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Telomere Maintenance Gene

National Cancer Institute

Source

National Cancer Institute. *Telomere Maintenance Gene*. NCI Thesaurus. Code C20338.

Telomere Maintenance Genes encode specialized proteins bound to telomeric DNA repeats and directly involved in maintaining/protecting chromosome telomere ends to prevent a damage response that halts cell proliferation. Telomerase, which lengthens telomeric DNA by RNA-templated addition of repeated DNA sequences, is regulated by proteins that bind to the telomeric DNA repeats and to additional proteins to assemble a higher-order telomeric complex. (NCI)