

KHB & Tianlong Product Catalogue

Care for life Dedicate to excellence

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About KHB Group

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Shanghai Kehua Bio-engineering Co., Ltd.

Shanghai Kehua Bio-engineering Co., Ltd. (KHB, Stock code: 002022.SZ), founded in 1981, is an IVD company that boasts a full line of medical diagnostic products including IVD reagents and full automatic analyzers. In 2004, KHB was listed in the Shenzhen Stock Exchange (SZSE) as the first IVD company in China; In 2015, KHB developed overseas investment in TGS Italy; In 2018, KHB developed cooperation with Tianlong Science and Technology, an innovative high-tech company specializing in molecular diagnostic products.

Headquartered in Shanghai China, KHB has set up R&D centers and production bases in a number of countries and regions including Italy, Shenzhen, Xi'an, and Suzhou, with over 30 subsidiaries and over 2,000 employees.

With over 40 years, now the KHB Group has developed into an international high-tech company that integrates R&D, manufacturing and marketing business operations, focusing on clinical chemistry, immunoassay, molecular diagnostics and point-of-care testing (POCT).

Clinical Diagnostics

- Clinical Chemistry
- Chemiluminescence Immunoassay
- Enzyme-linked Immunoassay
- Molecular Diagnostics
- POCT

Veterinary Diagnostics

- Molecular Diagnostics
- Agglutination

Environmental Hygiene Monitoring

- Bioluminescence

Food Safety Monitoring




- Molecular Diagnostics

Clinical Diagnostics

Automatic Clinical Chemistry Analyzer

ZY Series



Make clinical biochemical detection more convenient and efficient.

	ZY-260	ZY-400	ZY-1200
Model			
Configuration	Desktop	Floor-stand	Floor-stand
Throughput	200 tests/hour; ISE 400 tests/hour	400 tests/hour; ISE 400 tests/hour	800 tests/hour; ISE 400 tests/hour
Sample Capacity	54	90	180
Reagent Capacity	72	72	200
Reaction Cuvette	80	81	160

Automatic Module Clinical Chemistry Analyzer

Polaris Series

High efficiency detection, modular combination and intelligent management.

	Polaris C1000	Polaris C2000
Model		
Configuration	Floor-stand; Modular	Floor-stand
Throughput	1000 tests/hour; ISE: 600 tests/hour	2000 tests/hour; ISE: 600 tests/hour
Sample Capacity	325	405
Reagent Capacity	200	216
Reaction Cuvette	216	432

Clinical Chemistry Reagent

Over 100 kinds of clinical chemistry reagents that meet clinical requirement.

Liver Function

- ALT
- AST
- ALP
- TP
- ALB
- PA
- TBA
- γ -GT
- m-AST
- CIV*
- LAP*
- TB
- DB
- CHE
- AFU
- GPDA
- ADA
- 5'-NT
- CG
- MAO*
- AMM*
- GR*

Renal Function

- CRE
- UREA
- UA
- UMA
- Cys-C
- RBP
- NAG
- NGAL
- β 2-MG
- α 1-MG
- ulgG
- uTRF
- CSF*
- LC λ *
- LCK*

Blood Lipid

- TC
- TG
- HDL-C
- LDL-C
- ApoA1
- ApoB
- Lp (a)
- ApoE
- sd-LDL-C
- Lp-PLA2
- MPO*
- PLIP*

Specific Protein

- IgA
- IgM
- IgG
- C3
- C4
- CRP
- hs-CRP
- WCRP
- RF
- ASO
- anti-CCP
- SAA
- PCT*
- MMP-3*
- Clq*
- SOD*

Myocardium

- LDH
- CK
- CK-MB
- α -HBDH
- HCY
- IMA
- ACE
- MYO
- H-FABP
- cTnl*
- LDHI*

Electrolyte

- Ca
- Mg
- IP
- CO
- K
- Na
- Cl
- Fe*
- Zn*

Glycometabolism

- GLU
- HbA1c
- D3H
- NEFA
- GA
- INS*
- GSP*
- LAC*

Tumor Marker

- SA
- PGI
- PGII
- Fer*
- SGF*

Pancreas

- α -AMY
- LPS
- PAMY



Others

- D-Dimer
- TRF
- 25(OH)D
- FDP*
- Fbg*

*Coming soon

Automatic Chemiluminescence Immunoassay Analyzer

Polaris V150 /Polaris i2400

	Polaris V150	Polaris i2400
Model		
Configuration	Desktop	Floor-stand; Modular
Throughput	150 tests/hour	360 tests/hour
Sample Capacity	40, STAT available	200, STAT available
Reagent Capacity	15	30
Reaction Cuvette	Automatic loading, up to 200 in one batch	Automatic loading, up to 1000 in one batch

CLIA Reagent

Thyroid

- TSH
- TT3
- TT4
- FT3
- FT4
- TG
- Anti-TPO
- Anti-TG
- TRAb*
- Serum rT3*

Sex Hormones

- LH
- FSH
- PRL
- P(progesterone)
- T(testosterone)
- β -HCG
- AMH
- E2

Tumor Markers

- AFP
- CEA
- CA125
- CA15-3
- CA19-9
- SCCA
- t-PSA
- f-PSA
- Ferritin
- HE4
- NSE
- PIVKA II*
- CYfra21-1
- proGRP
- PGI
- PGI1
- G-17
- CA72-4

Infectious Diseases

- HBsAg
- HBsAg(quant)
- Anti-HBs
- HBeAg
- Anti-HBe
- Anti-HCV
- HIV Ag/Ab
- Anti-TP
- SARS-CoV-2 NAbs

Cardiac Markers

- cTnI
- hs-cTnI
- MYO
- CK-MB
- NT-proBNP
- D-dimer

Inflammation Markers

- PCT
- IL-6
- SAA
- wCRP
- TNF-α
- HBP*

Glycometabolism

- INS
- C-P

Drug Monitoring

- DIG

Anemia

- Vitamin B12 *
- Folate*



Bone Metabolic

- Intact PTH*
- Vitamin D*

*Coming soon



Microplate Washer

ST-36W/ST-96W

	ST-36W	ST-96W
Model		
Plate Types	96 well plate or strip (Flat, U-bottom, V-bottom)	96 well plate or strip (Flat, U-bottom, V-bottom)
Wash Mode	Row, single plate, multi plate	Row, single plate, multi plate
Wash Program	100 user defined wash protocols	100 user defined wash protocols
Wash Cycle	0-10	0-100
Dispensing Volume	50-450ul	50-2000ul

Microplate Reader

ST-360/ST-960

	ST-360	ST-960
Model		
Wavelength Range	400-750 nm	400-1000 nm
Optical Filter Configuration	8 filter positions	8 filter positions
Absorbance Range	0.000-4.000Abs	0.000-4.500Abs
Linear Range	0.000-3.000Abs	0.000-3.000Abs
Test Speed	3 seconds/96 wells (single and dual wavelengths are available)	< 5 seconds/96 wells (single and dual wavelengths are available)

ELISA Reagent

Hepatitis

- HBsAg
- Anti-HBs
- HBeAg
- Anti-HBe
- Anti-HBc
- HBV PreS1
- Anti-HBc IgM
- Anti-HAV IgM
- Anti-HEV IgM

STD

- Anti-HCV
- Anti-HCV (Sandwich method)
- Anti-HIV
- Anti-TP
- HIV Ag/Ab
- RPR

Tumor Marker


- AFP
- CEA

*Coming soon

Automatic Sample Processing System

GeneMix Pro

Designed for automating laboratory workflow; Maintain sample integrity with a hands-free operation

GeneMix Pro	
Model	
Throughput	96
Handling Time	≤20 minutes for 96 samples
Pipetting volume	5 -1000 μL
Pipetting Accuracy	5 μL~50 μL: Er: ≤3.5% 50 μL~200 μL: Er: ≤2.5% ≥ 200 μL: Er: ≤2.0%

Sample Collection Set

For storage and transportation of human specimen



Stable: prevent nucleic acid degradation

Convenient: storage under room temperature




Safe: inactivated, reduce infectivity and pathogenicity

User-friendly: with different specification to meet diverse needs

Automatic Nucleic Acid Extractor

GeneFlex/Libex/Npex 192




Optimizing your extraction efficiency with confidence

	GeneFlex	Libex	Npex 192
Model			
Throughput	16	32	192
Mixing Method	Rotary Mixing	Vibration Mixing	Vibration Mixing
Processing Volume	20 ~ 1700μL	30 ~ 1000μL	30 ~ 1000μL
Sample Processing Volume	200μL-500μL	50μL-200μL	50μL-200μL

Automatic Nucleic Acid Extractor

GeneRotex Series


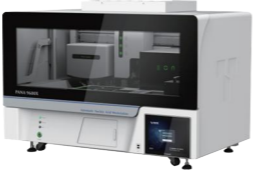
Innovative rotary mixing technology for extraction

	GeneRotex 24	GeneRotex 48	GeneRotex 96
Model			
Throughput	24	48	96
Mixing Method	Rotary Mixing	Rotary Mixing	Rotary Mixing
Processing Volume	50-15000μL	50 ~ 3000μL	30 ~ 1000μL
Sample Processing Volume	50-5000μL	50μL-1000μL	50μL-200μL

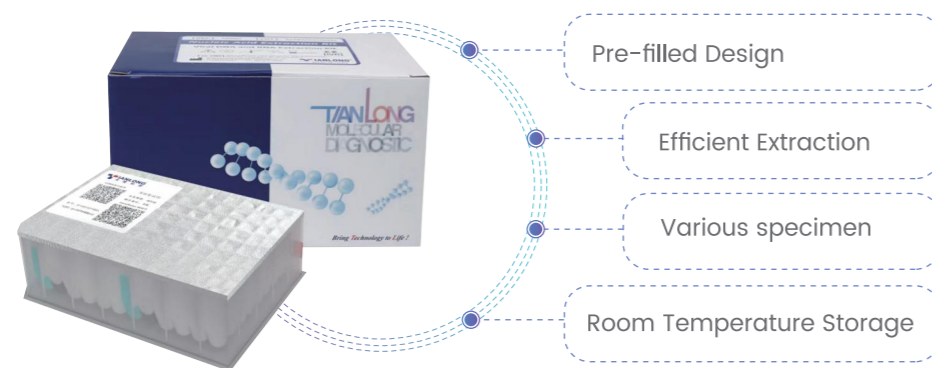
Automatic Nucleic Acid Workstation

PANA9600 Series

All innovation for boosting your lab efficiency with simplified workflow

	PANA9600S	PANA9600X
Model		
Throughput	96	96
Mixing Method	Rotary Mixing	Rotary Mixing
Processing Volume	30 ~ 1000μL	30 ~ 1000μL
Sample Processing Volume	50μL-200μL	50μL-200μL
Main Functions	Sample information scanning Sample loading Nucleic acid extraction PCR system setup	Capping/decapping Sample information scanning Sample loading Nucleic acid extraction PCR system setup

Nucleic Acid Extraction Reagent



- TB DNA
- HPV DNA
- HBV DNA&HCV RNA
- DBS(Dried Blood Spot) Genomic DNA-SMA
- Viral DNA/RNA
- Bacteria Genomic DNA
- Whole Blood Genomic DNA
- DBS (Dried Blood Spot) Genomic DNA
- FFPE Genomic DNA
- Free Circulating DNA
- Stool DNA/RNA
- Buccal Swabs DNA
- Amniotic Fluid DNA
- Plasmid DNA
- DNA Purification

*Tianlong offers extraction reagents covering various sample types (extraction from human, animal, plant, microorganism, environment, etc.) can meet different customer needs.

Automated Liquid Handling System

PANA S401

Providing consistent sample mixing and excellent pipetting performance to standardize your results

	PANA S401
Model	
Throughput	96 samples; up to 768 samples in one run
Sample Loading Channels	4 loading channels
Pipetting volume	1-1000μL
Tip Volume	5-50μL; 50-1000μL

Portable Real-Time PCR System

Gentier mini Series



Excellent performance and Portability; Design for mobile, small laboratories, or on site testing

	Gentier mini	Gentier mini+
Model		
Throughput	16	16
Fluorescence Channels	2	4
Max. Heating Rate	≥5.0°C/s	≥5.0°C/s
Max. Cooling Rate	≥4.0°C/s	≥4.0°C/s

Real-time PCR System

Gentier 48 Series



Maximum 48 samples in one run; Meet the needs of small or medium-sized laboratories, or on-site testing

	Gentier 48E	Gentier 48R
Model		
Throughput	48	48
Fluorescence Channels	4	2
Max. Heating Rate	≥8.0°C/s	≥8.0°C/s
Max. Cooling Rate	≥6.2°C/s	≥6.2°C/s

Real-Time PCR System

Gentier 96 Series




Maximum 96 samples in one run; Meet the needs of high-end laboratories

	Gentier 96E	Gentier 96R
Model		
Throughput	96	96
Fluorescence Channels	6	4
Max. Heating Rate	≥6.1°C/s	≥6.1°C/s
Max. Cooling Rate	≥5.0°C/s	≥5.0°C/s

Real-time PCR System

Gentier X3 Series


Advanced flexibility; 3 independent thermal blocks; Maximum 3×32 throughput

	Gentier X3E	Gentier X3S	Gentier X3R	Gentier X3C
Model				
Touch Screen	YES	NO	YES	NO
Throughput	32 x 3	32 x 3	32 x 3	32 x 3
Fluorescence Channels	6	6	4	4
Max. Heating Rate	≥6.2°C/s	≥6.2°C/s	≥6.2°C/s	≥6.2°C/s
Max. Cooling Rate	≥ 5.0°C/s	≥ 5.0°C/s	≥ 5.0°C/s	≥ 5.0°C/s

PCR Thermal Cycler

Genesy 96T

Ultimate performance to meet your diverse needs

	Genesy 96T
Model	
Throughput	96
Max. Heating Rate	≥3.5°C/s
Max. Cooling Rate	≥2.5°C/s

Clinical PCR Detection Reagent

 Respiratory Infections

- SARS-CoV-2
- Influenza Virus
- Avian Influenza Virus
- Respiratory Virus Panels
- Human Parainfluenza Virus
- Human AdenoVirus
- Human Bocavirus
- Human Metapneumovirus
- Human Rhinovirus
- Respiratory Syncytial Virus
- MERS-CoV
- Coronavirus
- Streptococcus Pneumoniae
- Haemophilus Influenza
- Streptococcus Haemolyticus
- Legionella Pneumophila
- Bacillus Pertussis
- Mycobacterium Tuberculosis
- Mycoplasma Pneumoniae
- Chlamydia Pneumoniae

Gastrointestinal Infections

Viral Gastrointestinal Infection

- Norovirus
- Sapovirus
- Astrovirus
- Enterovirus
- Enteric Adenovirus
- Rotavirus
- Coxsackievirus
- Enterohemorrhagic Escherichia coli
- Sapovirus/Adenovirus/Astrovirus

Foodborne Pathogenic Bacteria

- Escherichia Coli
- Salmonella
- Shigella
- Salmonella Enterica/Shigella
- Vibrio Parahaemolyticus
- Staphylococcus Aureus
- Vibrio Cholerae
- Clostridium Perfringens
- Campylobacter Jejuni
- Bacillus Cereus
- Listeria Monocytogenes
- Enterobacter Sakazakii
- Escherichia Coli /Staphylococcus Aureus
- Salmonella/Listeria Monocytogenes
- Vibrio Parahemolyticus/Bacillus Cereus

Viral Hepatitis

- Hepatitis C Virus (HCV)
- Hepatitis B Virus (HBV)

Oncology

- Human T-cell Leukemia Virus Type 1 (HTLV-1)
- EB Virus
- Human Cytomegalovirus (HCMV)
- Human B-raf
- Human K-ras

Pharmacogenomics

- Human ALDH2
- Human Leukocyte Antigen B27
- Human HLA-B*1502
- Human HLA-B*5801
- Human CYP2C19
- CYP2D6*10\CYP2C9*3\ADRB1(1165G>C)\AGTRI(1166A>C)\ACE(I/D)
- NPPA (2238T>C)\CYP3A5*3
- Human MTHFR (677C>T)
- Human MTHFR\MTRR
- Human APOE & SLC01B1

Sexually Transmitted Infections

- Chlamydia Trachomatis (CT)
- Neisseria Gonorrhoeae (NG)
- Ureaplasma Urealyticum (UU)
- Chlamydia Trachomatis (CT) / Neisseria Gonorrhoeae (NG) / Ureaplasma Urealyticum (UU) / Ureaplasma Parvum (UP)
- Human Papilloma Virus (HPV)
- Treponema Pallidum
- Herpes Simplex Virus (HSV)
- Human Immunodeficiency Virus 1 (HIV-1)
- HPV Genotypes 18

Maternal & Child Health

- Herpes Simplex Virus
- ParvoVirus B19
- Human Survival Motor Neuron 1 (SMN1)
- Measles/Rubella Virus
- Group B Streptococcus (GBS)

Tropical Infections & Zoonoses

- Dengue Virus
- Dengue Virus/Zika Virus/Chikungunya Virus
- Zika Virus
- Yellow Fever Virus
- Epidemic Encephalitis B
- Marburg Virus
- Lassa Fever Virus
- Ebola Virus
- Rift Valley Fever Virus
- Hantaan Virus/Seoul Virus

Herpes Viruses

- Monkeypox Virus
- Human Herpes Virus
- Varicella Zoster Virus (VZV)

Others

- Neisseria Meningitidis
- Mycobacterium Leprae
- Pseudomonas Aeruginosa
- Yersinia Pestis (YP)

All-in-one Molecular Diagnosis Solution




Panall 8000

All-in-one Molecular Diagnosis System

Fewer steps. Walkaway workflow. High quality results.

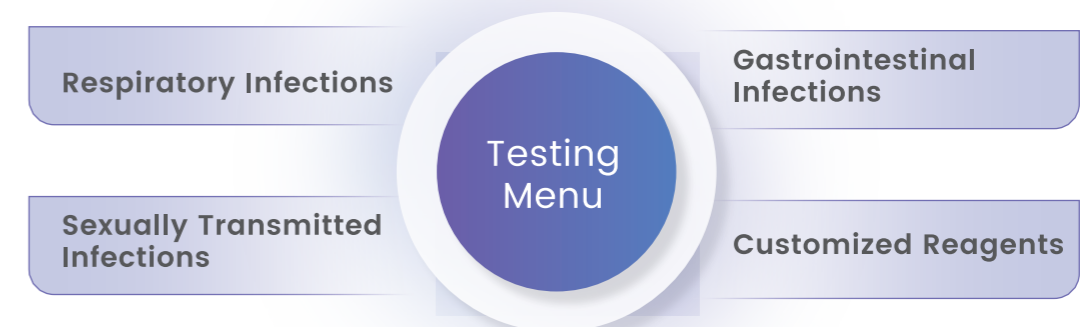


Compatible Consumables

-  Specialized sample tube
-  Specialized nucleic acid extraction kit
-  Specialized nucleic acid detection kit



Sample in -result out system



Personalized Medication Solution

Fascan 48E

Multi-channel fluorescence quantitative analyzer

Ensure accurate detection for guiding personalized medicine



Pharmacogenomic Reagent

Right drug with right dose, at the right time to the right patient



Assisted Reproduction

- Folic Acid

Cardiovascular Diseases

- Anticoagulation
- Antiplatelet
- Lipid Lowering
- Angina Pector

Rheumatoid Immunity

- Gout
- Immunosuppressant
- Autoimmune Disease
- Rheumatoid Arthritis

Endocrine Drugs

- Diabetes

Fungal Infection

- Fungal Infection

Oncology

- Breast Cancer
- Colorectal Cancer
- Acute Lymphocytic Leukemia

Disease Risk Genes

- Liver injury
- Senile Dementia
- Apoplexy
- Gout
- Thrombophilia

Digestive System Disease

- Proton Pump Inhibitor
- Helicobacter Pylori

Psychoneurology

- Antidepressant
- Antischizophrenics
- Antiepileptic
- Anesthesia

- Hypertension

Diagnostic Kit for HIV(1+2) Antibody (Colloidal Gold)

The HIV colloid gold kit has obtained WHO PQ certification in 2014, and IVDR certification in 2023.



Sample Type	Whole blood, serum, plasma
Sample Volume	40 µL
Detection Time	15-25min
Sensitivity	100% (95% CI)
Specificity	100% (95% CI)
Storage Condition	Up to 24 months at 4-30 C

Kit Specifications

Ref. No.	Specification	Sample Diluent	Accessories
KH-R-02	50 tests	4ml x 1 bottle	N/A
KH-R-03	50 tests	4ml x 2 bottle	N/A
R-401-50-C-2	50 tests	4ml x 1 bottle	50
R-401-50-C-3	50 tests	4ml x 2 bottle	50
KH-R-02-CE	50 tests	4ml x 1 bottle	N/A
R-401-1-C-CE	1 test	0.5ml x 1 bottle	1
R-401-25-C-1-CE	25 tests	4ml x 1 bottle	25

Veterinary Diagnostics

Diagnostics-in-a-Suitcase

iGenecase 1600

Take your testing anywhere with this lab in a suitcase

- Lab in a suitcase to be more convenient
- Flexible to take your testing anywhere
- Ideal for your on-site testing needs
- Various scenarios applications



GeneFlex 16

Automatic Nucleic Acid Extractor

- Flexible Throughput
- Small Footprint
- Immediate Results



Gentier mini Series

Portable Real-Time PCR System

- Portable
- Fast
- Always Online



Animal Health Detection Reagent

Swine Tests

- Porcine Reproductive and Respiratory Syndrome Virus (PRRSV)
- African Swine Fever Virus (ASFV)
- Classical Swine Fever Virus (CSFV)
- Porcine Viral Diarrhea (PEDV, TGEV, PDCoV, RV)

Artiodactyla Tests

- Foot-and-Mouth Disease Virus (FMDV)
- Brucellosis

Poultry Tests

- Newcastle Disease Virus (NDV)

Pet Tests

- Feline Upper Respiratory Disease (FURD)
- Feline Panleucopenia Virus (FPV)
- Canine Distemper Virus (CDV)

Animal Health Extraction Reagent

- Animal Tissues Genomic DNA
- Animal Virus DNA/RNA

Automatic Brucellosis Detection System

RBT320

Highly efficient to meet large-scale Brucellosis screening needs

Standardized detection based on the RBT method

Automated workflow and hands-free operation

AI image recognition to interpret the results

Compatible with most common RBT reagents on the market



Sample Throughput	320T (16T * 20)
Sample Type	Blood serum
Sample Loading Channels	4
Operation Time	24T/4min (320T /hour)
Main Functions	Sample loading Reagent dispensing and mixing Automatic reaction plate placing Photographing AI image recognition Result interpretation

Application Areas



Animal CDC

Epidemiological investigation of Brucellosis in animal disease control centers



Livestock Farms

Evaluating the immunization effect of the Brucellosis vaccines in cattle, sheep, pigs and isolation detection for variety introduction



Testing Laboratory

Providing testing report when quarantine on transfer

Environmental Hygiene Monitoring





Food Safety Monitoring

Portable ATP Hygiene Monitoring System

Biolum

Your reliable hygiene safety guardian



Compatible Swabs		QuickSwab	For Surface test
		LiquSwab Total	For Liquid test (Total ATP)
		LiquSwab Free	For Liquid test (Free ATP)
Accessories		EternalLight-H	LED Calibration Verification for ATP

Portable ATP Hygiene Monitoring System

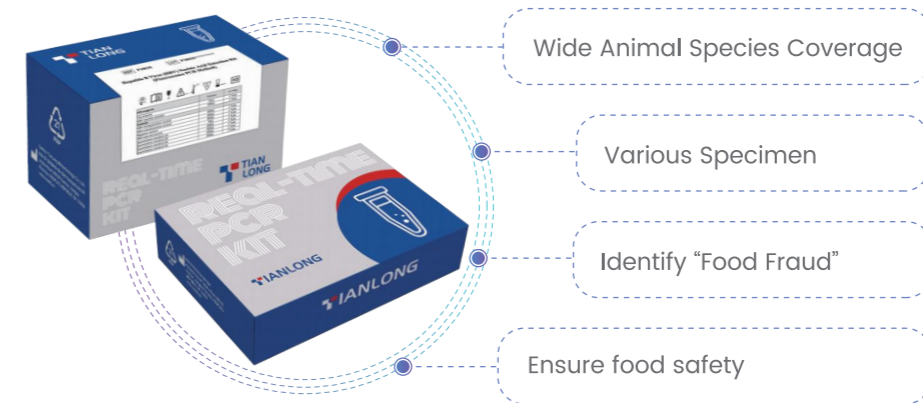
Biolum Pro














Make hygiene monitoring easier as using a smartphone



Animal Species Identification Reagent

Animal species identification in food and feed products has increasingly acquired importance due to public health, economic and legal concerns. Even religious and ethical criteria can be at risk in the case of food adulteration. Tianlong Animal Species DNA Detection Kits offer a broad portfolio of real-time PCR-based animal species detection solutions. The range includes assay kits for pig, cow, equine, sheep, donkey, chicken, duck, goose, dog, cat, mouse, deer, and fox DNA in food samples and animal tissues.



Animal Species							
Detected	✓	✓	✓	✓	✓	✓	✓
Animal Species							
Detected	✓	✓	✓	✓	✓	✓	

Application Areas



Mission

Care for life, dedicate to excellence

Vision

Becoming a mainstay in the IVD field

Values

Customer focus, innovation, collaboration, responsibility and pragmatism

KHB Group Global Office

Italy|TECHNOGENETICS
S.p.A.(TGS),
Chemiluminescent and
autoimmune reagents

Xi'an|Molecular diagnostics
R&D and manufacturer
center

Suzhou|Wuxi|Molecular
diagnostics reagents R&D
and manufacturer center

Shanghai|Headquarter
Biochemistry,CLIA,ELISA
R&D and manufacturer
center

Guangzhou|POCT R&D and
manufacturer center

Russia|Subsidiary,
local Team

Thailand|Branch,
local team

Vietnam|Subsidiary,
local team

Brazil|Branch,
local team

2000+
Employees

30+
Subsidiaries

7500+
Global Distributors