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RNAPath Target Identification via Fluorescent Hybridization

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In Development d

dx.doi.org/10.17504/protocols.io.bk37kyrn

XPRIZE Rapid Covid Testing RNAPath



EXTERNAL LINK

http://rnapath.com/

DOI

dx.doi.org/10.17504/protocols.io.bk37kyrn

PROTOCOL CITATION

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KEYWORDS

Molecular Instruments, COVID, Microscopy, Hybridization, Flourescence, RNA

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MATERIALS

TE Buffer

NAME	CATALOG #	VENDOR
SSC (20X), RNase-free	AM9770	Thermo Fisher
Molecular Instruments HCR COVID Probe Set		Molecular Instruments
Molecular Instruments Alexa Flour 488 B1 HCR Amplifier		Molecular Instruments
STEPS MATERIALS		
NAME	CATALOG #	VENDOR
Molecular Instruments HCR COVID Probe Set		Molecular Instruments

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protocols.io

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Thermo Fisher

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BEFORE STARTING

Ensure you have cleaned the workspace with an appropriate RNAse away solution to prevent RNA degradation

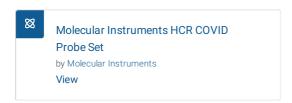
Sample Preperation

1 Suspend RNA pellet in **□2 µl TE Buffer**



Hybridization

2 Add **2** μl Molecular Instruments COVID Probe Set to the RNA suspension



- 3 Place Molecular Instruments Alexa Flour 488 B1 HCR Amplifier in 8 90 °C for © 00:02:00
- 4 Remove Molecular Instruments Alexa Flour 488 B1 HCR Amplifiers and place at 8 Room temperature for © 00:30:00
- 5 Add 🙀 2 μl of each Molecular Instruments Alexa Flour 488 B1 HCR Amplifier H1 and H2 to the RNA suspension
- 6 Dilute 100 μl of 20x SSC Buffer to 5x SSC Buffer



- 7 Add **4 µ** of 5x SSC Buffer to the RNA Suspension
- 8 Incubate at & 37 °C for © 12:00:00

Imaging

- 9 Remove sample from incubation and pipette 11 µl onto a glass slide with a coverslip
- 10 Image slide under a fluorescent microscope with filter cubes for FITC or Alexa Flour 488