

# THERMAL STABILITY OF COVID-19 RNA IN PRIMESTORE MTM® (EXP. 3)

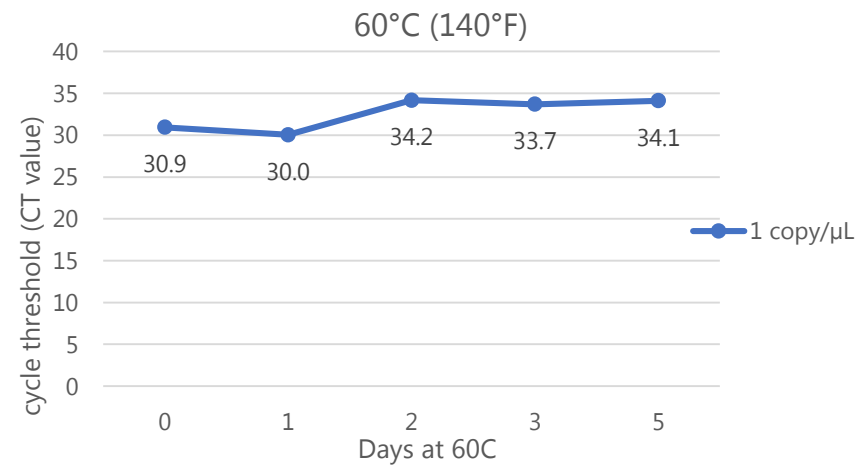
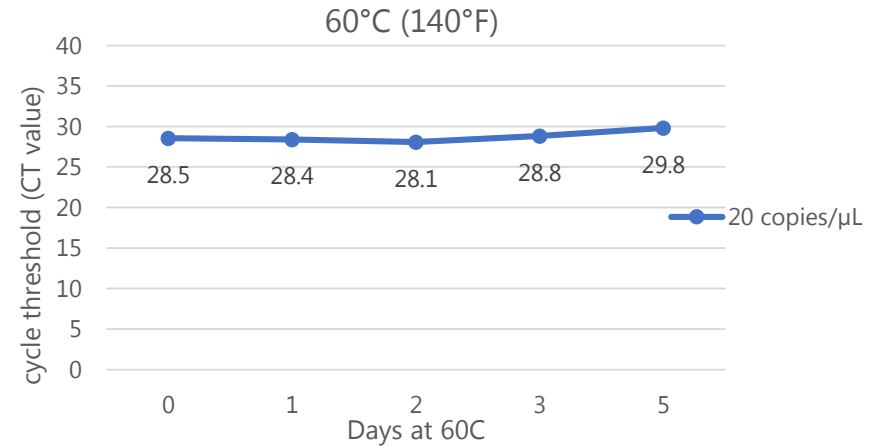
## Overview

- ▶ **Experimental Design:** Extended High Heat Study. Study was performed at 60°C (140°F) at 20 and 1 copies/μL. 20 replicate extractions were performed at 0 (benchmark), 48 hrs., 72 hrs., and 5 days. Nucleic acids were extracted (20 replicates) using PrimXtract according to manufacturer's instructions and qPCR analysis was performed using an ABI-7500 with CDC's COVID-19 assay.
- ▶ **Summary:** 20 of 20 replicate extractions were detected at all timepoints for both 20 and 1 copies/μL concentrations. At 60°C, there was an average 1.4 and 3.2 cycle threshold reduction noted at 20 and 1 copies/μL, respectively.
- ▶ **Conclusion:** At elevated temperature, SARS-CoV-2 RNA is preserved in PrimeStore MTM® with only marginal loss in cycle threshold value according to qPCR.

Copies/μL	0 (benchmark)	Day 5	qPCR CT difference
1	30.9	34.1	-3.2
20	28.5	29.8	-1.3



## RNA Stability in PrimeStore® at High Heat



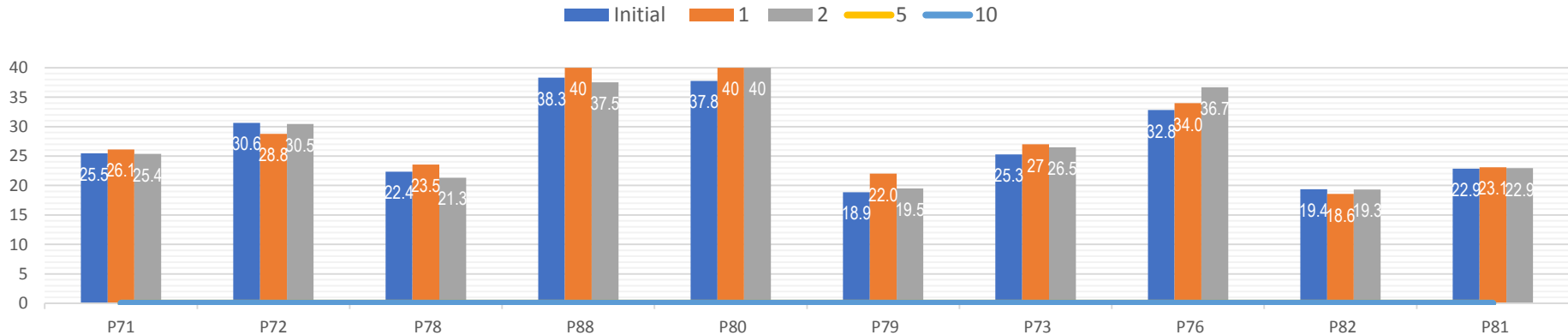
# FREEZE (-20°C) / THAW (+40°C) STABILITY OF CLINICAL NP COVID-19 SAMPLES IN PRIMESTORE MTM® (EXP. 4)



## Overview

- ▶ **Experimental Design:** 10 Clinical samples (NP swabs in PrimeStore MTM) that tested positive for SARS-CoV-2 previously by Amazon were used in this analysis. An initial qPCR was performed upon receipt of specimens to confirm positivity of COVID-19. After detection was confirmed, 0.6 mL of PrimeStore was added to each tube to ensure sufficient material for triplicate extraction at each timepoint. Samples were frozen (-20°C) and thawed at high heat (+40°C) a total of 1, 2, 5, and 10 times and assessed by qPCR.
- ▶ **Summary:** TBD
- ▶ **Conclusion:** TBD

\*Initial qPCR was performed upon receipt of specimens to confirm positivity. After detection was confirmed, 0.6 mL of PrimeStore was added to each tube to ensure enough material was available for triplicate extraction at each timepoint.



Study in progress