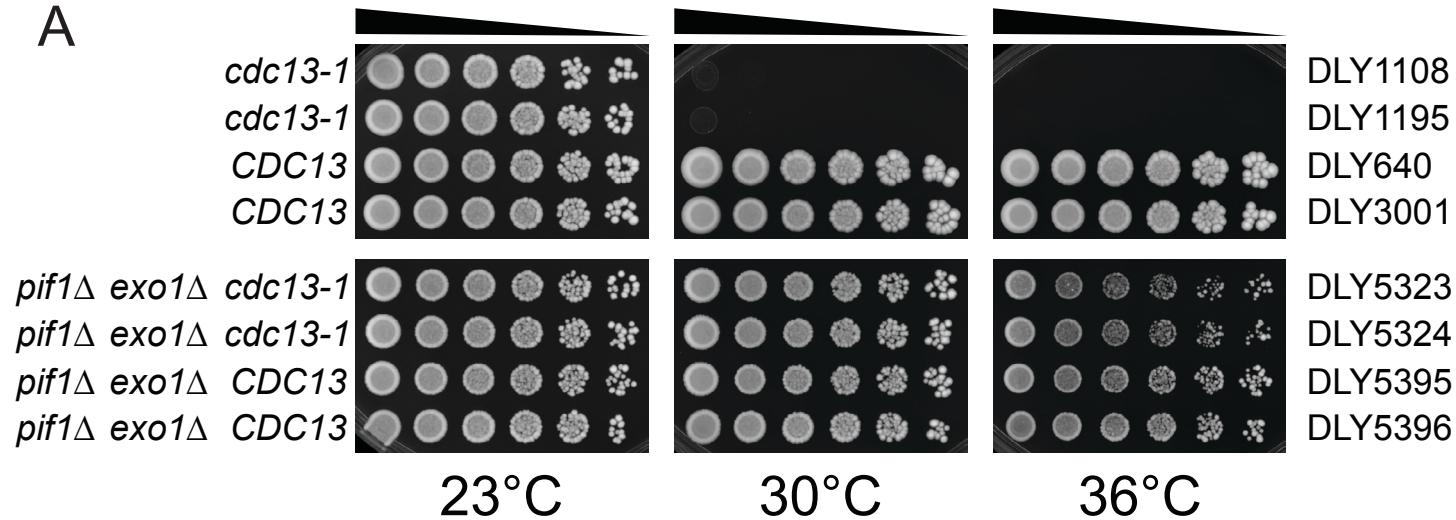
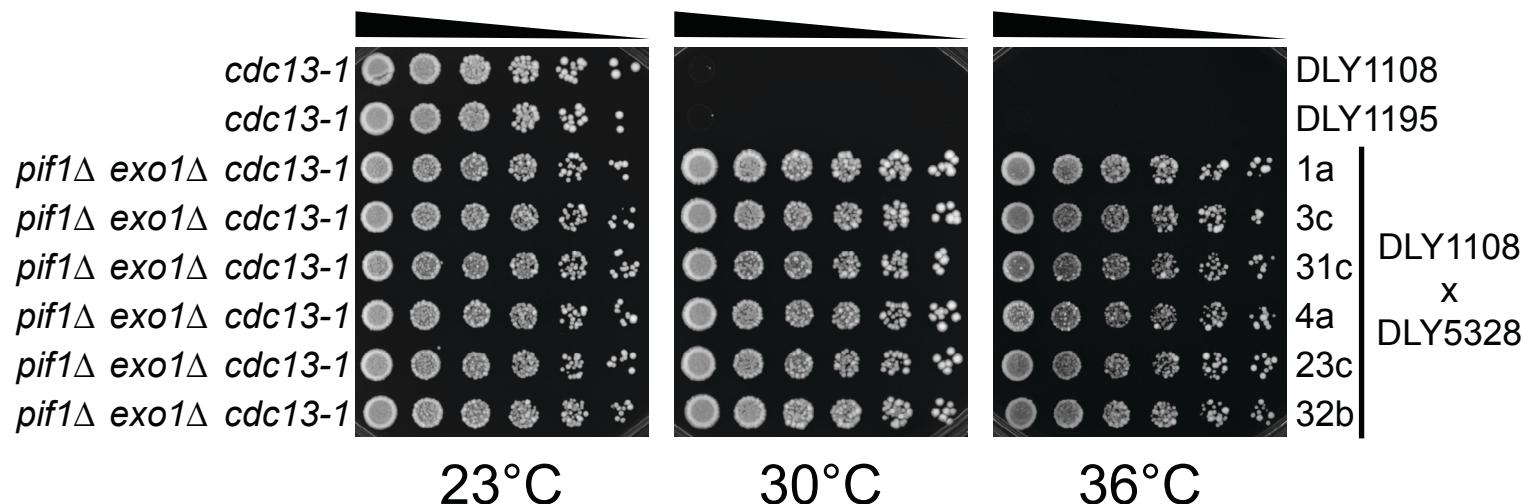


# Supplementary Figure 1

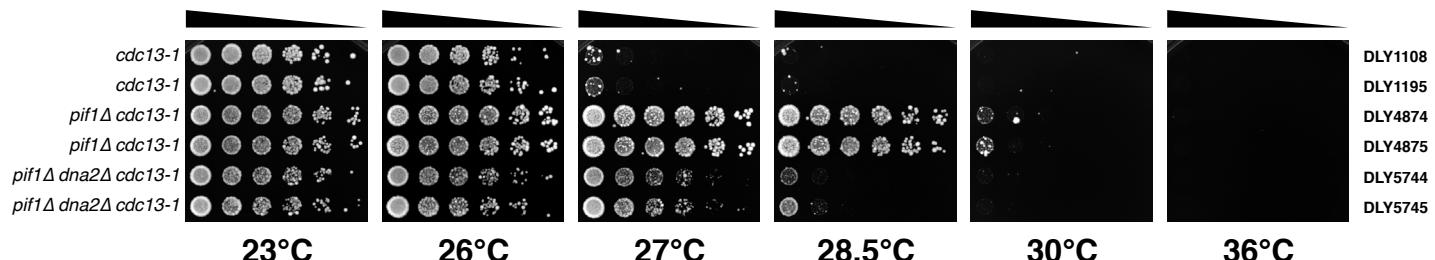
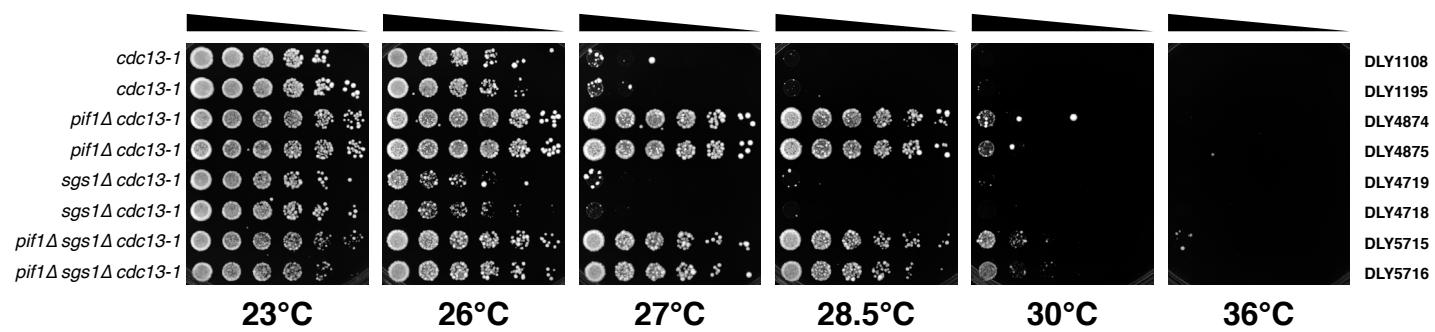
A



B

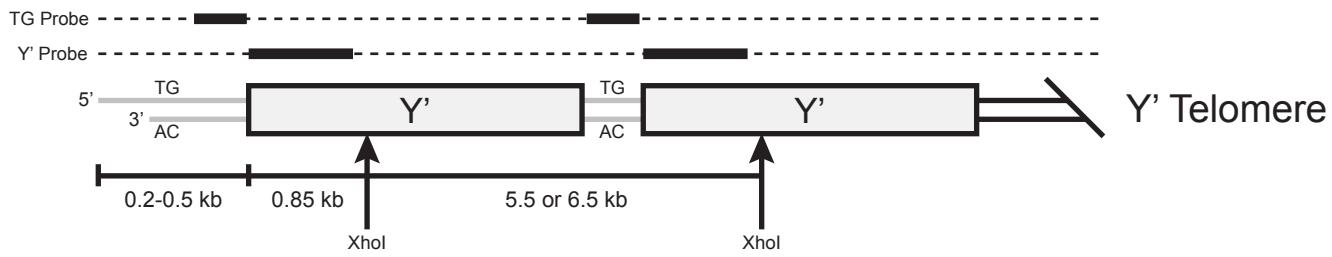


# Supplementary Figure 2

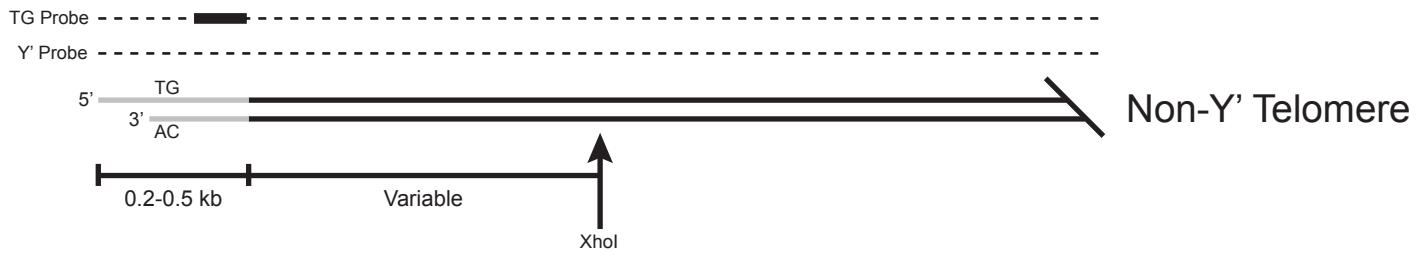
**A****B**

# Supplementary Figure 3

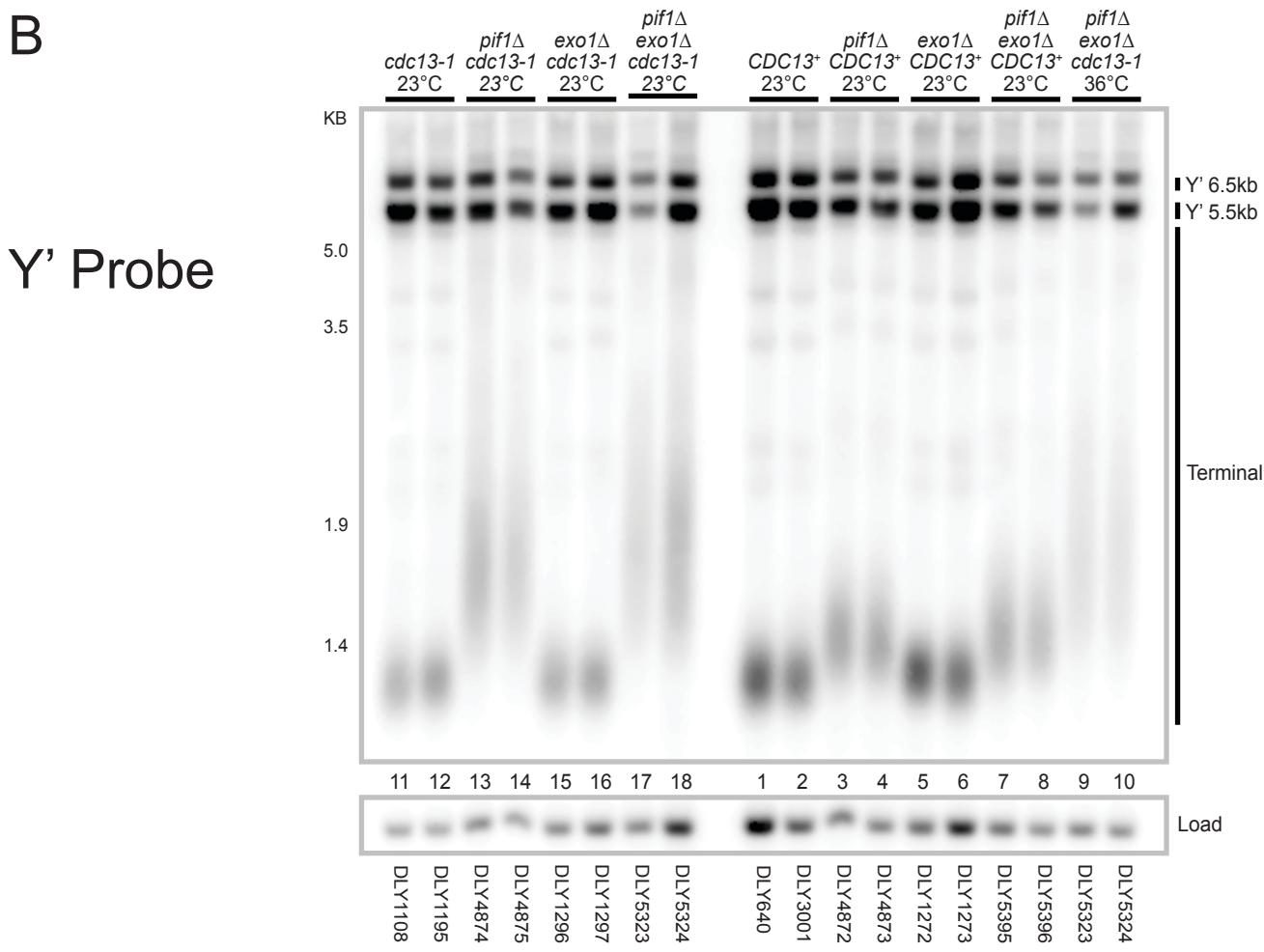
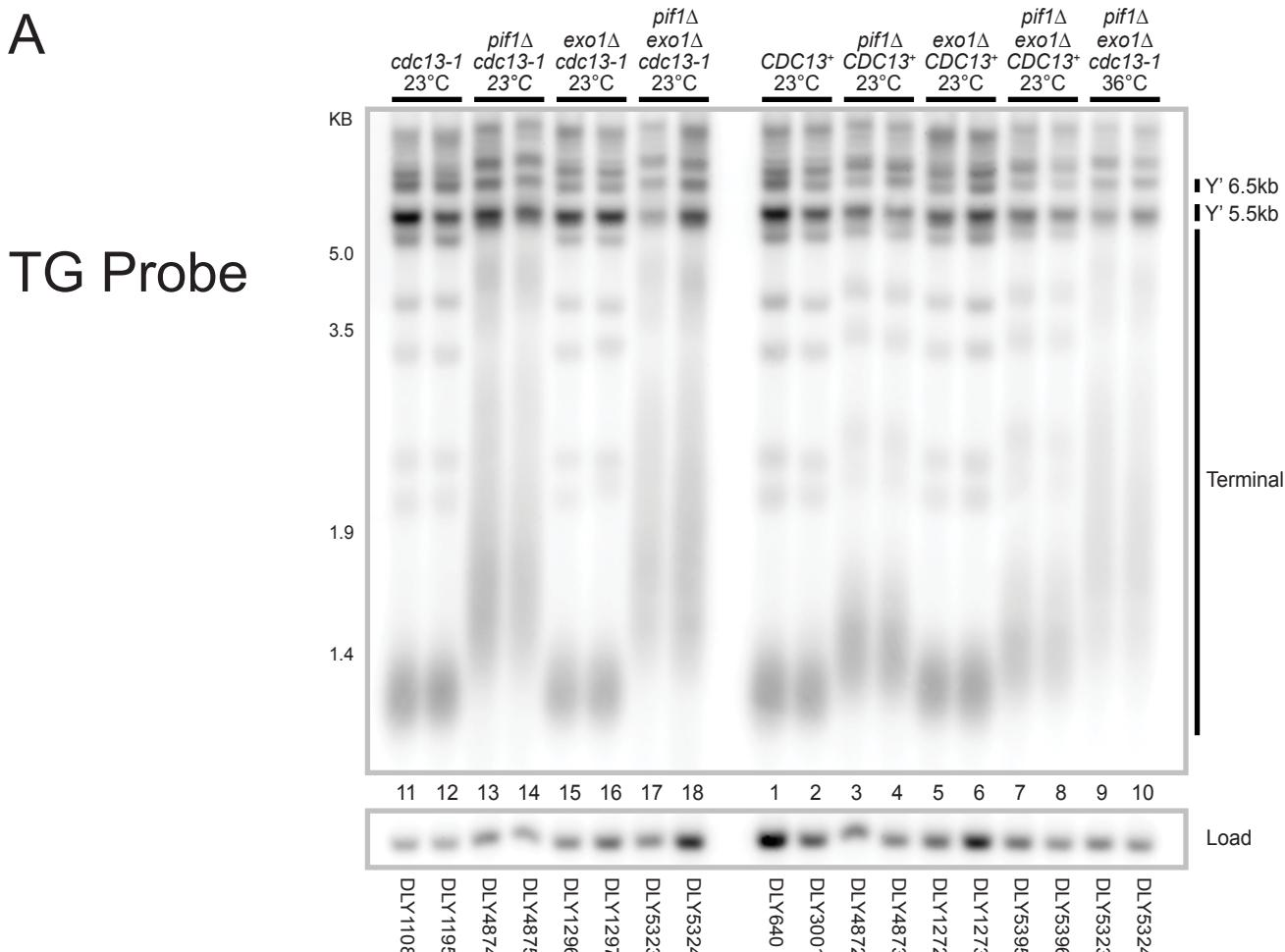
A



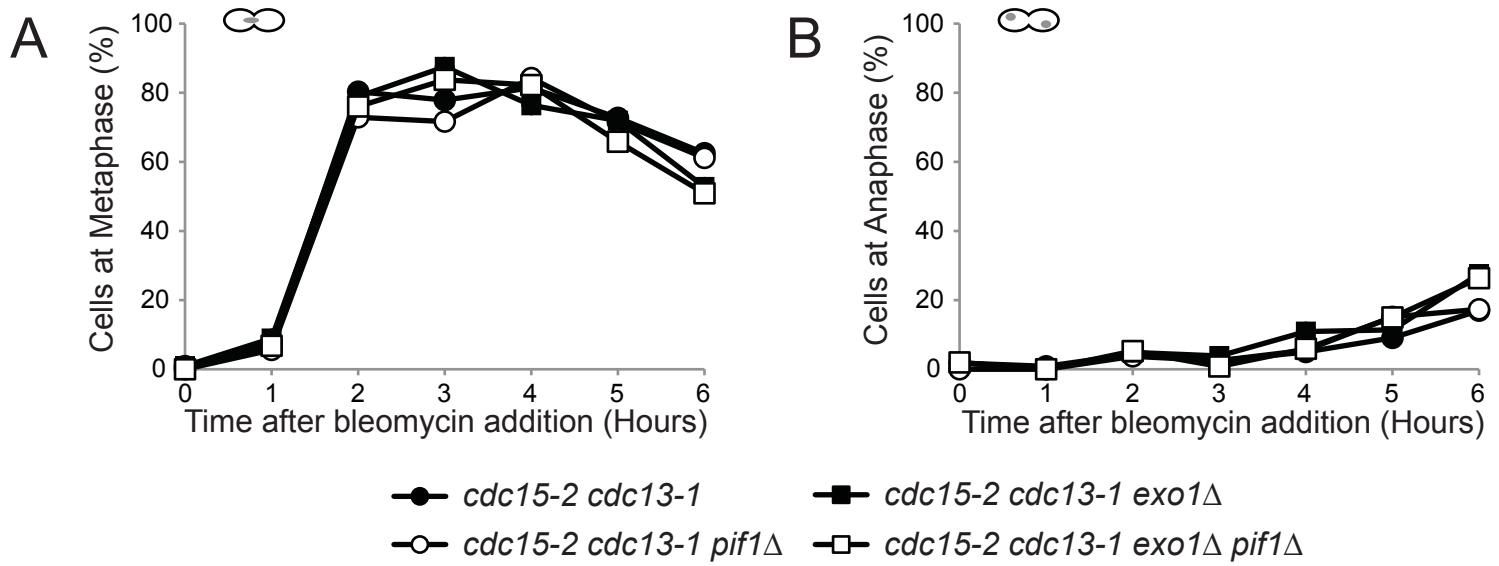
B



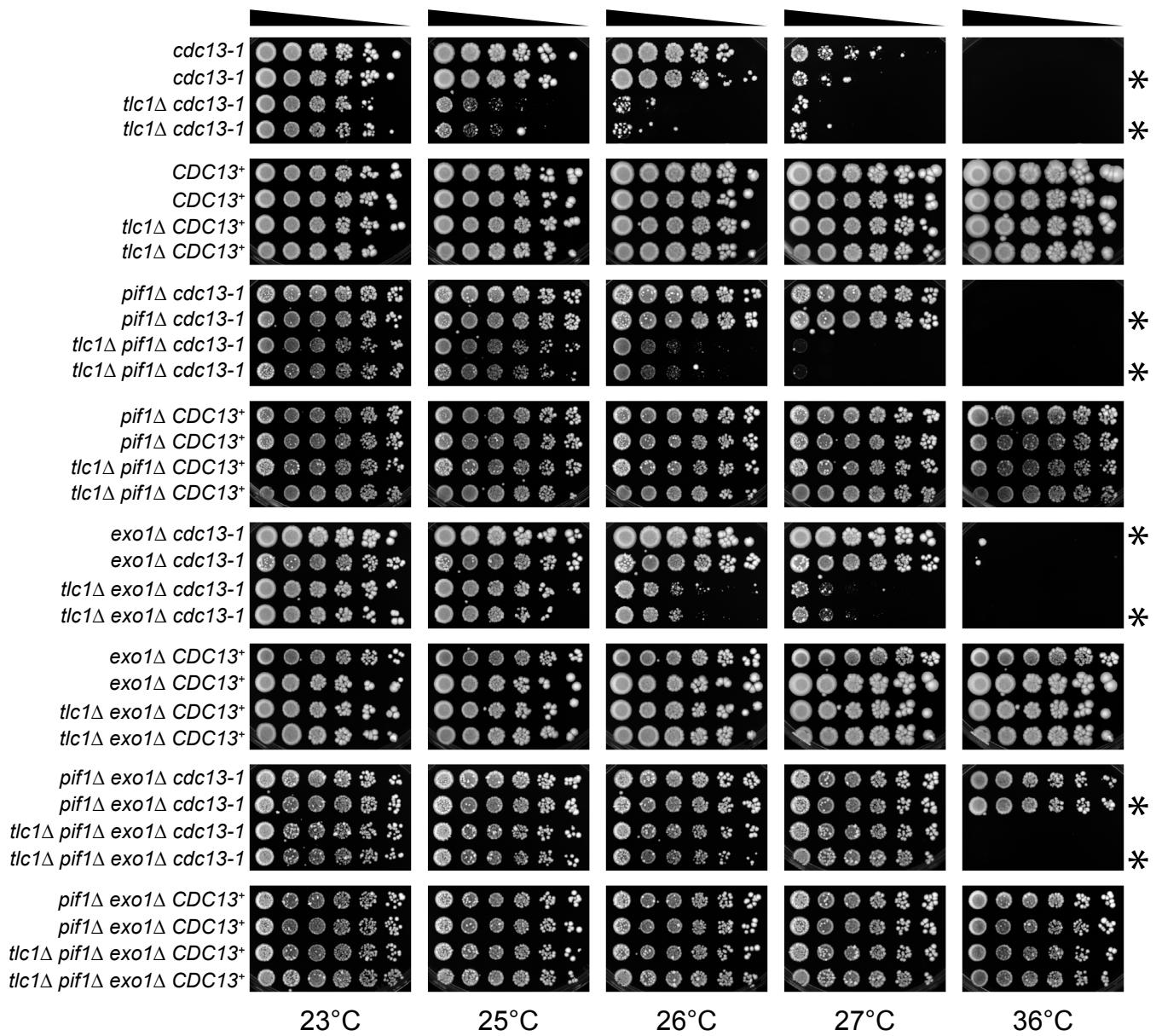
# Supplementary Figure 4



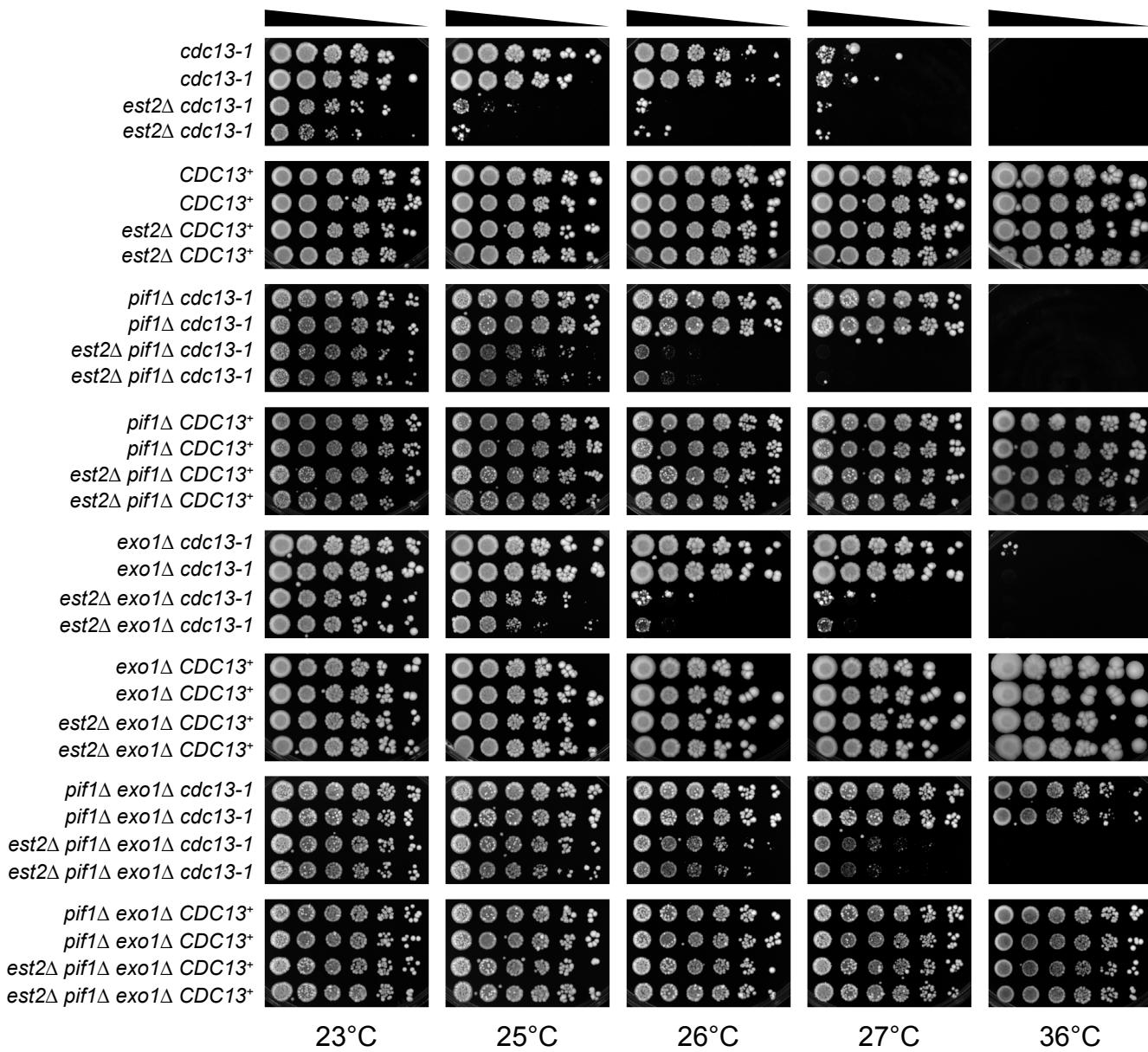
# Supplementary Figure 5



# Supplementary Figure 6

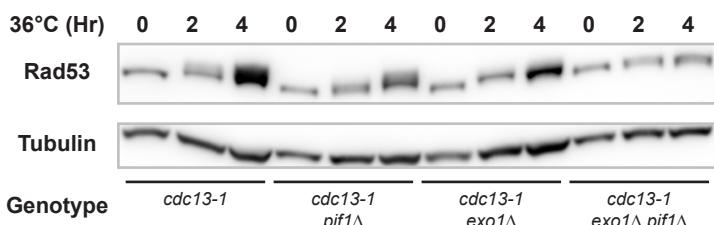
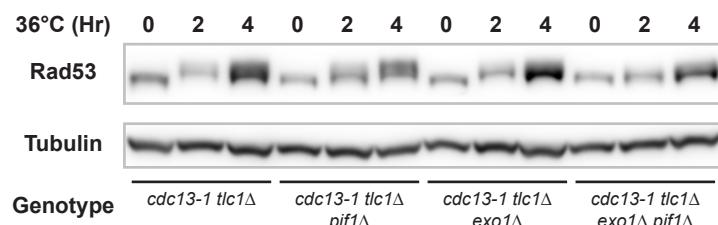


# Supplementary Figure 7

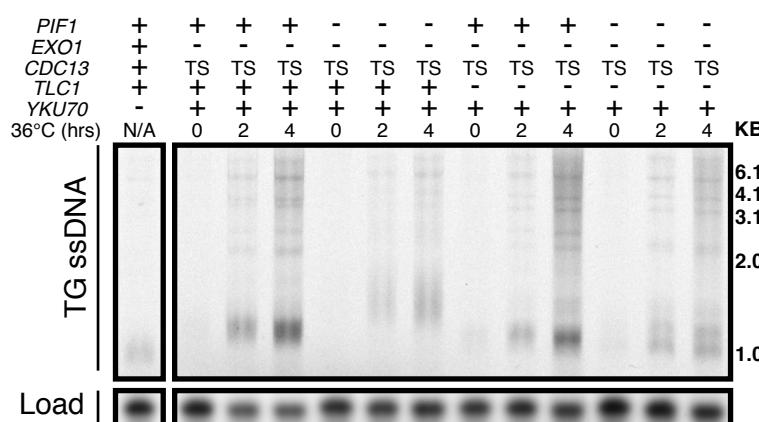
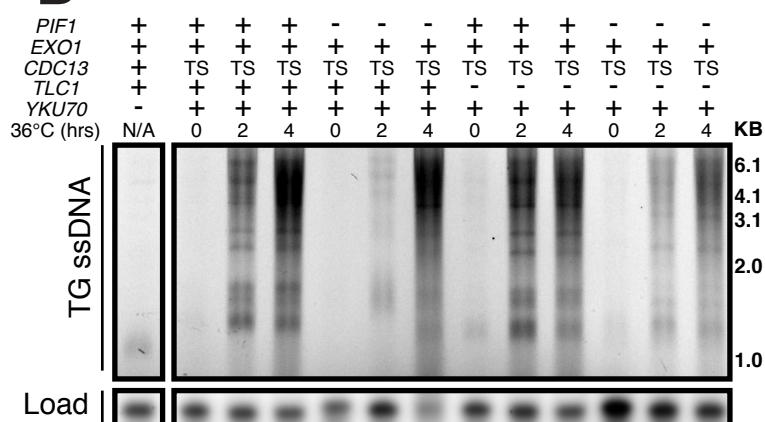


# Supplementary Figure 8

**A**



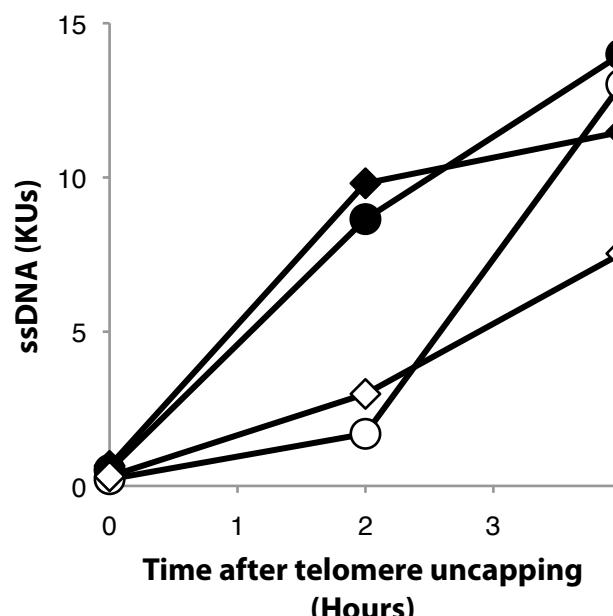
**B**



**C**

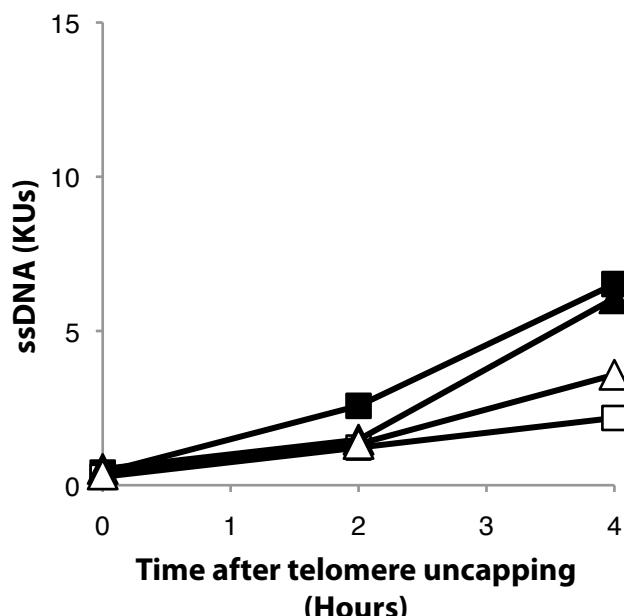
Legend:

- $TLC1^+ cdc13-1$
- $TLC1^+ cdc13-1 pif1\Delta$
- ◆  $tcl1\Delta cdc13-1$
- ◇  $tcl1\Delta cdc13-1 pif1\Delta$

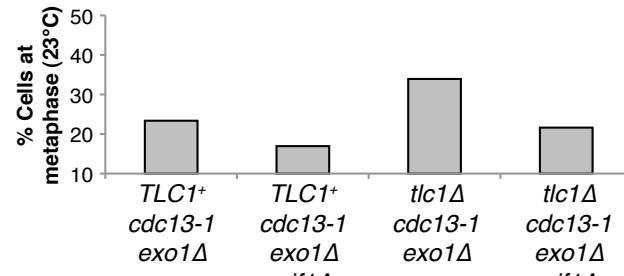
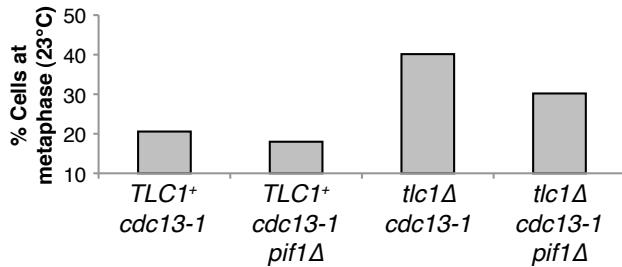


Legend:

- $TLC1^+ cdc13-1 exo1\Delta$
- ▲  $tcl1\Delta cdc13-1 exo1\Delta$
- $TLC1^+ cdc13-1 exo1\Delta pif1\Delta$
- △  $tcl1\Delta cdc13-1 exo1\Delta pif1\Delta$

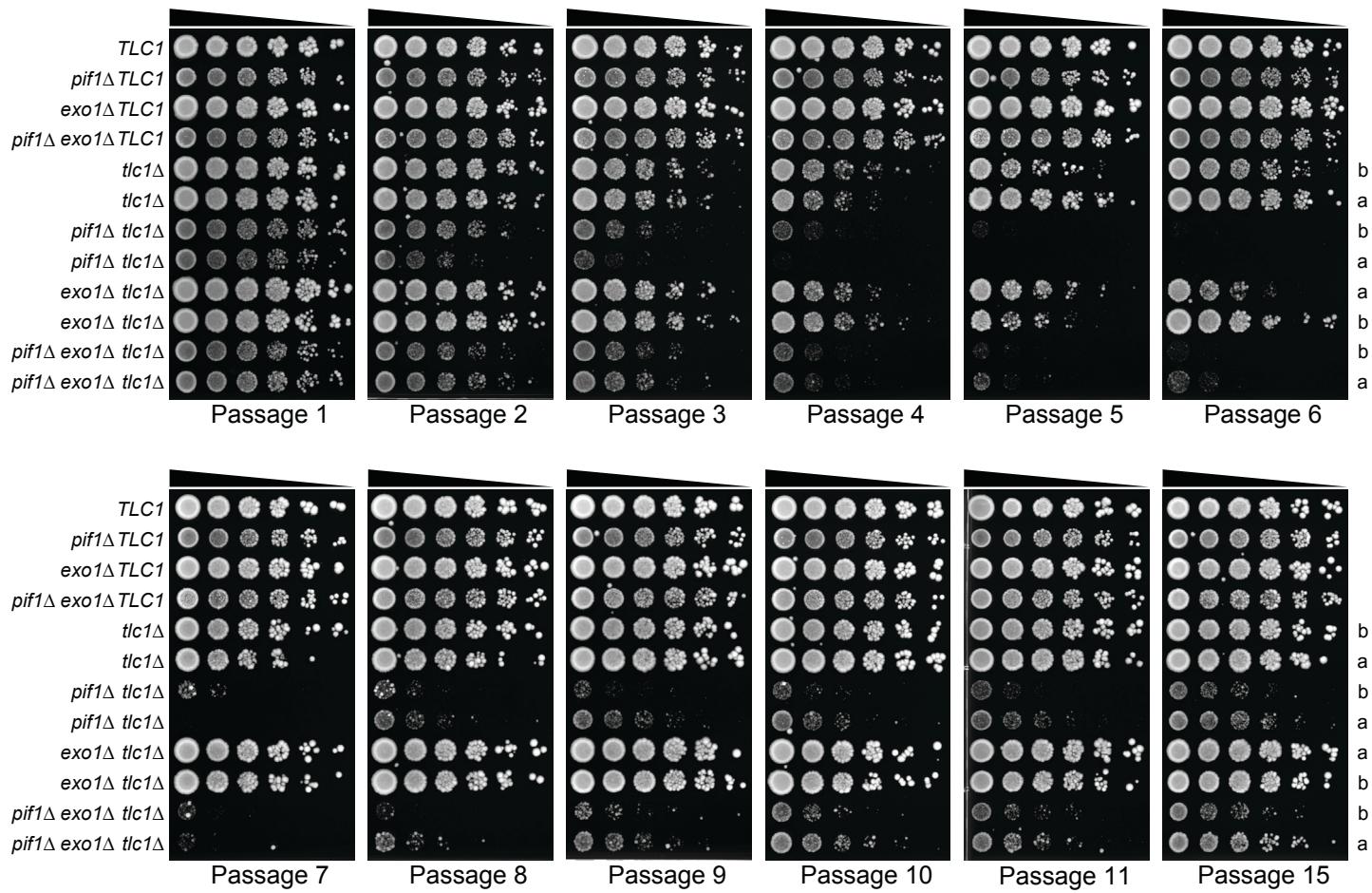


**D**

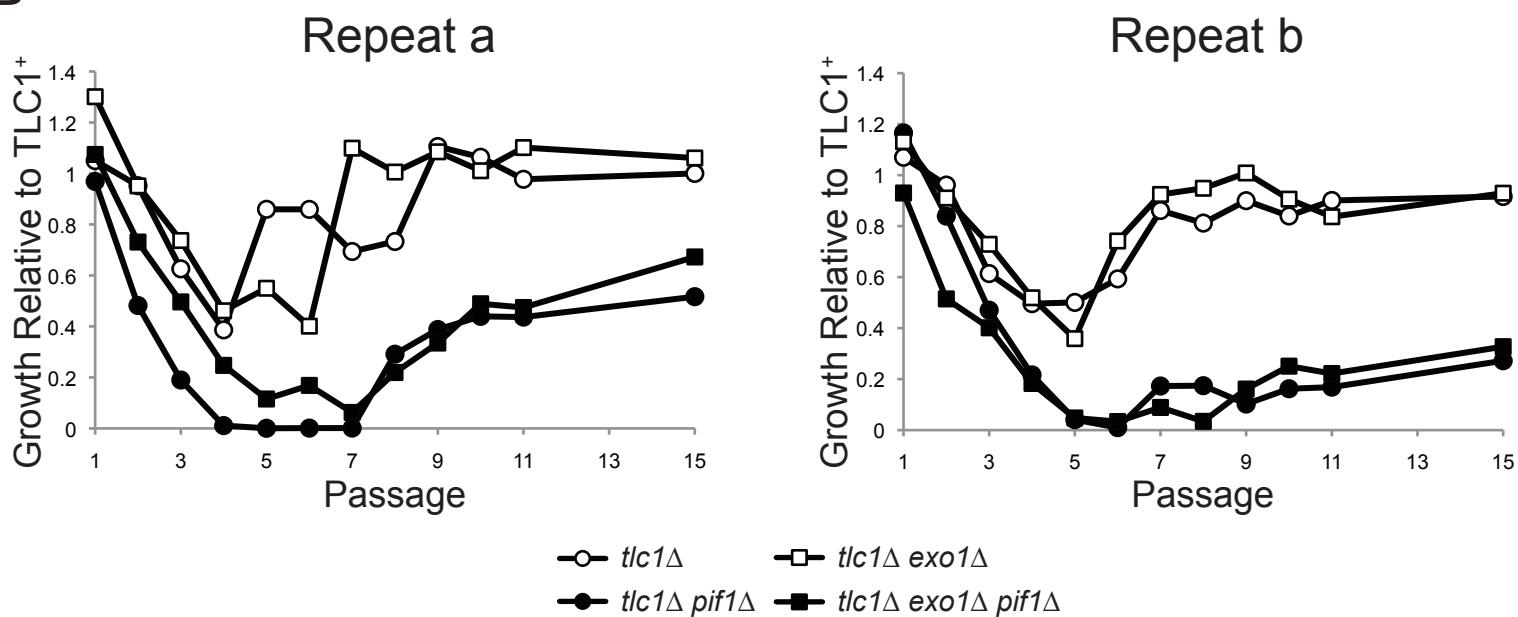


# Supplementary Figure 9

A

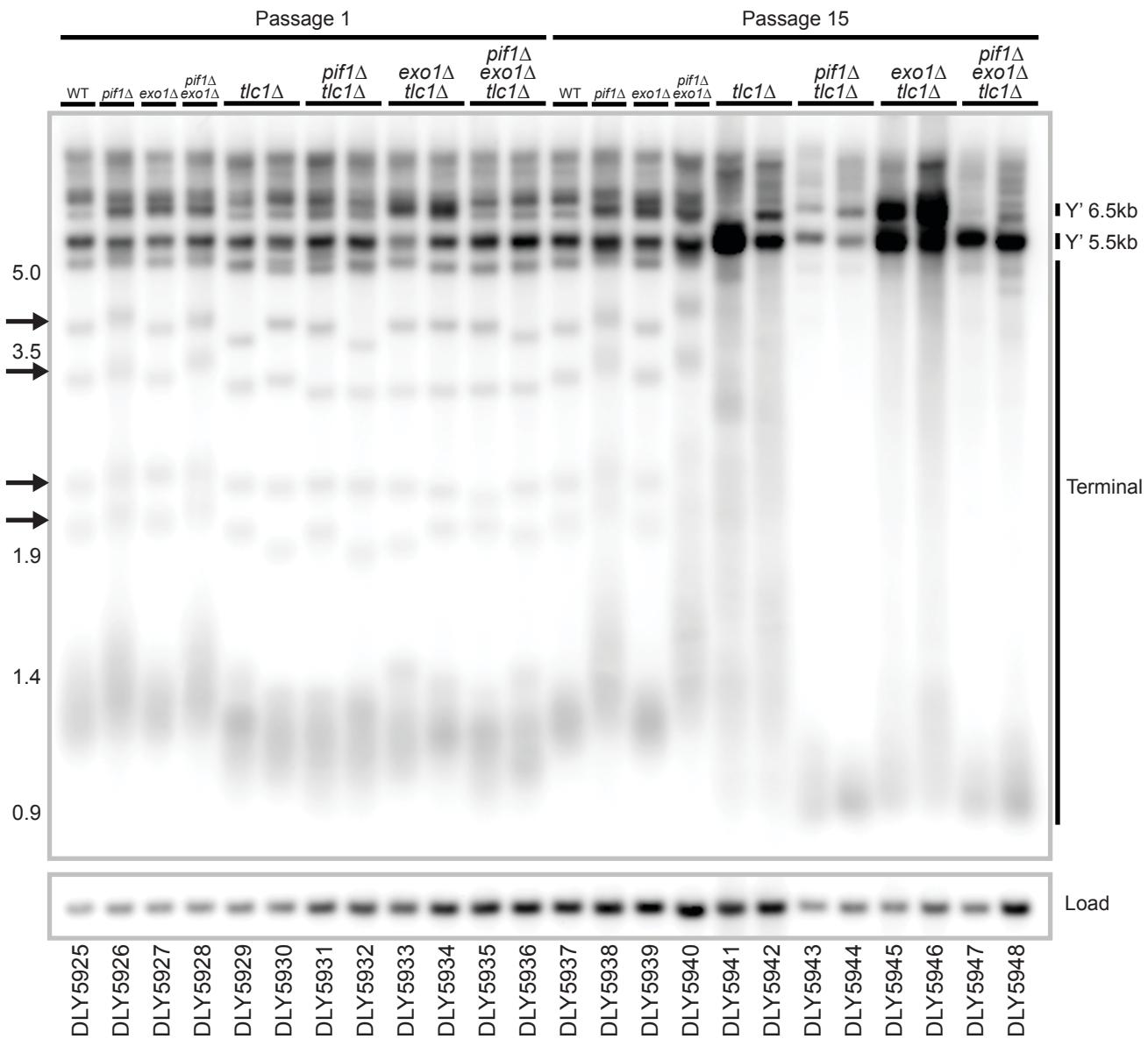


B

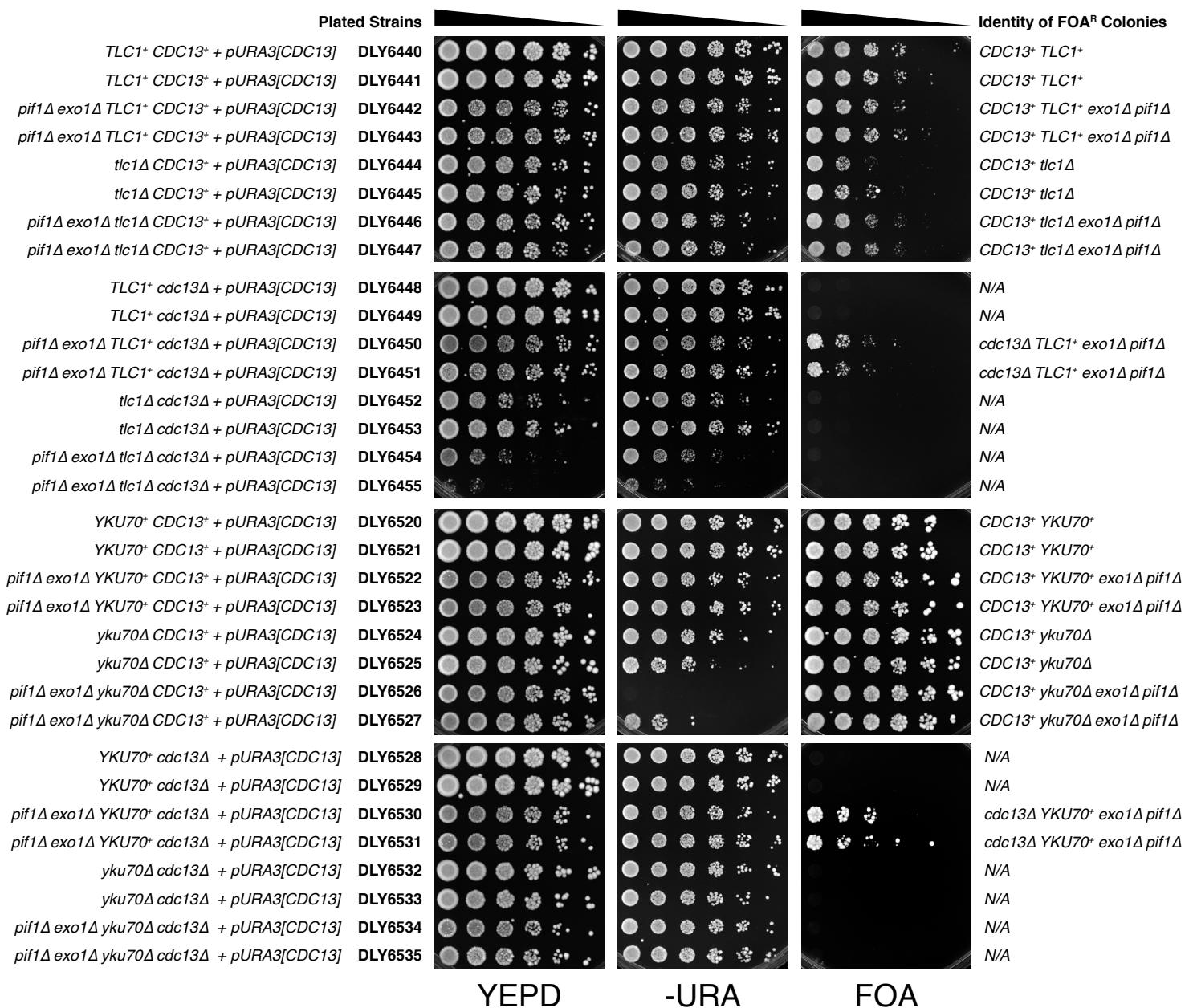


## Supplementary Figure 10

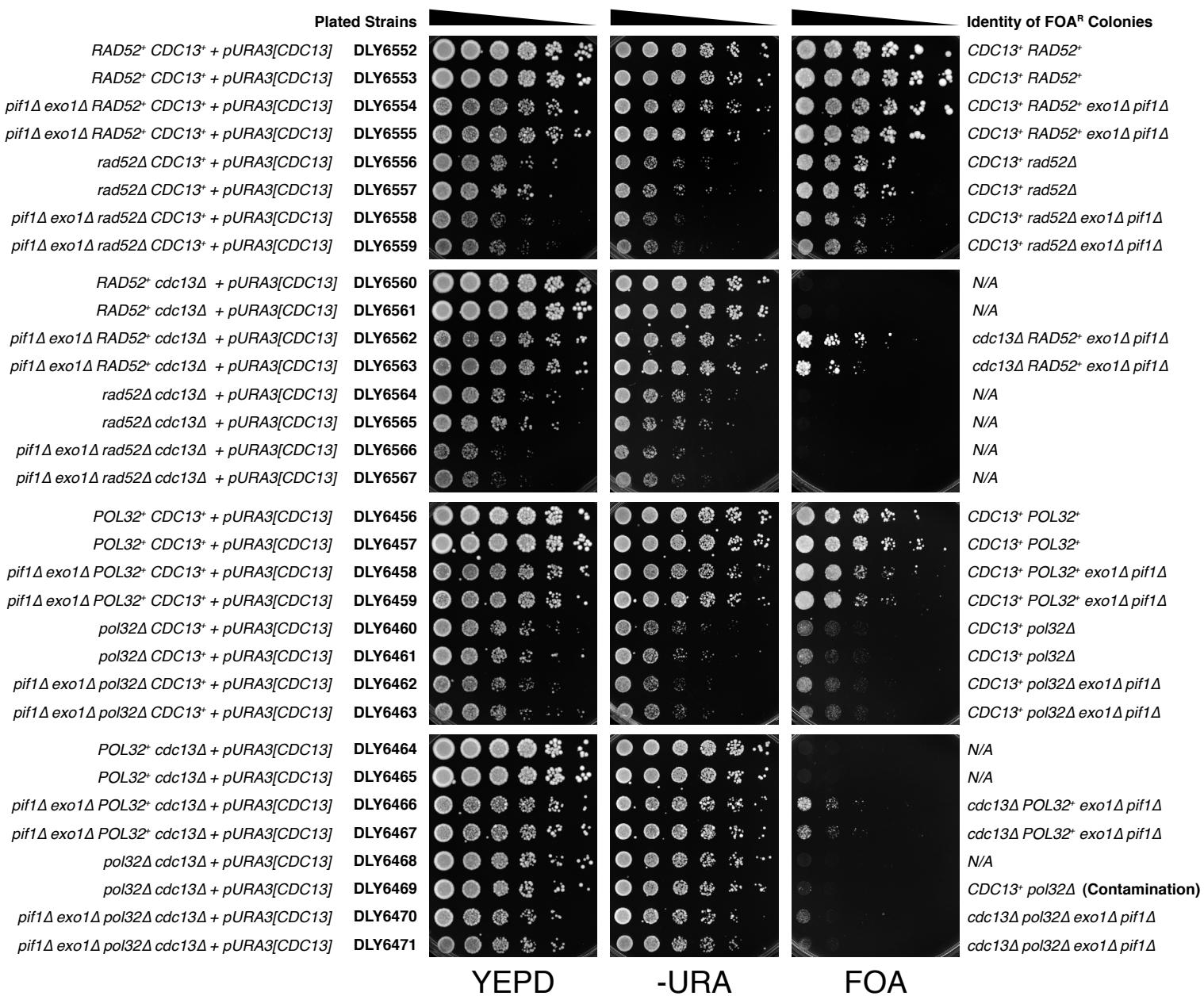
# TG Probe



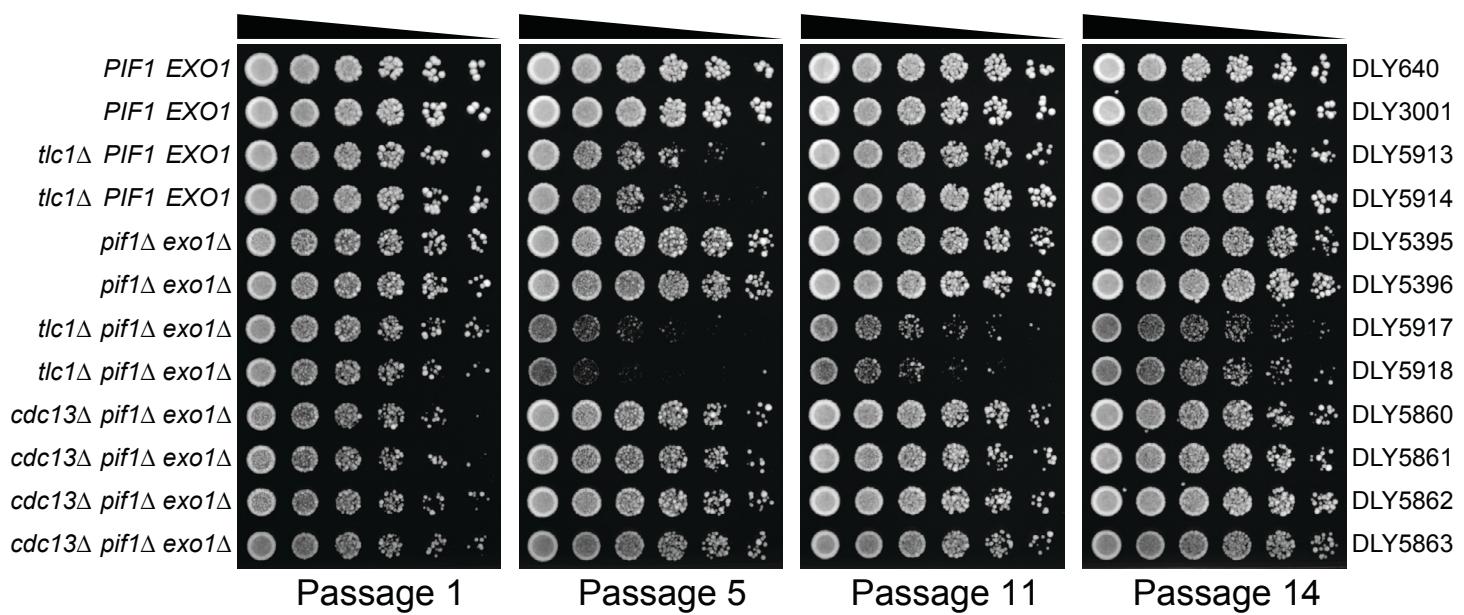
# Supplementary Figure 11



# Supplementary Figure 12



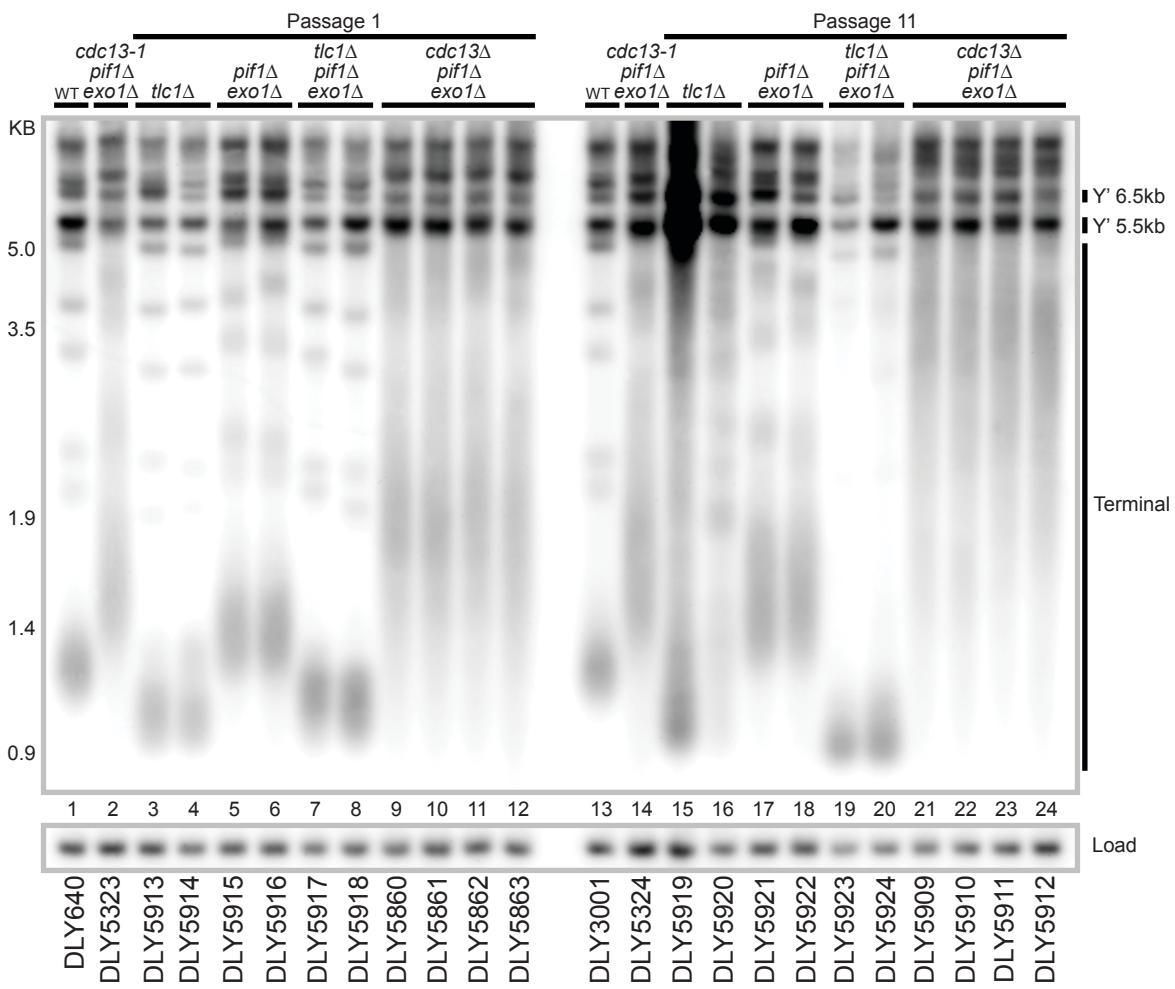
# Supplementary Figure 13



# Supplementary Figure 14

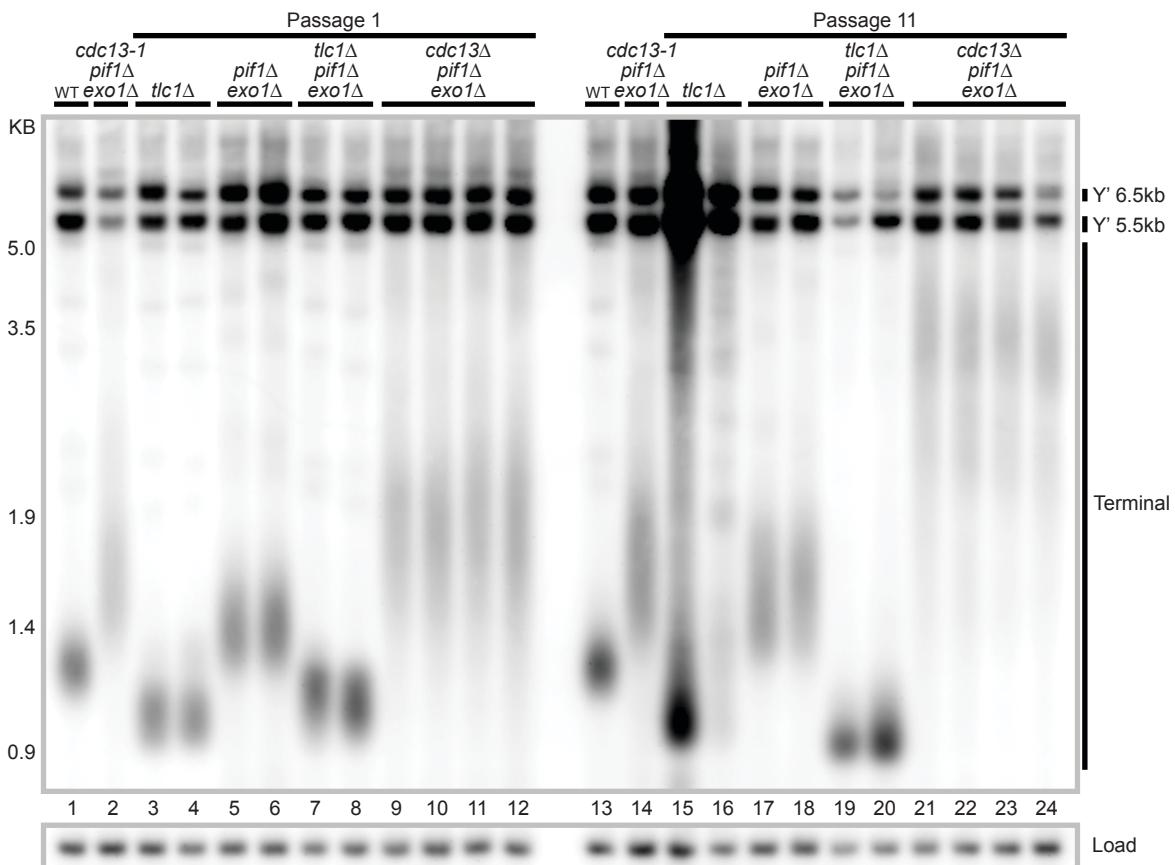
**A**

**TG Probe**



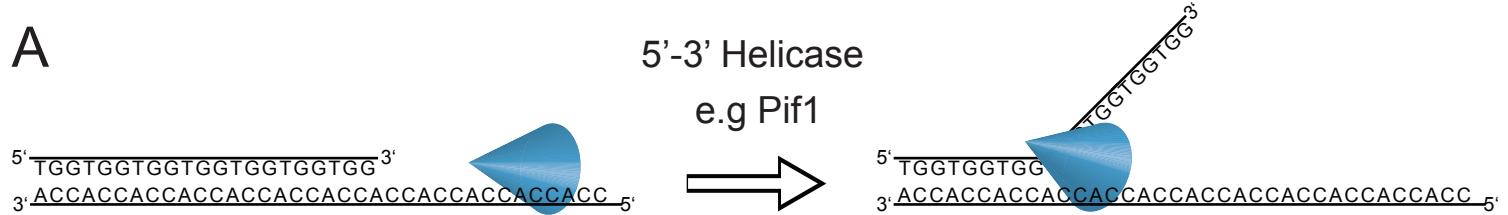
**B**

**Y' Probe**

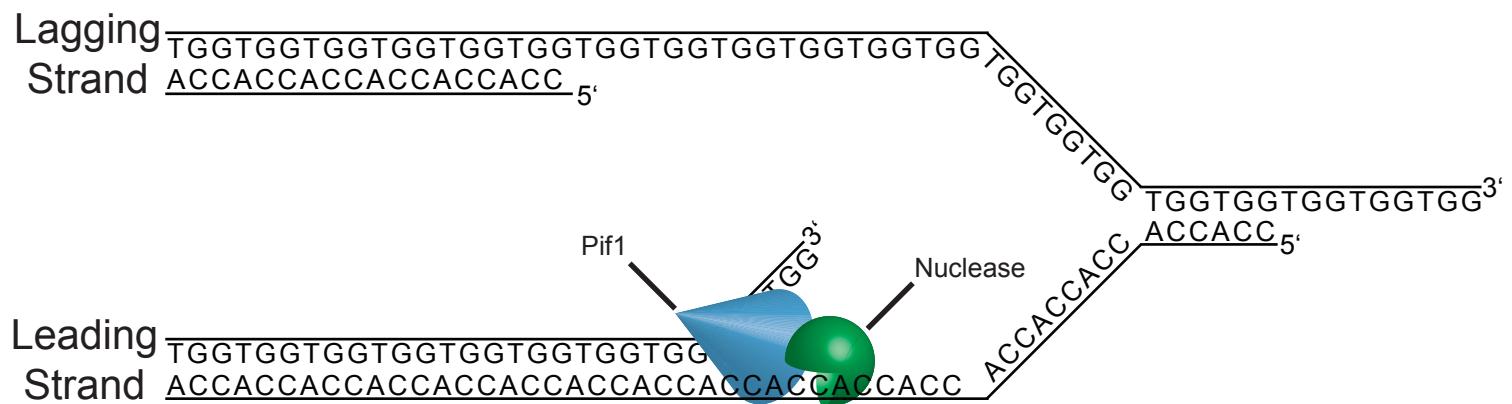


# Supplementary Figure 15

A



B



Diploid	Spores Dissected	<i>PIF1</i> <sup>+</sup> <i>EXO1</i> <sup>+</sup> <i>CDC13</i> <sup>+</sup> colonies (expected)	<i>PIF1</i> <sup>+</sup> <i>EXO1</i> <sup>+</sup> <i>CDC13</i> <sup>+</sup> colonies (observed)	<i>pif1</i> <sup>Δ</sup> <i>exo1</i> <sup>Δ</sup> <i>CDC13</i> <sup>+</sup> colonies (observed)	<i>pif1</i> <sup>Δ</sup> <i>exo1</i> <sup>Δ</sup> <i>cdc13</i> <sup>Δ</sup> colonies (observed)	<i>cdc13</i> <sup>Δ</sup> / <i>CDC13</i> <sup>+</sup> viability (%)
DDY340	176	22	17	13	12	92
DDY341	176	22	23	19	16	84

**Supplementary Table I**