



Figure 5. Model for yeast heterochromatin at telomeres and the *HM* loci. The telomere and *HM* silencer mechanisms for nucleating Sir complex spreading both use Rap1, Sir2, Sir3, and Sir4. Yet they differ in that telomeres also rely on yKu, whereas the *HM* silencer elements use the factors ORC, Abf1 and Sir1. Telomeric heterochromatin is thought to fold back onto itself to form a cap that protects the telomere from degradation and whose condensation and folding silences genes. In the case of *HM* heterochromatin, the repressed domain between the silencer elements consists of closely spaced nucleosomes that form a condensed structure. Both the telomeric and *HM* silent regions are inaccessible to a number of transcription factors and degradative enzymes.