## CHAPTER VII

## Conclusion

- 1. P. falciparum had the gene encoding enzyme uridine phosphorylase on the genome and locating at chromosomes 5 and 7 with a single open reading frame and no intron.
- 2. P. falciparum uridine phosphorylase gene was heterologous expressed in E. coli.
- 3. The specific activities of the enzyme was  $342 \pm 83$  nmol/min/mg protein and the  $k_{cat}$  value was 1.18 min<sup>-1</sup>.
- 4. The  $K_m$  values for non-induced expressed protein and induced expressed protein were 28.41 and 121.95  $\mu$ M, and  $k_{cat}$  values were 1.59 and 1.15  $min^{-1}$ , respectively.
- 5. The molecular mass of *P. falciparum* uridine phosphorylase was approximately 30 kDa.
- 6. The gene encoding uridine phosphorylase located on chromosome 5 locus PFE0660c had been transcribed throughout the parasite's life cycle.