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(54) Title: LINEAR DNA WITH ENHANCED RESISTANCE AGAINST EXONUCLEASES AND METHODS FOR THE PRODUCTION THEREOF

(57) Abstract: Methods for producing a linear deoxyribonucleic acid (DNA) product with enhanced resistance to nuclease digestion are provided. The methods comprise: (a) contacting a double-stranded DNA molecule with an endonuclease, a ligase and first and second adaptor molecules to form a single contiguous aqueous volume; and (b) incubating the single contiguous aqueous volume to generate a linear DNA product. There are also provided linear deoxyribonucleic acid (DNA) products with enhanced resistance to nuclease digestion and uses thereof.

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