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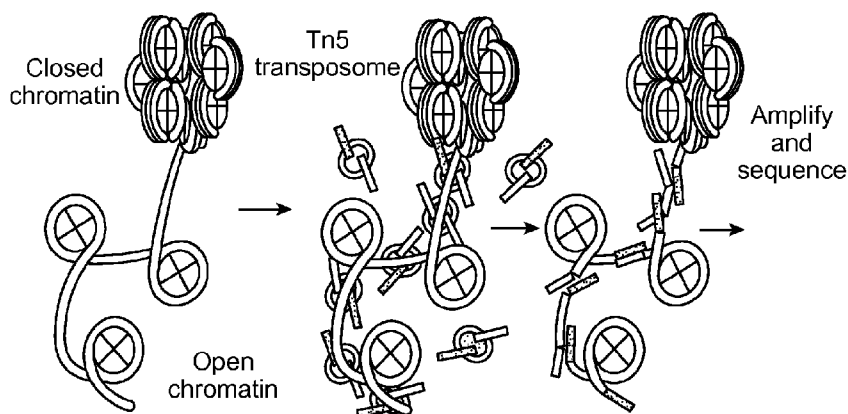


FIG. 1A

(57) **Abstract:** Provided herein is a method for analyzing polynucleotides such as genomic DNA. In certain embodiments, the method comprises: (a) treating chromatin isolated from a population of cells with an insertional enzyme complex to produce tagged fragments of genomic DNA; (b) sequencing a portion of the tagged fragments to produce a plurality of sequence reads; and (c) making an epigenetic map of a region of the genome of the cells by mapping information obtained from the sequence reads to the region. A kit for performing the method is also provided.