

Title (en)

LOADING AND UNLOADING OF PERMEATING PROTECTANTS FOR CELL, TISSUE, AND ORGAN CRYOPRESERVATION BY VITRIFICATION

Title (de)

BE- UND ENTLADEN VON PERMEIERENDEN SCHUTZMITTELN FÜR ZELL-, GEWEBE- UND ORGAN TIEFTEMPATURKONSERVIERUNG DURCH VERGLASUNG

Title (fr)

CHARGE ET DECHARGE DE PROTECTEURS A PERMEATION POUR LA CRYOPRESERVATION DE CELLULES, DE TISSUS ET D'ORGANES PAR VITRIFICATION

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9745010A1] The present invention is directed to a method for cryopreserving a biological sample, including gradually or stepwise loading the sample with permeating protectant by contacting the sample with solutions including the protectant and a non-permeating co-solute that limits the amount of protectant that penetrates into cells of the biological specimen. The method further includes the gradual or step of unloading (rehydration) of the sample by contacting the sample with one or more rehydration solutions having progressively lower concentrations of both the protectant and co-solute, such that the protectant is removed from the cells of the sample. Concentration of the co-solute during loading and unloading should be at maximum value that still does not damage the sample at room and subzero temperatures.

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