CHAPTER 6

CONCLUSION

In this present study, the HIV-1 RNA from plasma samples were quantitated using validated real-time PCR. External standard curve construction was generated from in vitro transcribed HIV-1 gag RNA. Moreover, for PCR inhibitor determination, IC-RNA was transcribed and used as individual systemic control. Reproducibility of the validated assay was performed by intra- and inter-run assay. Additionally, specificity of the assay was evaluated and shown high specificity. The validated assay indicated the limit of the assay was $10^3$–$10^{10}$ copies/ml. Statistical analysis indicated a highly correlation and good agreement between the validated and reference kit. The validation assay was inexpensive and reliable for quantitation of HIV-1 RNA in plasma that suitable for several countries such as Thailand.