

Key Word Index

"Problems of Cryobiology", Volume 20 (2010)

3 β -hydroxysteroid dehydrogenase 379

A

activation energy 153

activity

antioxidant 288

nucleating 18, 123, 225

virus-neutralizing 99

adipogenic differentiation 436

adhesive cells of bone marrow 145

adrenal cell suspension 379

adrenocorticytes 282

aggregation of platelets 443

alginate microbeads 235

amides 109

amphibia 354

amphiphilic compounds 388

antioxidant(s) 297

activity 288

enzymes 255

anti-virus activity of the preparation "Cryocell-Haemocord" 159, 318

artificial hypometabolic state 25

avian sperm 109

B

bacteria 18, 123

psychrophilic 225

bencyclane fumarate 255

blood nucleated cells 66

bone marrow 436

adhesive cells 145

bovine spermatozoa 246, 396

brain ischemia 338

C

carp spermatozoa 246

canal, *flat* 88

cell(s)

adrenal, suspension of 379

bone marrow adhesive 145

cryopreserved fetal neuronal C. 338

hemopoietic and non-hemopoietic stem C. 303

mesenchymal stromal 135, 235, 436

of chorion, culture 309

size, testes interstitium C. 83

suspension 88

testis interstitium 83, 153

cellular potential, *transmembrane* 407

chorion cells, *culture of* 309

chlorophyll 297

chromogranin A 379

clot retraction, *platelet* 443

coefficients of permeability 153

concentrate of platelets 443

colony-forming ability 59

comparability of cryopreservation results 246, 396

container 59

cooling

rates 59, 379, 443

regimens 59, 443

cord blood of human 66, 99, 303

"Cryocell-Haemocord", preparation, anti-virus activity 159, 318

cryopreservation

efficiency of 246, 396

of adrenal cell suspension 379

of avian sperm 109

of bone marrow adhesive cells 145

of chorion cell culture 309

of human cord blood 66, 303

of mesenchymal stromal cells 135, 235, 436

of platelets 443

results

comparability 396

reproducibility 246, 396

cryopreservatives, *combined* 47

cryopreserved fetal neuronal cells 338

cryoprotectant(s) 34, 47, 109, 153, 266, 416, 443

cytotoxicity 109

density 416

surface tension 416

viscosity 266, 416

cryoprotective media 109, 443

crystallization 18, 123

plateau 443

culture of chorion cells 309

cytotoxicity of cryoprotectants 109

D

dehydration 282

density of cryoprotectants 416

dielectric relaxation of water molecules, *frequency of* 73

differentiation

adipogenic 436

of chorion cells 309

of mesenchymal stromal cells 135

osteogenic 436

dimethyl sulfoxide 407

diols 109

dynamic viscosity 266

- E**
 efficiency of cryopreservation 246, 396
 embryos, *murine* 246, 327
 empirical equations 266, 416
 encapsulation 235
 energy of activation 153
 enzymes, *antioxidant* 255
 equation, *empirical polynomial* 266, 416
 erythrocyte(s) 7, 47, 388
 membrane 88
 extract of human placenta 288, 327
- F**
 fetal, *cryopreserved neuronal cells* 338
 flat canal 88
 follicular fluid 73
 flavoproteins 297
 fluorescence 297
 fluorescent
 dyes 379
 probe 34, 407
 fowl spermatozoa 34
 free radical reactions 297
 freeze-thawing 288
 freeze-tolerance 354
 freezing
 of follicular fluid 73
 regimens 443
 frequency of dielectric relaxation of water molecules 73
 fumarate, *bencyclane* 255
 functional properties 66
- G**
 genes of nucleating proteins 123, 225
- H**
 hemolysis
 hypotonic 7
 osmotic 47
 hemolytic pores 7
 hemopoietic and non-hemopoietic stem cells 303
 hepatocytes 407
 hormones, *steroid* 282
 human
 bone marrow 436
 cord blood 66, 303
 placenta extract 288, 327
 hydration 73
 hydroxysteroid dehydrogenase, 3β - 379
 hypertonic stress 388
 hypometabolic state, artificial 25
 hypotonic hemolysis 7
 hypothermic storage
 of human cord blood 303
 of liver 255
 hypotonic shock reaction 443
- I**
 ice-nucleating proteins 18, 123, 225, 354
 immunocompetent organs 99
 immunophenotype of mesenchymal stromal cells 135, 436
 immunoreactivity of myelotransplant 145
 infection with influenza virus 99, 159, 318
 inflammation 327
 influenza virus infection 159, 318
 insects 354
 ischemia of brain 338
- L**
 lipid(s) 34
 droplets 282
 peroxidation 338
 liposomes 34
 liver hypothermic storage 255
 lungs 159, 318
 lymph nodes 159
- M**
 mathematical model 246
 membrane of erythrocyte 88
 meristems 297
 mesenchymal stromal cells 135, 235, 436
 mice 159, 318, 327
 mitochondrial potential, *transmembrane* 407
 morphological study 159, 318
 murine embryos 246
 myelotransplant immunoreactivity 145
- N**
 Nile red 282
 nucleated cells of blood 66
 normothermic reperfusion 255
 nucleating
 activity 18, 123, 225
 proteins 18, 123, 225, 354
 genes 123, 225
 neuronal, *cryopreserved fetal cells* 338
- O**
 oocyte 327
 osmotically inactive volume, *relative* 83
 osmotic hemolysis 47
 osteogenic differentiation 436
- P**
 paradoxical sleep 25
 permeability
 coefficients 153
 peroxidation 255, 297, 338

placenta extract, *human* 288, 327
platelet concentrate 443
pores, *hemolytic* 7
potential, *transmembrane*
 cellular 407
 mitochondrial 407
proliferation of chorion cells 309
protein(-s)
 ice-nucleating 18, 123, 225, 354
 genes 123, 225
psychrophilic bacteria 225

R

rate of cooling 59, 379, 443
rat 25, 363
regimens of cooling 59, 443
re-hydration 282
repair of hemolytic pores 7
reperfusion, *normothermic* 255
reproducibility of cryopreservation results 246, 396
reptiles 354
respiratory parameters 255

S

Saccharomyces cerevisiae 59
shear modulus 88
sleep
 paradoxical 25, 363
 slow wave 25, 363
slow wave sleep 25
spectrin 388
sperm(atozoa)
 avian 109
 bovine 246, 396
 carp 246
 fowl 34

spleen 159
stem hemopoietic and non-hemopoietic cells 303
steroid hormones 282
storage, *hypothermic*
 of human cord blood 303
 of liver 255
stress, *hypertonic* 388
structure reorganization
supercooling 443
superovulation 327
surface tension of cryoprotectants 416

T

tardigrades 354
thermoregulation 25, 363
testes interstitium cell(s) 153
 size 83
thymus 159
transmembrane potential
 cellular 407
 mitochondrial 407

V

viability 135, 309
virus
 V.-neutralizing activity 99, 159, 318
 of influenza, infection 99, 159, 318
viscosity of cryoprotectants
 dynamic 266
 kinematic 416
volumetry 153

W

water molecules, *frequency of dielectric relaxation of* 73