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(54) Title: METHODS AND COMPOSITIONS FOR DETECTION OR QUANTIFICATION OF NUCLEIC ACID SPECIES

(57) Abstract

The present invention provides a method for detecting a target nucleic acid species including the steps of providing an array of probes affixed to a substrate and a plurality of labeled probes wherein each labeled probe is selected to have a first nucleic acid sequence which is complementary to a first portion of a target nucleic acid and wherein the nucleic acid sequence of at least one probe affixed to the substrate is complementary to a second portion of the nucleic acid sequence of the target, the second portion being adjacent to the first portion; applying a target nucleic acid to the array under suitable conditions for hybridization of probe sequences to complementary sequences; introducing a labeled probe to the array; hybridizing a probe affixed to the substrate to the target nucleic acid; hybridizing the labeled probe to the target nucleic acid; affixing the labeled probe to an adjacently hybridized probe in the array; and detecting the labeled probe affixed to the probe in the array.

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