CHAPTER 5

SUMMARY

In an attempt to produce mAb to DDT and its derivatives, in this study, two different linkers of hapten were synthesized and used for preparation of immunogens. Six immunogens can stimulate mice to produced Ab to the hapten. Mice immunized with DCBH-S-BSA gave high antibody titer and one mouse from this group was used to produce mAb. The monoclonal Ab obtained is IgG1 (kappa chain) isotype.

Monoclonal Ab can detect DCBH, dicofol, *p,p'*-DDA, and *p,p'*-DDD But cannot detect the other derivatives. IC_{50} and % cross-reactivity of mAb was shown in table 5.1

Table 5.1 IC_{50} and %Cross-reactivity of produced mAb

Inhibitors	IC_{50} (µg/ml)	% Cross-reactivity
DCBH	0.30	100
Dicofol	0.36	83.33
p,p'-DDA	2.89	9.40
p,p'-DDD	3.19	10.38

The recovery of spiked DCBH in human sera by mAb was good. The mAb obtained from the present study could be used to develop test kits for detecting dicofol residues and DCBH, a metabolite of dicofol, in biological and environmental samples.