

## CHAPTER V

### CONCLUSION

1. Baculovirus expression system did not express the recombinant proteins of anti-LPS factor, both of 6XHis Tag full-length (HFLAL) and 6XHis Tag NH<sub>2</sub>terminal truncated anti-LPS factor (HΔNAL), from *P. monodon*.
2. 6XHis Tag NH<sub>2</sub>-terminal truncated anti-LPS factor (HΔNAL) gene was prepared by PCR amplification and the specific PCR product was about 441 bp containing an ORF of 399 bp nucleotides encoding 133 amino acids.
3. *Pichia* (yeast) expression system was used to express the 6XHis Tag NH<sub>2</sub>terminal truncated anti-LPS factor (HΔNAL), from *P. monodon*.
4. Screening for high level of expression from 19 clones found 4 clones which gave percent growth inhibition against *E. coli* over 30% were found and the highest expression level with 52.7 % inhibition was the clone number 12.
5. Expressed recombinant 6XHis Tag NH<sub>2</sub>terminal truncated anti-LPS factor (HΔNAL) was partially purified by affinity column chromatography and gel filtration column chromatography with 40.9 % yields and 65.5 purification folds and 2.0 % yields and purification 12.5 folds, respectively.
6. Recombinant 6XHis Tag NH<sub>2</sub>terminal truncated anti-LPS factor (HΔNAL) had antibacterial activity on 4 types of bacteria, at 10 µg can inhibit *V. harveyi*, *E. coli*, *S. aureus* and *M. luteus* 87.7, 81.7, 14.3 and 39.8 % respectively.