SARS-CoV-2 RNA Stability Study: 40, 50 and 55°C

vRNA diluted in PrimeStore Molecular Transport Medium (MTM)

Methods

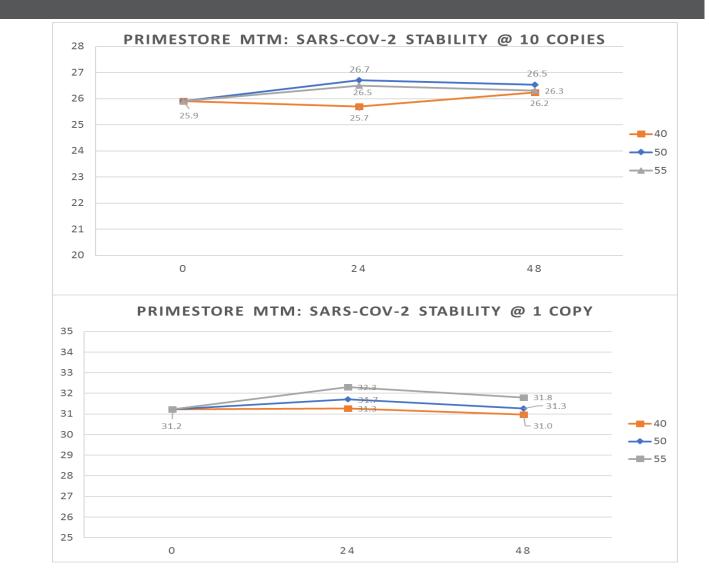
SARS-CoV-2 RNA was diluted in PrimeStore tubes (1.5 mL) to 10 and 1 copies/ μ L.

Analysis was performed from tubes incubated at 40, 50 and 55°C. Triplicate extractions at each temperature were included at timepoints, 0 (baseline), 24, and 48 hours.

Nucleic acid was extracted using PrimXtract according to manufacture's instructions and qPCR analysis was performed using an ABI-7500 with CDC's COVID-19 assay.

Experiment designed and executed by Luke T. Daum, Ph.D. (Longhorn Vaccines and Diagnostics)

Results



SARS-CoV-2 RNA stability was noted across all temperatures--40, 50 and 55°C as assessed by triplicate extractions.

Even in samples held at elevated 55°C temperature for 48 hours, less than a 1 CT loss in SARS-CoV-2 RNA was observed as compared to baseline (timepoint 0) values.

SARS-CoV-2 RNA is stabilized/preserved in PrimeStore Molecular Transport Medium at clinically relevant concentrations (10 and 1 copies/ μ L) according to qPCR.