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(54) Title: METHOD AND SYSTEM FOR CELL AND/OR NUCLEIC ACID MOLECULES ISOLATION

(57) Abstract: The present invention relates to methods and system for tissue cell and/or nucleic acid molecule isolation. In particular, to a method for isolating nucleic acid molecules from tissue samples comprising: i) treating a tissue sample with at least one enzyme for tissue dissociation; ii) adding a lytic solution; and iii) isolating nucleic acid molecules. The method further comprises a step of applying hydrodynamic shear force to the product of step (i). The methods and/or system according to the invention are adaptable for use with micromechanical and/or automated processes.

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