Identification Of Pregnancy Associated Glycoprotein (PAG) From Milk Of Pregnant Dairy Cattle

Abstrak :

The sustainability of livestock sources is related to birth rate increase and the shortening of calving interval. One of the efforts to shorten the calving interval in dairy cattle is by conducting early diagnosis of pregnancy after mating. The development of early pregnancy diagnosis method in livestock can be undertaken by observing specific substance presents in the milk of pregnant livestock, i.e. the Pregnancy Associated Glycoprotein (PAG). The objective of this study was to isolate PAG protein from milk of pregnant dairy cattle as the base for developing one of early pregnancy test in cattle. This study was conducted by following these stages: 1) Isolation milk protein and 2) Identification of PAG protein from the milk of pregnant dairy cattle by SDS-PAGE and Western Blot method. The results of SDS-PAGE of milk pregnant dairy cattle PAG isolate revealed 10 protein bands with molecular weights between 37.85 and 210.51kDa. Specificity test with Western blot indicated protein band recognized by anti-PAG monoclonal antibody, believed to be PAG protein with molecular weight of 66.41 kDa. Based on the results, it can be concluded that milk of pregnant dairy cattle express PAG protein with molecular weight 66.41 kDa.

Keyword :

Daftar Pustaka :

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