

Simulation report

Type of Freezer: CELL (SmartFreez's unidirectional CRF)

Biomixture: DMSO + Culture medium

Mass fraction of DMSO: 0.15 Cooling rate (°C/min): 5

Ice growth velocity (µm/s)

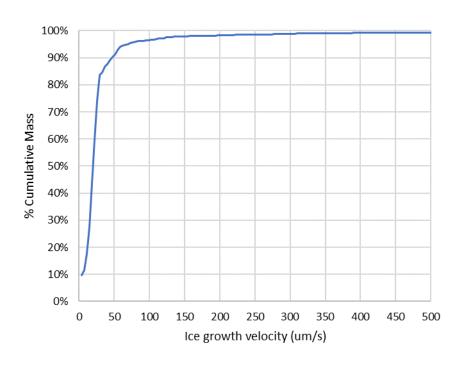


Figure 1: Cumulative mass distribution of ice growth velocity (μ m/s)

Cryoconcentration (C/C_0)

Cryoconcentration is defined as the ratio of solute concentration after freezing (C) and initial solute concentration (C_0).

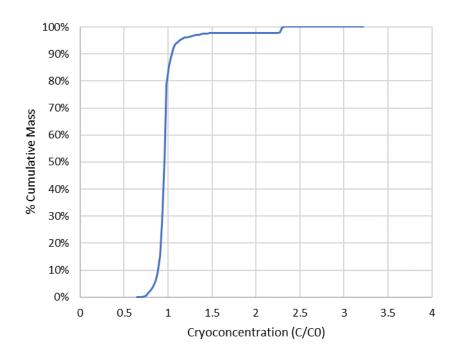


Figure 2: Cumulative mass distribution of cryoconcentration ($\mathbb{C}/\mathbb{C}_{\Omega}$)

Freezing stress-time (min)

Freezing stress-time is defined as the time that a cell spends between the freezing temperature (T_f) and the vitrification temperature (T_g ').

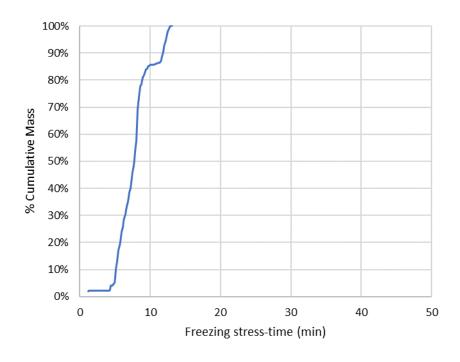


Figure 3: Cumulative mass distribution of freezing stress-time (min)

PRECISION CRYOSYSTEMS

For more informations or technical support:

Please contact SMARTFREEZ by the following e-mails:

info@smartfreez.com support@smartfreez.com

Our engineers will get back to you.

www.smartfreez.com

