



RESPIRATORY MULTIPLEX

RT-PCR TEST PANEL

REAL TIME PCR TEST FOR SIMULTANEOUS DETECTION OF SARS-CoV-2, INFLUENZA A, INFLUENZA B, & RSV A/B

**HUMAN RESPIRATORY TRACT INFECTIONS ARE THE
PREDOMINANT CAUSE OF HOSPITALIZATIONS ACROSS
ALL AGE GROUPS.**

The wide range of pathogens can cause acute respiratory infections presenting with similar clinical syndromes. Respiratory Multiplex RT-PCR Kit allows for the rapid real-time detection of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), Influenza A, Influenza B, and Respiratory Syncytial Virus (RSV) from nasopharyngeal swab and sputum samples. The test can also detect SARS-CoV-2 variants Alpha, Beta, Gamma, Kappa, Iota, Epsilon, Delta, Delta plus and Omicron.

**FOR USE ON
MULTIPLE RT-PCR
INSTRUMENTS**

**UPPER OR
LOWER
RESPIRATORY
TRACT SAMPLES**

**READY-TO-USE
RT-PCR MASTER
MIX**

NEW DAY DIAGNOSTICS, LLC., 6701 BAUM DRIVE, KNOXVILLE, TENN., USA



RESPIRATORY MULTIPLEX RT-PCR TEST

SARS-CoV-2 INFLUENZA A INFLUENZA B RSV A/B



KEY FEATURES

Sensitivity- 97% (Influenza A) and **100%** (Influenza B, RSV, SARS-CoV-2)

Specificity - 100%

Processing time
1.5 hours

Shelf life
12 months

Compatibility

Real-time PCR instruments with a minimum of 5 fluorescence channels (FAM, HEX, Texas Red, CY5.5 and CY5)

Validated on

Bio-Rad CFX96, Bio-Rad CFX Opus and Quantstudio 5 from ThermoFisher Scientific

Kit Content & Storage

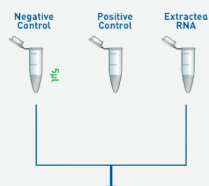
Ready to use reagents (storage at -20°C)

- Respiratory Reaction mix
- Respiratory Primer-Probe mix
- Respiratory Positive control
- Respiratory Negative control)

TEST PROCEDURE

Sample Preparation

8ul of Reaction Mix + 2ul of Primer Probe Mix



Total Volume of 25ul in each tube

Real Time PCR

Temperature	Time	Cycles
45°C	20 min	1
95°C	3 min	1
95°C	15 sec	45
59°C	20-30 sec*	

Pathogen	Target Gene	Channel
SARS-CoV-2	ORF1ab	Texas Red
Influenza A	Matrix (M)	FAM
Influenza B	Hemagglutinin (HA)	HEX
RSV A/B	Matrix (M) / RNA Polymerase L (L)	CY5.5
Internal control	Human B-globin	CY5

Amplification protocol as per the instructions for use
Elongation time depends on the instrument requirements

RESULT INTERPRETATION

Result Interpretation

Influenza A (FAM)	Influenza B (HEX)	SARS-CoV-2 (TEXAS RED)	RSV (CY5.5)	*IC (CY5)	Result Analysis
≤40	UNDET	UNDET	UNDET	≤38	Influenza A Positive
UNDET	≤40	UNDET	UNDET	≤38	Influenza B Positive
UNDET	UNDET	≤40	UNDET	≤38	SARS-CoV-2 Positive
UNDET	UNDET	UNDET	≤40	≤38	RSV Positive
UNDET	UNDET	UNDET	UNDET	≤38	Negative
UNDET	UNDET	UNDET	UNDET	UNDET	Invalid

- If more than one target, besides IC, has a Ct value below the determined cut off, the sample could be positive for those targets.
- Multiple infections are possible but rare.
- It is recommended to confirm the result based on other lab tests/clinical findings or by repeating the test.

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ORDERING INFORMATION

For ordering information visit [newdaydiagnostics.com](https://www.newdaydiagnostics.com)

Product Codes:

100 Reactions Kit 8100532

500 Reactions Kit 8100533

Please note: Product specifications, including product modifications, improvements, or upgrades are subject to change without prior notice. Please contact your sales representative with any questions.

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