

RANDOX

FOOD DIAGNOSTICS

Milk Analysis



Better Science, Safer Food

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Guarding the Global Dairy Industry

Commitment to research and development is the driving force behind our innovative technology and has allowed Randox Food Diagnostics to become a global leader in drug residue screening. With a comprehensive range of testing solutions and validations across a range of matrices, we are changing the face of food safety and quality worldwide.

Randox Food Diagnostics has developed a specific product portfolio to suit the needs of global dairy processors. Putting the food and agriculture industries at the forefront of what we do has allowed Randox Food to become the industry's trusted supplier of the most innovative technology. Randox's patented Biochip Array Technology offers the user more information, faster and cheaper than ever before, empowering them to protect not only their dairy products, but the animals that produce them.

Biochip Array Technology

Randox's patented Biochip Array Technology (BAT) provides multiple results from a single, undivided sample with accurate and trusted results on a 9x9mm ceramic Biochip. Our unique technology is at the forefront of testing and provides a large number of results in less time when compared to other methods.

Randox's comprehensive test menus allow for the screening of multiple sample types, providing semi-quantitative results. These versatile arrays are ideal for dairy screening, providing you with the ability to accurately detect antibiotic residues, antiparasitic residues, unauthorised substances and pathogens in milk and dairy products using a single platform. This technology ultimately provides a more informed decision on confirmatory analysis required.

Benefits



Simultaneous Detection

Multiplex testing facilitates simultaneous screening of contaminants in milk from a single undivided sample.



Excellent Sensitivity

Unrivalled multi-analyte detection of contaminants to fulfil global regulatory requirements with qualitative and semi-quantitative formats available.



Higher Throughput

The Biochip can assess one sample in under 30 minutes using the fully automated Evidence MultiSTAT, up to 48 samples in under two hours using the semi-automated Evidence Investigator.

Multiplex Explained

Randox's patented Biochip Array Technology (BAT) is based upon a competitive immunoassay format but provides multiple results from a single sample. BAT utilises a nano-spotting technique to create a versatile array which can accommodate 44 discrete test regions (DTRs).

Each DTR is coated with a single high quality, engineered antibody which is used to detect the presence of multiple compounds. For example, the InfiniPlex array for milk can screen for up to 130 contaminants, providing the most comprehensive level of testing currently available to the dairy industry. Multiplex screening increases the throughput of testing, greatly reduces labour requirements, and provides unrivalled test consolidation.

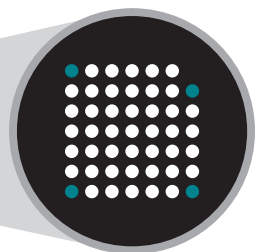
Key

○ Discrete test region

● Quality control spot



7x7 Biochip surface



44 discrete test regions on each biochip for individual analytes

The Evidence Series

The Evidence Series of immunoassay analysers are powered by Biochip Array Technology and combine the latest technological advances for contaminants detection using immunoassay principles. This has resulted in the creation of two systems that allow for simultaneous semi-quantitative or qualitative analysis.





Evidence Investigator

- Semi-automated system
- Consolidation of testing delivers multiple test results from a single sample
- Fast analysis of up to 48 samples in under 2 hours (96 samples in 2 hours 30 minutes)
- Ideal for centralised laboratories
- Provides qualitative or semi-quantitative results (array dependent)



Evidence MultiSTAT

- Fully automated system including touch screen interface
- Extremely easy to use with 3 simple steps to results
- Highly accurate results in under 30 minutes
- Ideal for processing plants, low throughput laboratories or at farm level
- Provides qualitative results

Evidence Investigator

The Evidence Investigator is a compact, semi-automated benchtop analyser. Utilising the revolutionary Biochip Array Technology (BAT), the Evidence Investigator is a multi-analyte, semi-quantitative analyser. Using BAT, the Evidence Investigator ensures screening dairy for drug residues is accurate and efficient, offering laboratories comparable results to that of LC-MS/MS and other confirmatory methods.



Analyser Process

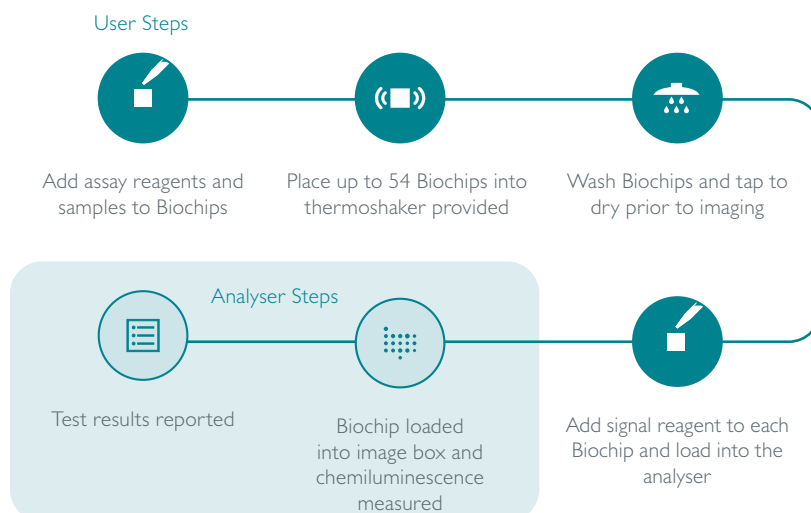




Image Processing

The analyser uses unique image processing software to translate the Relative Light Units (RLU) generated from the chemiluminescent reactions into a qualitative or semi-quantitative result.



On Board Data Analysis

No manipulation of results is required, reducing scope for operator error. The Evidence Investigator provides excellent sensitivity with either a semi-quantitative or qualitative result for each analyte.



Multiplex Technology

Using multiplex technology, the Evidence Investigator can provide simultaneous detection for a wide range of analytes from a single sample.



True Cost Reduction

Multiplex testing reduces the amount of time and labour spent on individual tests as well as associated laboratory costs.

Technical Snapshot

Analyser Description	Semi-automated Biochip Array analyser
Dimensions	750 (h) x 480 (d) x 420 (w) mm
Weight	24kg / 52.9lbs
Biochip Format	1 x Biochip carrier (Holds 9 individual Biochips)
Maximum Throughput	48 samples in under 2 hours*
Accreditation	Internally accredited to full CE & UL certification
Measurement Principal	Competitive techniques with chemiluminescent reaction

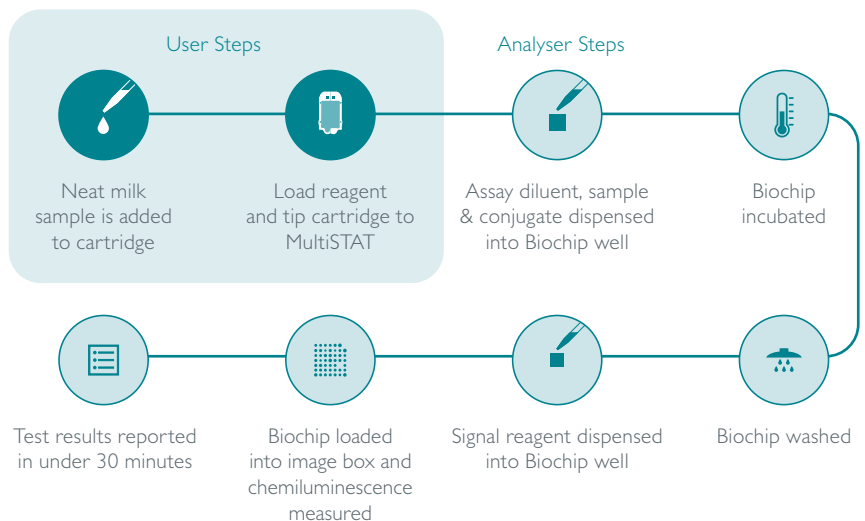
*can be increased with multiple thermoshakers (Cat No. EV700-997)

Evidence MultiSTAT

Using our revolutionary Biochip Array Technology (BAT), the Evidence MultiSTAT is an automated analyser that enables the onsite screening for up to 130 contaminants in under 30 minutes from a single sample of milk. Designed to meet the needs of the global dairy industry, our patented multi-analyte testing platform can be utilised in any setting including dairy processors, surveillance programmes, low throughput laboratories and farm level testing.



Analyser Process





Revolutionising Testing

MultiSTAT offers a complete profile over 4 residue groups (antibiotics, mycotoxins, anti-inflammatories and anti-parasitic drugs).



Quick, Accurate Results

From sample entry to results in 3 steps and analysis completed in under 30 minutes the MultiSTAT is a quick reliable option for accurate sample profiling.



Fully Automated

MultiSTAT offers rapid, fully automated and highly accurate results from a single sample for a complete profile, with results generated with less than 60 seconds of operator involvement.



Easy to Use Software

The easy to use, step by step software means no laboratory experience is necessary when using the machine.

Technical Snapshot

Analyser Description	Fully automated Biochip Array Analyser
Dimensions	585 (H) x 535 (D) x 570 (W) mm
Weight	48kg / 106lbs
Biochip Format	Cartridge based system – assay reagents sealed in a pre-filled cartridge
Data Backup Methods	Data export functionality
Sample Loading	Single cartridge loading bay
Measurement Principal	Competitive techniques with chemiluminescent reaction
Accreditations	Internally accredited to full CE and UL certification

InfiniPlex for Milk

InfiniPlex for Milk brings the world's first screening technology that ensures dairy processors are compliant with regulations. The advanced screening array is designed to simultaneously detect up to 130 contaminants including: antibiotics, anti-inflammatories, corticosteroids, growth promoters, antiparasitic, mycotoxins, novobiocin, melamine and cyromazine. InfiniPlex provides insight into the specific veterinary drugs administered at animal level from as little as 25µl sample of raw commingled cow milk.

InfiniPlex is changing the face of the global dairy industry, providing the most comprehensive screening test available from a single sample and meeting the complex market needs that other test providers cannot.

Why Choose InfiniPlex?



Comprehensive and Easy to Use

43 reported DTRs covering up to 130 contaminants per Biochip providing results with minimal technical expertise required.



No Sample Preparation

25µl of raw commingled cow milk sample is directly added to the Biochip, supplying a qualitative result for up to 130 contaminants.



Drug Discrimination

Detects compounds to identify combinations of veterinary drugs used, as residues are often specific pharmaceutical product combinations.

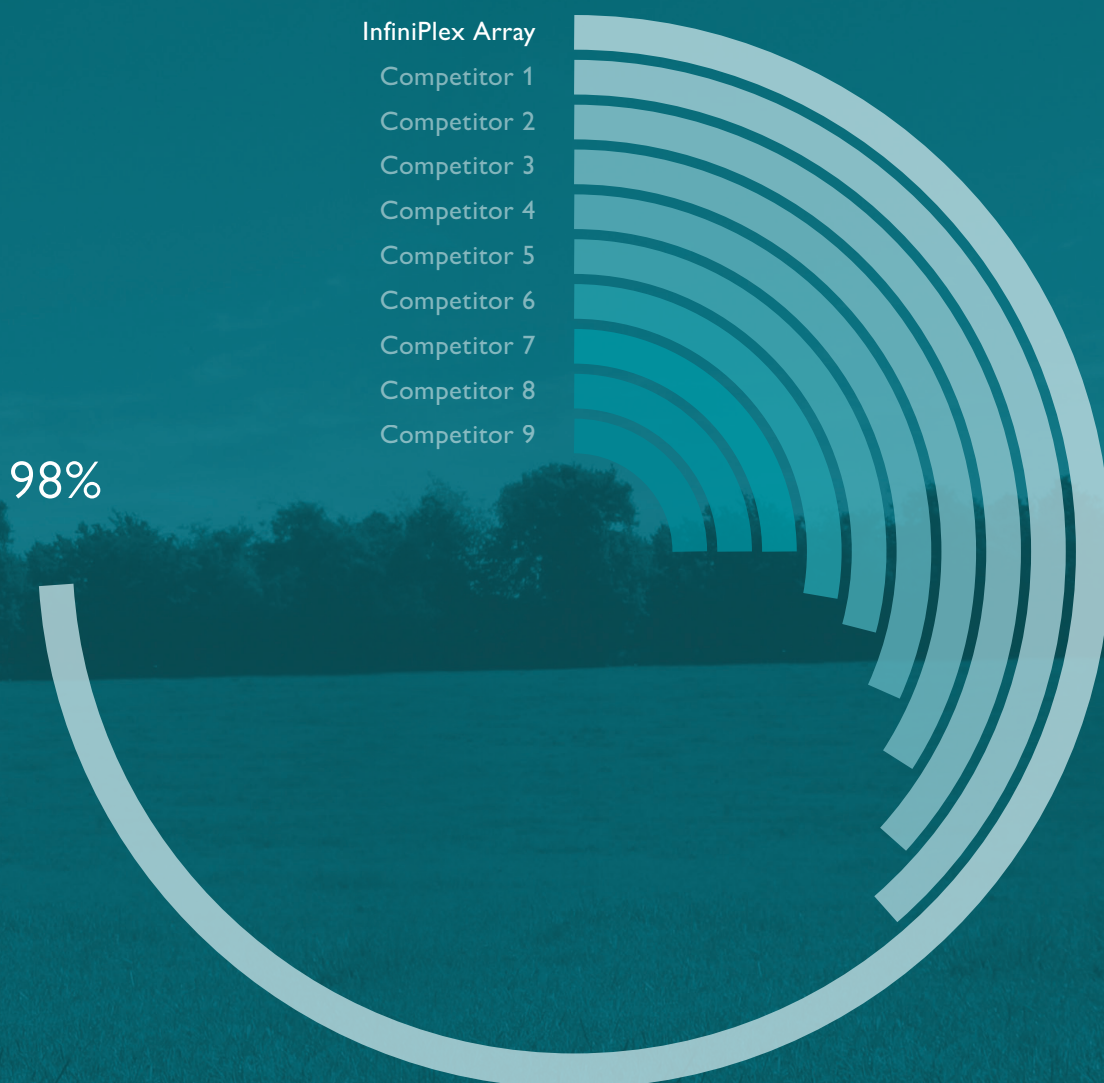


Detection of Unauthorised Substances

Including: Chloramphenicol, Cyromazine, Dapsone, Doxycycline, Florfenicol, Gamithromycin, Paromomycin, Tulathromycin, Phenylbutazone, Ractopamine.

Compliance with EU Annex 37/2010

The InfiniPlex array offers a 98% compliance rate with all currently regulated antibiotics within the EU from a single test. The residue profile of the InfiniPlex array makes it the most comprehensive array available on the market. To compete with the power of InfiniPlex you would need to purchase and interpret 37 of our top 9 competitor's kits, still only achieving a 77% compliance within the EU.



InfiniPlex Decision Levels

Available on Evidence Investigator | Cat No:EV4076 | Assay Time: Under 2 hours

Available on Evidence MultiSTAT | Cat No:EV4278 | Assay Time: Under 30 mins

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Penicillin G (Benzylpenicillin)	Beta-Lactams	0.88	0.75
Ampicillin		2.00	3.00
Dicloxacillin		2.00	1.35
Amoxicillin		2.40	1.90
Cloxacillin		1.30	3.00
Oxacillin		1.40	3.75
Nafcillin		3.00	6.75
Cefalonium		0.35	1.25
Cefoperazone		3.80	1.75
Cefapirin		5.00	15.00
Cefquinome		6.30	5.50
Ceftiofur		25.00	89.00
Desfuroylceftiofur		25.00	<100
Cefacetril		10.00	32.00
Cefazolin		18.00	>50.00
Penicillin V (Phenoxymethylpenicillin)		0.15	1.50
Penicillin G Procaine		x	1.90
Procaine Benzylpenicillin		0.50	x
Penethamate		2.00	6.50
Benzathine Benzylpenicillin		1.25	2.00
Cephalothin		3.10	14.00
Desacetylcefapirin		3.75	25.00
Cefalexin	Cefalexin	23.00	7.00
Erythromycin	Erythromycin	10.00	4.00
Gamithromycin		64.00	600.00
Tulathromycin		200.00	>1100
Roxithromycin		2.50	x
Oleandomycin		240.00	>1500

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Enrofloxacin	Quinolones	12.50	1.50
Ciprofloxacin		13.80	2.00
Danofloxacin		11.30	3.00
Difloxacin		20.00	5.00
Marbofloxacin		22.50	5.75
Oxolinic Acid		15.00	5.00
Flumequine		22.50	7.00
Pefloxin (Perfloxin)		6.25	1.00
Norfloxacin		20.00	1.00
Ofloxacin		12.50	3.25
Spiramycin	Spiramycin	52.00	30.00
Josamycin		1.60	x
Neospiramycin		56.00	125.00
Tildipirosin	Tildipirosin	x	1.30
Tilmicosin		x	5.00
Lincomycin	Lincosamides	6.50	10.00
Clindamycin		9.00	9.00
Pirlimycin		>150.00	x
Pirlimycin	Pirlimycin	11.00	25.00
Streptomycin	Streptomycin	32.00	45.00
Dihydrostreptomycin		20.00	35.00
Gentamycin	Gentamicin	3.00	7.00
Neomycin	Neomycin	9.00	35.00
Framycetin		7.50	45.00
Paromomycin		3.00	30.00
Tilmicosin	Tylosin	12.50	8.00
Tylosin A		7.50	6.00
Tobramycin	Tobramycin	7.00	x
Kanamycin		100.00	x

Key:

DLs IPM EI - Decision Levels Infiniplex for Evidence Investigator

DLs IPM MS - Decision Levels Infiniplex for Evidence MultiSTAT

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Chloramphenicol	Amphenicols	0.22	0.15
Thiamphenicol		1.60	1.75
Florfenicol		0.40	0.20
Colistin	Polymixins	1.30	2.00
Polymixin B		0.50	1.50
Bacitracin	Bacitracin	2.00	1.75
Meloxicam	Meloxicam	6.00	4.50
4-Methylaminoantipyrin	Metamizole	42.00	20.00
Metamizole (Dipyrone)		24.00	17.00
Tolfenamic Acid	Tolfenamic Acid	1.60	2.50
Flunixin		1.08	1.90
5-hydroxy Flunixin		100.00	>55.00
Trimethoprim	Trimethoprim	9.00	2.00
Baquiloprim	Baquiloprim	3.00	6.00
Chlortetracycline	Tetracyclines	2.50	4.75
4-epichlortetracycline		5.00	9.50
Tetracycline		1.25	3.75
4-epitetracycline		2.50	6.75
Oxytetracycline		1.25	3.75
4-epioxytetracycline		2.50	7.50
Doxycycline		1.25	5.50
5-OH Flunixin	5-hydroxy Flunixin	0.25	0.50
Flunixin		0.36	0.80
Phenylbutazone	Phenylbutazone	1.25	1.10
Oxyphenbutazone		1.50	0.75
Rifaximin	Rifaximin	1.00	3.00
Sulphaguanidine	Sulphaguanidine	50.00	22.00
Hygromycin B	Hygromycin B	7.50	x
Cefazolin	Cefazolin	x	1.50

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Virginiamycin MI	Virginiamycin	0.75	1.00
Cefuroxime	Cefuroxime	8.50	7.00
Ceftiofur		x	>100
Desfuoyl Ceftiofur		x	>100
Chlormadinone	Chlormadinone	1.20	8.00
Methylprednisolone	Methylprednisolone	0.40	0.60
Prednisolone		1.40	2.50
Sulphamethazine (Sulphadimidine)	Sulphamethazine	1.20	2.00
Sulphamerazine		25.00	37.50
Sulphamoxol		174.00	450.00
Sulphapyridine	Sulphapyridine	0.90	5.00
Sulphaethoxypyridazine		30.00	47.00
Sulphamethoxypyridazine		30.00	43.00
Sulphamoxol		28.50	65.00
Sulphasalazine		1.20	4.70
Sulphanitran		60.00	150.00
Sulphathiazole		50.00	150.00
Sulphamonomethoxine		80.00	>400
Sulphachlorpyridazine		>100	x
Melamine	Melamine	200.00	150.00
Cyromazine		27.00	12.50
Nitroxynil	Nitroxynil	1.50	2.00
Aflatoxin MI	Aflatoxin MI	0.038	0.045
Novobiocin	Novobiocin	12.50	3.00
Dexamethasone	Dexamethasone	0.20	0.25
Betamethasone		2.50	1.00
Ractopamine	Ractopamine	0.32	0.50
Tripelennamine	Tripelennamine	x	5.00

InfiniPlex Decision Levels

Available on Evidence Investigator | Cat No:EV4076 | Assay Time: Under 2 hours
Available on Evidence MultiSTAT | Cat No:EV4278 | Assay Time: Under 30 mins

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Sulphathiazole	Sulphonamides	24.00	16.00
Sulphaquinoxaline		4.50	2.30
Sulphadimethoxine		1.60	1.80
Sulphacetamide		2.40	1.00
Sulphadoxine		2.50	1.50
Sulphabenzamide		0.56	0.75
Sulphamethoxazole		1.60	2.50
Sulphamonomethoxine		0.76	1.00
Sulphachlorpyridazine		1.80	2.25
Sulphadiazine		9.50	7.50
Sulphamethoxypyridazine		40.00	43.00
Sulfisoxazole		0.75	0.70
Sulphamerazine		22.00	70.00
Sulphamethizole		6.00	7.50
Sulphameter		6.00	4.50
Sulphamoxol		88.00	60.00
Sulphanitran		46.00	28.00
Sulphaphenazole		4.60	2.50
Sulphatroxazole		0.75	0.75
Sulfisomidine		13.00	15.00
Sulphaethoxypyridazine		30.00	25.00
Sulphapyridine		110.00	60.00
Sulfaclozine		4.00	x

Drug Residue	Channel ID IPM	DLs IPM EI (ppb)	DLs IPM MS (ppb)
Dapsone	Dapsone	0.90	0.90
Sulphathiazole		35.00	17.00
Sulphadoxine		25.00	25.00
Sulphadimethoxine		7.00	6.00
Sulphanitran		70.00	70.00
Sulphapyridine		50.00	50.00
Sulphaquinoxaline		5.00	5.00
Sulphamerazine		12.50	15.00
Sulphamonomethoxine		12.00	57.00
Sulphadiazine		30.00	25.00
Sulphamethoxypyridazine		85.00	43.00
Sulphamethizole		25.00	27.50
Sulphameter		10.00	7.50
Sulfisomidine		16.00	15.00
Sulphamethazine		15.00	20.00
Sulphaethoxypyridazine		30.00	25.00
Sulphamethoxazole		50.00	95.00
Sulphamoxol		> 100	x
Spectinomycin	Spectinomycin	48.00	4.00
Kanamycin A	Kanamycin	4.00	30.00

InfiniPlex II Decision Levels

Available on Evidence Investigator | Cat No:EV4301 | Sample Prep: 1 hour | Assay Time: Under 2 hours

Drug Residue	Assay Name (Abbreviation)	Decision Level (ppb)
Albendazole	Benzimidazoles (BNZ)	0.25
Albendazole sulphoxide		0.10
Albendazole sulphone		0.10
Fenbendazole		3.00
Oxfendazole (Fenbendazole sulphoxide)		0.70
Oxibendazole		1.00
Mebendazole		0.70
Oxfendazole sulphone (Fenbendazole sulphone)		0.50
Hydroxy Mebendazole		4.00
Flubendazole		0.28
Hydroxy Flubendazole		1.00
Parbendazole		1.80
Carbendazim		15.00
Albendazole 2-amino sulphone		4.00
Albendazole 2-amino sulphone	2-Amino Benzimidazole (AMINO)	0.20
Amino-flubendazole		0.50
Amino-mebendazole		0.40
Oxfendazole sulphone (Fenbendazole sulphone)		>600
Thiabendazole	Thiabendazole/ Niclosamide (THIA)	0.60
Niclosamide		>150
5-hydroxythiabendazole		0.50
Cambendazole		0.06
Triclabendazole (TCBZ)	Triclabendazole (TRI)	4.50
Triclabendazole Sulphoxide		0.70
Triclabendazole Sulphone		2.00
Keto-triclabendazole		0.80

Drug Residue	Assay Name (Abbreviation)	Decision Level (ppb)
Levamisole	Levamisole (LEVA)	30.00
Ivermectin	Avermectins (AVER)	3.00
Abamectin		1.00
Doramectin		4.00
Emamectin Benzoate		0.15
Eprinomectin		0.70
Moxidectin	Moxidectin (MOXI)	38.00
Nitroxynil	Nitroxynil (NTX)	1.20
Closantel	Closantel (CLOS)	43.00
Rafoxanide		>150
Niclosamide		>150
Oxyclozanide		>300
Oxyclozanide	Oxyclozanide (OXY)	5.00
Clorsulon	Clorsulon (CLOR)	5.00
Morantel	Morantel (MRT)	1.00
Pyrantel		0.25
Oxantel		2.50
Derquantel	Derquantel (DRQ)	0.45
Monepantel	Monepantel (MON)	4.00
Monepantel Sulfone		1.50
Halofuginone	Halofuginone (HALO)	0.50
Imidocarb	Imidocarb (IMIDO)	11.00
Toltrazuril Sulfone	Toltrazuril (TOLT)	1.15
Toltrazuril		1.00
Toltrazuril Sulfoxide		1.50
Monensin	Monensin (MOE)	1.80
Lasalocid	Lasalocid (LAS)	4.00

Anthelmintics

Available on Evidence Investigator

Catalogue No: EV3770

Sample Prep - 1hr

Assay Time - Under 2 hours

Results Type: Semi-Quantitative

Requires Milk Prep Kit (EV3776)



GOST No: 34275-2017

Assay (DTR)	LOD (ppb)	Drug Residue	%CR
Benzimidazoles	1.00	Albendazole*	100
		Albendazole Sulphoxide	99
		Albendazole Sulphone	178
		Fenbendazole	10
		Oxfendazole (Fenbendazole Sulphoxide)	40
		Oxibendazole	48
		Mebendazole	18
		Oxfendazole sulphone (Fenbendazole Sulphone)	14
		Hydroxy Mebendazole	1
		Flubendazole	29
		Hydroxy Flubendazole	2
		Parbendazole	30
		Carbendazim	10
Amino Benzimidazoles	0.30	Albendazole 2-amino sulphone*	100
		Amino-flubendazole	99
		Amino-mebendazole	141
Thiabendazole	0.50	Thiabendazole*	100
		5-hydroxythiabendazole	91
		Cambendazole	800
Triclabendazole	0.60	Triclabendazole*	100
		Triclabendazole Sulphoxide	40
		Triclabendazole Sulphone	1
		Keto-triclabendazole	150
Levamisole	2.00	Levamisole*	100
Moxidectin	1.60	Moxidectin*	100
Avermectins	0.75	Ivermectin*	100
		Abamectin	178
		Doramectin	75
		Emamectin Benzoate	254
		Eprinomectin	191

*Each LOD standardised to this compound

Antimicrobial Array I ULTRA

Available on Evidence Investigator

Catalogue No: EV3843

Sample Prep - 10 mins

Assay Time - Under 2 hours

Results Type: Semi-Quantitative

Requires Milk Prep Kit (EV3776)



GOST No: 34275-2017

Assay (DTR)	LOD (ppb)	Drug Residue	%CR
Sulphadimethoxine	0.60	Sulphadimethoxine* Sulphamonomethoxine	100 1.7
Sulphadiazine	0.50	Sulphadiazine*	100
Sulphadoxine	0.50	Sulphadoxine*	100
Sulphamethoxazole	0.50	Sulphamethoxazole* Sulphamethizole Sulphachlorpyridazine	100 92 12.1
Sulphachlorpyridazine	0.50	Sulphachlorpyridazine* Sulphamethizole	100 1.2
Sulphamethoxypyridazine	0.50	Sulphamethoxypyridazine* Sulphaethoxypyridazine Sulphachlorpyridazine	100 56 2.1
Sulphamerazine	0.50	Sulphamerazine* Sulphadiazine	100 4.8
Sulphisoxazole	0.50	Sulphisoxazole* Sulphachlorpyridazine Sulphamethizole	100 2.9 2.2
Sulphathiazole	0.50	Sulphathiazole* Sulphadiazine Sulphapyridine	100 6.2 1.5
Sulphamethazine	2.50	Sulphamethazine* Sulphamerazine	100 1.9
Sulphaquinoxaline	0.50	Sulphaquinoxaline*	100
Sulphapyridine	0.50	Sulphapyridine * Sulphasalazine Sulphamethoxypyridazine Sulphathiazole	100 12.9 3.4 1.6
Trimethoprim	0.5	Trimethoprim*	100
Dapsone	0.5	Dapsone*	100
Sulphamonomethoxine	2.00	Sulphamonomethoxine*	100

*Each LOD standardised to this compound

Antimicrobial Array II Plus

Available on Evidence Investigator

Catalogue No: EV4169 A/B

Sample Prep - 10 mins

Assay Time - Under 2 hours

Results Type: Semi-Quantitative

Requires Milk Prep Kit (EV3776)



GOST No: 34275-2017

Assay (DTR)	LOD (ppb)	Drug Residue	%CR
Quinolones	1.00	Norfloxacin*	100
		Pefloxacin	84
		Enrofloxacin	76
		Ciprofloxacin	59
		Ofloxacin	57
		Enoxacin	54
		Pipemidic Acid	36
		Fleroxacin	32
		Levofloxacin	32
		Nadifloxacin	27
		Orbifloxacin	23
		Danofloxacin	20
		Marbofloxacin	16
		Oxolinic Acid	12
		Difloxacin	8
		Pazufloxacin	7
		Sarafloxacin	6
Ceftiofur	1.50	Ceftiofur*	100
		Desfuroylceftiofur	92
Thiamphenicol	0.50	Florfenicol*	100
		Thiamphenicol	53
Streptomycin	2.00	Streptomycin*	100
		Dihydrostreptomycin	99
Tylosin	2.50	Tylosin*	100
		Tilmicosin	37
Tetracyclines	1.00	Tetracycline*	100
		4-epitetracycline	87
		Rolitetracycline	67
		4-epioxytetracycline	52
		Oxytetracycline	52
		Chlortetracycline	51
		Demeclocycline	41
		Doxycycline	23
		4-epichlortetracycline	20
		Methacycline	11

*Each LOD standardised to this compound

Antimicrobial Array III CAP only

Available on Evidence Investigator

Catalogue No: EV3738

Sample Prep - 10 mins

Assay Time - Under 2 hours

Results Type: Semi-Quantitative

Requires Milk Prep Kit (EV3776)

Assay (DTR)	LOD (ppb)	Drug Residue	%CR
Chloramphenicol	0.04	Chloramphenicol*	100
		Chloramphenicol Glucuronide	75.1

*Each LOD standardised to this compound

Beta Lactams Plus

Available on Evidence Investigator

Catalogue No: EV3957 A/B

Sample Prep - 10 mins

Assay Time - Under 2 hours

Results Type: Semi-Quantitative

Requires Milk Prep Kit (EV3776)



GOST No: 34275-2017

Assay (DTR)	LOD (ppb)	Drug Residue	%CR
Beta Lactams	0.75	Ampicillin*	100
		Amoxicillin	59
		Cloxacillin	52
		Dicloxacillin	70
		Nafcillin	6
		Oxacillin	47
		Penicillin G	388
		Penicillin V	246
		Cefacetril	7
		Cefazolin	6
		Cefoperazone	105
		Cefquinome	12
		Ceftiofur	11
		Cephalonium	237
		Cefapirin	81
		Cephalexin	1
Cephalexin	0.30	Cephalexin*	100
		Cefadroxil	39.40
Cefuroxime	1.25	Cefuroxime*	100

*Each LOD standardised to this compound

Protecting Animal Health

Infectious disease represents a major threat to the productivity and welfare of cattle worldwide. The scale of infection and costs associated with disease outbreaks represent one of the biggest challenges facing farmers today. The introduction and spread of disease within a herd can result in loss of milk, meat and money.

Bovine Pathogen Array

Catalogue No - EV4355

Randox's Bovine Pathogen Array is the latest advancement in bovine disease screening, providing simultaneous antibody detection against six of the world's most economically important infectious agents.

Our exciting new panel utilises Randox Food's innovative Biochip Array Technology for the multiplex screening of a milk sample for nine biomarkers related to six prevalent bovine diseases.

Disease	
Bovine Viral Diarrhoea	Leptospirosis
Infectious Bovine Rhinotracheitis	Neosporosis
Paratuberculosis	Fascioliasis

Benefits



Test Consolidation

Streamlined laboratory organisation with reduced labour, turnaround time and assay costs as all tests are performed simultaneously.



Enhanced Surveillance

Increased efficiency at producer level with the ability to simultaneously detect antibodies against 6 economically important bovine pathogens.



Higher Throughput

Capacity to test 47 samples for 6 pathogens in 2 hours 30 minutes using a single test kit.



Superior Diagnostic Capacity

Detection of subclinically and co-infected animals and the differentiation between vaccination and natural infection (DIVA* Capacity) for Infectious Bovine Rhinotracheitis using a single milk sample.

*where feasible



No Sample Preparation

Unlike any other test for bovine pathogens, no sample preparation is needed for Paratuberculosis.

Local Engineers. Global Coverage.

Randox Food Diagnostics provide customers with an unrivalled support service. A team of highly trained specialists are on-hand to deal with any technical and service issues you may have.



>100

> 100 Specialists

We have >100 engineers and technical support specialists placed around the world to ensure an efficient response to customer requests



Global Offices

We have 25 international offices acting as direct points of contact for customers



Aftercare

We offer the ultimate after-care support with tailored service packages to suit your available budget



Technical Distributors

We have official Randox Food Diagnostics technical distributors in over 100 countries

700+

700+ Scientists

We have more than 700 scientists placed around the world, dedicated to providing a quality product offering



1,000+

laboratories using Randox
Food Diagnostics technology

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