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(54) Title: PREPARATION AND USE OF BLOCKED SUBSTRATES

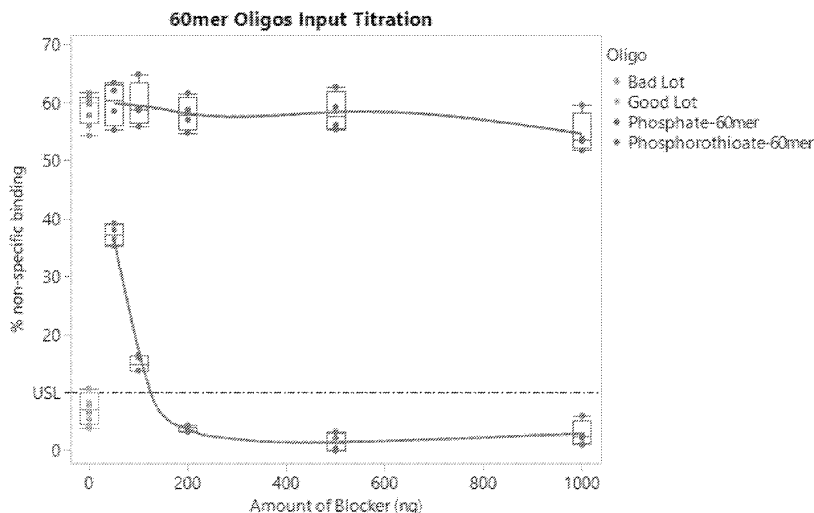


FIG. 32B

(57) Abstract: Some embodiments of the methods and compositions provided herein relate to blocked substrates in which non-specific binding of nucleic acids to the substrate is reduced. Some embodiments include use of carrier nucleic acids. More embodiments include the use of beads contacted with an oligonucleotide, such as an oligonucleotide containing one or more phosphorothioate bonds. Such substrates are useful in methods for obtaining long-read information from short reads of a target nucleic acid.

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