

CHAPTER 5

CONCLUSION

The proposal of this study was to prepare a mass production of effective vaccine in order to control rabies in domestic animals in Thailand, and to reduce the amount of imported vaccine annually. At the present the use of both imported Flury LEP and HEP vaccines which cost 20-25 Baht per dose. But the production of MLV produced locally will cost approximately 10 Baht per dose only.

Following the method of vaccine production using ERA strain of virus, a pair of kidneys obtained from a six week old pig could produce tissue cells approximately 1500 - 2000 mls. (3×10^5 cells per ml). Using two kinds of growth medium (LE and LH medium) could create equally very confluent cell monolayers within 4-5 days, and cell cultures were in good conditions at least four weeks when using 5% fetal bovine or calf serum. No cytopathic effect could be seen in the infected cell cultures, but the fluid contained high titer of the viruses. The propagation of viruses in pig kidney tissue culture was high in titer between the eighth day and the ninth day when keeping cell cultures at 34°C incubator. There was not very much difference in virus titers at 36°C, but cell cultures keeping at 36°C will deteriorate more rapidly than at 34°C. The fluid vaccine could be stored at 4°C for 3 months, or 2 days at room temperature (29°C - 31°C). The addition of the stabilizer to the vaccine before lyophilization made the

vaccine more stable. The process of lyophilization caused a little drop in titer from $10^{-4.38}$ to $10^{-4.16}$ LD₅₀/0.03 ml, which was still high enough to meet the standard requirements of Connaught Laboratories (p. 55). The result of antigenicity test showed that the prepared vaccine could induce high antibody titer in experimented animals and provided sufficient immune response.