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Computer Vision Enabled Funnel Adapted Sensing Tube (FAST) for Power-Free and Pipette-Free Nucleic Acid Detection

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Table 1. Sequences of DNA and crRNA used in this study.

Forward primer	5'-GCCATTTGTCATGATGGAAAAGCACACTTTCCT-3'
Reverse primer	5'-CTCATTGAGGCGGTCAATTTCTTTTGAATGT-3'
crRNA	5'- UAAUUUCUACUAAGUGUAGAUUGUCUGGUAACUGU GAUGUUGUA-3'
SARS-CoV-2	TS: 5'... TTTG TGTCTGGTAACTGTGATGTTGTA ...-3'
crRNA	uaauuucuacuaaguguagauAUCGGUAAGAAUAGGUUU GC

Calculation process to convert detection sensitivity in fM to that in copies/ μ L

$$10 \text{ fM} \sim \frac{10 \text{ fmole} \times 6 \times 10^{23} \text{ copies/mole}}{1 \text{ L}} \quad (1)$$

$$\sim \frac{10^{-15} \text{ mole} \times 6 \times 10^{23} \text{ copies/mole}}{10^6 \mu\text{L}} \quad (2)$$

$$\sim 6 \times 10^{23} \text{ copies}/\mu\text{L} \quad (3)$$

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