IDENTIFIKASI GROWTH DIFFERENTIATION FACTOR-9 (GDF-9) PADA OOSIT SAPI YANG DIMATURASI SECARA IN VITRO DENGAN METODE ELEKTROFORESIS

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ABSTRACT

The aim of this research was to identification of protein Growth Differentiation Factor-9 (GDF-9) isolated from oocytes dominant follicles in in vitro maturation. Bovine ovary obtained from a slaughterhouse was aspired in its ovary dominant follicles. The oocytes were matured in Tissue Culture Medium 199 (TCM 199) then culture for 22 hours at 38,5 ºC in incubator CO₂. Twenty two hours after being culture, the GDF-9 protein identification were examined using Sodium Dodecyl Sulphonate Polyacrilamide Gel Electrophoresis (SDS PAGE). Several protein fractions were obtained from the result of research. Based on calculation of regression equation resulting from protein marker to determine the molecular weight of GDF-9 protein. Eight protein fractions were determined, they are : 177 kDa, 137 kDa, 100 kDa, 73 kDa, 51 kDa, 41 kDa, 38 kDa, 27 kDa, 20 kDa. Protein appearing in the protein band the molecular weight of 51 kDa was identified as GDF-9 protein playing role in maturation process.

Key word : GDF-9, oocyte, maturation, SDS PAGE