



CE

RANDOX

RX daytona

A compact benchtop solution
for clinical chemistry testing



RX daytona

Flexible, versatile and efficient

The RX daytona can provide a performance like no other with an industry leading test menu on a cost effective, compact analyser.

Have confidence in testing with accurate and reliable results from the RX daytona. The compact fully automated clinical chemistry analyser can provide rapid, cost effective testing for informed and dependable decisions, from the bench top to the bedside.

RX daytona system overview

B Unique dual three speed stirring system



A Versatile reagent carousel with 40 cooled positions



RX daytona gives unrivalled performance guaranteed with:

The largest clinical chemistry test menu on the market providing complete consolidation of specialised and routine tests onto one platform.

International accreditation ensures high quality testing you can trust.

Dedicated RX support team provides instant expert knowledge and advice when you need it most.

Versatile applications for a variety of settings including:

- Clinical Chemistry laboratories
- Research laboratories
- Food and wine testing
- Veterinary laboratories
- Forensic toxicology

© 45 Permanent Pyrex® cuvettes



Ⓓ Universal sample carousel with 40 positions



Ⓔ Optional Integrated ISE unit



Why RX daytona?

A compact high performance system for all tests

Advanced onboard stability

- Cooled reagent carousel extends stability and reduces reagent wastage
- 40 cooled positions enable reagent overnight storage onboard the analyser

Most comprehensive test menu on the market

- Wider range of tests available than any other sole supplier
- Ability to run specific protein tests removes the need for a separate nephelometry system

Highly accurate testing

- Separate reagent and sample probes minimise contamination and carry over
- Unique three speed rotating stirrers optimise mixing for each assay
- Serum indices detect haemolysed, icteric or lipaemic samples building confidence in results and reducing expensive repeats
- Dedicated onboard micropipettes with liquid level sensor and crash protection

STAT sampling

- Immediate sampling interruption for STAT addition

Time saving

- Pre-programmed settings eliminate the need to input test parameters
- True walk away automation optimises staff time
- Auto sample re-run function reduces downtime and eliminates risk of human error
- Minimal daily maintenance and lowest service requirements in its class

Built in inventory management system

- The RX daytona automatically calculates remaining reagent volume and the number of tests available
- Storage capacity of 100,000 test results including 10,000 patient results and data for up to 30 controls





Flexibility

- Capable of running monochromatic, bi-chromatic, endpoint, kinetic, ISE, sample blanking and reagent blanking assays
- Filters provide coverage at wavelengths 340, 415, 510, 546, 570, 600, 660 and 700nm
- Six different calibration options available including linear, factor, 2 point, point to point, log-logit and exponential

Cost savings

- No extra consumables required
- Five year permanent reusable pyrex® cuvettes
- Universal sample carousel-holds all standard sample vessels
- Economic platform with low water consumption at 7.5L per hour
- Minimal reagent volumes required per test

Optimum laboratory efficiency

- System calculates remaining reagent volume and number of tests available
- Complete package of IQC and EQA available
- Bar coded reagents and samples mean no time is wasted programming routine assays
- Programmable analyser autostart function

Unrivalled QC capabilities

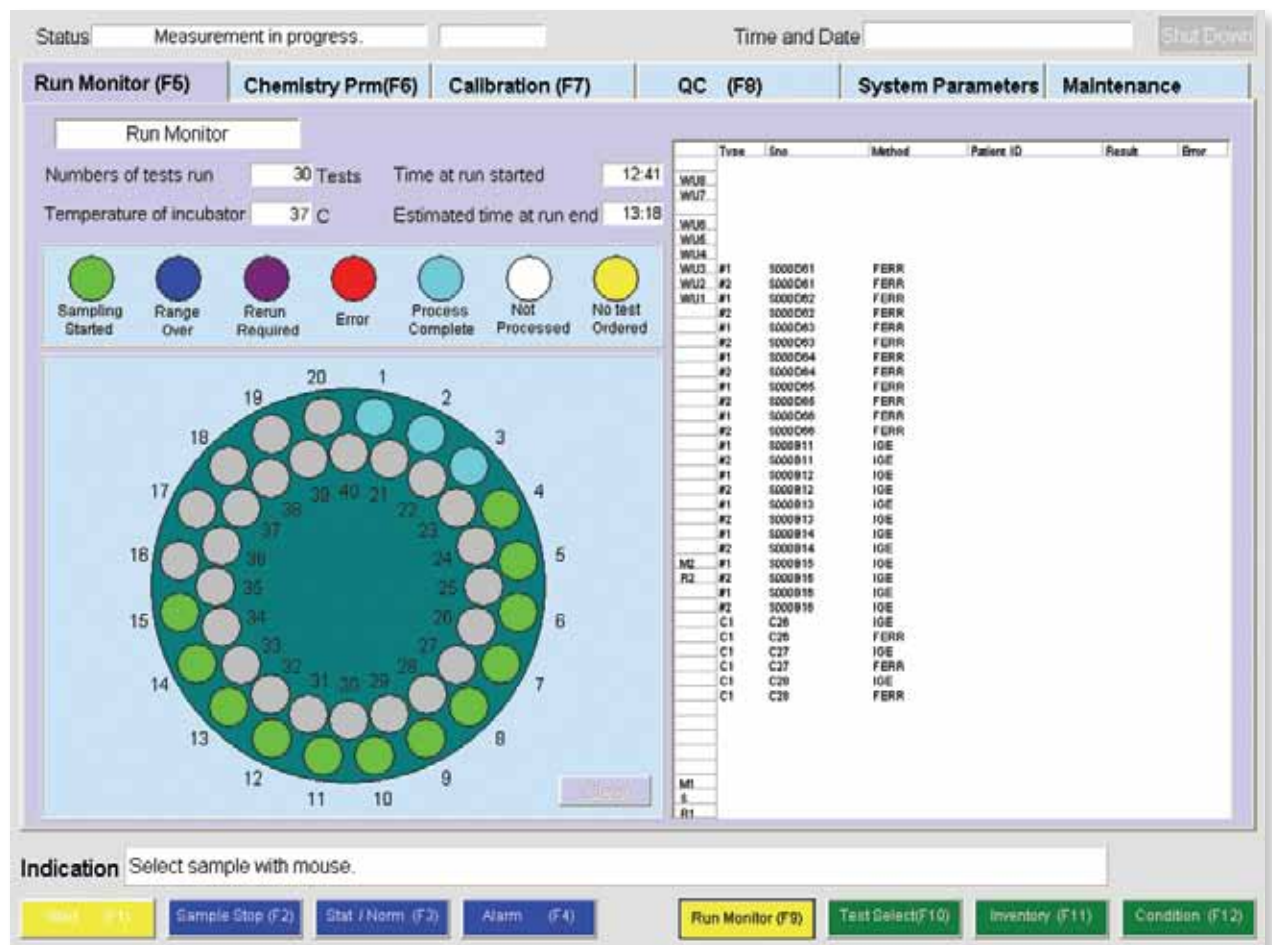
- Automatic generation of Levey Jennings charts, running mean values and QC statistics
- User defined multipoint rules to identify any trends or bias

High throughput

- 180 photometric tests per hour
- 270 ISE tests per hour

RX daytona software

Ensures straightforward and intuitive operations



Run monitor screen

Connectivity

Software capable of connecting to LIMS system via ASTM standard

RX series software commonality

Software consistent across all of the RX series, for ease-of-use and straightforward operations

Simplistic and intuitive operations

Microsoft Windows based software offers ease of navigation.

Intuitive software results in minimal training requirements and enhanced productivity

Control operations from the main screen with six informative software tabs

Run monitor screen

- Displays full patient demographics
- View status in real time including time to completion

System parameters screen

- Define up to 15 normal ranges

Quality control screen

- Levey-Jennings charts, running mean values and QC

Chemistry parameter screen

- Set up to eight test profiles and define order of analysis
- Enables sample dilution and test re-runs

Maintenance screen

- Less than five minutes daily maintenance required

Results screen

- Download and print results

Calibration screen

- Sets calibrator serial dilution and displays multipoint calibration curves



Quality control screen



Calibration screen

Easy to follow reports

View real time results status, including time to completion

Reduces downtime

Save time and costs with secure remote diagnostics allowing immediate support from expert technical and applications staff, anytime, anywhere!

RX daytona test menu

Largest clinical chemistry test menu on the market

Clinical

Autoimmune:

Complement Component 3
Complement Component 4
CRP
CRP Full Range (0.3-160mg/l)
CRP High Sensitivity
IgA
IgE
IgG
IgM
Rheumatoid Factor

Basic Metabolic Profile:

Calcium
CO₂ Total
Chloride
Creatinine Enzymatic
Creatinine (Jaffe)
Glucose
Potassium
Sodium
Urea

Bone Profile:

Alkaline Phosphatase
Calcium
Phosphorus
Total Protein

Cardiac:

Cholesterol
CK-MB
CK-NAC
CRP
CRP Full Range (0.3-160mg/l)
CRP High Sensitivity
Digoxin
Direct HDL Cholesterol
Direct LDL Cholesterol
Heart-Type Fatty Acid Binding Protein (H-FABP)
Lipoprotein (a)
Myoglobin
sLDL
Triglycerides
TxB Cardio

Comprehensive Metabolic Profile:

Albumin
Alkaline Phosphatase
ALT
AST (GOT)
Direct Bilirubin
Calcium
Chloride
CO₂ Total
Creatinine Enzymatic
Creatinine (Jaffe)
Glucose
Lactate
Potassium
Sodium
Total Bilirubin
Total Protein
Urea

Diabetes:

Cholesterol
Creatinine Enzymatic
Creatinine (Jaffe)
Cystatin C
Direct HDL Cholesterol
Direct LDL Cholesterol
Fructosamine
Glucose
Glycerol
HbA1c/Hb
Microalbumin
NEFA (Non-Esterified Fatty Acids)
Ranbut (Hydroxybutyrate)
Total Protein
Triglycerides
Urinary Protein

Electrolytes

Calcium
Chloride (Direct / Nondirect)
CO₂ Total
Lithium
Magnesium
Potassium (Direct / Nondirect)
Sodium (Direct / Nondirect)

Haemolytic Anaemia:

G6P-DH
Haptoglobin
LDH

Hepatic Function:

Albumin
Aldolase
Alkaline Phosphatase
Alpha-1 Antitrypsin
ALT
Ammonia
AST (GOT)
Cholinesterase
Complement Component 3
Complement Component 4
Direct Bilirubin
Gamma GT
GLDH
Glycerol
Haptoglobin
IgA
IgG
IgM
Iron (UIBC)
LAP
LDH
Total Bilirubin
Total Protein
Transferrin
Transthyretin (Prealbumin)

Inflammation and Infection:

Alpha-1 Acid Glycoprotein
ASO
CRP
Lactate
Rheumatoid Factor

Lipids:

Apolipoprotein A-1
Apolipoprotein AII
Apolipoprotein B
Apolipoprotein CII
Apolipoprotein CIII
Apolipoprotein E
Cholesterol
Direct HDL Cholesterol
Direct LDL Cholesterol
Lipoprotein (a)
sLDL
Triglycerides

Neonatal Screening:

Alpha-1 Antitrypsin
CRP
CRP Full Range (0.3-160mg/l)
CRP High Sensitivity
IgE
Transthyretin (Prealbumin)

Neurological Disorders (CSF):

IgA
IgG
IgM

Nutritional Status:

Albumin
Copper
Ferritin
Iron
Iron (UIBC)
Lipase
Magnesium
Potassium
TIBC
Transferrin
Transthyretin (Prealbumin)
Zinc

Pancreatic Function:

Amylase
Glucose
LDH
Lipase
Pancreatic Amylase

Renal Function:

Albumin
Ammonia
Beta-2 Microglobulin
Calcium
Chloride
Creatinine Enzymatic
Creatinine (Jaffe)
Cystatin C
Glucose
HbA1c/Hb
IgG
LDH
Magnesium
Microalbumin
Potassium
Sodium
Phosphorus (Inorganic)
Urinary Protein
Urea
Uric Acid

Veterinary

Albumin	Cholesterol	Glycerol	Ranbut (Hydroxybutyrate)
Alkaline phosphatase	Cholinesterase (Butyryl)	HDL	Ransel (Glutathione peroxidase)
ALT (GPT)	CK-NAC	Iron (UIBC)	Ransod (Superoxide dismutase)
Aldolase	CO ₂ Total	Lactate	Sodium
Ammonia	Copper	Lactate dehydrogenase	Therapeutic drugs
Amylase	Creatinine	LDL	Total Protein
AST (GOT)	CRP	Lipase	Triglycerides
Bile acids	Fructosamine	Magnesium	Urea
Bilirubin	Gamma-GT	NEFA (Non-esterified fatty acids)	Uric Acid
Calcium	GLDH	Phosphorus (Inorganic)	Urinary protein
Chloride	Glucose	Potassium	Zinc

Toxicology

Therapeutic Drugs:	Phenobarbitol	Drugs of Abuse:	EDDP
Carbamazepine	Phenytoin	Amphetamines	Ecstasy
Digoxin	Salicylate	Barbiturates	Ethanol
Gentamicin	Theophylline	Benzodiazepines	Methadone
Lithium	Valproic Acid	Cannabinoids	Opiates
Acetaminophen		Cocaine metabolite	

Protein

Specific Proteins:	Apolipoprotein E	CRP High Sensitivity	IgG
Alpha-1 Antitrypsin	ASO	Cystatin C	IgM
Alpha-1 Acid Glycoprotein	Beta-2 Microglobulin	Ferritin	Lipoprotein (a)
Apolipoprotein A-I	Ceruloplasmin	Fructosamine	Microalbumin
Apolipoprotein AII	Complement Component 3	Haptoglobin	Myoglobin
Apolipoprotein B	Complement Component 4	HbA1c/Hb	Rheumatoid Factor
Apolipoprotein CII	CRP	IgA	Transthyretin (Prealbumin)
Apolipoprotein CIII	CRP Full Range (0.3-160mg/l)	IgE	Transferrin

Research

Antioxidants:	Biotechnology:	Food and Wine Testing:	Speciality:
Albumin	Glutamate	Acetic Acid	Acid phosphatase
Bilirubin	Glutamine	Ammonia	
Ferritin		Calcium	
Glutathione Reductase		Copper	
Ransel (Glutathione Peroxidase)		Glucose	
Ransod (Superoxide Dismutase)		Glucose/Fructose	
TIBC		Glycerol	
Total Antioxidant Status		Iron	
Transferrin		L-Lactic Acid	
Uric Acid		Malic Acid	
		Potassium	
		Total Antioxidant Status	

Unrivalled customer service

Our global network, ensuring local support

At Randox our highly specialised RX support team is on hand with expert advice and support regardless of where you are in the world. Our global team of expert technical and applications staff ensure unbeatable service for hassle free diagnostics.

Time is critical in any laboratory, therefore you are our top priority. Dedicated specialists answer all queries in a quick and thorough manner and our field agents are on hand at any time so you can be sure of a quick response.

Remote Access diagnostics

Our ground breaking 'Remote Access diagnostics' allows immediate support to your system reducing down time and the expense associated with timely call outs. Randox is committed to the smooth running of your laboratory ensuring that your system will remain operational with optimum productivity. Our unrivalled customer support and quality products also extends in the form of our leading IQC and EQA programmes, 24·7, a peer group IQC programme and RIQAS the largest global EQA scheme in the world.



email: rxsupport@randox.com



RX family of analysers

The RX daytona provides the solution for consolidated, high quality clinical chemistry testing

Clinical chemistry testing has advanced dramatically in recent years with demands fixed on consolidation, speed, quality and cost. Randox is committed to advancing diagnostic testing to suit our customers. Investing heavily into research and development, Randox has developed a full range of clinical chemistry analysers to suit any working environment



RX monza

Versatility for reduced cost, low-volume manual testing. The RX monza semi-automated clinical analyser has an integral screen, keyboard and printer.



RX daytona

Convenient bench top system, the RX daytona clinical analyser has a throughput of 450 tests per hour including ISEs via the optional ISE unit.

including clinical, paediatric, research, veterinary, forensic and pharmaceutical laboratories.

The RX series of clinical analysers has an impressive range of time-saving and cost-saving features. All of which offer outstanding flexibility coupled with optimum reliability.



RX imola

Designed for medium to high throughput laboratories, the RX imola is a random access bench top clinical analyser with a maximum throughput of 560 tests per hour including ISEs.



RX suzuka

The latest addition to the RX family of analysers; the RX suzuka is a fully automated, discrete, random access clinical analyser with a throughput of 1200 tests per hour including ISEs.

Specifications

Physical Dimensions

Height	550 mm, 24.5 in
Depth	620 mm, 20 in
Width	770 mm, 30 in
Weight	135 kg, 298 lbs

Performance Characteristics

Analysers Accreditation	CE marking in compliance with In Vitro Diagnostic Medical Device Directive 98/79/EC, FDA 510k cleared and UL certification
Analysers Type	Compact fully automated random access bench top clinical analyser
Assay Tests	Endpoint, kinetic, biochromatic, turbidimetric, sample blanking, reagent blanking and ISE (via optional integrated ISE unit)
Calibration Principal	Factor, Linear, 2 point, point to point, spline, log-logit and exponential, Up to 7 calibrators per test
Cuvettes	45 reusable Pyrex cuvettes with 5-year lifespan, min volume 180µl, Max volume 500µl, 8-stage cuvette washing system
Cycle Time	20 seconds
Data Management	Storage of up to 10,000 patient reports, search facility
Detection Principal	8 wavelengths: 340, 415, 510, 546, 570, 600, 660, 700 nm
Detector Method	Direct absorbance in cuvette (bichromatic and monochromatic)
ISE Unit	Optional ISE unit available
Light Source	Halogen tungsten lamp (Air-cooled, 6 months service life)
LIMS Connectivity	Bi-directional; ASTM Standard (RS232 connection)
Maintenance	Daily maintenance- less than 5 minutes. No rear access required. Simple twice yearly preventative maintenance.
Maximum Humidity	45-85% without condensation
Minimum Reaction Volume	180µl
Operator Interface	15" LCD display and printer externally connected. Windows XP based user interface
Quality Control	Interactive Levey Jennings Charts, Daily, monthly and batch QC with data archiving, Automatic QC and Automatic calibration
Reagent Capacity	Removable tray with 40 cooled positions (20 positions for 100, 50 or 20ml bottles and 20 positions for 20ml bottles)
Reagent Cooling	8-15°C
Reagent Identification	Automatic barcode reagent identification
Reagent Inventory	Calculation of remaining reagent volume and tests available. Alert for shortage, expired reagent and expired calibration
Reagent Pipette	Dedicated reagent micropipette with liquid level sensor and crash detection. Rinsed inside and outside with purified water
Reagent Volume	20-400µl (1 µl increments)
Sample Addition	Sampling interruption for addition of samples
Sample Capacity	Removable tray with 40 positions for samples, calibrators and controls
Sample Dead Volume	100µl in standard or primary tubes, 50µl in paediatric cups
Sample Dilution	Pre-dilution and automatic re-assay with diluted, reduced or increased sample volume
Sample Identification	Barcode sample identification
Sample Pipette	Dedicated sample micropipette with liquid level sensor and crash protection, rinsed inside and outside with purified water
Sample Type	Serum, plasma, CSF, urine and supernatants

Sample Tube Size	Multiple primary tube sizes (diameter 12 to 16mm, height 55 to 100 mm), paediatric cups
Sample Volume	2 to 35µl (0.1µl increments)
STAT Sampling	Immediate STAT sampling interruption
Stirring Speed	Dual 3-speed rotating stirrers
Stirring System	Stick type rotating stirrer cleaned with purified water
Temperature	37°C±0.3
Test Channels	40 photometric channels, 3 direct ISE
Throughput	180 photometric tests per hour; 270 ISE tests per hour
Time to First Result from Sample Barcode Scan	14 minutes
Time to First Result from Standby	12 minutes 30 seconds
Water Consumption	Maximum 7.5L per hour
Water Requirements	NCCLS type 1 or 2 purified water supply
Walk-away Time	1 hour 40 minutes

Power Requirements

Input Voltage	100 -240Vac
Power Consumption	<700 W
UPS Requirements	1.35KW

Catalogue No./ Ordering Info.

RX daytona analyser without ISE	RX3900
RX daytona analyser with ISE	RX3901

RANDOX INTERNATIONAL HEADQUARTERS

Randex Laboratories Limited, 55 Diamond Road, Crumlin, Co. Antrim, United Kingdom, BT29 4QY
T +44 (0) 28 9442 2413 F +44 (0) 28 9445 2912 E marketing@randox.com
I www.randox.com

Randex have sales and distribution agreements in over 130 countries. Australia, Brazil, China, Czech Republic, France, Germany, Hong Kong, India, Italy, Jamaica, Poland, Portugal, Puerto Rico, Russia, Slovakia, South Africa, South Korea, Spain, Switzerland, USA and Vietnam are directly represented by Randex Companies



Australia

Randex (Australia) Pty Ltd.
Suite 2/4 Charles Street,
Paramatta, NSW 2150, Australia.
Tel: +61 (0) 2 9615 4640
Fax: +61 (0) 2 9615 4644



Brazil

Randex Brasil Ltda
Rua Fernandes Moreira, 415
CEP: 04716-000 - São Paulo / SP - Brasil.
Tel: +55 11 5181-2024
Fax: +55 11 5181-0817



China

Randex Laboratories Ltd.
Shanghai Representative Office
Room 522-523, Fortune Times Tower, No. 1438 North,
Shanxi Road, Putuo District, Shanghai, China 20060
Tel: +86 021 6288 6240
Fax: +86 021 6288 6246



Czech Republic

Randex S.R.O.
BHM, Sovadinova 7,
69002 Breclav 2, Czech Republic.
Tel/Fax: +420 (0) 519 325 130



France

Laboratoires Randex
• Roissy Parc, ZAC du Moulin
• 24-26 rue du Noyer, 95700 Roissy en France
Tel: +33 (0) 130 18 96 80
• Fax: +33 (0) 130 18 0360



Germany

Randex Laboratories GmbH
Wilhelmstr. 147a, 42489 Wülfrath, Germany.
Tel: +49 (0) 2151/93 706-11
Fax: +49 (0) 2151/ 93 706-222



Hong Kong

Randex Laboratories Hong Kong
Room 602, Skyline Commercial Centre,
No 71-77 Wing Lok Street, Sheung Wan, Hong Kong
Tel: +852 3595 0515
Fax: +852 3008 5133



India

Randex Laboratories India Pvt Ltd.
3rd Floor, Godrej Coliseum, Somaiya Hospital Road,
Off. Eastern Express Highway, Sion (East), Mumbai - 400 022, India
Tel: +91 22 6714 0600
Fax: +91 22 2408 3803



Italy

Randex Laboratories Ltd.
Corso Montevercchio 37,
10129 Torino, Italy.
Tel: +39 06 9896 8954
Fax: +39 06 6051 3810



Poland

Randex Laboratories
ul. Wolnosc 7 lok. 15, 01-018, Warszawa.
Tel: +48 (0) 22 862 1080
Fax: +48 (0) 22 862 1081



Portugal

Irlandox Laboratorios Quimica Analitica Ltda
Rua Agostinho de Jesus e Sousa 258,
4000-015 Porto, Portugal.
Tel: +351 22 589 8320
Fax: +351 22 589 8329



Puerto Rico

Randex de Puerto Rico
PMB 590 PO Box 29029 San Juan,
PR 00929-0029.
Tel: +1 787 701 7000
Fax: +1 787 701 6901



Republic of Ireland

Randex Teoranta
Meenmore, Dungloe,
Co Donegal, Republic of Ireland
Tel: +353 7495 22600



Slovakia

Randex S.R.O.
Vilová 2, 851 01 Bratislava, Slovakia.
Tel: +421 2 6381 3324
Fax: +421 2 6381 2482



South Africa

Randex Laboratories (SA) (PTY) Ltd
Unit 69F Allandale Business Park
Cnr: Le Roux Avenue & Morkels Close
Halfway House, Midrand, South Africa
Tel: +27 011 461 371



South Korea

Randex Korea Ltd.
• 904 Doosan Venturetime 126-1, Pyeongchon,
Dongan-gu, Anyang City, Kyeonggi-do, South Korea
• Tel: +82 (0) 31 478 3121
• Fax: +82 (0) 31 478 3122



Spain

Laboratorios Randex S.L.
C/Enric Prat de la Riba, 226, 1º Planta,
08901 L'Hospitalet de Llobregat, Barcelona.
Tel: +34 93 475 09 64
Fax: +34 93 475 09 65



Switzerland

Randex Laboratories Ltd. (Switzerland)
C/O Wirtschafts-Treuhand Auctor Schwyz AG,
Oberer Steisteg 18, 6430 Schwyz, Switzerland.
Tel: +41 41 810 48 89
Fax: +41 41 810 48 34



UK

Randex Laboratories Ltd.
55 Diamond Road, Crumlin, Co. Antrim,
United Kingdom, BT29 4QY
Tel: +44 (0) 28 9442 2413
Fax: +44 (0) 28 9445 2912



USA

Randex Laboratories-US, Ltd.
515 Industrial Boulevard, Bardane Industrial Park,
Kearneysville, West Virginia, 25430
Tel: +1 304 728 2890 Toll Free: 866 4 RANDOX
Fax: +1 304 728 1890 Toll Free: 866 RANDOX I



Vietnam

Randex Laboratories Ltd. Vietnam
• Villa Phuc Thinh 2Bis Nguyen Thi Minh Khai St.
• Dakao Ward, District 1, Ho Chi Minh City, Vietnam.
Tel: +84-8-39 11 09 04
Fax: +84-8-39 11 09 05

RANDOX

Randex Laboratories Limited, 55 Diamond Road, Crumlin, County Antrim, BT29 4QY, United Kingdom
T +44 (0) 28 9442 2413 F +44 (0) 28 9445 2912 E marketing@randox.com I www.randox.com

Randex Laboratories-US Limited, 515 Industrial Boulevard, Bardane Industrial Park, Kearneysville, West Virginia, 25430
T +1 304 728 2890 Toll Free: 866 4 RANDOX F +304 728 1890 Toll Free: 866 RANDOX I

