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[Continued on next page]

(54) Title: SINGLE CELL RNA AND MUTATIONAL ANALYSIS PCR (SCRM-PCR): A METHOD FOR SIMULTANEOUS
ANALYSIS OF DNA AND RNA AT THE SINGLE-CELL LEVEL

[Fig. 1]

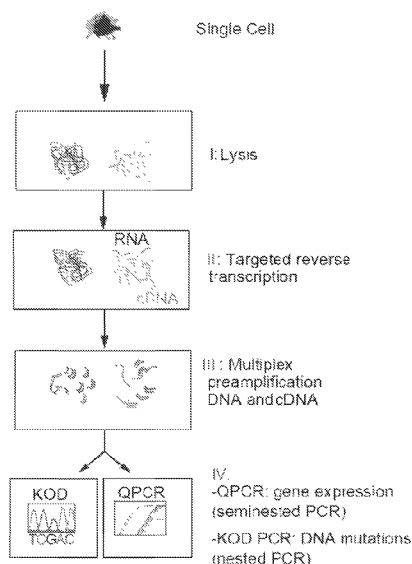


Figure 1

(57) Abstract: A method of simultaneously analyzing RNA and DNA in a sample, the method comprising the step (a) contacting the sample with a reverse primer from a first primer pair directed to a target RNA region to effect reverse transcription of RNA into cDNA with a reverse transcriptase; (b) subsequently contacting the sample with (i) a forward primer from the first primer pair directed to a second cDNA region, (ii) a forward and a reverse primers from a second primer pair targeted to a DNA region, and (ii) a DNA polymerase to simultaneously amplify the target cDNA and target DNA region; and (c) analyzing the amplified target cDNA region and/or amplified target DNA region. Also encompassed are uses of the method to analyze gene expression and mutations, kits comprising primers, enzymes, buffers.



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