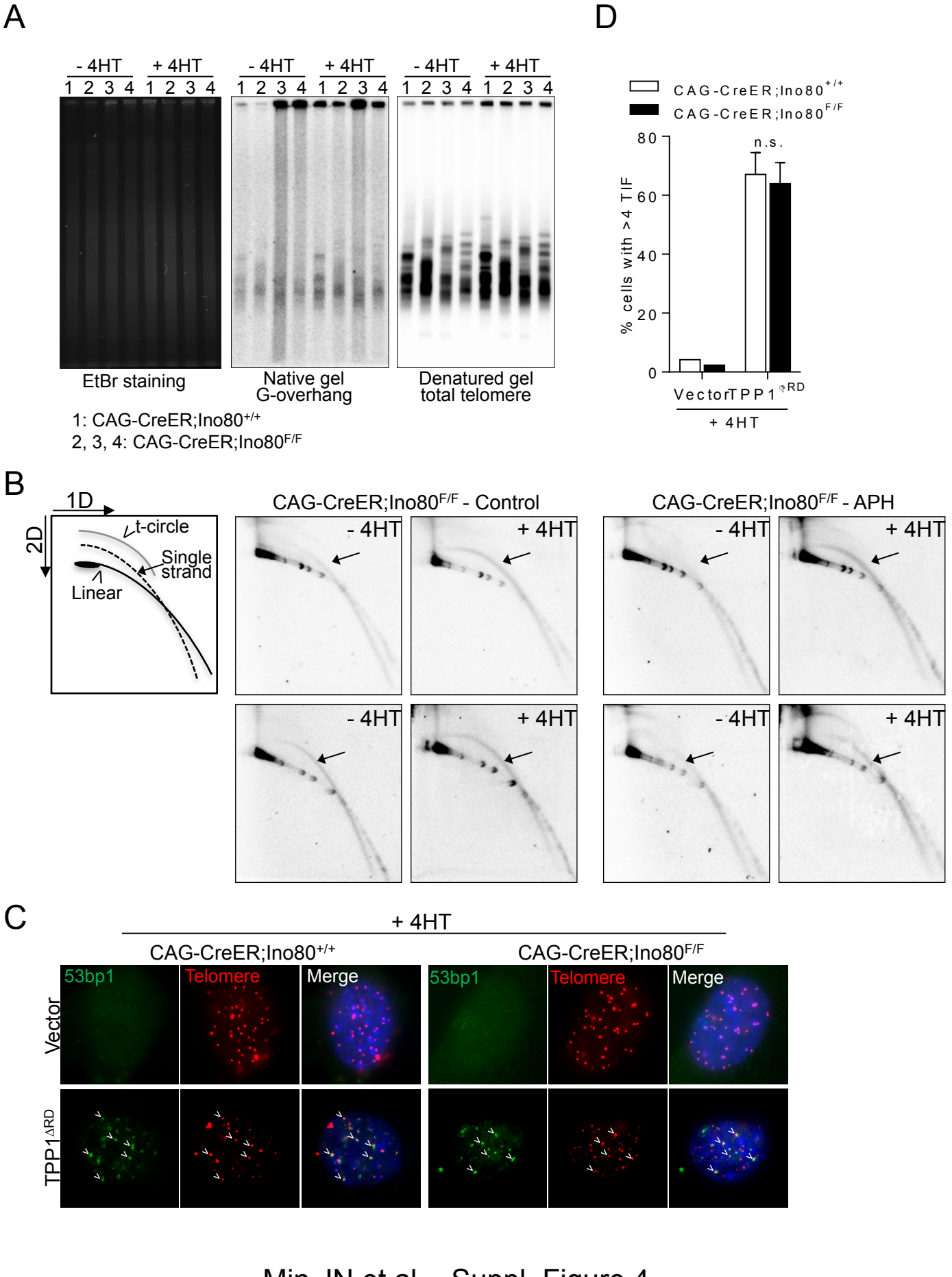

Min JN et al.,- Suppl. Figure 4

Supplementary Figure 4 *mIno80* deletion did not alter total telomere length, G-overhang status, and recruitment 53BP1 to dysfunctional telomeres. (A) Telomere restriction fragment length analysis from MEFs of the following genotypes: (lane 1: *CAG-CreER; mIno80*$^{+/+}$; lanes 2-4: *CAG-CreER; mIno80*$^{F/F}$) treated with or without 4-HT for 6 days. Left panel: photograph of EtBr stained gel indicating equal amount genomic DNA loaded among samples analyzed. Right panel: in-gel hybridization using telomere oligonucleotide probe (5'-$(CCCTAA)_4$-3') showing telomeric G-overhangs under native (middle panel) and total telomere length under denatured conditions (right panel). (B) 2D gel electrophoresis of genomic DNA isolated from *CAG-CreER; mIno80*$^{F/F}$ MEFs with or without 4-HT treatment for 6 days. Left panel display schematic of telomere patterns after 1D (separation by size) and 2D (separation by conformation) gel electrophoresis. After electrophoresis, gels were denatured and in-gel hybridization performed with the telomere oligonucleotide probe (5'-$(CCCTAA)_4$-3'). Arrows point to ss telomeric DNA. Telomeric (t-) circles were not detected under any condition. Right panel: aphidicolin (APH, 0.2μM) was added to *CAG-CreER; mIno80*$^{F/F}$ or *CAG-CreER; mIno80*$^{\Delta/\Delta}$ MEFs for 24 hours before harvesting genomic DNA for 2D analysis. All 2D gel analyses were repeated three times, two of which are shown. (C) Immunostaining for 53BP1-positive TIFs following 72 hours expression of TPP1$^{\Delta RD}$ in *CAG-CreER; mIno80*$^{F/F}$ MEFs with or without 4-HT treatment. (D) Quantification of percentage of cells with more than 4 TIFs. At least 100 cells were counted per genotype. Error bars represent s.e.m. n.s.: *p* value does not reach significance.