

Meizheng **Dairy Test**



Meizheng is focused on food safety testing solutions and has developed multiple product lines, including rapid testing, microbiological testing, and lab testing solutions. Our solutions are targeted at food value chain stakeholders in various industries like grain, feed, dairy, honey, meat processing, distribution, etc. Our testing items cover biotoxin, heavy metal, vet drug residue, pesticide residue, nutrition, pathogen, etc.

Through yaers of development, Meizheng has set up 5 entities and 4 manufacturing sites in China, and has developed technological platforms including immunoassay, ELISA, sample preparation, microbiology, standard materials, automated instrument, etc. The company has passed ISO9001 quality management system and has also set up a certified third party testing lab.

Meizheng is committed to provide fit-for-purpose food safety testing solutions. Various series products such as ToxinFast®, HMFAST®, AnticFast® and MicroFast® have been recognized by customers. Besides China, Meizheng products have been sold in over 20 countries like Russia, Belarus, France, United States, India, Vietnam, etc.

In 2009, Meizheng was incorporated into PerkinElmer, and has futher expanded overseas network since then. Also, Meizheng has accelerated various products' certification process in AOAC and ILVO. In 2021, MicroFast® Aerobic Count Plate (AC) has obtained AOAC certificate.

For dairy segment, our products cover rapid testing kits and instruments, enabling rapid detection of antibiotic residues, pesticide residues, mycotoxins, illegal additives, asulteration, hormones, and nutrients.

- Summary of Rapid Test
- Lateral Flow Rapid Test Kits
- **ELISA Test Kits**

Contents

- 12 DASH Test Kit
- 13 Immunoaffinity Columns
- Microbial Count Plates
- Instruments

Summary of Rapid Test



Beta-lactams

For rapid screening 15 betalactams in cow and goat milk, including penicillins and cefalosporins.



Tetracyclines

For rapid screening 4 tetracyclines in cow and goat milk, including tetracycline, chlortetracycline, doxycycline and oxytetracycline.



Chloramphenicols

For rapid screening 3 chloramphenicols in cow and goat milk, including chloramphenicol, thiamphenicol and florfenicol.



Sulfonamides

For rapid screening 13 sulfonamides in cow and goat milk, eg. sulfamethazine.



Fluoroquinolones

For rapid screening 14 fluoroquinolones in cow and goat milk, eg. enrofloxacin.



Macrolides

For rapid screening 6 macrolides in cow and goat milk, eg. tylosin, abamectin and erythromycin.



Aminoglycosides

For rapid screening 5 aminoglycosides in cow and goat milk, including neomycin, kanamycin, gentamicin, spectinomycin and streptomycin.



Lincosamides

For rapid screening lincomycin in cow and goat milk.

Combo Test



2 in 1, BT, Beta-lactams & Tetracyclines

Test beta-lactams and tetracyclines residues in one single strip. Meet EU, CODEX and Russian Federation maximum residue limits.

2 in 1, BC, Beta-lactams & Cephalexin

Test beta-lactams and cephalexin residues in one single strip. Meet EU, CODEX and Russian Federation maximum residue limits.

3 in 1, BTS, Beta-lactams & Tetracyclines & Sulfonamides

Test beta-lactams, tetracyclines and sulfonamides residues in one single strip. Meet EU, CODEX and Russian Federation maximum residue limits.

4 in 1, BTSC, Beta-lactams & Tetracyclines & Streptomycin & Chloramphenicol Test beta-lactams, tetracyclines, streptomycin and chloramphenicol residues in one single strip. Customized for CIS region.

4 in 1, BTSQ, Beta-lactams & Tetracyclines & Sulfonamides & Quinolones

Test beta-lactams, tetracyclines, sulfonamides and guinolones residues in one single strip. Meet EU and CODEX maximum residue limits.

OTHERS



Pesticide Residues: Carbendazim, Fipronil, Carbaryl, Imidacloprid rapid screening

Mycotoxin: Aflatoxin M₁ rapid screening Illegal Additives: Melamine rapid screening

Adulteration: Cow Milk in Goat Milk rapid screening

Nutrients: Vitamin B₁₂, Folic acid, Biotin, Lactoferrin rapid screening

Hormones: Zeranol, Estradiol, Ractopamine, Dexamethasone rapid screening

AnticFast® Lateral Flow Rapid Test Kits



Cost-effective



High sensitivity



「 🕻) Fast and efficient (





Easy to operate





Reaction Principle

Lateral Flow Tests (LFTs), also known as lateral flow immunochromatographic assays or rapid tests, is an experimental technique based on the combination of Immune Colloidal Gold Technology and Antigen-Antibody reaction. LFTs are simple devices intended to detect the presence of a target substance in a liquid sample without the need for specialized and costly equipment.

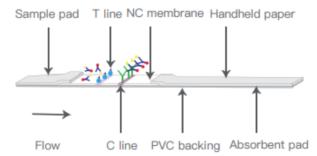
The sample solution absorbed on the sample pad is wicked onto the NC membrane (nitrocellulose filter membrane). The target substance in the sample solution competes with the test line (T line) on the NC membrane for binding the gold conjugated antibodies. The presence of a target substance in the sample is qualitatively determined through the color contrast of C line and T line.

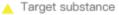


















Y Secondary antibody

Test Procedure



Add 200µL milk sample and mix



Incubate for 2 min at 20-25°C

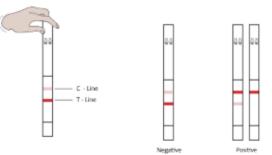


Develop color for 5 min at 20-25°C



Interpretation

Visual Interpretation





Product Information

Detection Sample: Raw milk

Storage: 2-8°C, keep away from sunlight and moisture.

Shelf life: 12 months.

Have positive / negative control in the kit.

Antio	cFast® Veterinary Drugs		
Catalog No.	Product Name	LOD (μg/kg)	Specification (test/kit)
JC0792	Chloramphenicol Rapid Test Kit	0.1	96
JC0279	Lincomycin Rapid Test Kit	105	96
JC0210	Lincomycin Rapid Test Kit	1–2	96
JC0055	Tetracyclines Rapid Test Kit	6–9	96
JC0213	Sulfonamides Rapid Test Kit	10	96
JC0286	Streptomycin Rapid Test Kit	50	96
JC0211	Quinolones Rapid Test Kit	2-3	96
JC0278	Gentamicin Rapid Test Kit	50	96
JC0072	Tilmicosin Rapid Test Kit	25	96
JC0121	Kanamycin Rapid Test Kit	40	96
JC0283	Neomycin Rapid Test Kit	200	96
JC0299	Erythromycin Rapid Test Kit	2-4	96
JC0272	Spectinomycin Rapid Test Kit	50	96
JC0160	Florfenicol Rapid Test Kit	0.1	96
JC0162	Thiamphenicol Rapid Test Kit	10	96
JC0284	Tylosin Rapid Test Kit	20	96
JC0331	Trimethoprim Rapid Test Kit	5	96
JC0618	Metronidazole Rapid Test Kit	2–3	96
JC0369	Albendazole Metabolites Rapid Test Kit	2–4	96
JC0147	Flunixin Meglumin Rapid Test Kit	20	96
JC0422	Clindamycin Rapid Test Kit	1–2	96
JC0501	Colistin Rapid Test Kit	5	96
JC0571	Natamycin Rapid Test Kit	Raw milk: 2	96
JC0584	Ansamycins Rapid Test Kit	2–4	96

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0206	Tylosin/Tilmicosin Rapid Test Kit	Tylosin: 2-4 Tilmicosin: 1-2	96
JC0056	Beta-lactams Rapid Test Kit	Penicillin G: 2-3	96
JC0620	Beta-lactams & Cefalexin Rapid Test Kit	Penicillin G: 1-2 Cefalexin: 10-15	96
JC0084	Beta-lactams & Tetracyclines Rapid Test Kit	Penicillin G: 2-3 Tetracycline: 15-25	96
JC0608	Beta-lactams & Tetracyclines Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 15-25	96
JC0209	Beta-lactams & Tetracyclines Rapid Test Kit	Penicillin G: 1–2 Tetracycline: 7–10	96
JC0196	Sulfonamides & Trimethoprim Rapid Test Kit	Sulfamethazine: 6–10 Trimethoprim: 6–8	96
JC0585	Beta-lactams & Tetracyclines & Cefalexin Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 7-10 Cefalexin: 10-15	96
JC0641	Beta-lactams & Tetracyclines & Cefalexin Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 15-25 Cefalexin: 10-15	96
JC0607	Beta-lactams & Tetracyclines & Ceftiofur Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 15-25 Ceftiofur: 10-15	96
JC0458	Beta-lactams & Tetracyclines & Sulfonamides Rapid Test Kit	Penicillin G: 2-3 Tetracycline: 15-25 Sulfamethazine: 18-25	96
JC0269	Fluoroquinolones & Lincomycin & Tylosin/Tilmicosin Rapid Test Kit	Tylosin: 4-8 Tilmicosin: 3-6 Lincomycin: 1-2 Enrofloxacin: 2-3	96
JC0192	Kanamycin & Erythromycin & Lincomycin Rapid Test Kit	Erythromycin: 20 Lincomycin: 75 Kanamycin: 40	96
JC0207	Lincomycin & Erythromycin & Tylosin/Tilmicosin Rapid Test Kit	Tylosin: 7-10 Tilmicosin: 6-9 Erythromycin: 2-3 Lincomycin: 2-3	96
JC0117	Neomycin & Streptomycin & Gentamicin Rapid Test Kit	Streptomycin: 50 Dihydrostreptomycin: 50 Gentamicin: 50 Neomycin: 200	96
JC0417	Melamine & Tetracyclines & Beta-lactams & Cefalexin Rapid Test Kit	Melamine: 10-15 Penicillin G: 0.8-1.5 Tetracycline: 6-10 Cefalexin: 7-13	96
JC0208	Beta-lactams & Tetracyclines & Streptomycin & Chloramphenicol Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 7-10 Streptomycin: 50 Chloramphenicol: 0.3	96
JC0457	Beta-lactams & Tetracyclines & Sulfonamides & Quinolones Rapid Test Kit	Sulfamethazine: 18–25 Enrofloxacin: 15–20 Penicillin G: 2–3 Tetracycline: 15–25	96
JC0311	Lincomycin & Erythromycin & Tylosin/Tilmicosin & Fluoroquinolones Rapid Test Kit	Tylosin: 5-10 Tilmicosin: 3-6 Erythromycin: 2-4 Lincomycin: 1-2 Enrofloxacin: 2-3	96
JC0313	Neomycin & Kanamycin & Gentamicin & Spectinomycin Rapid Test Kit	Neomycin: 2–5 Kanamycin: 1–5 Spectinomycin: 1–6 Gentamicin: 3–6	96
JC0586	Beta-lactams & Tetracyclines & Streptomycin & Chloramphenicol & Cefalexin Rapid Test Kit	Penicillin G: 1-2 Tetracycline: 7-10 Streptomycin: 50 Chloramphenicol: 0.3 Cefalexin: 10-15	96

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0312	Thiamphenicol & Meloxicam & Colistin & Trimethoprim & Sulfonamides Rapid Test Kit	Thiamphenicol: 6 Meloxicam: 5 Colistin: 10 Trimethoprim: 8 Sulfamethazine: 10	96
JC0429	Sulfonamides & Lincomycin & Erythromycin & Tylosin/Tilmicosin & Fluoroquinolones Rapid Test Kit	Tylosin: 5–10 Tilmicosin: 3–6 Erythromycin: 2–4 Lincomycin: 1–2 Enrofloxacin: 2–3 Sulfamethazine: 10	96

Pesticides

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0398	Fipronil Rapid Test Kit	18	96
JC0399	Carbendazim Rapid Test Kit	25	96
JC0593	Carbaryl Rapid Test Kit	8–10	96
JC0599	Chlorothalonil Rapid Test Kit	15–20	96
JC0600	Paraquat Rapid Test Kit	0.8–1	96
JC0601	Imidacloprid Rapid Test Kit	0.3-0.5	96

Mycotoxins

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0030	Aflatoxin M ₁ Qualitative Rapid Test Kit	0.3	96
JC0032	Aflatoxin M ₁ Qualitative Rapid Test Kit	0.2	96
JC0416	Aflatoxin M ₁ Qualitative Rapid Test Kit	0.1	96
JC0666	Aflatoxin M ₁ Qualitative Rapid Test Kit	0.5	96
JC0793	Aflatoxin M ₁ Quantitative Rapid Test Kit	0.02	96

Illegal Additives

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0101	Melamine Rapid Test Kit (cassette)	50	50
JC0103	Melamine Rapid Test Kit	100	96
JC0260	Melamine Rapid Test Kit	30	96
JC0282	Melamine Rapid Test Kit	10	96
JC0427	Melamine Rapid Test Kit	50	96
JC0540	Beta-lactamase Rapid Test Kit	2-4U/mL	96

Adulteration

Catalog No.	Product Name	LOD	Specification (test/kit)
JC0187	Goat Milk Adulteration (Cow milk) Rapid Test Kit	0.1%-0.2%	96

Hormones

Catalog No.	Product Name	LOD (µg/kg)	Specification (test/kit)
JC0142	Dexamethasone Rapid Test Kit	0.2	96
JC0143	Zeranol Rapid Test Kit	1	96
JC0790	Prednisolone Rapid Test Kit	4–6	96

AnticFast® ELISA Test Kits



Simple pre-treatment



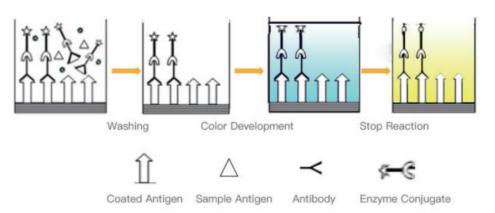
Reaction Principle



The Enzyme-linked Immunosorbent Assay (ELISA) is a common experimental technique based on immunological reaction with high sensitivity, which combines antigen-antibody (Ag-Ab) interactions and catalytic action on substance by enzyme.

Antigen-antibody interaction occurs in a polystyrene microtiter plate (a solid support). After incubating with the reagent, the unbound antibodies are removed by washing the plate to ensure the specificity and stability of the results. For

competitive ELISA, the more antigen in the sample solution, the more Ag-Ab complexes are formed and so there are less unbound antibodies available to bind to the antigen coated in the well.



Test Procedure



1. Sample preparation.



2. Add standard, samples, enzyme conjugate, antibody, then incubate.



3. Wash the plate.



4. Develop color: add substrate solutions and incubate.



5. Stop reaction.



6. Interpretation.

Product Information

Detection Sample: Raw milk and milk products

Storage: 2-8°C, keep away from sunlight and moisture.

Shelf life: 12 months.

For the specific detection samples, please refer to the user instructions or consult your sales representative.

AnticFast® Veterinary Drugs

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0166	Beta-lactams ELISA Test Kit	0.1	IFU	96
SC0111	Chloramphenicol ELISA Test kit	0.01	IFU	96
SC0113	Florfenicol ELISA Test Kit	0.05	0.1	96
SC0112	Thiamphenicol ELISA Test Kit	2	2	96
SC0039	Quinolones ELISA Test Kit	0.5	IFU	96
SC0041	Furacilin Metabolite ELISA Test Kit	0.05	0.1	96
SC0042	Furantoin Metabolite ELISA Test Kit	0.05	0.1	96
SC0043	Furazolidone Metabolite ELISA Test Kit	0.03	0.1	96
SC0044	Furaltadone Metabolite ELISA Test Kit	0.05	0.1	96
SC0045	Streptomycin ELISA Test Kit	0.2	4	96
SC0046	Gentamicin ELISA Test Kit	0.2	12	96
SC0047	Sulfonamides ELISA Test Kit	2	10	96
SC0048	Enrofloxacin ELISA Test Kit	0.5	1	96
SC0049	Tetracyclines ELISA Test Kit	0.2	2	96
SC0050	Chlortetracycline ELISA Test Kit	0.1	1	96
SC0051	Doxycycline ELISA Test Kit	0.1	1	96
SC0052	Oxytetracycline ELISA Test Kit	0.2	2	96
SC0053	Lincomycin ELISA Test Kit	0.5	10	96
SC0056	Abamectin ELISA Test Kit	0.1	0.8	96
SC0057	Ivermectin ELISA Test Kit	0.2	0.5	96
SC0058	Doramectin ELISA Test Kit	0.4	1	96
SC0102	Diazepam ELISA Test Kit	0.5	0.5	96

Illegal Additives

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0067	Melamine ELISA Test Kit	1.0	15	96

Pesticides

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0176	Fipronil ELISA Test Kit	1	5	96
SC0177	Carbendazim ELISA Test Kit	0.2	2	96

Biotoxins

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0033	Aflatoxin M ₁ ELISA Test Kit	0.015	0.015	96
LR50501	Staphylococcus aureus Enterotoxin ELISA Test Kit	0.25–2	0.25	96

Hormones

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0064	Dexamethasone ELISA Test Kit	0.05	0.1	96
SC0065	Zeranol ELISA Test Kit	0.1	0.2	96
SC0101	Estradiol ELISA Test Kit	0.03	0.3	96
SC0095	Estriol ELISA Test Kit	0.3	0.3	96

Nutrients

Catalog No.	Product Name	Sensitivity (µg/kg)	LOD (µg/kg)	Specification (test/kit)
SC0114	Folic Acid ELISA Test Kit	1	100	96
SC0071	VB ₁₂ ELISA Test Kit	0.25	3.75	96
SC0072	Bovin Lactoferrin ELISA Test Kit	20	40	96
SC0162	Alpha-lactalbumin ELISA Test Kit	100	200000	96

DASH Test Kit

Reaction Principle

DASH (Dairy Antibiotics Spore High-throughput) Test Kit uses the principle of microbial inhibition.

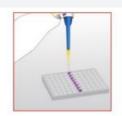
The microwell plate is filled with a culture medium containing Bacillus stearothermophilus spores and a pH indicador. When cultured at 65°C, the spores germinate, and the bacteria grow and metabolize to produce acid. The pH value decreases and the indicator changes from purple to yellow.

If target samples contain antibiotics, the antibiotics will inhibit bacterial growth, so that no acid is produced, the indicator does not change color with purple maintained; if target samples do not contain antibiotics or the content of antibiotics is below the detection limits, the spores germinate, metabolize acid production, and the culture medium turns vellow.

Test Procedure



1. Take required amount of microwells.



2. Pipette 50µL milk sample to each microwell.



3. Incubate for 135-165 minutes at 65°C.



4. Interpretate the results according to the colorimetric card.

Detection Limits

Antibiotic	LOD (ppb)	Antibiotic	LOD (ppb)	Antibiotic	LOD (ppb)	
Beta-lactams		Sulfonami	Sulfonamides		Macrolides	
Penicillin G	2	Sulfamethazine	20-50	Erythromycin	100-150	
Ampicillin	2-3	Sulfadimethoxine	25-50	Spiramycin	400-800	
Amoxicillin	2-3	Sulfamerazine	100	Tilmcosin	50	
Nafcillin	5	Sulfathiazole	40	Tylosin	20-40	
Cloxacillin	20	Sulfadiazine	50	Quinolo	nes	
Oxacillin	6–10	Sulfadoxine	50	Ciprofloxacin	1000-1500	
		Sulfamethoxazole	< 25	Danofloxacin	1000-2000	
Dicloxacillin	10–15	Sulfamethoxypyridazine	60-80	Marbofloxacin	> 1000	
Cefacetrile	20	Sulfisoxazole	50	Aminoglyo	Aminoglycosides	
Cefalexin	60-80	Sulfachlorpyridazine	25-50	Gentamicin	100	
Cefalonium	10	Sulfaphenazole	25-50	Kanamycin	2500	
Cefoperazone	30	Sulfamethoxydiazine	50	Neomycin	200-300	
Ceftiofur	50	Sulfabenzamide	100	Spectinomycin	>300	
Cefquinome	75	Sulfaclozine	100	Streptomycin	1100-1500	
Cefapirin	2.5–5	Sulfapyrazole	50	Dihydrostreptomycin	700-1000	
Cefazolin	10–15	Sulfamethoxypyrazine	25-50	Various		
		Sulfisomidine	50	Chloramphenicol	2500	
Tetracyclines		Sulfamonomethoxine	50	Rifaximin	60-100	
Chlortetracycline	100	Sulfapyridine	100	Pirlimycin	50	
Doxycycline	100	Sulfaquinoxaline	50	Thiamphenicol	> 1000	
Oxytetracycline	100	Sulfamethazole	100	Trimethoprim	100	
Tetracycline	100	Sulfamethizole	80-100	Lincomycin	150	



Product Information

Catalog No.: WC0006 Storage: 4-8°C Shelf life: 12 months

Detection samples: raw cow's milk, raw sheep's milk, raw goat's milk, UHT milk and milk powder.

Immunoaffinity Columns



High specificity and precision



Reaction Principle

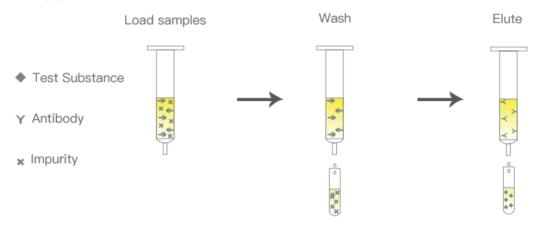
Immunoaffinity Columns (IAC) technology are based on a specific binding of the antigen to antibody-analyte, which can be used for purification and concentration of the target substance in a sample.

Immunoaffinity columns contain a gel bed with toxin-specific antibodies coupled to the gel particles. These antibodies will capture the target substance in a sample. The impurities which are not combined with



antibodies will be washed out from the column. The target substance is recovered in the eluting solution to achieve the high-efficiency purification and concentration.

Detection Sample: Dairy product



Product List of Immunoaffinity Columns

CODE	Product Name	Column Capacity (ng)	Specification	Detection Sample
QC0131/QC0071	IAC for Aflatoxin M ₁	100	3mL,25T/50T	Dairy product
QC0132/QC0073	IAC for Aflatoxin M ₁ , M ₂	200	3mL,25T/50T	Dairy product
QC0134/QC0077	Zearanols Immunoaffinity Column	1000	3mL,25T/50T	Dairy product
QC0135/QC0085	Folic Acid Immunoaffinity Column	500	3mL,25T/50T	Dairy product
QC0136/QC0087	Biotin Immunoaffinity Column	1000	3mL,25T/50T	Dairy product
QC0137/QC0138	Bovine Immunoglobulin G Immunoaffinity Column	15 mg	3mL,25T/50T	Dairy product
QC0139/QC0092	VB ₁₂ Immunoaffinity Column	1000	3mL,25T/50T	Dairy product
QC0140/QC0108	Heparin Immunoaffinity Column	10 mg	3mL,25T/50T	Dairy product

MicroFast ® Microbial Count Plates



Precise and consistent results



Easy operation, work efficiency



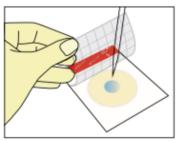
Rapid diffusion technology (Intuitive observation



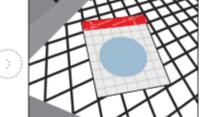
MicroFast® microbial count plate is a rapid and reliable microbial testing solutions, which can greatly improve the efficiency of laboratory testing and is widely accepted by enterprises.

Reliable results, Only 3 Steps

- Inoculation Lift the top film and add sample.
- Incubation Incubate the plates following the instruction.
- Interpretation Count the colonies.











Inoculation

Incubation

Interpretation

Catalog No.	Product Name	Specification(pieces/pack)
LR1001	Aerobic Count Plate	25
LR1002	Coliform Count Plate	25
LR1003	Yeast & Mold Count Plate	25
LR1005	Staphylococcus aureus Count Plate	25
LR1005Q	Staphylococcus aureus Confirmation Plate	25
LR1007	Coliform & E. coli Count Plate	25
LR1010	Bacillus cereus Count Plate	25
LR1011	Enterobacteriaceae Count Plate	25

Instruments

BMZ6000 Portable Strip Reader

- Small and portable
- Fast detection and stable operation
- Large capacity memory
- Thermal print function
- LCD touch screen, Android operating system, user-friendly



HMG-GS Dry Heater

- Low energy consumption, no noise
- Temperature deviation calibration function
- Automatic fault detection and alarm function
- Built in over temperature protection device, safe and reliable
- Fast heating speed, uniform heating and accurate temperature control



HF4500 Microplate Reader

- High definition display, small size
- Support TF card to expand memory
- WiFi module, connection to the laboratory information system supported
- The board can be arranged in rows, which is efficient and convenient
- Android operating system, mouse operation, keyboard operation and independent offline-work supported

