CHAPTER V

CONCLUSION

The fluorescence-ELISA with FITC-HABP was developed and applied to analyze hyaluronan in normal and cancer patient's serum. The procedure of this study was modified and described by Yingsang and this optimal conditions were used in experiments similar to those previously studies for biotinylated HABP (Yingsang, 1996). However, the dilution of FITC-HABP was optimized. It was found that HABPs could prepare from chicken cartilage. Chicken HABPs was isolated and purified, it showed two bands in SDS-PAGE analysis, and it was 33-34, 40-45 kDa, respectively. In addition to, FITC-HABP could prepare sufficiently for using in ELISA assay. From experiments, the sensitivity of this method was at 10 to 10,000 ng/ml of HA. Furthermore, histochemical study demonstrated that FITC-HABP probably recognized hyaluronan in the pericellular and extracellular matrix. From the result increased HA concentration indicated that HA played role to concerning cancer progression. FITC-HABP was applied for HA determination in biological fluids. The concentration of HA was analyzed in serum samples. It was found that HA levels in cancer patients were higher than normal subjects significantly *($p< 0.01$)*. Besides, cervix cancer serum, CEA positive serum and other cancer sera contained higher level of HA than normal serum significantly *($p<0.01$)*.

Finally, this fluorescent method based on ELISA assay might be used to help diagnose cancer, predict a patient's response to particular therapies, check a patient's response to treatment, or determine if cancer has returned. Consequently, it must be combined with other tumor markers and other tests in conjunction with physician's investigation.