

Multiplex Respiratory Pathogen Detection Kit

Fluorescent Probe-Based Real-Time PCR Assay

Respiratory tract infections remain a major global health challenge, driven by diverse pathogens and overlapping clinical symptoms. In routine practice, conventional diagnostic methods often lack comprehensive coverage, resulting in delayed or missed identification, especially in cases of mixed infections or those caused by atypical pathogens. In addition, the increasing prevalence of antimicrobial resistance further complicates clinical decision-making and may lead to inappropriate treatment and prolonged disease courses.

This all-in-one respiratory panel enables simultaneous detection of 40 pathogens and four key macrolide resistance-associated mutations in *Mycoplasma pneumoniae* in a single test, addressing complex infections, co-infections, and antimicrobial resistance to support precise diagnosis and optimized therapy.

Testing Principle

This kit utilizes multiplex real-time PCR for qualitative detection and differentiation of 40 respiratory pathogens and four macrolide resistance mutations in *Mycoplasma pneumoniae* in oropharyngeal swabs, nasopharyngeal swabs, sputum, and bronchoalveolar lavage fluid collected from patients or suspected patients with respiratory tract infections.



Target Pathogens

Panel 1: R23202T2012 Panel 2: R23203T2012

	FAM	HEX/VIC	ROX	Cy5
Well 1	Human respiratory syncytial virus	Influenza B virus	Human adenovirus	Influenza A virus
Well 2	Human enterovirus	Human coronavirus	Mumps orthorubulavirus	Rubella virus (RUO)
Well 3	Rhinovirus	Enterovirus A71	Human parainfluenza virus	Human metapneumovirus
Well 4	Influenza A virus H1N1 2009	Influenza A virus H1N1 2009	Enterovirus D68	Measles virus
Well 5	Human alphaherpesvirus 1	<i>Haemophilus influenzae</i>	Parvovirus B19	Influenza A virus
Well 6	<i>Staphylococcus aureus</i>	<i>Legionella pneumophila</i>	<i>Neisseria meningitidis</i> (Panel 1) <i>Pseudomonas aeruginosa</i> (Panel 2)	<i>Arcanobacterium haemolyticum</i>
Well 7	<i>Streptococcus dysgalactiae</i>	<i>Fusobacterium necrophorum</i>	<i>Streptococcus pneumoniae</i>	<i>Streptococcus anginosus</i>
Well 8	<i>Streptococcus agalactiae</i>	<i>Moraxella catarrhalis</i>	<i>Streptococcus intermedius</i>	<i>Neisseria gonorrhoeae</i> (Panel 1) SARS-CoV-2 (Panel 2)
Well 9	<i>Chlamydia psittaci</i> (RUO)	<i>Chlamydia trachomatis</i> (RUO)	<i>Chlamydia pneumoniae</i> (RUO)	<i>Mycoplasma pneumoniae</i>
Well 10	<i>Streptococcus pyogenes</i>	<i>Bordetella pertussis</i>	Human bocavirus	<i>Corynebacterium diphtheriae</i>
Well 11	/	Human betaherpesvirus 5	/	β -actin (Internal Control)
Well 12	<i>Mycoplasma pneumoniae</i> 23S rRNA A2063G	/	/	/
Well 13	<i>Mycoplasma pneumoniae</i> 23S rRNA A2064G	/	/	/
Well 14	<i>Mycoplasma pneumoniae</i> 23S rRNA A2067G	Reference	<i>Mycoplasma pneumoniae</i> 23S rRNA C2617G	/

Ordering Information

Cat. No.	Product Name	Sample Types	Format	Storage	Shelf Life	Kit Size	Certification
					Months	Tests/Kit	
R23102T2024 17-Plex	Mospire Multi Respiratory Pathogen Real Time PCR Detection Kit	Oropharyngeal swab	Lyophilized	2-8°C	24	24	CE-IVD
R23202T2012 40+4-Plex (Panel 1)		Oropharyngeal swab, nasopharyngeal swab, sputum, and bronchoalveolar lavage fluid			12	12	
R23203T2012 40+4-Plex (Panel 2)					12	12	



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