

TIANGEN BIOTECH (BEIJING) CO., LTD.



TIANGEN Mission

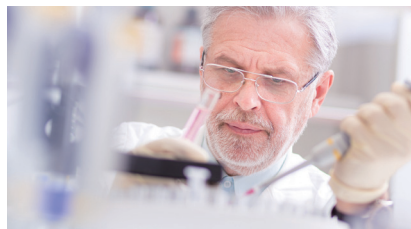
Our mission is to help our customers achieve outstanding achievements and breakthroughs in the fields of life science, applied detection, biological pharmacy and molecular diagnosis, thereby promote the progress of life science research and upgrade the industrial chain in China.

TIANGEN Introduction

TIANGEN BioTech (Beijing) Co., Ltd. is a biological enterprise integrating R&D, manufacturing, sales and customer service. We are committed to providing customers with a comprehensive solution from sample preservation to nucleic acid extraction and detection. At present, TIANGEN has been recognized as the leading enterprise in the field of nucleic acid purification in China.

TIANGEN products are widely applied in basic research of life science, medicine, agriculture, pharmacy, environment, etc. We have been providing high-quality products to universities, research institutes, hospitals, inspection institutes, blood stations, entry-exit inspection and quarantine units. Currently, more than 90% of molecular biology laboratories in Chinese mainland are using TIANGEN products.

TIANGEN always adheres to the tenet of "quality is the life, service is the soul", as well as the business philosophy of "customer first". We are continuously improving our product quality, and strives to provide professional, stable and reliable products and services for customers.



Academic Research



Molecular Diagnostic



Applied Detection



Pharmacy

TIANGEN Product Line

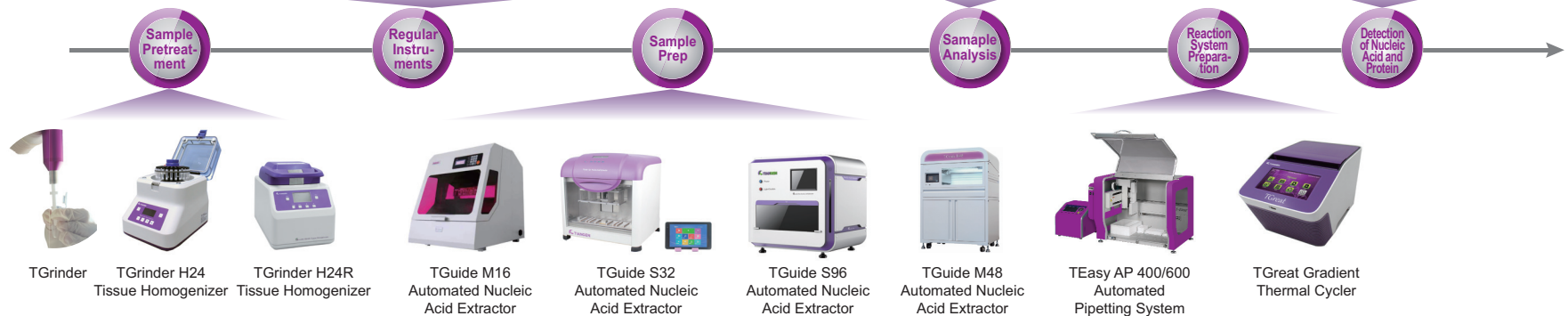
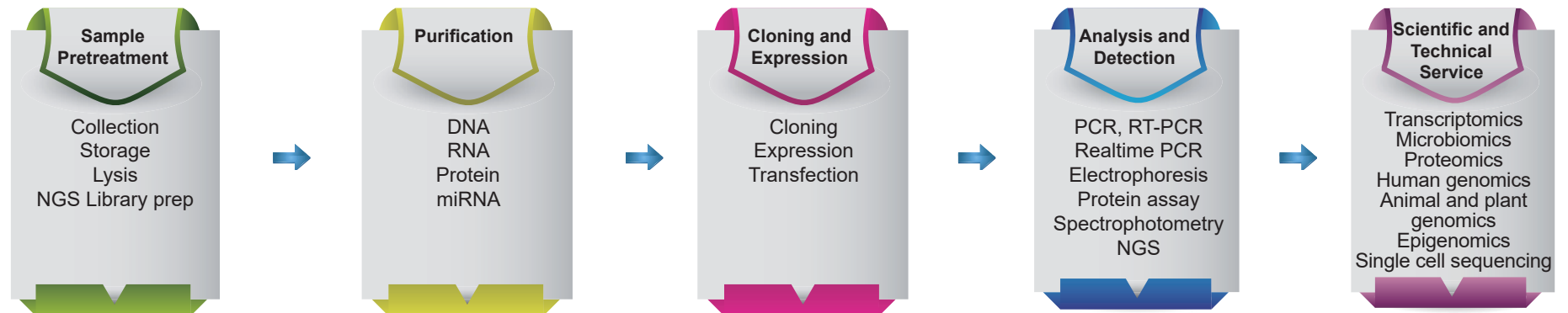
Structure of Products

■ Reagents

■ Consumables

■ Automatic instruments and portable instruments

■ Scientific and technical service



TIANGEN Virus Detection Overall Solutions

TIANGEN Virus Nucleic Acid Extraction Solutions

Automated Nucleic Acid Extraction Solution



TGGrinder H24 Tissue Homogenizer (OSE-TH-01)
High efficient grinding and homogenizing of 1-24 samples in one run



TGGuide S32 Magnetic Viral DNA/RNA Kit (DP604)
Perfectly matched with TGGuide S32 to extract virus DNA/RNA with high yield, high purity, stable and reliable quality



TGGuide S32 Automated Nucleic Acid Extractor (YOSE-S32)
Automated extraction of virus DNA/RNA from 32 samples in one run



TGGuide S96 Magnetic Viral DNA/RNA Kit (DP804)
Perfectly matched with TGGuide S96 to extract virus DNA/RNA with high yield, high purity, stable and reliable quality



TGGuide S96 Automated Nucleic Acid Extractor (OSE-S96-01/02/03)
Automated extraction of virus DNA/RNA from 96 samples in one run



TGGuide Virus DNA/RNA Kit (OSR-M202/M202-T1)
Perfectly matched with TGGuide M16/M48 to extract virus DNA/RNA with high yield, high purity, stable and reliable quality



TGGuide M16/M48 Automated Nucleic Acid Extractor (OSE-M16/M48)
Automated extraction of virus DNA/RNA from 16/48 samples in one run

Manual Nucleic Acid Extraction Solution



TGGrinder Set (OSE-Y30/Y40/Y50)
Hand-hold electronic grinder for rapid tissue grinding and homogenizing



RNAstore Reagent (DP408)
Preservation of tissue samples with no RNA degradation



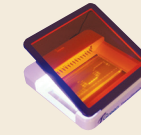
TGrade Dry Bath Incubator (OSE-DB-01/02/03)
Fast temp. change; Precise temp. control; Used for sample pyrolysis and insulation



TIANamp Virus DNA/RNA Kit (DP315)
Rapid purification of virus DNA/RNA from plasma/serum/lymph



TIANamp Virus RNA Kit (DP315-R)
Rapid purification of virus RNA from plasma/serum/lymph



TGreen Transilluminator (OSE-470/470L/470M)
Small and portable, used for nucleic acid observation



TGem Plus Spectrophotometer (OSE-260-01/02)
Accurate and fast, used for UV detection after nucleic acid extraction

TIANGEN Virus Nucleic Acid Detection Solution

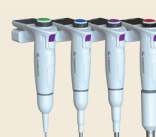
RT-qPCR Detection Solution



FastKing One Step RT-qPCR Kit (Probe) (FP314)
Rapid virus RNA detection in one step



TEasy Automated Pipetting System (OSE-AP400/600)
Rapid automated pipetting for PCR reaction system



TGet Electronic Pipette (OSE-EP)
Fast and accurate manual pipettes for PCR system preparation and other pipetting operations



TGyrate Vortex Basic (OSE-VX-01/02)
For the rapid mixing of PCR reaction system



TGear Mini Centrifuge (OSE-MC8)
Suitable for the instant centrifugation of EP tubes in different sizes

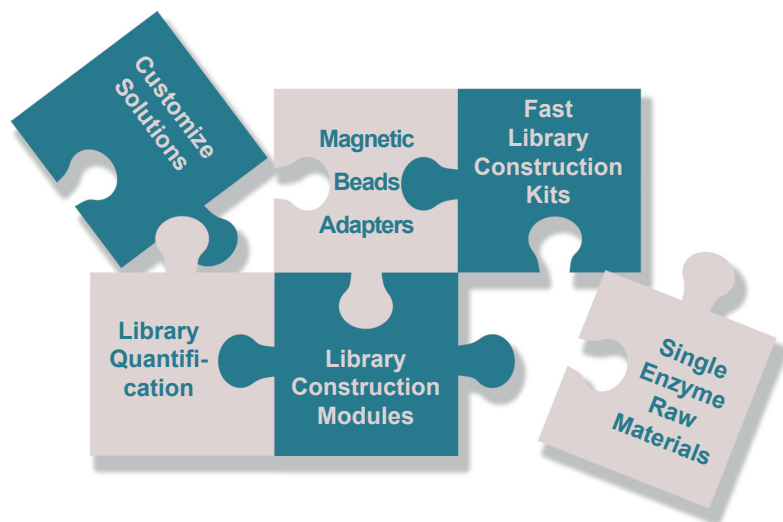


TGear Plate Centrifuge (OSE-MP25)
For the centrifugation of 8-tube strips or 96/384-well plates

NGS Overall Solution

Global High-Quality NGS Library Construction Reagent Supplier

Based on the group's global high-quality raw materials, TIANGEN creates the industry's leading products and solutions for sample preparation, purification, detection and NGS library construction.



The flexible library construction module includes single or multiple steps that can be combined in the construction process and the workflows can be combined with other reagents for special needs.

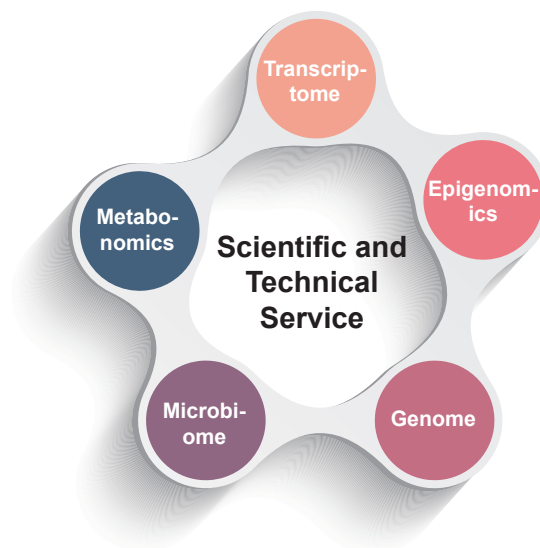
All kinds of raw materials that can be purchased independently with fully optimization and adjustment space, and are applicable for various special experimental purposes or large-scale library construction needs.

Customized complete library construction solution according to different library characteristics and sample types. We can help you to recommend reagents suitable for each step of your library construction, and is widely welcomed by scientific researchers for library construction service, and by industrial customers for performing NGS experiments.

Reliable High Quality Scientific Research Service Platform for Customers

We plan and manage scientific research service needs for customers, coordinate high-quality resources, and provide comprehensive scientific research service solutions from nucleic acid and protein life science research, high-throughput sequencing and protein metabolism mass spectrometry service, as well as experimental verification to functional research for University, Research Institute, hospital and enterprise customers.

TIANGEN's scientific and technical service senior technical team provides professional guidance for researchers from project application, experimental scheme design to result interpretation. Our strong database support (TCGA, HGMD, etc.) ensures the professionalism and comprehensiveness of data analysis.



Global high quality raw materials

Senior experts to provide customized solutions

Professional and high quality project management mechanism

15 years of global customer service experience

Powerful Data Support

IPA

HGMD

IVA

TCGA

Quality is The Life

Integrating Global Resources Realizing Scale Production

● Global raw material supply chain

Relying on global procurement supply chain platform, TIANGEN's raw materials select the most stable and high-quality raw materials from over 300 suppliers all over the world. Moreover, 100% strict quality inspection will be carried out to ensure the quality and stability of all raw materials between batches.

● Automatic production

The widespread adoption of various automatic production equipment not only improves the production efficiency, but also helps to control the uniformity and stability of product quality, and reduces the error caused by human operation. Automation equipment covers all links from the production of reagents and consumables to packaging.

● Large-scale production for globalization development

With the continuous increase of international market demand, TIANGEN has continuously improved its production scale and production capacity.

In order to adapt to the rapid development of the international market, TIANGEN has developed the English-labeled packaging for global supply of full-line of products.

The wide application of various automatic production equipment also greatly improves the production efficiency, ensuring the rapid development of global business.

Large Scale Intelligent Numerical Control Warehouse

● Partition management of multiple storage temperature

Room temp zone: 15-25 °C RT storage

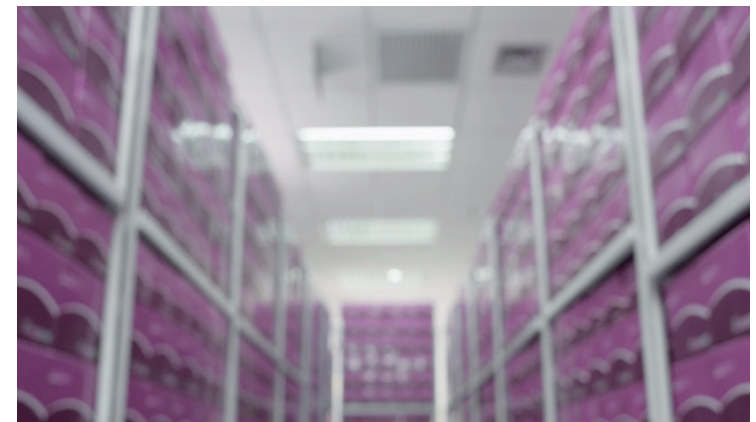
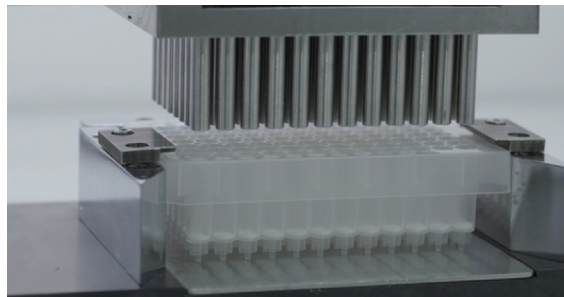
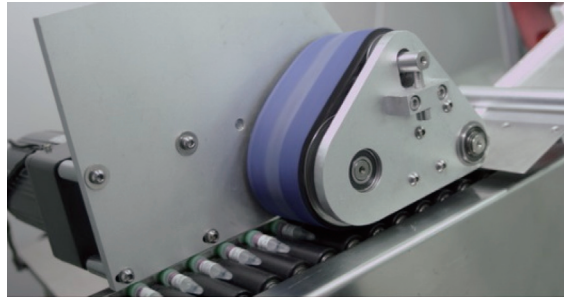
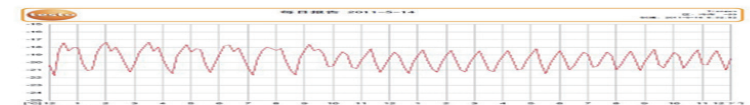
Cold zone: 2-8 °C cold storage

-20 °C cold storage

-80 °C super-cold storage

● Advanced numerical control (24 h × 365 days temperature monitoring)

24-hour CNC testing. When the data fluctuation exceeds the normal range, there will be instant system SMS to inform the relevant responsible person to ensure the first time rapid processing and maintain temperature control safety.





Quality is The Life

Professional manufacturing Stable quality

- **Clean production workshop--Above 100,000 class environmental cleanliness**

TIANGEN's production workshops are built according to GMP standards, and the environmental cleanliness ensures the quality and stability of products.

- **Millipore Central Water System--Ensure the purest water supply**

The industrial production level Millipore Central Water System adopts RO reverse osmosis technology, ultraviolet sterilization and other purification treatment, combined with multi-level exchange column and filter membrane, to remove heavy metal, bacteria, organic matter, toxin and other pollution, ensuring the purity of the water supplied for R&D and manufacturing.

Water quality standard: Resistivity: 18.2 m $\Omega \cdot \text{cm}$; TOC<5 ppb; Endotoxin<0.001 EU/ml

- **Production process control--Ensure product quality**

The whole process management of SAP system is introduced in the production process to make the production management standard and controllable. Batch production and automatic production are applied to ensure the minimum difference between batches.

Professional training mechanism and monitoring and assessment system to minimize human error. Each product unit can be traced all the way to the raw material level.

- **Technique training**

The regular quality awareness, safety, technical training is continuous improving quality awareness and production technology capacity of employees.

Strictly control Quality assurance

- **TÜV Rheinland ISO certification**

-- Professional management control
From the R&D, raw material procurement, product production, to the follow-up product quality control and logistics storage, TIANGEN carries out every link under the supervision and management of the quality system of TÜV ISO9001-2008 in Germany.



- **Certification of Class I medical device production registration**

TIANGEN has been granted the "Certification of Class I Medical Device Production Registration" by Beijing Food and Drug Administration, which approved our qualification of R&D, production and quality inspection of Class I medical devices. At present, more than 20 kinds of nucleic acid extraction kits, such as micro DNA and dry blood spot DNA, have obtained the Class I Medical Device Certificates.



- **Quality process control**

From raw materials, semi-finished products to finished products, strict quality control and layer by layer monitoring are performed every link. During the whole production process, there are follow up inspection and supervision, and the process documents are strictly recorded. Regular inspection of clean area and pure water system are conducted to ensure the proper operation of the system. We have established strict quality inspection process and quality control standard with the headquarter. The quality improvement project throughout ensures that the quality inspection system is constantly improved with the change of market requirements.

TIANGEN & VIP

—Cooperation Modes

OEM



Reagent kits/Instruments

Raw Material



Reagent kits/Instruments

Cooperative development



Reagent kits/Instruments

1,000 Customized Projects

Ideal raw material supply partner

—Special for key accounts



Cooperative
development with
key accounts

For the special needs of industrial VIP customers, designated personnel is specially responsible for providing customized products:

Develop and optimize the products according to customers' requirements

Project Flow



Requirements
discussion



Project set-up



Project team
set-up



Product de-
velopment



Product
delivery

KA
PM

R&D
PM

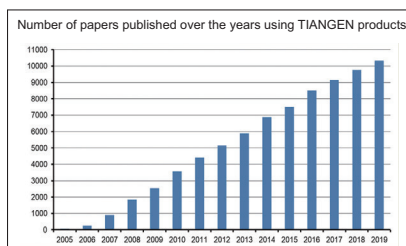
Partner
Project leader

Academic Contributions

Everyday researchers are applying 200,000 preps of TIANGEN products.

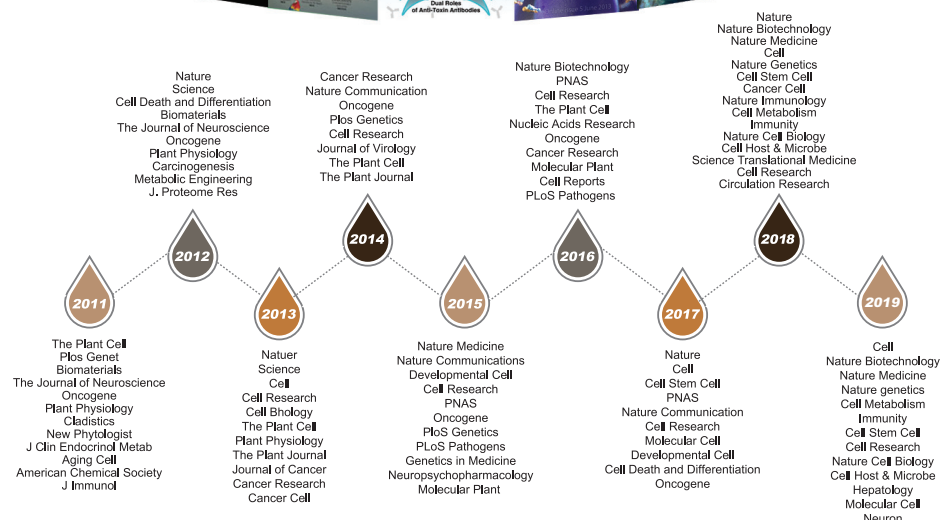
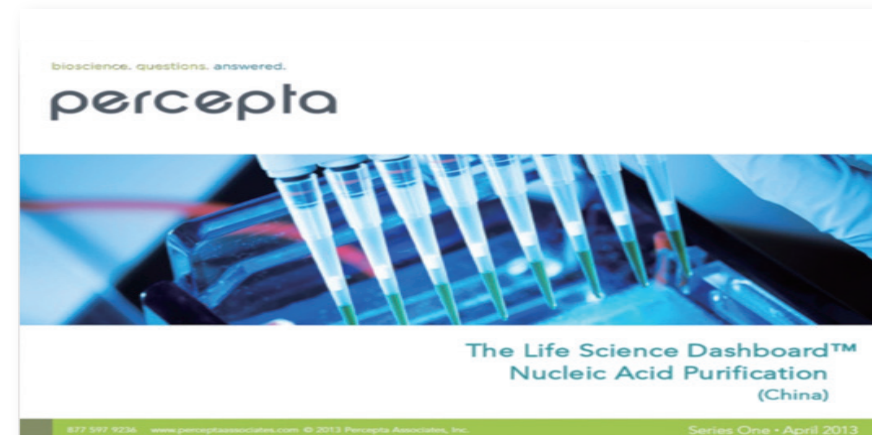
TIANGEN products are widely used in domestic universities, research institutes, hospitals, blood stations and other medical institutions as well as forensic, import and export quarantine and other testing departments. More than 72,000 domestic and foreign literatures have been published using TIANGEN products.

At present, TIANGEN has 41 categories of products, 12 major instrument series and 580 kinds of kits. Including the complete solutions for sample processing, nucleic acid extraction, gene cloning, protein expression, as well as analysis and detection. TIANGEN has been constantly committed to providing high cost performance, stable and reliable molecular biology products and professional technical services for users in China.



Industry Position

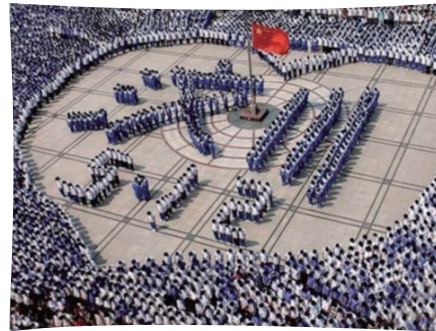
In 2013, the authoritative third party China market analysis report pointed out that TIANGEN occupied the leading position in China's nucleic acid market.



Public Events and Social Contributions



Provided more than 1 million preps of blood DNA extraction products for the **Chinese Marrow Donor Program**



Provided more than 25,000 bacterial detection products for the food safety inspection in disaster areas after **WenChuan Earthquake**



Cooperation with Zhongguancun Dongsheng science park to establish **biotechnology innovation platform**



Establish teaching practice base and **TIANGEN scholarship** in cooperation with Graduate School of Academy of Agricultural Sciences



Provided the detection products of cattle and sheep feedstuff to **prevent and control BSE**, and participated **developing industry standards with Ministry of Agriculture of China**.



Provided more than 10 million rxns of virus detection reagents for **HFMD and Flu** monitoring



Products boarded the Chinese Research Vessel Xuelong for its **Antarctic Research Expedition**



Provided more than **3 million preps** of medical sample detection kits for **Prenatal and New Born Screening**



Provided more than 100,000 tests of virus detection products for the **Global TB Screening Program**



TIANGEN product was listed as the standard test method by **the only OIE rabies standard testing laboratory in China**, and is used for the technical training of rabies prevention and control personnel in Southeast Asia



The nucleic acid purification technology and downstream detection technology of medical samples based on silica gel membrane and nucleic acid adsorption magnetic beads were recognized by **Beijing "High-Tech Achievements Transformation" project**



Launched the large-scale public welfare project **"One Million Research Grant"**, which includes more than 200 laboratories from 26 provinces.

2012

2013

2014

2016

2019



Support the recording of CCTV program **"Just So"**



Provided automated nucleic acid extraction solutions for **the largest Health Population Sample Library in China**



Elected the first chairman unit of **"Alliance of Chinese Science and Technology Service"**, and committed to promoting the establishment of standardized market standards for information transparency and fair trading



Provided sample prep and detection kits to prevent the **African Swine Fever** and have detected **30 million pigs**

Quality is the life, service is the soul



TIANGEN BIOTECH(BEIJING)CO.LTD

Address: Building C7-3, Zhongguancun Dongsheng Science Park, NO.66 Xi Xiao Kou Road, Haidian District, Beijing, China

E-mail: export@tiangen.com Website: www.tiagen.com/en

Post Code: 100192

Tel: +86 10 59822724