

Figure 7. Higher-Order Structuring of Chromatin

The 11-nm fiber represents DNA wrapped around nucleosomes. The 30-nm fiber is further compacted into an as-yet-unconfirmed structure (illustrated as solenoid conformation here), involving linker histone H1. The 300–700-nm fiber represents dynamic higher-order looping that occurs in both interphase and metaphase chromatin. The 1.5-µm condensed chromosome represents the most compacted form of chromatin that occurs only during nuclear division (mitosis or meiosis). It is not yet clear how mitotic chromosome-banding patterns (i.e., G- or R-banding) correlate with particular chromatin structures.

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