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(54) Title: METHOD OF ANIMAL-DERIVED TISSUE DECELLULARIZATION AND BIOINK COMPRISING ANIMAL-DERIVED DECELLULARIZED TISSUE

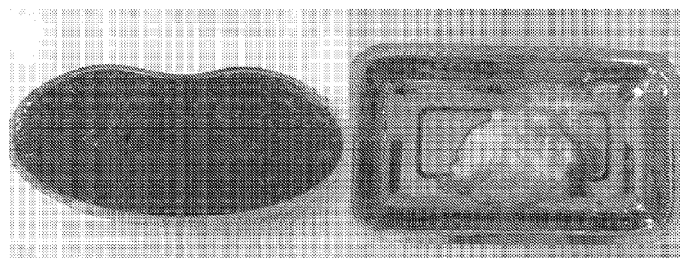


Fig. 1

(57) Abstract: A method of decellularization of animal tissue, comprising the steps of: mechanical homogenization of animal-derived tissue, incubation of the homogenized tissue from step a) in a solution of trypsin and EDTA, subjecting the filtered tissue to incubation in a PBS buffer solution with a pH in the range of 7.2-7.6 containing a non-ionic detergent at a concentration of 4 - 2% and NH₄OH at a concentration of 0.2 - 0.08%, rinsing the tissue with a PBS buffer solution containing an antimicrobial agent, incubation in a deoxyribonuclease solution at a concentration of 0.001 to 0.003% (w/v), rinsing the decellularized tissues obtained with a PBS buffer solution containing an antimicrobial agent, wherein the non-ionic detergent is a compound with a molecular weight of 596 g/mol and additional steps of incubating the tissue in the solution PBS buffer with a pH of 7.2- 7.6 containing a non-ionic detergent at a concentration of 1.5-0.5% and NH₄OH at a concentration of 0.2-0.08%, where the incubation is carried out at a temperature below room temperature for 36-48h, and incubation of the tissue in a PBS buffer solution with a pH of 7.2-7.6 containing a non- ionic detergent at a concentration of 0.75-0.25% and NH₄OH at a concentration of 0.2-0.08%, where the incubation is carried out at a temperature below room temperature for 36-48h. Bioink containing decellularized tissue of animal origin.

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