

RT-LAMP assay for detecting lentiviruses

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1 Introduction

Tests for known lentivirus retroviruses with a high viral diversity such as HIV are very specific and could miss divergent HIV strains [1][2]. In [3], a number of studies designing degenerate PCR primers for detecting lentiviruses are reviewed.

2 Design

design constraints balance minimal design/development time, minimal equipment requirements, adequate performance.

2.1 Sample Collection

minimal sample volume, blood drop from lancet

2.2 Lysis

[4]

2.3 Reaction

References

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- [3] C. Voisset, R. A. Weiss, and D. J. Griffiths, “Human rna tumor viruses: the search for novel human retroviruses in chronic disease,” *Microbiology and Molecular Biology Reviews*, vol. 72, no. 1, pp. 157–196, 2008.
- [4] K. A. Curtis, D. L. Rudolph, and S. M. Owen, “Rapid detection of hiv-1 by reverse-transcription, loop-mediated isothermal amplification (rt-lamp),” *Journal of virological methods*, vol. 151, no. 2, pp. 264–270, 2008.