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(54) Title: METHODS FOR PRODUCING NUCLEIC ACIDS

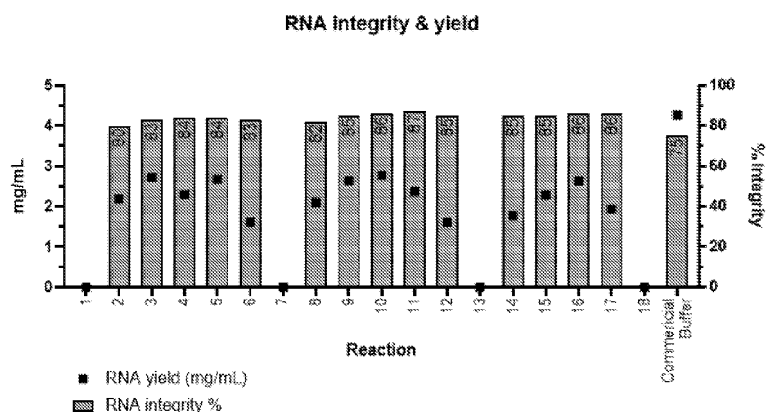


FIG. 34B

(57) **Abstract:** Described are methods for producing RNA molecules in an in vitro transcription reaction. Also described are methods for producing an mRNA molecule from a circular double-stranded DNA template using an in vitro transcription reaction system wherein the in vitro transcription reaction system lacks a polyamine. Also described are in vitro transcription reaction systems comprising enzymatic 5' capping and oligo(dT) purification.

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