

TandemPlex®

Multiplexed Tandem PCR (MT-PCR)



Efficient:
Maximum number of diagnostic targets per PCR run



Precise:
Patented technology for highest analytical sensitivity and specificity



Convenient:
Intuitive and user-friendly workflow

TandemPlex® Product portfolio

Reliable syndromic diagnostics

AusDiagnostics TandemPlex® panels are based on Multiplex Tandem PCR (MT-PCR) technology. MT-PCR offers unparalleled multiplexing capabilities and allows comprehensive and efficient diagnostics in the field of syndromic testing.

MT-PCR panels enable the detection of more than 30 different genetic markers in a single sample, as well as parallel detection and differentiation of bacteria, viruses and parasites.

Thus, reliable diagnostic results can be obtained within a very short time. At the same time, MT-PCR panels guarantee maximum sensitivity and specificity of the detected targets.

Well-designed, automatic system solutions, which can be flexibly adapted to the corresponding sample throughput, form the complete workflow - from sample extraction to the evaluation of the results.



Respiratory infections

Product	Art. No.	Targets				Instruments
Respiratory Pathogens 24-well	80617	SARS-CoV-2 (2 assays) Seasonal Coronavirus Influenza A Influenza B Influenza A Typing	RSV A & B Rhinovirus & Enterovirus Enterovirus (excl. Rhino) Parainfluenza 1 – 4 Parechovirus 1 – 8	Adenovirus (B, C, E) Metapneumovirus Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>) <i>Bordetella pertussis</i> <i>Bordetella parapertussis</i>	<i>Mycoplasma pneumoniae</i> <i>Chlamyd. pneumoniae</i> <i>Chlamyd. psittaci</i> <i>Pneumocystis jirovecii</i> <i>Legionella pneumophila</i> <i>Legionella longbeachae</i>	UP + HP
Respiratory Pathogens 12-well	80618	SARS-CoV-2 (2 assays) Influenza A Influenza B	RSV A & B Rhinovirus & Enterovirus Parainfluenza 1 – 4	Adenovirus (B, C, E) Metapneumovirus Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>)		UP + HP
Respiratory Pathogens 16-well	20620	SARS-CoV-2 (2 assays) Influenza A Influenza B	RSV A & B Rhinovirus & Enterovirus Enterovirus (excl. Rhino) Parechovirus 1 – 8 Parainfluenza 1 – 4	Adenovirus (B, C, E) Metapneumovirus Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>)	<i>Mycoplasma pneumoniae</i>	UP* + HP
Respiratory Pathogens B 16-well	20612	SARS-CoV-2 (2 assays) Influenza A Influenza B	RSV A & B Rhinovirus & Enterovirus Parainfluenza 1 – 4	Adenovirus (B, C, E) Metapneumovirus Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>) <i>Bordetella parapertussis</i>	<i>Mycoplasma pneumoniae</i> <i>Chlamyd. pneumoniae</i> <i>Legionella pneumophila</i> <i>Legionella longbeachae</i>	UP* + HP
Respiratory Pathogens C 16-well	20613	SARS-CoV-2 (2 assays) Influenza A Influenza B Influenza A Typing	RSV A & B Rhinovirus & Enterovirus Parainfluenza 1 – 4	Adenovirus (B, C, E) Metapneumovirus Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>) <i>Bordetella pertussis</i>	<i>Mycoplasma pneumoniae</i> <i>Legionella pneumophila</i> <i>Legionella longbeachae</i>	UP* + HP
Respiratory Viruses 16-well	20602	SARS-CoV-2 (2 assays) Seasonal Coronavirus Influenza A Influenza A Typing Influenza B	RSV A & B Parainfluenza 1 – 4 Rhinovirus & Enterovirus Enterovirus (excl. Rhino) Parechovirus 1 – 8 Bocavirus	Adenovirus (B, C, E) Metapneumovirus		UP* + HP
SARS-CoV-2, Influenza & RSV 8-well	80081	SARS-CoV-2 (3 assays) Influenza A Influenza A Typing Influenza B	RSV A & B			UP + HP
Pneumonia 16-well	20631	<i>Haemophilus influenzae</i> , <i>H. parainfluenzae</i> & <i>H. haemolyticus</i>	<i>Streptococcus pneumoniae</i> <i>Staphylococcus aureus</i> <i>Coxiella burnetii</i> <i>Mycobacterium tuberculosis</i> complex	Bordetella (<i>B. pertussis</i> / <i>B. holmesii</i>) <i>Aspergillus fumigatus</i> <i>Cryptococcus</i> spp. <i>Chlamydomphila psittaci</i>	<i>Mycoplasma pneumoniae</i> <i>Chlamydomphila pneumoniae</i> <i>Legionella pneumophila</i> <i>Legionella longbeachae</i> <i>Pneumocystis jirovecii</i>	UP* + HP



Gastrointestinal infections

Product	Art. No.	Targets				Instruments
Fecal Pathogen M 16-Well	25039	<i>Salmonella</i> spp. <i>Shigella</i> spp. <i>Campylobacter</i> (<i>jejuni</i> and <i>doyeli</i>) Shigatoxin 1 Shigatoxin 2	<i>Aeromonas</i> spp. <i>Clostridium difficile</i> toxin A <i>Clostridium difficile</i> toxin B <i>Yersinia enterocolitica</i> <i>Yersinia pseudotuberculosis</i>	Rotavirus A Norovirus genogroup I Norovirus genogroup II Adenovirus (F, G) Sapovirus Astrovirus	<i>Giardia</i> <i>Cryptosporidium</i> (<i>parvum</i> and <i>hominis</i>) <i>Entamoeba histolytica</i>	UP + HP
Enteric Viruses 8-Well	25037			Rotavirus A Norovirus genogroup I Norovirus genogroup II Adenovirus (F, G) Sapovirus Astrovirus Enterovirus (all serotypes)		HP
Faecal Bacteria and Parasites 12-Well	25041	<i>Salmonella</i> spp. <i>Shigella</i> spp. <i>Campylobacter</i> spp. (<i>C. jejuni</i> , <i>C. coli</i> , <i>C. doylei</i>) Shigatoxin 1 Shigatoxin 2	<i>E. coli</i> 0157 <i>Clostridium difficile</i> toxin A <i>Clostridium difficile</i> toxin B <i>Yersinia enterocolitica</i> <i>Yersinia pseudotuberculosis</i>		<i>Giardia</i> <i>Cryptosporidium</i> (<i>parvum</i> and <i>hominis</i>) <i>Entamoeba histolytica</i>	HP
Parasites 8-Well	25021				<i>Giardia</i> (<i>lamblia</i> and 18s gene) <i>Cryptosporidium</i> (<i>parvum</i> and <i>hominis</i>) <i>Dientamoeba fragilis</i> <i>Entamoeba histolytica</i> <i>Blastocystis hominis</i> type 1 <i>Blastocystis hominis</i> type 3 <i>Cyclospora cayentanensis</i>	UP* + HP

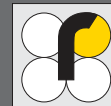
* Available soon



Sexually transmitted infections

Product	Art. No.	Targets				Instruments
Urogenital and Resistance 12-Well	87123	<i>Chlamydia trachomatis</i> <i>Chlamydia trachomatis</i> LGV <i>Neisseria gonorrhoeae</i> (2 targets)	<i>Trichomonas vaginalis</i> <i>Mycoplasma genitalium</i> <i>Mycoplasma hominis</i> <i>Ureaplasma urealyticum</i> <i>Ureaplasma parvum</i>		<i>M. genitalium</i> Macrolide resistance <i>M. genitalium</i> Fluoroquinolone resistance <i>N.gonorrhoeae</i> Cephalosporin resistance	UP + HP
Urogenital 8-Well	27113	<i>Chlamydia trachomatis</i> <i>Neisseria gonorrhoeae</i> (2 targets)	<i>Trichomonas vaginalis</i> <i>Mycoplasma genitalium</i> <i>Mycoplasma hominis</i> <i>Ureaplasma parvum</i> <i>Ureaplasma urealyticum</i>			HP
Vaginitis and Vaginosis 12-Well	87124	<i>Lactobacillus iners</i> <i>Lactobacillus crispatus</i> <i>Lactobacillus jensenii</i> <i>Lactobacillus gasseri</i>	<i>Trichomonas vaginalis</i>	<i>Gardnerella vaginalis</i> <i>Atopobium vaginae</i>	<i>Candida albicans</i> <i>Candida tropicalis</i> <i>Candida glabrata</i> <i>Candida krusei</i> (<i>Pichia kudriavzevii</i>) <i>Candida parapsilosis</i>	UP + HP
STI 16-Well	27112	<i>Chlamydia trachomatis</i> <i>Chlamydia trachomatis</i> LGV <i>Neisseria gonorrhoeae</i> (2 targets)	<i>Trichomonas vaginalis</i> <i>Mycoplasma genitalium</i> <i>Mycoplasma hominis</i> <i>Streptococcus agalactiae</i> (GBS) <i>Ureaplasma parvum</i> <i>Ureaplasma urealyticum</i>	HSV-1 HSV-2 <i>Treponema pallidum</i> <i>Haemophilus ducreyi</i>	<i>Candida albicans</i> <i>Candida glabrata</i> <i>Candida krusei</i> (<i>Pichia kudriavzevii</i>)	UP* + HP

* Available soon



Antibiotic resistance

Product	Art. No.	Targets				Instruments
CRE 16-Well	21098	VIM IMP NDM IMI	SME GES KPC	OXA-23-like OXA-48-like OXA-51-like OXA-58	CMY CTX-M group 1 CTX-M group 9 Bacteria 16S RNA	UP* + HP
CRE EU 16-Well	21099	VIM IMP IMP 8 IMP-14a NDM IMI	SME GES KPC GIM SIM SPM	OXA-48-like FRI	<i>mcr</i> (Colistin resistance)	UP* + HP
CRE Reference 24-Well	81099	VIM IMP IMP 8 IMP-14a NDM IMI GIM SIM SPM DIM	SME GES FRI PER VEB KPC KPC Mutation (D179Y)	OXA-23-like OXA-24/40 OXA-48-like OXA-51-like OXA-58	<i>mcr</i> (Colistin resistance)	UP + HP
Staphylococcus & VRE 8-Well	21340	<i>Staphylococcus aureus</i>	<i>mecA</i> (Methicillin resistance)	VanA (Vancomycin resistance) Van B (Vancomycin resistance)	<i>Enterococcus faecium</i> <i>Enterococcus faecalis</i>	HP

* Available soon



Other panels

Product	Art. No.	Targets				Instruments
Dermatophytes and Other Fungi 12-Well	84115	<i>Trichophyton</i> spp. <i>Trichophyton rubrum</i> complex <i>Trichophyton interdigitale</i>	<i>Microsporum</i> spp. <i>Microsporum canis</i> <i>Epidermophyton floccosum</i>	<i>Nannizzia gypsea</i> <i>Scopulariopsis</i> spp. <i>Aspergillus</i> spp.	<i>Candida albicans</i> <i>Candida guilliermondii</i> <i>Candida parapsilosis</i> <i>Candida glabrata</i>	UP + HP
CSF 16-Well	27050	<i>Neisseria meningitidis</i> (2 assays) <i>Streptococcus pneumoniae</i> complex <i>Haemophilus influenzae</i> <i>Listeria monocytogenes</i>	<i>Leptospira interrogans</i> <i>Mycobacterium tuberculosis</i> complex <i>Cryptococcus neoformans</i>	HSV-1 HSV-2 VZV EBV	Enterovirus (all serotypes) Parechovirus	HP
High Risk HPV Genotyping 8-Well	23201	HPV16 HPV18 HPV31 HPV33	HPV35 HPV39 HPV45 HPV51	HPV52 HPV56 HPV58	HPV59 HPV66 HPV68	HP

Automation Product portfolio

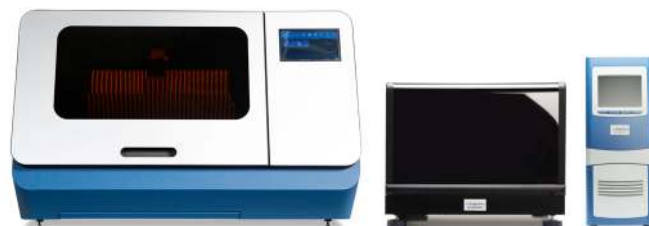
Highplex Alliance™ For low to medium sample throughput

The Highplex Alliance™ includes MT-Prep™ 24 for automated nucleic acid purification, the Highplex instrument for automated setup of the MT-PCR, as well as the MT-Analyser for running and analyzing the MT-PCR.

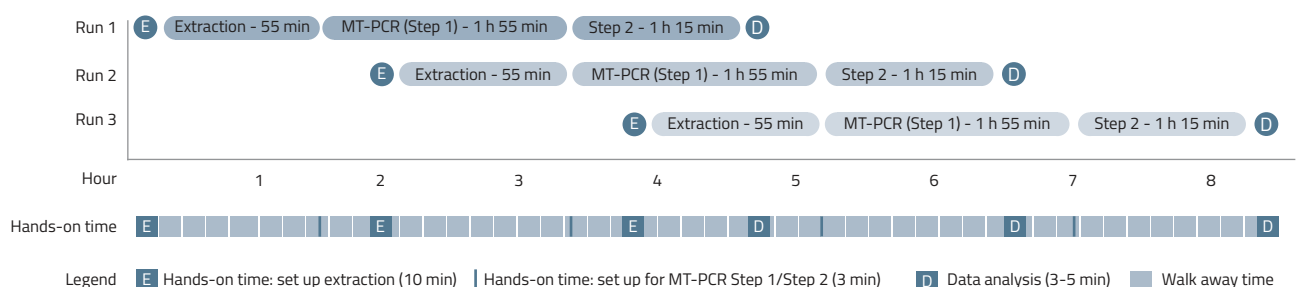
Simplify your daily laboratory routine with:

- Ready-to-use reagents and consumables
- Easy setup within a few minutes
- Maximized workflow efficiency by simultaneous use of instruments
- Automated analysis of results
- LIMS compatibility via data export option

Feature	Details
Extractions/run:	Up to 24 samples
Analyzable samples/run:	Up to 24 samples
Processing time:	30-55 min (extraction); 3 h 10 min (MT-PCR)
Hands-on time:	10 min (extraction); 10 min (MT-PCR)
Cost efficiency:	From 5-6 samples/run
Space requirements:	Approx. 90 cm (extraction) and ca. 50-80 cm (MT-PCR) width, depending on arrangement of instruments
Compatibility (MT-PCR Panels):	Compatible with all universal TandemPlex® MT-PCR Panels
Decontamination:	UV Sterilization of the deck to prevent contamination



Workflow



Automation Product portfolio

Ultrplex Alliance™ For high sample throughput

The Ultrplex Alliance™ includes MT-Prep™ XL for automated nucleic acid purification, the Ultrplex 3 instrument for automated setup of the MT-PCR, as well as three MT-Analysers for running and analyzing the MT-PCR.

Simplify your daily laboratory routine with:

- Ready-to-use reagents and consumables
- Easy setup within a few minutes
- Maximized workflow efficiency by simultaneous use of instruments
- Automated analysis of results
- LIMS compatibility via data export option

Feature	Details
Extractions/run:	Up to 96 samples
Analyzable samples/run:	Up to 96 samples
Processing time:	75 min (extraction); 3 h (MT-PCR)
Hands-on time:	10 min (extraction); 10 min (MT-PCR)
Cost efficiency:	From 15 samples/run
Space requirements:	Approx. 135 cm (extraction) and ca. 155-250 cm (MT-PCR) width, depending on arrangement of instruments
Compatibility (MT-PCR Panels):	Compatible with broad portfolio of TandemPlex® MT-PCR panels
Pipetting mode (PCR setup):	multichannel pipetting for efficient sample processing



Workflow

