

C426340 : MAJOR BIOTECHNOLOGY

KEY WORD: HEPATOCELLULAR CARCINOMA/HEPATOMA/MONOCLONAL ANTIBODY/EPITOPE

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FOR INCREASING BINDING ACTIVITY TO HEPATOCELLULAR CARCINOMA. THESIS
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The early diagnosis which has sufficient specificity and sensitivity to human hepatocellular carcinoma is important for successful treatment because the clinical symptom show in advanced stages of the disease. Recently monoclonal antibodies (MAbs) are being used for diagnosis of many cancers. However there is problem about heterogeneity of antigen on cancer cell surface. Therefore single MAbs will not have sufficient sensitivity for diagnosis and treatment. This problem may be eliminated by using MAb which do not interfere in antigen binding of each other. This technique can increase sensitivity of MAb for diagnosis of cancers. In this study, fourteen antihepatoma of difference epitope MAbs were selected. They were classified into three groups based on non interfering antigen binding reaction. By using single, double or triple mixtures of I^{125} -labelled MAbs of these three groups on hepatoma cells binding, it was observed that mixed MAbs enhanced the binding activity either at saturated or half-saturated concentration.