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# RNA Polymerase II Subunit Gene

National Cancer Institute

## Source

National Cancer Institute. *RNA Polymerase II Subunit Gene*. NCI Thesaurus. Code C20660.

RNA polymerase II subunit genes encode DNA-dependent RNA polymerase II, a complex multisubunit enzyme that is responsible for the transcription of protein-coding genes. Ten to 14 subunits encoded by these genes range in size from 220 to 10 kD. The complex interacts with the promoter regions of genes as well as with a variety of elements and transcription factors to determine essentially all of the parameters that govern transcription, e.g., tissue and development specificity, stress response, etc. A fraction of the large subunit of Pol II (Pol II LS) is ubiquitinated after exposing cells to UV radiation or cisplatin. (NCI)