

Urinary Tract Infections

r-biopharm®



Efficient

Detect up to 40 targets with a single panel



Precise

High specificity and sensitivity for reliable results



Convenient

Intuitive, user-friendly workflow

r-biopharm.com.au

RIDA®Plex

Combined differentiation of a broad range of pathogens and detection of resistance genes is critical for rapidly determining the most appropriate medical interventions in a suspected urinary tract infection.

Our UTI & antimicrobial resistance (AMR) panels are a set of highly multiplexed molecular diagnostic panels designed for high-throughput laboratories to automate UTI testing. Many pathogens are involved in causing UTIs other than *Escherichia coli*.

RIDA®Plex panels feature our proprietary multiplex-tandem PCR (MT-PCR) technology, a highly multiplexed molecular method that empowers users with the added capability to detect bacterial and fungal pathogens, along with their resistance genes, in a single run. MT-PCR enables comprehensive syndromic diagnosis and earlier medical intervention.

Multiplexed molecular methods are becoming the gold standard for drug resistance and critical testing due to their superior sensitivity, rapid turnaround time, simplicity and ability to identify multiple pathogens, some of which are slow growing or difficult to culture.

Benefits of RIDA®Plex Panels

- Detect up to 40 targets with a single panel
- High specificity for reliable results
- Separated 2-step process that allows parallel processing for greater efficiency
- Low volume of sample required, allowing for further analysis of the remainder of the sample
- Low number of multiplexed amplification cycles which limits competition and preserves quantitation

RX
24

RIDA®Plex panel compatible with RIDA®Xplore Instrument

RJ
96

RIDA®Plex panel compatible with RIDA®Jump Instrument

8
well

8 well RIDA®Plex panel

12
well

12 well RIDA®Plex panel

16
well

16 well RIDA®Plex panel

24
well

24 well RIDA®Plex panel

Urinary Tract Infections RIDA®Plex Panels

Comprehensive Testing

The broadest panels for the detection of a broad range of common pathogens that cause urinary tract infections.

RIDA®Plex UTI 16 well REF 22421 | RUO

RX
24

Bacteria

Acinetobacter baumannii
Citrobacter freundii
Enterobacter cloacae complex
Enterococcus faecalis
Escherichia coli
Klebsiella pneumoniae

Morganella morganii
Proteus mirabilis
Pseudomonas aeruginosa
Staphylococcus aureus
Staphylococcus saprophyticus
Streptococcus agalactiae

Fungi

Candida albicans

Nakaseomyces glabratus (formerly
Candida glabrata)

Resistance Genes

Methicillin resistance genes *femA* and *mecA*
genes in *S. aureus*

RIDA®Plex UTI A 24 well REF 82412 | RUO

RX
24

RJ
96

Bacteria

Acinetobacter baumannii
Citrobacter freundii
Enterobacteriaceae tuf gene
Enterococcus spp.
Escherichia coli
Klebsiella pneumoniae
Mycoplasma hominis
Morganella morganii

Pseudomonas aeruginosa
Proteus mirabilis
Staphylococcus spp.
Staphylococcus aureus
Streptococcus agalactiae
Streptococcus pyogenes
Ureaplasma urealyticum

Fungi

Candida albicans
Candida parapsilosis

Nakaseomyces glabratus (formerly
Candida glabrata)

Resistance Genes

Ambler Class A Carbapenemases
pan-TEM

Other

Methicillin resistance genes *mecA* and
mecC in *S. aureus*

Vancomycin resistance genes *vanA* and
vanB in *E. faecalis* and *E. faecium*

RIDA®Plex UTI B 24 well REF 82420 | RUO

RX
24

RJ
96

Bacteria

Acinetobacter baumannii
Acinetobacter baumannii
Aerococcus urinae
Citrobacter freundii
Corynebacterium urealyticum
Enterobacter cloacae complex
Enterococcus faecalis
Escherichia coli

Klebsiella oxytoca
Klebsiella pneumoniae
Proteus mirabilis
Pseudomonas aeruginosa
Serratia marcescens
Staphylococcus spp.
Staphylococcus aureus
Staphylococcus saprophyticus

Fungi

Candida albicans
Candida tropicalis

Nakaseomyces glabratus (formerly *Candida glabrata*)

Resistance Genes

Methicillin resistance genes *mecA* and
mecC in *S. aureus*

Fluoroquinolone and macrolide
resistance markers in *M. genitalium*

RIDA®Plex UTI 24 well
REF 82422 | RUO



Bacteria

<i>Acinetobacter baumannii</i>	<i>Morganella morganii</i>
<i>Actinotignum schaalii</i>	<i>Mycoplasma hominis</i>
<i>Aerococcus urinae</i>	<i>Proteus mirabilis</i>
<i>Citrobacter freundii</i>	<i>Pseudomonas aeruginosa</i>
<i>Citrobacter koseri</i>	<i>Serratia marcescens</i>
<i>Corynebacterium urealyticum</i>	<i>Staphylococcus aureus</i>
<i>Enterobacter cloacae</i> complex	<i>Staphylococcus epidermidis</i>
<i>Enterococcus faecium</i>	<i>Staphylococcus saprophyticus</i>
<i>Enterococcus faecalis</i>	<i>Streptococcus agalactiae</i>
<i>Escherichia coli</i>	<i>Streptococcus pyogenes</i>
<i>Klebsiella pneumoniae</i>	<i>Ureaplasma urealyticum</i>
<i>Klebsiella</i> spp.	

Fungi

<i>Candida albicans</i>	<i>Nakaseomyces glabratus</i> (formerly
<i>Candida tropicalis</i>	<i>Candida glabrata</i>)

UTI Resistance

Panels for identification of genes associated with UTI resistance markers provide clinicians with relevant information necessary to deliver rapid and appropriate medical intervention while minimising inappropriate use of antimicrobials.

RIDA®Plex UTI Resistance 16 well
REF 22422 | RUO



Resistance Genes

Ambler Class A Carbapenemases

KPC	pan-TEM
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Ambler Class C β -Lactamases

DHA-1

Ambler Class D β -Lactamases

OXA-48 like

Other

Vancomycin resistance genes <i>vanA</i> and <i>vanB</i> in <i>E. faecalis</i> and <i>E. faecium</i>	Sulfonamide resistance gene <i>sul1</i>
Macrolide resistance genes <i>ermA</i> , <i>ermB</i> and <i>ermC</i>	Trimethoprim resistance genes <i>dfrA1</i> , <i>dfrA5</i> , <i>dfrA12</i> and <i>dfrA17</i>
Quinolone/Fluoroquinolone resistance genes <i>aac(6')-Ib</i> , <i>qnrA</i> , <i>qnrB</i> and <i>qnrS</i>	

RIDA®Plex UTI Resistance 24 well
REF 81092 | RUO



Resistance Genes

Ambler Class A Carbapenemases

CTX-M Groups 1 and 9	pan-TEM
KPC	

Ambler Class B Metallo- β -Lactamases

pan-IMP	NDM
IMP-8	VIM
IMP-14	

Ambler Class C β -Lactamases

DHA-1	KPC
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Ambler Class D β -Lactamases

OXA-23 like	OXA-48 like
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Other

Methicillin resistance gene <i>mecA</i> in <i>S. aureus</i>	Nitrofurantoin resistance genes <i>oqxA</i> and <i>oqxB</i>
Vancomycin resistance genes <i>vanA</i> and <i>vanB</i> in <i>E. faecalis</i> and <i>E. faecium</i>	Quinolone/Fluoroquinolone resistance genes <i>aac(6')-Ib</i> , <i>qnrA</i> , <i>qnrB</i> and <i>qnrS</i>
Mobilised colistin resistance genes <i>mcr-1</i> and <i>mcr-9</i>	Sulfonamide resistance gene <i>sul1</i>
Macrolide resistance genes <i>ermA</i> , <i>ermB</i> and <i>ermC</i>	Trimethoprim resistance genes <i>dfrA1</i> , <i>dfrA5</i> , <i>dfrA12</i> and <i>dfrA17</i>

Automation

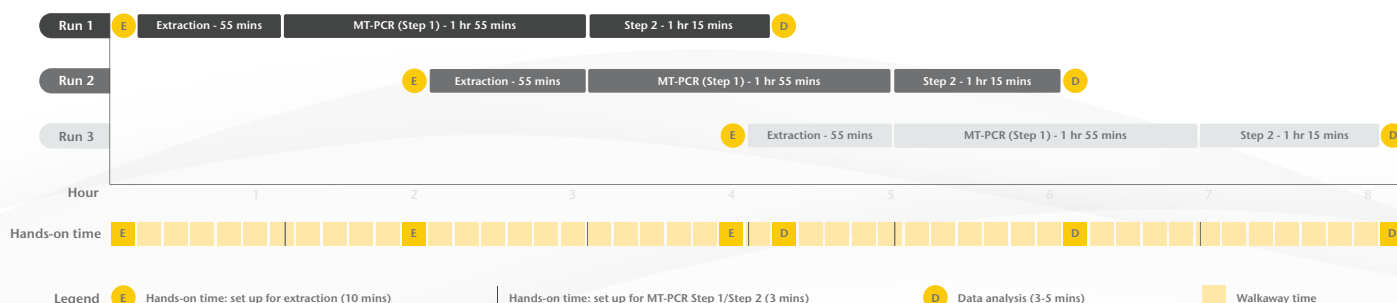
Diagnostic testing using RIDA®Plex panels is effortless with automation solutions for any workflow, ranging from low to high throughput and screening applications.

RIDA®Xplore Alliance

Low-Medium Throughput

RIDA®Xtract 24 extraction with RIDA®Xplore MT-PCR processing

- Sample to results from up to 24 samples¹ in approx. 4 hrs 30 mins
Extraction: 35 – 55 mins² | MT-PCR: 3 hrs 30 mins
- Quick and easy setup in approx. 2 mins
- Ready-to-use reagents and key plastic consumables
- Small footprint – requires less than 2m of bench space
- UV deck sterilisation to prevent cross contamination
- Automatic results calling
- LIMS compatible



¹8 well, 12 well and 16 well RIDA®Plex panels can run up to 24 samples; 24 well RIDA®Plex panels can run up to 16 samples.

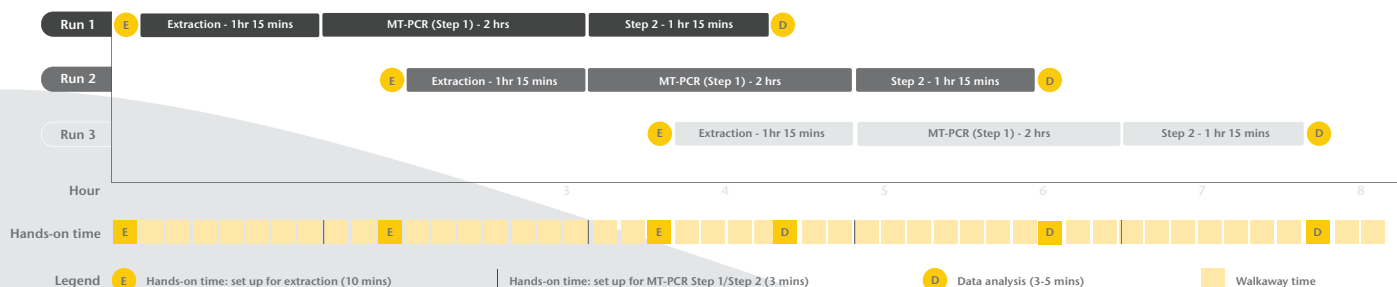
²Using RIDA®Xtract 24 Pathogen Kit. Approx. 35-minute rapid protocol, 55-minute standard protocol for up to 24 samples.

RIDA®Jump Alliance

High Throughput

RIDA®Xtract 96* (coming soon) extraction with RIDA®Jump MT-PCR processing

- Sample to results from up to 96 primary samples³ in approx. 4 hrs 15 mins
- Extraction: 1 hr 15 mins⁴ | MT-PCR: 3 hrs 30 mins
- Set up in approx. 2 mins
- Ready-to-use reagents and key plastic consumables
- Multi-channel pipetting for efficient processing
- Use with universal RIDA®Plex panels
- Automatic results calling
- LIMS compatible



³8 well, 12 well and 16 well RIDA®Plex panels can run up to 96 samples; 24 well RIDA®Plex panels up to 64 samples.

⁴Sample purification using RIDA®Xtract 96 DNA/RNA Kit (currently registered as Puryx Comprehensive DNA/RNA Extraction Kit).

*RIDA®Xtract 96 registered as MT-Prep XL

Sample RIDA®Plex Results

Presence of a target gene is represented by the fluorescence detected during the MT-PCR process. These results (Figure 1) are also presented as melt curves and gene targets detected in the sample are automatically called for clear diagnosis.



Figure 1: Sample results for Urinary Tract Infection Antibiotic Resistance 16-well panel (REF 22422) (RUO)

Product Portfolio



RIDA®Plex



RIDA®Prep



RIDA®PrepX



RIDA®Xtract 24



RIDA®Xtract 96



Automation Systems



Dermatophytes



Gastrointestinal



Respiratory Pathogens



Hospital Care



Drug Resistance



Sexual Health



Urinary Tract Infections



Women's Health



Vector-Borne Infections



Animal Health



Applied Testing

Ordering Information

Each RIDA®Plex panel requires the following to run:

1. RIDA®Plex Step 1 Tubes (e.g. 22421S)
2. RIDA®Plex Step 2 Plates (e.g. 22421P)
3. Reagent Cassette for RIDA®Xplore or Reagent Reservoir for RIDA®Jump instruments
4. A RIDA®Plex Positive Control



Learn More

Key Reagents

#####S	RIDA®Plex Step 1 for the desired panel	RX 24	RI 96
#####P	RIDA®Plex Step 2 for the desired panel	RX 24	RI 96
40241	RIDA®Plex S DNA Cassette ¹	RX 24	
40231	RIDA®Plex L DNA Cassette ¹	RX 24	
40341	RIDA®Plex S RNA Cassette ¹	RX 24	
40331	RIDA®Plex L RNA Cassette ¹	RX 24	
40631	RIDA®Plex S DNA Reservoir ²		RI 96
40621	RIDA®Plex M DNA Reservoir ²		RI 96
40611	RIDA®Plex L DNA Reservoir ²		RI 96
40731	RIDA®Plex S RNA Reservoir ²		RI 96
40721	RIDA®Plex M RNA Reservoir ²		RI 96
40711	RIDA®Plex L RNA Reservoir ²		RI 96
91491	RIDA®Plex Positive Control UTIs and Resistances	RX 24	RI 96
RIDA®Xplore Alliance		RX 24	
96420	RIDA®Xtract 24		
96521	RIDA®Xplore		
RIDA®Jump Alliance			RI 96
96120	RIDA®Xtract 96 ³		
96221	RIDA®Jump		

¹Reagent Cassettes are for use with the RIDA®Xplore.

²Reagent Reservoirs are for use with the RIDA®Jump.

³RIDA®Xtract 96 registered as MT-Prep XL

Ordering information on consumables for the RIDA®Xplore Alliance and RIDA®Jump Alliance is available from your local R-Biopharm Australia representative.



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