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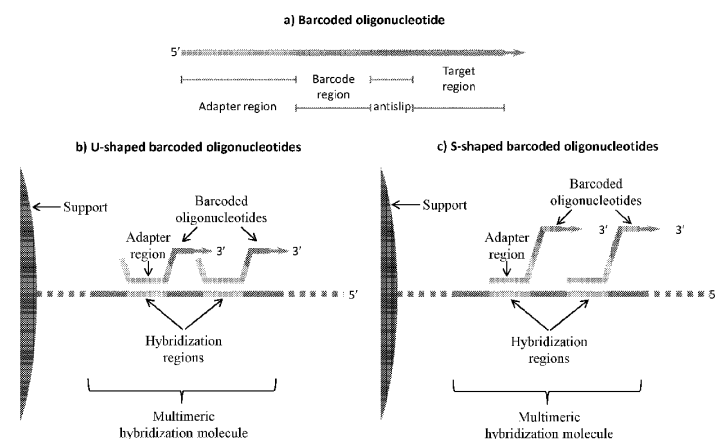
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(54) Title: REAGENTS AND METHODS FOR MOLECULAR BARCODING

Options for annealing barcoded oligonucleotides to a multimeric hybridization molecule

FIGURE 26



(57) Abstract: Reagents and methods for preparing nucleic acid samples for sequencing are provided. The reagents include multimeric barcoding reagents that comprise barcode regions linked together and a cell-binding moiety. The methods comprise contacting a nucleic acid sample comprising cells with a library of multimeric barcoding reagents, wherein each multimeric barcoding reagent comprises barcode regions linked together, and appending barcode sequences of a first multimeric barcoding reagent to sub-sequences of a target nucleic acid of a first cell, and appending barcode sequences of a second multimeric barcoding reagent to sub-sequences of a target nucleic acid of a second cell. Methods are also provided that comprise steps of internalising multimeric barcoding reagents into cells (e.g. by endocytosis) or exposing multimeric barcoding reagents to target nucleic acids by lysing cells or permeabilizing cell membranes.

[Continued on next page]

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