

## **SUPPORTING INFORMATION**

# **Enhanced cellular cryopreservation by biopolymer-associated suppression of RhoA/ROCK signaling pathway**

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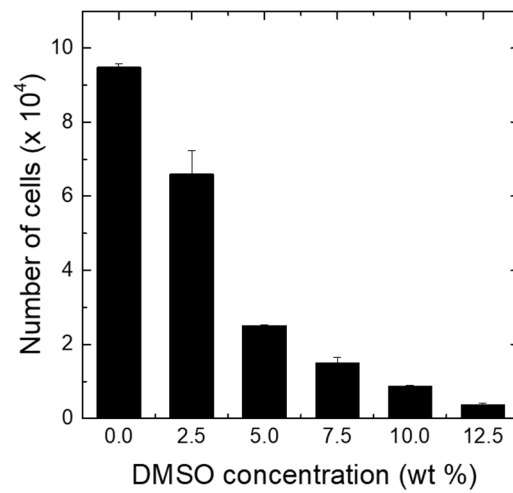
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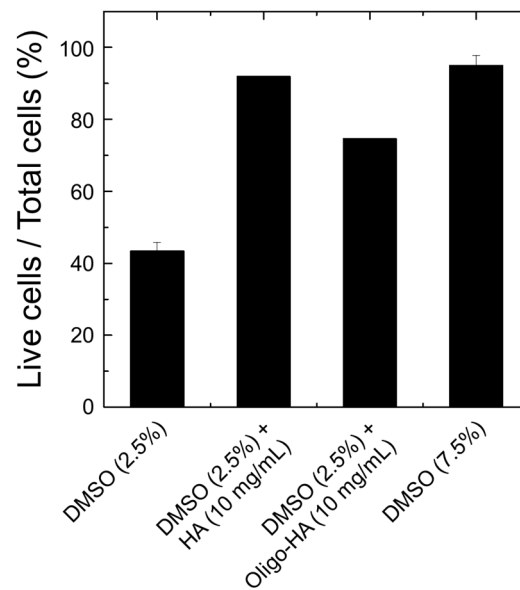
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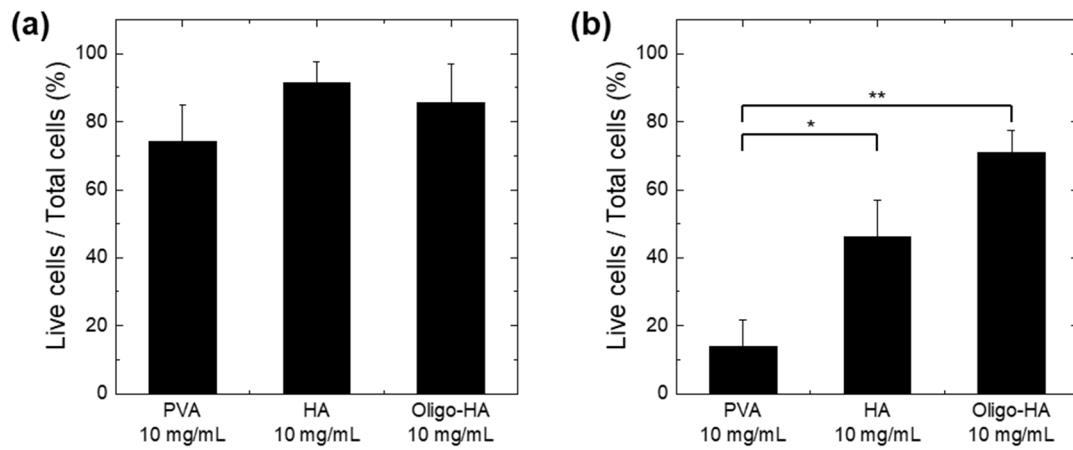
**KEYWORDS:** Cryopreservation; Hyaluronic acid; Dimethyl sulfoxide (DMSO), RhoA/ROCK signaling pathway; Polymeric cryoprotectant



**Figure S1.** Cell viability tests using NIH-3T3 fibroblasts cultured in media containing different DMSO concentrations for 3 h.



**Figure S2.** Bar graph showing the percentage of live cells per total cells after cryopreservation with different cryopreservation media.



**Figure S3.** Bar graphs showing the ratio of viable cells per total cells in (a) human adipose-derived mesenchymal stem cells and (b) rabbit corneal stromal cells measured by the trypan blue exclusion assay. PVA, HA and Oligo-HA with 10 mg/mL concentrations were supplemented to 2.5 w% DMSO cryopreservation media. The data represent the mean  $\pm$  S.D. \*  $p < 0.05$  and \*\*  $p < 0.01$ .