

Figure 8. Sir proteins and Rap1 are found in foci at the nuclear periphery. (A) Rap1 (anti-Rap1, green) identifies seven clusters representing all 64 telomeres in this diploid yeast cell nucleus, in which DNA is stained red. Telomeres are either perinuclear or adjacent to the nucleolus (blue, anti-Nop1). (B) Telomeric repeat DNA (red) and B0 (green) is identified by fluorescent in situ hybridization. The two colocalize in \sim 70% of the cases and both are adjacent to the nuclear envelope (anti-pore staining, blue). (B0) The focal distribution of Sir4 (green) adjacent to the nuclear envelope (Mab414, red). (B0) This pattern is lost in a yKu70 deletion strain, coincident with the loss of telomeric silencing (Laroche et al. 1998).

Epigenetics, Second Edition © 2015 Cold Spring Harbor Laboratory Press