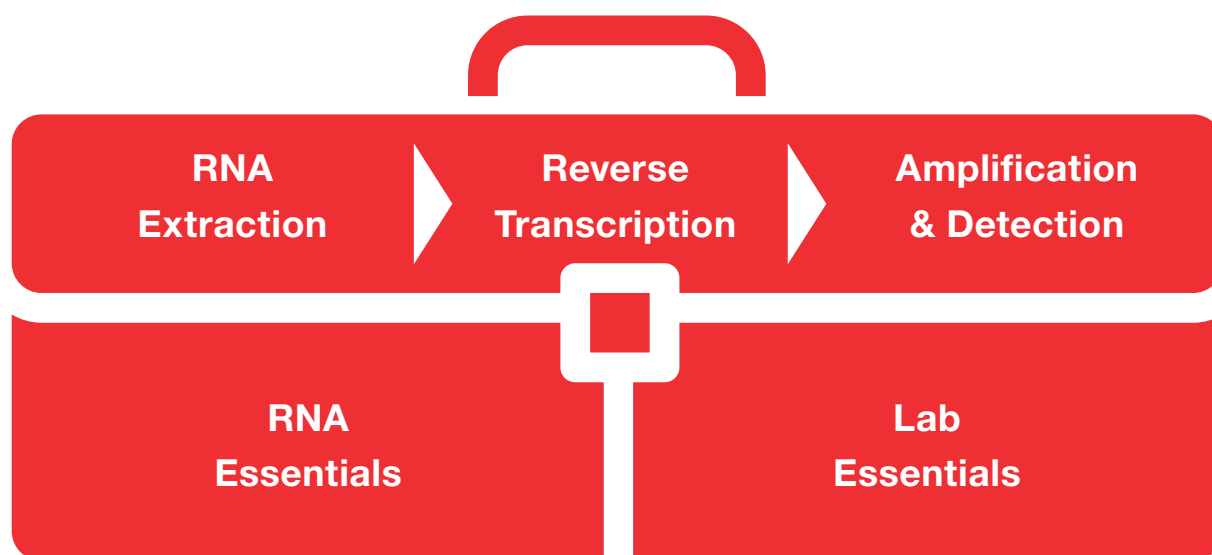


Detect SARS-CoV-2 rapidly with our Thermo Fisher Scientific toolkit



Utilized in our protocol granted EUA by FDA, and in protocols referenced by WHO:

RNA Extraction

MagMAX™ Viral/Pathogen Nucleic Acid Isolation Kit + KingFisher™ Flex

- Processes 96 samples in <30 minutes
- Accommodates sample volume inputs from 200 µL to 2 mL of biofluids or transfer media

Reverse Transcription

SuperScript™ III One-Step RT-PCR System with Platinum™ Taq DNA Polymerase

- cDNA synthesis and PCR amplification in a single tube from 0.01 pg to 1 µg of total RNA.
- Compatible detection of targets up to 4.5 kb in length for greater flexibility

Lab Essentials

MicroAmp™ Fast Optical 96-Well Reaction Plates (with MicroAmp™ Optical Adhesive Film & MicroAmp™ Optical 8-Cap Strips)

- Reduces PCR reaction time from 2 hours to as little as 25 minutes.

RNA Essentials

DNAzap™ PCR DNA Degradation Solutions

- Instantaneously degrade high levels of contaminating DNA and RNA from labware and surfaces

RNase AWAY™ Decontamination Reagent

- Ready-to-use solution for eliminating RNase contamination from labware

Product References:

Product	Pack Size	Cat No.
RNA EXTRACTION		
Centrifuge Column-Based Extraction		
PureLink™ Viral RNA/DNA Mini Kit	50 rxns	12280050
PureLink™ Pro 96 Viral RNA/DNA Purification Kit	4 X 96 rxns	12280096A
Magnetic Bead-Based Extraction		
MagMAX™ Viral/Pathogen Nucleic Acid Isolation Kit	100 preps	A42352
MagMAX™ Microbiome Ultra Nucleic Acid Isolation Kit, with bead plate	100 preps	A42357
MagMAX™ Microbiome Ultra Nucleic Acid Isolation Kit, with bead tubes	100 preps	A42358
Automation		
KingFisher™ Flex Magnetic Particle Processor with 96 Deep-Well Head	Each	5400630
KingFisher™ Flex 96 Deep-Well Heating Block	Each	24075430
KingFisher™ Deepwell 96 Plate	Each	95040450
KingFisher™ 96 KF microplate	Case of 48	97002540
KingFisher™ 96 tip comb for DW magnets	Case of 100	97002534
REVERSE TRANSCRIPTION		
One-Step RT-PCR		
SuperScript™ III One-Step RT-PCR System, with Platinum™ Taq DNA Polymerase	25 rxns	12574018
SuperScript™ IV One-Step RT-PCR System	100 rxns	12574026
SuperScript™ IV One-Step RT-PCR System	25 rxns	12594025
SuperScript™ IV One-Step RT-PCR System with ezDNase™	100 rxns	12594100
SuperScript™ IV One-Step RT-PCR System	25 rxns	12595025
SuperScript™ IV One-Step RT-PCR System with ezDNase™	100 rxns	12595100
RT-PCR Grade Water		
UltraPure™ DNase/RNase-Free Distilled Water	500 mL	10977015
	10 x 500 mL	10977023
AMPLIFICATION & DETECTION		
Real-Time PCR System		
Applied Biosystems™ 7500 Fast Dx Real-Time PCR Instrument	Each	4406984
	Each	4406985
qPCR Reagents		
TaqPath™ 1-Step RT-qPCR Master Mix, CG	5 x 1 mL	A15299
	10 mL	A15300
	1 x 0.5 mL	A28521
	1 x 10 mL	A28522
TaqPath™ 1-Step Multiplex Master Mix (No ROX™)	5 x 1 mL	A28523
	100 rxns	A47813
	1000 rxns	A47814
RNA ESSENTIALS		
Nuclease Control Reagents		
DNAZap™ PCR DNA Degradation Solutions	250 mL	AM9890
RNase AWAY™ Decontamination Reagent	250 mL	10328011

RNaseZap™ RNase Decontamination Solution	250 mL	AM9780
	6 x 250 mL	AM9782
	4 L	AM9784
RNaseZap™ RNase Decontamination Wipes	100 sheets	AM9786
	300 sheets	AM9788
Ambion RNase-Free Pipette Tips		
RNase-free Tips, 200 µL size	10 racks	AM12650
RNase-free Tips, 1,000 µL size	10 racks	AM12660
Barrier (Filter) Tips, 10 µL size (compatible with Eppendorf™ pipettors)	10 racks	AM12635
Barrier (Filter) Tips, 20 µL size	10 racks	AM12645
Barrier (Filter) Tips, 100 µL size	10 racks	AM12648
Barrier (Filter) Tips, 200 µL size	10 racks	AM12655
Barrier (Filter) Tips, 1,000 µL size	10 racks	AM12665
LAB ESSENTIALS		
PCR Plastics		
MicroAmp™ Fast Optical 96-Well Reaction Plate, 0.1 mL	10 plates	4346907
MicroAmp™ Fast Optical 96-Well Reaction Plate with Barcode, 0.1 mL	20 plates	4346906
	200 plates	4366932
ABY™ Dye Spectral Calibration Plate for Multiplex qPCR, Fast 96-well	1 plate	A24734
JUN™ Dye Spectral Calibration Plate for Multiplex qPCR, Fast 96-well	1 plate	A24735
MicroAmp™ Adhesive Film Applicator	5 applicators	4333183
MicroAmp™ Optical Adhesive Film	25 covers	4360954
	100 covers	4311971
MicroAmp™ Clear Adhesive Film	100 films	4306311
	100 covers	4311971
MicroAmp™ Optical 8-Cap Strips	300 strips	4323032
Tips		
ART 10 Extended Length, Low Retention, Barrier Tip	Case of 4800	2140-05-HR
ART 20 Low Retention, Barrier Tip	Case of 4800	2149P-05-HR
ART 200 Low Retention, Barrier Tip	Case of 4800	2069-05-HR
ART 200 Extended Length, Low Retention, Barrier Tip	Case of 3840	2160P-05-HR
ART 1000 Low Retention, Barrier Tip	Case of 3072	2179-05-HR
ART 1000 Extended Length, Low Retention, Barrier Tip	Case of 3072	2079-05-HR
Pipettors		
Finnpipette F2, 1-10µL Micro Single Channel Pipette		4642030
Finnpipette F2, 2-20µL Micro Single Channel Pipette		4642050
Finnpipette F2, 20 -200µL Single Channel Pipette		4642080
Finnpipette F2, 100 -1000µL Single Channel Pipette		4642090
Finnpipette F2 GLP Kit 2, inclusive of single channel, 0.2-2 µl, 2-20 µl, 20-200 µl and 100-1000 µl		4700880

Summary Table of Available Protocols

Source	Country	Developed by:	Gene Target	Protocols
FDA	US	Thermo Fisher Scientific	Gene Orf-1ab, N Protein, S Protein	TaqPath™ COVID-19 Combo Kit (13 March 2020)
	Germany	Charité	RdRP, E, N	Diagnostic detection of Wuhan coronavirus 2019 by real-time RT-PCR – Charité, Berlin Germany (17 January 2020)
WHO	Hong Kong SAR	Hong Kong University	ORF1b-nsp14, N	Detection of 2019 novel coronavirus (2019-nCoV) in suspected human cases by RT-PCR – Hong Kong University (23 January 2020)
	US	Centers for Disease Control and Prevention	Three targets in N gene	US CDC Real-Time RT-PCR Panel for Detection 2019-Novel Coronavirus (28 January 2020)