4. Conclusions

Differential release of two enantiomers of chiral drug especially in a formulation with a corporation of chiral excipient could have a dramatic effect on the bioavailability, efficacy and toxicity of the individual enantiomorphs. This is a case for racemic salbutamol because the two isomers of salbutamol have unlike pharmacological profiles including efficacy and toxicity as described before. Though the work is carried out in vitro, the results may be used for the prediction of in vivo bioavailability. In another aspect, γ-CD is the best chiral excipient for among other chosen in this study to be an enantioselective-controlled modifier because it provides higher release of eutomer than that of distomer. This could be an opportunity to deliberately change the rates of release from racemic dosage forms of salbutamol.

5. Acknowledgement

Financial support from Prince of Songkla University (Thailand) is gratefully acknowledged.