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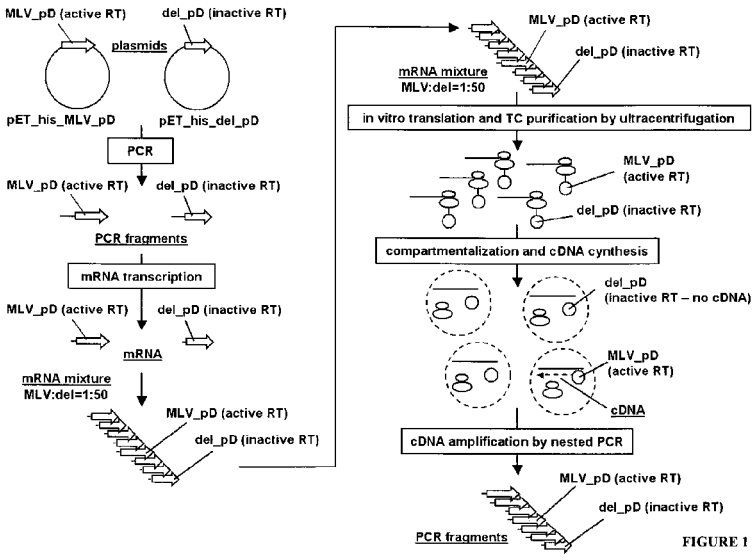


FIGURE 1

(57) Abstract: The present invention provides a process for the production of nucleic acid encoding a target protein, which comprises: (a) providing an array of RNA or DNA molecules including one or more encoding the target protein; (b) generating a target protein from the array to form RNA-protein or DNA-protein complexes in which the RNA or DNA molecule is non-covalently or covalently bound to the complex; (c) separating the complexes into compartments wherein most or all of the compartments contain no more than one complex; (d) subjecting the complexes to reaction conditions which allow target protein activity; and (e) selecting nucleic acid encoding the target protein on the basis of the activity associated therewith, wherein when the complex is a DNA-protein complex in which the DNA is non-covalently bound, step b) is performed in the absence of separate compartments for each complex.

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