

MultNAT Respiratory Panel



The Challenges

Respiratory pathogens pose significant challenges to human health due to their high transmissibility, ability to cause a wide range of diseases, and impact on vulnerable populations. Spread through droplets, aerosols, and contact, they can lead to acute and chronic conditions, exacerbate comorbidities, and overwhelm healthcare systems, especially during pandemics like influenza or COVID-19. The rise of antibiotic and antiviral resistance complicates treatment, while delayed or inadequate diagnostics hinder effective control. Vulnerable groups, including children, the elderly, and those with weakened immunity, are at higher risk. These pathogens also impose substantial socioeconomic burdens, disrupting education, productivity, and economies. Advanced diagnostics are crucial to mitigating their impact.

The Solution

This product is a multiplexed nucleic acid test intended for the simultaneous qualitative detection and identification of multiple respiratory pathogen nucleic acids in nasopharyngeal swabs (NPS) obtained from individuals suspected of respiratory tract infections. The following respiratory pathogens are identified using this product:

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), Respiratory Syncytial Virus (RSV), influenza A virus (Flu A), influenza virus (Flu B), Mycoplasma pneumoniae (MP), Parainfluenza Viruses (PIVs) types 1, 2, 3 and 4, human coronaviruses OC43, 229E, NL63 and HKU1, Bordetella pertussis (BP), Bordetella parapertussis (BPP), human metapneumovirus (hMPV), human rhinovirus (HRV)/human enterovirus (hEV) and adenovirus (AdV).

The Feature

1

Streamlined process delivers precise Nucleic Acid Amplification Test (NAAT) results within **60 minutes.**

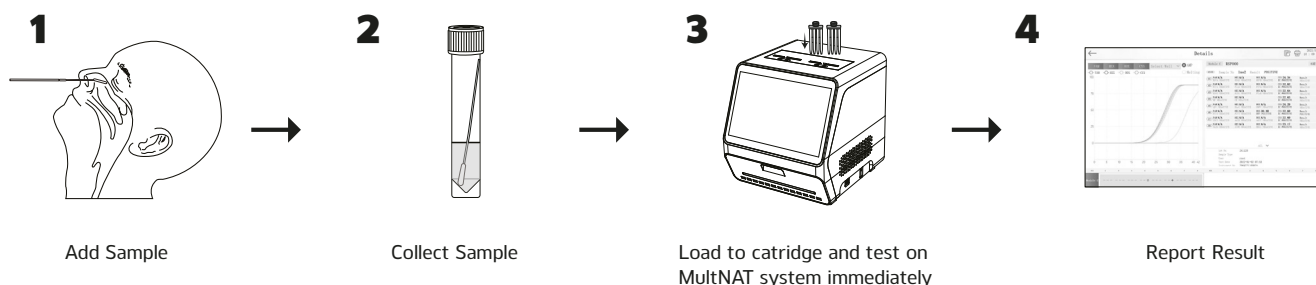
2

Point-of-care Nucleic Acid Testing applicable across diverse medical settings.

3

Comprehensive detection of 20 distinct targets supports physicians in prescribing targeted treatments.

Workflow



Clinical Value

Comprehensive	The USTAR MultNAT Respiratory Panel detects and differentiates 20 targets of respiratory pathogens, including viruses and bacteria, offering broad diagnostic capabilities. This ensures timely identification of the causative agent for respiratory infections.
Tailored	Differentiating between viral and bacterial pathogens helps reduce unnecessary antibiotic use and guides targeted therapy, improving patient outcomes and combating antimicrobial resistance.
Scientific	Rapid and reliable identification of pathogens enables physicians to initiate appropriate treatment, reduce complications, and minimize hospital stays, enhancing overall patient care.

Performance

Turn-around Time	< 60 minutes
Target	20 Respiratory Pathogens
Specificity	98.79%
Sensitivity	98.62%
Total Agreement	98.65 %
Sample Types	Nasopharyngeal swab

Product	MultNAT Respiratory Panel	Shelf life	12 months
Applicable instrument	MultNAT Molecular Diagnostic Testing System	Storage conditions	2-8°C
Specification	5 Tests/box	Transport conditions	Ambient Temperature