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(54) Title: SAMPLE ANALYSIS USING ASYMMETRIC CIRCULARIZABLE PROBES

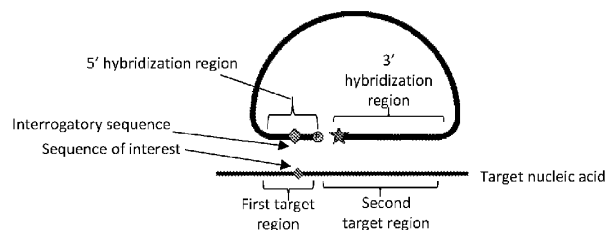


FIG. 1A

(57) Abstract: The present disclosure in some aspects relate to a direct RNA (dRNA) detection approach incorporating the use of circularizable probes (e.g., padlock probes) having asymmetric arms, rolling circle amplification of the ligated circularizable probes, and in situ detection (e.g., using hybridization-based in situ sequencing) for multiplexed spatial analysis of nucleic acid sequences (e.g., short sequences such as SNPs and point mutations) in a biological sample. In some aspects, compositions and methods disclosed herein improve detection specificity, reduce false positive signal detection, and/or maintain or improve detection efficiency.



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