

Cumulus Cells of Mature Local Goat Oocytes Vitrified with Insulin Transferrin Selenium and Heat Shock Protein 70

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Abstract : Freezing oocyte could cause temperature stress. Temperature stress triggers cell damage. Insulin Transferrin Selenium (ITS) and Heat Shock Protein 70 (HSP70) had been used to prevent damage to the oocyte after freezing. ITS and HSP70 could cause the difference protective effect. The aim of this research was to obtain an effective cryoprotectant for freezing local goat oocyte in cumulus cells change. The research began by collecting the ovary from a local slaughterhouse in Indonesia, aspiration follicle, in vitro maturation and the freezing had been used vitrification method. Examination of the morphology cells by native staining method. Data on the calculation morphology oocyte analyzed by Kruskal-Wallis Test. After the Kruskal-Wallis Test which indicated significance, followed by Mann-Whitney Test to compare between treatment groups. As a result, cryoprotectant ITS has the best culumus cells after warming

Keywords : Insulin Transferrin Selenium, Heat Shock Protein 70, cryoprotectant, vitrification

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