

MedixMDx qRT-PCR Lyo ready mix (MX6102)

Introduction

MedixMDx qRT-PCR Lyo ready mix is a universal one-step probe mix that is ready to be lyophilized to produce stable reagents at room temperature. Upon addition of target specific primers/probes and reverse transcriptase (RTase Lyo) to the mastermix, the mixture can be lyophilized directly, without the need to add additional excipients. MedixMDx qRT-PCR Lyo ready mix allows robust, sensitive, and fast RT-qPCR. The mix uses state-of-the-art technologies with an antibody-regulated hot-start Taq polymerase and reverse transcriptase for efficient cDNA synthesis and real-time PCR amplification in a single reaction. MedixMDx qRT-PCR Lyo ready mix is ideal for rapid detection and quantification of a variety of RNA templates, such as mRNA, viral RNA, and total RNA.

Methods

- Rehydrated lyophilized MedixMDx qRT-PCR Lyo ready mix was compared to the "wet" MedixMDx qRT-PCR Lyo ready mix. Human FLUAV RNA was used as a template at six concentrations, with three replicates at each concentration.
- MedixMDx qRT-PCR Lyo ready mix was compared to an alternative supplier. Three different serum sample quantities with three replicates at each concentration were analyzed with a multiplex of HAV, HBV, HCV and HEV viral targets.

Results

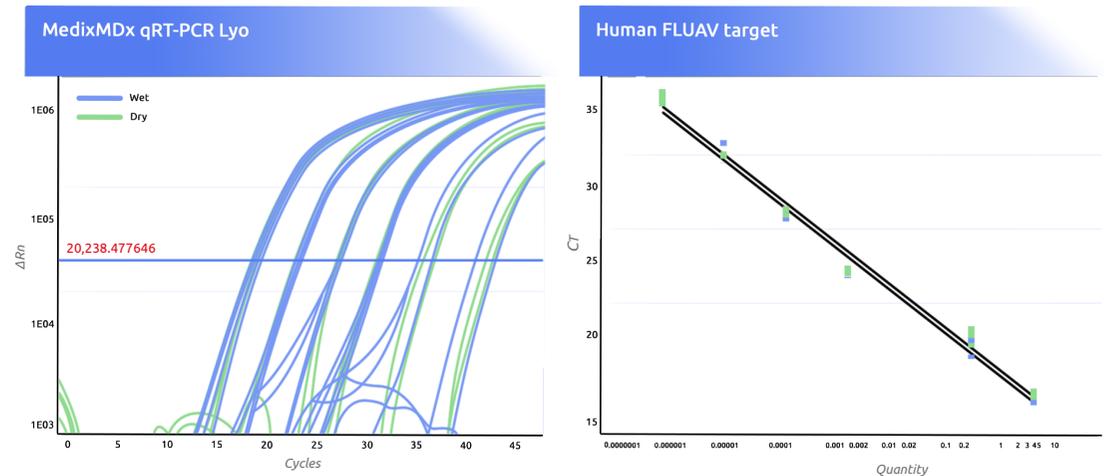


Figure 1. RT-qPCR amplification profiles and standard curve of human FLUAV target.

- blue "wet" MedixMDx qRT-PCR Lyo ready mix

- green rehydrated lyophilized "dry" MedixMDx qRT-PCR Lyo ready mix

Conclusions

- Enzyme activity was well preserved in MedixMDx qRT-PCR Lyo ready mix. 100 % functional RT-qPCR activity was recovered upon rehydration of lyophilized product. Both mixes show equal relative activity and comparable reaction efficiencies (Figure 1).
- MedixMDx qRT-PCR Lyo ready mix is developed and optimized for detection of multiplexed viral targets direct from human patient samples. MedixMDx qRT-PCR Lyo ready mix performed better than the alternative supplier in a multiplex reaction with a serum sample (Figure 2).

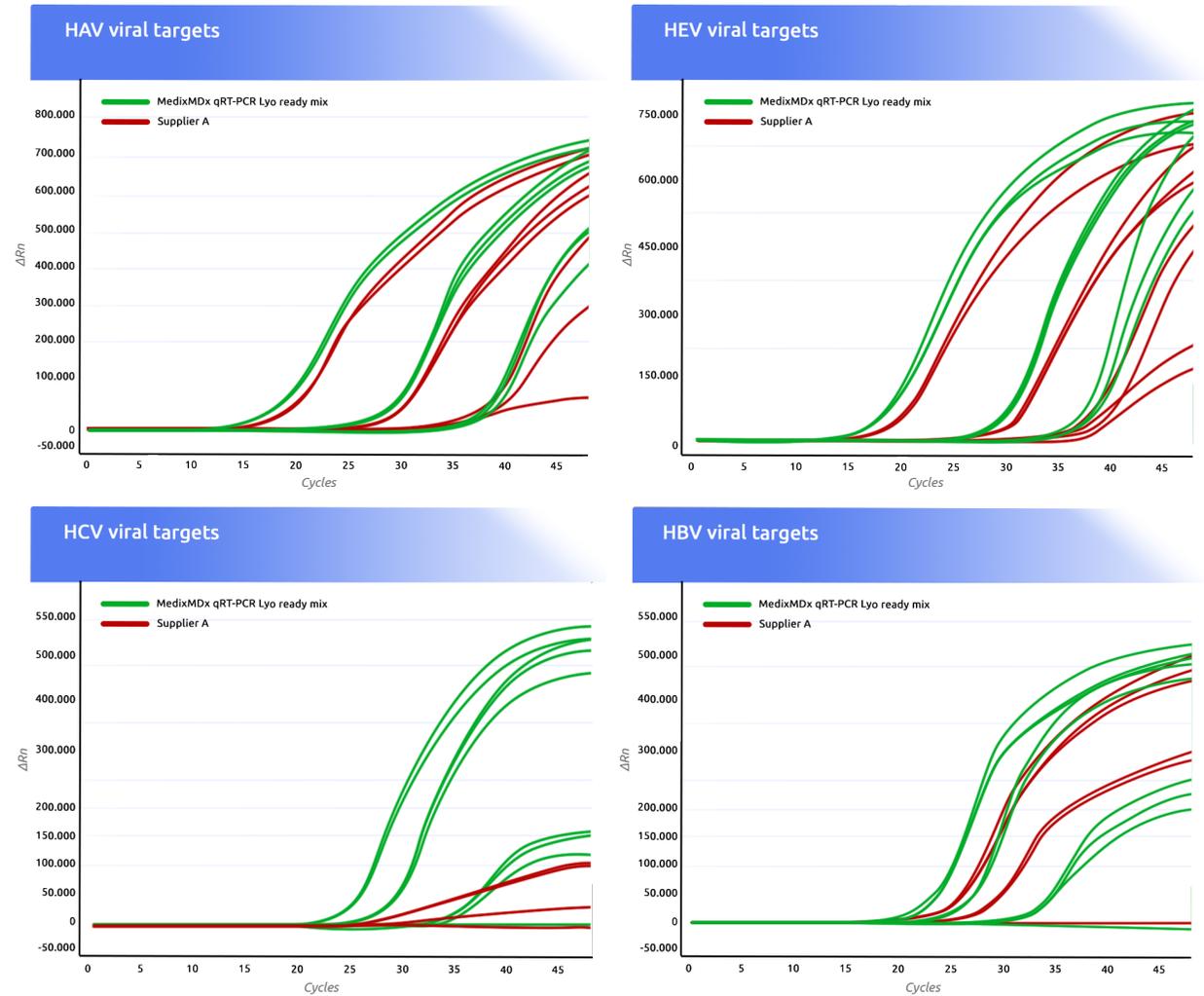


Figure 2. RT-qPCR amplification profiles of multiplexed human viral targets: (A) HAV, (B) HBV, (C) HCV and (D) HEV at three different serum sample quantities.

- **green** MedixMDx qRT-PCR Lyo ready mix
- **red** Supplier A

Contact us

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