

RPP3

Influenza A,
Influenza B,
RSV

RPP12

12 pathogens of
upper respiratory
tract

RPP36

36 pathogens of
upper & lower
respiratory tract

RPP4

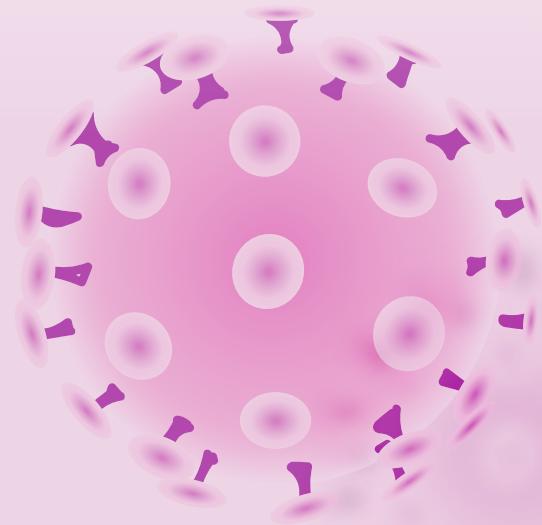
Influenza A,
Influenza B, RSV,
SARS-CoV-2

RPP17

17 pathogens of
lower respiratory
tract

RPP19

19 pathogens of
upper respiratory
tract



Respiratory Pathogen Panels

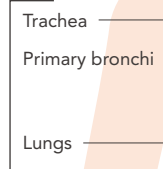
Comprehensive detection of respiratory coinfections to help clinicians improve patient outcomes with reduced cost

Respiratory tract infections (RTIs) are infections of parts of the body involved in breathing, such as the sinuses, throat, airways or lungs.

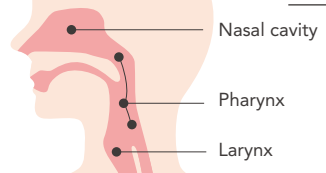
Lower respiratory infections (LRIs), such as pneumonia, tend to be far more severe than **upper respiratory infections (URIs)**, such as the common cold.

LOWER RESPIRATORY TRACT

Incident cases of LRIs :
488.9 million
Deaths due to LRIs :
2.4 million



UPPER RESPIRATORY TRACT



Incident cases of URIs :
17.2 billion
Deaths due to URIs :
9,464

*Data from the Global Burden of Disease (GBD) study 2019, published in Oct 2020.



A variety of pathogens may cause respiratory tract infections. However, current diagnostic tests do not cover most of them.



The clinical manifestations of RTIs are complicated. Antibiotics are commonly prescribed for RTIs in adults and children in primary care.



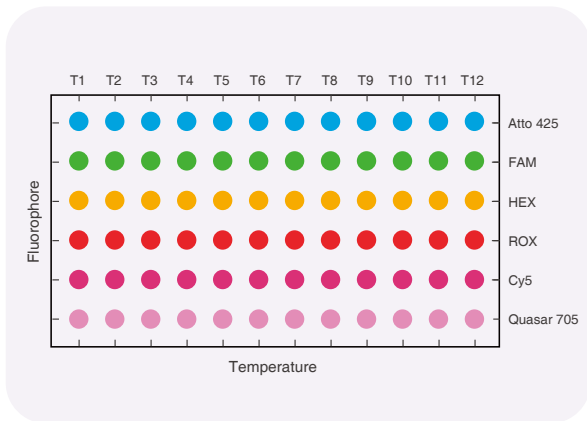
The inappropriate prescribing of antibiotics may lead to the prevalence of antibiotic resistance.

Comprehensive panel-based respiratory tests can help reduce unnecessary antibiotic courses and hospitalization time.

+ Technology

Patented **Multicolor Melting Curve Analysis (MMCA®)** overcomes the limitations of conventional RT-PCR in terms of the maximum number of detectable targets (usually between 2-5, depending on the number of fluorescence channels) in one tube.

With **MMCA®**, up to **72** targets can be detected simultaneously in one tube.



*Huang et al, PNAS 2022

MMCA 2D Label = Fluorescence Channels + Melting Curve



19 pathogens that may cause URIs



17 pathogens that may cause LRIs

+ Advantages



Covering the most common pathogens



Pre-loaded reagents for easy handling



Unique MMCA® multiplex PCR to save precious samples



Compatible with multiple sample types

+ Respiratory Pathogen Panels

RPP3

- Influenza A virus
- Influenza B virus
- Respiratory syncytial virus (RSV)

RPP4

- Influenza A virus
- Influenza B virus
- Respiratory syncytial virus (RSV)
- SARS-CoV-2

RPP12

- Influenza A virus
- Bocavirus
- Parainfluenza Virus 1/2/3/4
- Human metapneumovirus (HMPV)
- Chlamydia pneumoniae
- Influenza B virus
- RSV A/B
- Adenovirus
- Rhinovirus
- Coronavirus 229E/OC43/NL63/HKU1
- Mycoplasma pneumoniae
- Bordetella pertussis

RPP17

- *Staphylococcus epidermidis*
- *Salmonella*
- *Staphylococcus aureus*
- *Candida albicans*
- *Pneumocystis jirovecii*
- *Aspergillus fumigatus*
- *Rickettsia*
- *Streptococcus pneumoniae*
- *Haemophilus influenzae*
- *Moraxella catarrhalis*
- *Acinetobacter baumannii*
- *Klebsiella pneumoniae*
- *Escherichia coli*
- *Legionella pneumophila*
- *Cryptococcus*
- *Pseudomonas aeruginosa*
- *Streptococcus pyogenes*

RPP19

Viruses

- Influenza A virus (covering H1N1-2009, H7N9, H1N1, H3N2, H5N1)
- Influenza B virus (covering Victoria strain and Yamagata strain)
- Bocavirus
- Adenovirus (covering group B, C and E)
- Rhinovirus/Enterovirus
- Parainfluenza Virus I
- Parainfluenza Virus II
- Parainfluenza Virus III
- Parainfluenza Virus IV
- Coronavirus 229E
- Coronavirus OC43
- Coronavirus NL63
- Coronavirus HKU1
- Respiratory Syncytial Virus A
- Respiratory Syncytial Virus B
- Human Metapneumovirus

Bacteria

- *Mycoplasma pneumoniae*
- *Chlamydia pneumoniae*
- *Bordetella pertussis*

RPP36

RPP17 + RPP19

+ High-throughput Workflow



Automated Nucleic Acid Extraction
(Up to 96 samples)



qPCR Detection
(Up to 94 samples)



Data Interpretation

Cat. No.	Product	Size
801115	Respiratory Pathogen Panel (RPP3D)	48 Tests/Kit
801113	Respiratory Pathogen Panel (RPP4D)	48 Tests/Kit
801117	Respiratory Pathogen Panel (RPP12D)	48 Tests/Kit
801108	Respiratory Pathogen Panel (RPP17D)	48 Tests/Kit
801109	Respiratory Pathogen Panel (RPP19D)	48 Tests/Kit
801111	Respiratory Pathogen Panel (RPP36D)	48 Tests/Kit

+ Integrated Workflow



Sanity 2.0 System (1-4 samples)

- Easy setup
- Pre-loaded reagent cartridges
- Fully automated



Cat. No.	Product	Size
801114	Sanity-2 Respiratory Pathogen Panel (RPP3)	24 Tests/Kit
801112	Sanity-2 Respiratory Pathogen Panel (RPP4)	24 Tests/Kit
801183	Sanity-2 Respiratory Pathogen Panel (RPP12)	24 Tests/Kit
801116	Sanity-2 Respiratory Pathogen Panel (RPP17)	24 Tests/Kit
801148	Sanity-2 Respiratory Pathogen Panel (RPP19)	24 Tests/Kit
801118	Sanity-2 Respiratory Pathogen Panel (RPP36)	24 Tests/Kit

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