

## CHAPTER 5

### CONCLUSION

1. The pCSBC14 was a clone of *B. subtilis* TISTR25 L-glutamine D-fructose-6-phosphate amidotransferase (*gcaA*) gene. This gene consisted of an open reading frame of 1,803 bp, encoded a predicted protein of 600 amino acids. The deduced amino acid sequence was highly homologous to the *gcaA* protein from *B. subtilis* 168 (86% identity at the nucleotide sequence level). The molecular weight of this enzyme was approximately 65,431 daltons.
2. The result of hybridization with both neutral and alkaline protease probes indicated that the protease genes for both neutral and alkaline protease exist in the genome of *B. subtilis* TISTR25.