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MedMak
Trading Est CR:7035621932

MedMak Est Ltd acts as the authorized representative of Genebio, a prominent Chinese biotechnology firm, within the Kingdom of Saudi Arabia and the Gulf Cooperation Council (GCC) countries. Genebio specializes in the development of nucleic acid testing systems and is involved in the research, development, and manufacturing of biopharmaceutical quality control products. The initiative spans four main technical domains: reagents, consumables, instrument platforms, and service platforms, facilitating full localization of the associated genetic detection systems.

MedMak Est Ltd serves as the official representative of **Genebio**, a leading Chinese biotechnology company, in the Kingdom of Saudi Arabia and the Gulf Cooperation Council (GCC) states. Genebio is Incorporation Co., Ltd, founded in 2012 under the support of *Yangpu "3310" project, is a high-tech enterprise under Anhui Anke Bioengineering (Group) Co., Ltd.* (stock code 3000009). primarily focuses on developing nucleic acid testing systems. Its operations encompass the research, development, and production of biopharmaceutical quality control products. The project covers four key technical areas: reagents, consumables, instrument platforms, and service platforms. It enables the complete localization of the corresponding genetic detection system.



The Corporate Mission
To bring nucleic acid testing into every household for the sake of societal security and public health.

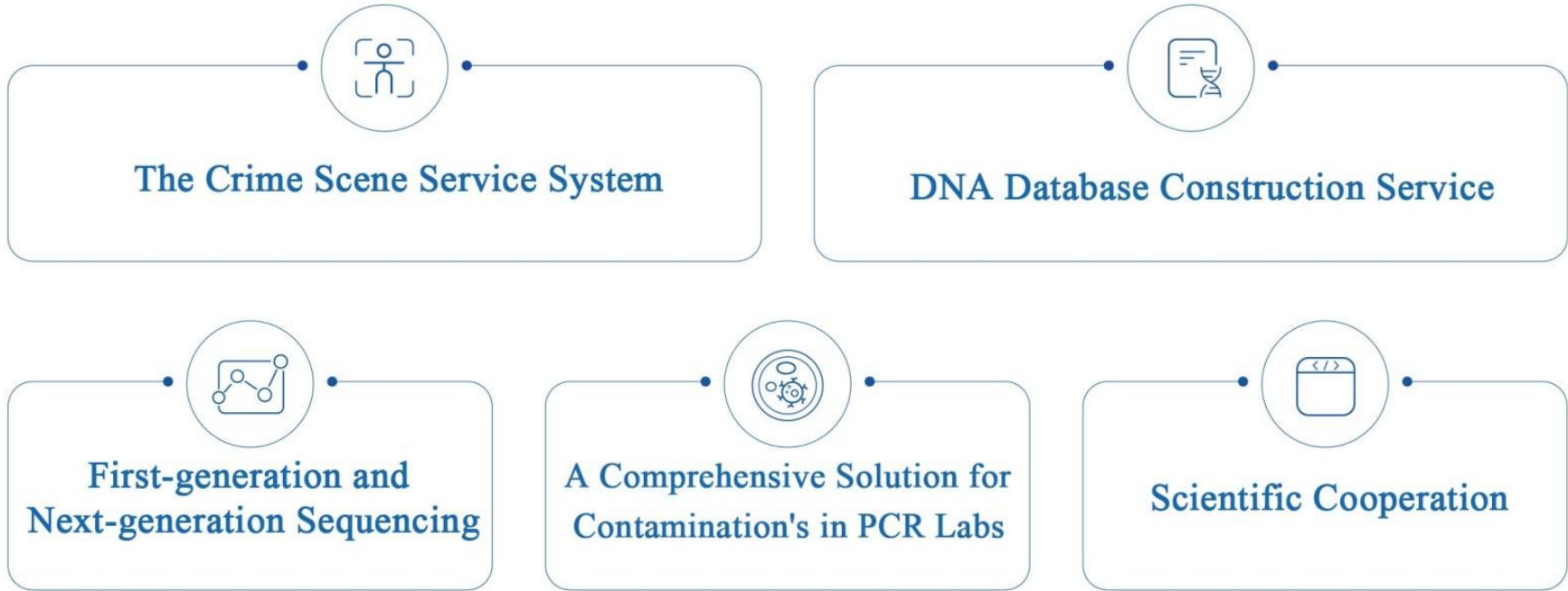


Core Ideology
AGCU ScienTech, to pursuit the excellence of tracing the source

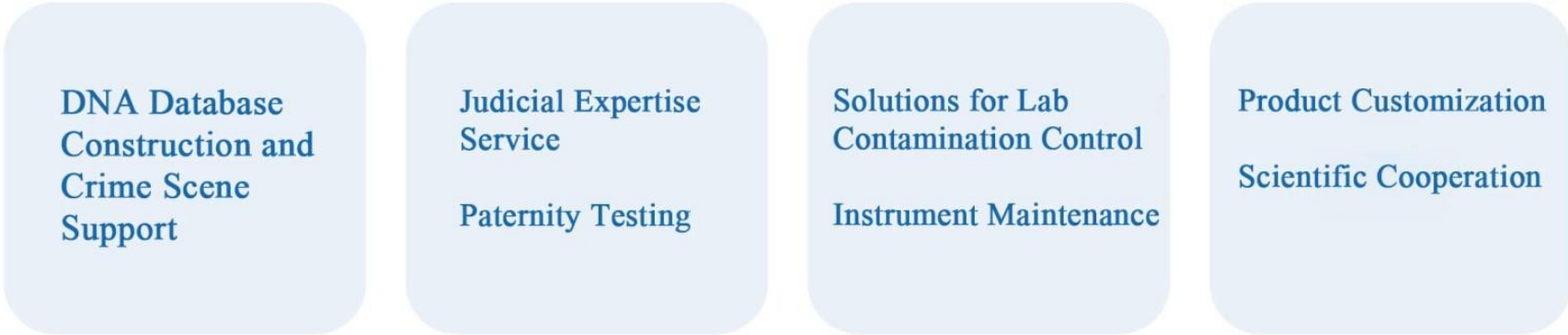


Brand Philosophy
Holding "Professionally Serving the Nation and Strengthening the Race" as our principle, we uphold innovation-driven development, contributing to social stability and people's health.

The Forensic DNA Testing Comprehensive Service Plan



Forensic DNA service



CONTENT

► Crime Scene Detection Series

SF 28CS STR Kit
SF Y43CS STR Kit
SF Y SUPP Plus STR Kit
SF mtDNA-SNP60 Kit
SF Mini A Kit
SF Mini Y Kit
SF Human DNA Quantification Kit **(New Arrival)**

► DNA database series

SF 38 STR Kit **(New Arrival)**
SF 30 STR Kit
SF 25 STR Kit
SF YNFS Y STR Kit
SF Y56+5 STR Kit **(New Arrival)**
SF Y37+5 STR Kit

► Paternity Test Series

SF 22 STR Kit
SF 21+1FS STR Kit
SF 21+1 STR Kit
SF 21HS STR Kit **(New Arrival)**
SF X PLUS STR Kit

► Other Kit Series

SF Canine 17A STR Kit
SF High-Efficiency Silica Bead DNA Extraction and Purification Kit
SF Mag FCS DNA Kit

► Instruments and Equipments

Highly Efficient Crime Scene Forensic DNA Evidence Collector
32-channel Automated Nucleic Acid Extraction Machine
24-channel Automated Nucleic Acid Extraction Machine
EO9600 Real-Time qPCR System **(New Arrival)**
PEC280 Portable Electronic Cooler
Vortex Oscillation Centrifugal Integrated Machine
Ares Nucleic Acid Clearance System **(New Arrival)**

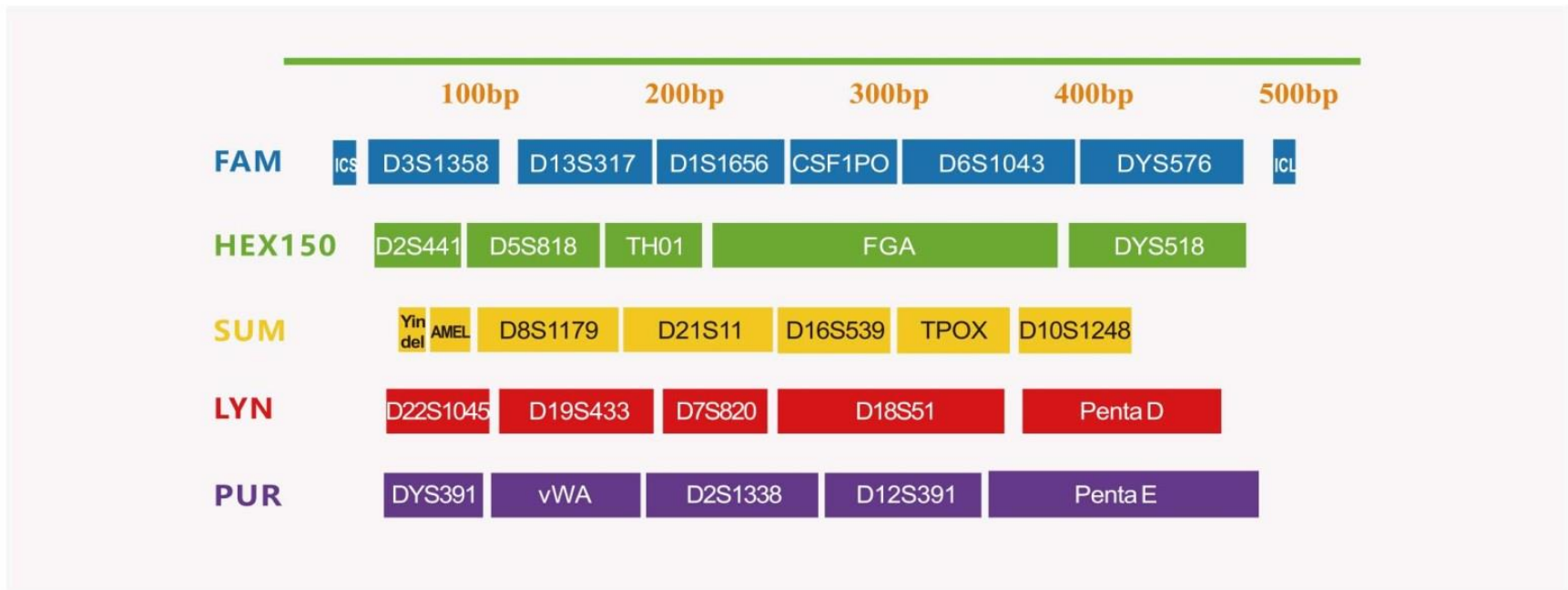
► Consumables

Nucleic Acid Aerosol Scavenger (Solid tablets)
Nucleic Acid Eraser Tissue
Fragment Separation Polymer
Deionized Formamide
The 10X Electrophoresis Buffer
AC Buffer
The DNA Evidence Collection and Preservation Solution
Capillary Regeneration Reagent
Regulatory Reagent
Blood Card / Saliva Cell Collection Set
DNA JH100 Puncher

► Product Specification Catalogue

SF 28CS STR Kit

This kit employs an efficient six-color fluorescence labeling system to detect allelic polymorphisms in 28 STR loci across the human genome DNA. It includes 23 autosomal STRs, 1 sex-specific loci, 1 Y indel, and 3 Y-STRs, along with 2 internal PCR control genes. Among these 300 base pairs, there are 14 STR genetic loci, which greatly enhance the detection efficiency for degraded samples. In addition, the kit boasts heightened sensitivity and greater resistance to inhibition, making it ideal for detecting a wide variety of samples in complex and diverse cases.



PRODUCT FEATURES

High Sensitivity

Powered by an advanced PCR buffer system and a specialized primer pair, the assay exhibits high sensitivity, resilience against inhibitory substances, and a high detection rate for minute samples. Its sensitivity can reach up to 50 pg.

The Task of Distinguishing Mixed Samples

Incorporating the two Y-STR loci DYS576 and DYS518 with higher GD values, aids in quantifying the number of male samples in a mixed sample.

Fast and Efficient

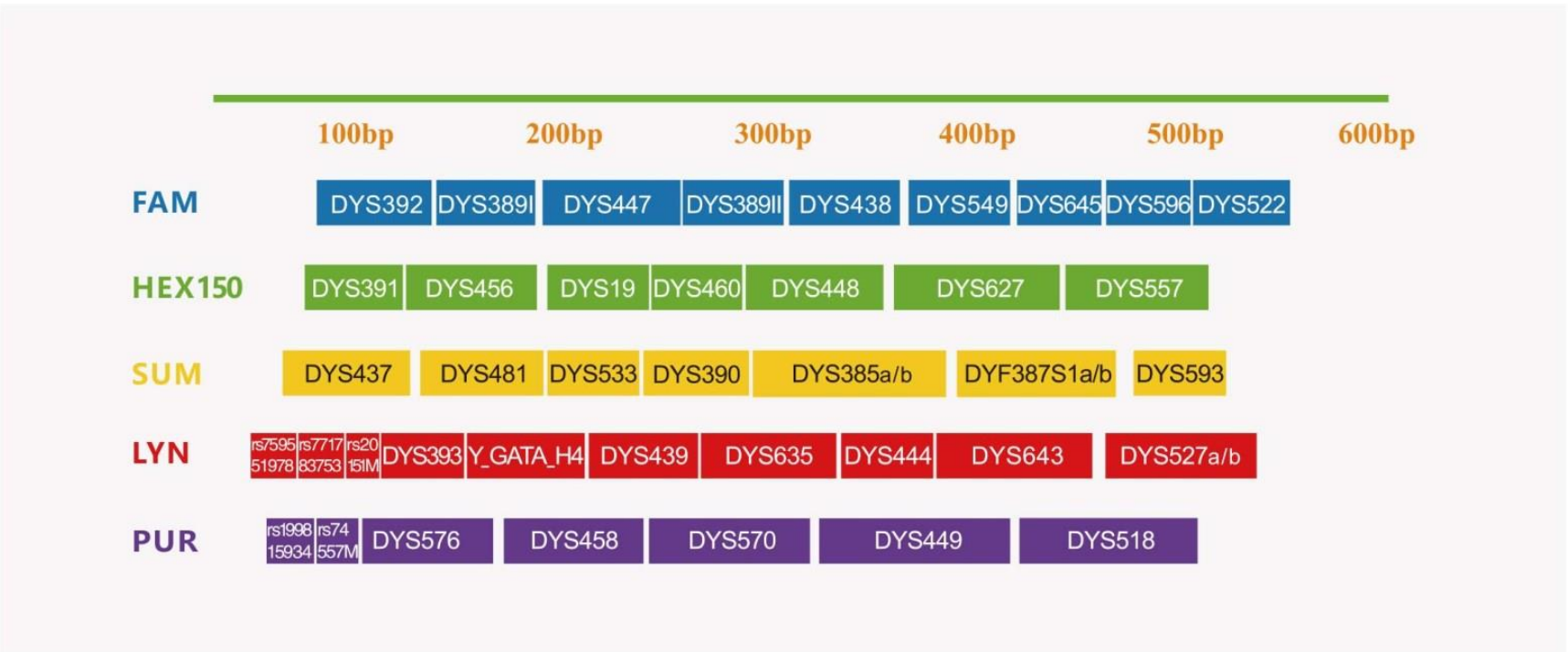
This kit boasts the fastest theoretical amplification time of 60 minutes.

The Internal Control Performance is Robust

It incorporates two internal PCR control genes for monitoring the PCR process and evaluating sample quality.

SF Y43CS STR Kit

This kit employs an advanced, six-color fluorescent labeling system to detect the polymorphisms in 38 Y-STRs and 5 Y indels located on the human Y chromosome, offering higher sensitivity and stronger resistance to inhibitory effects. It is suitable for tracing minute amounts of male DNA samples amidst a vast background of female DNA, such as in forensic analyses of semen samples in sexual crimes or other criminal cases, as well as familial lineage investigations and paternity tests.



PRODUCT FEATURES

High Performance

Optimized primer design facilitates reduced female DNA interference with enhanced detection of hybridization spots.

High Sensitivity

Employing high-performance PCR buffer systems with superior sensitivity and resistance to inhibitors, one can enhance the detection rate for samples containing inhibitory compounds, with a detection limit as low as 30 pg.

Core Optimization

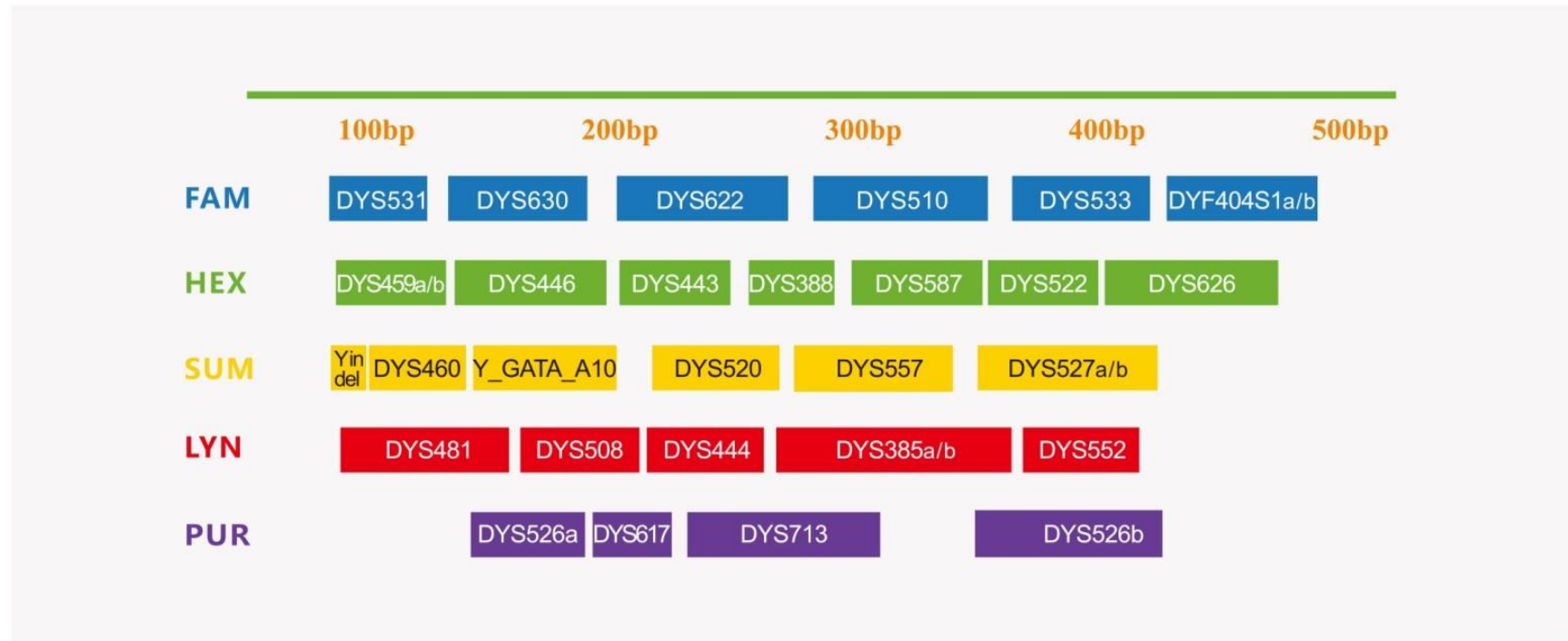
20 core loci are arrayed within 350 base pairs, with 13 situated within 250 base pairs, ensuring the prioritized amplification of core loci.

Excellent Compatibility

The kit is compatible with all core and preferred Y-STR loci recommended by GB/T 41009-2021 standard, catering to the prevalent Y-chromosome cases in the market along with kits for library construction.

SF Y SUPP Plus STR Kit

This kit employs a six-color fluorescent labeling system capable of amplifying 31 Y chromosome STR loci and 1 Y indel loci simultaneously. It serves as an effective supplement to conventional Y testing kits, with its use in conjunction with Y43CS or Y37+5 allowing for the detection of 59 Y-STR loci and 5 Y indel loci. This enhances the ability to identify male individuals and improve familial inquiries. Applicable for kinship segmentation and case inquiries.



PRODUCT FEATURES

Good Specificity

This system contains multiple exclusive genetic markers, with better diversity and heterozygosity, and higher individual recognition and non-parental exclusion rates.

Comprehensive Performance

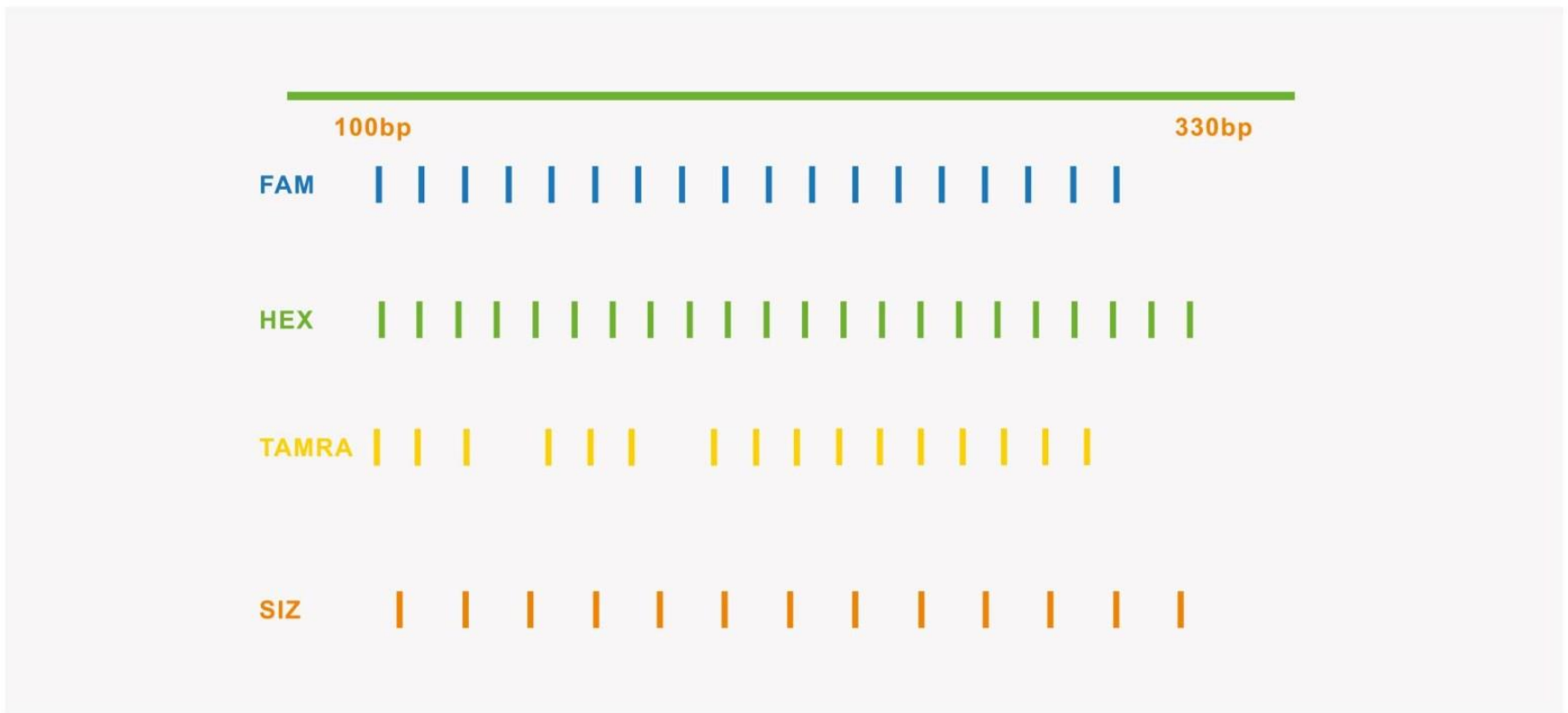
The low mutation loci of the Chinese population are selected. Its haplotype has better family representation, which is suitable for the construction of Y-STR database. It also contains 8 high mutation loci, which is conducive to family screening and the differentiation of male close relatives in male kinship.

Extraction Free Direct Amplification

Direct amplification of mainstream blood cards or saliva cards can be performed without the need for template extraction and purification. Also suitable for extracted DNA template.

SF mtDNA-SNP60 Kit

SF mtDNA-SNP60 Kit uses a 4-color fluorescent labeling system to simultaneously amplify 60 SNP loci with high polymorphism, low reverse mutation rate, and strong genotyping ability that conform to genetic characteristics. It is suitable for maternal lineage identification and is an important auxiliary mean of identification.



PRODUCT FEATURES

Excellent Compatibility

Extraction from template DNA, PCR amplification, electrophoresis detection, data analysis are all completely consistent with the existing forensic system, which is simpler and more economical than the existing mitochondrial hypervariable region full sequencing method.

High Sensitivity

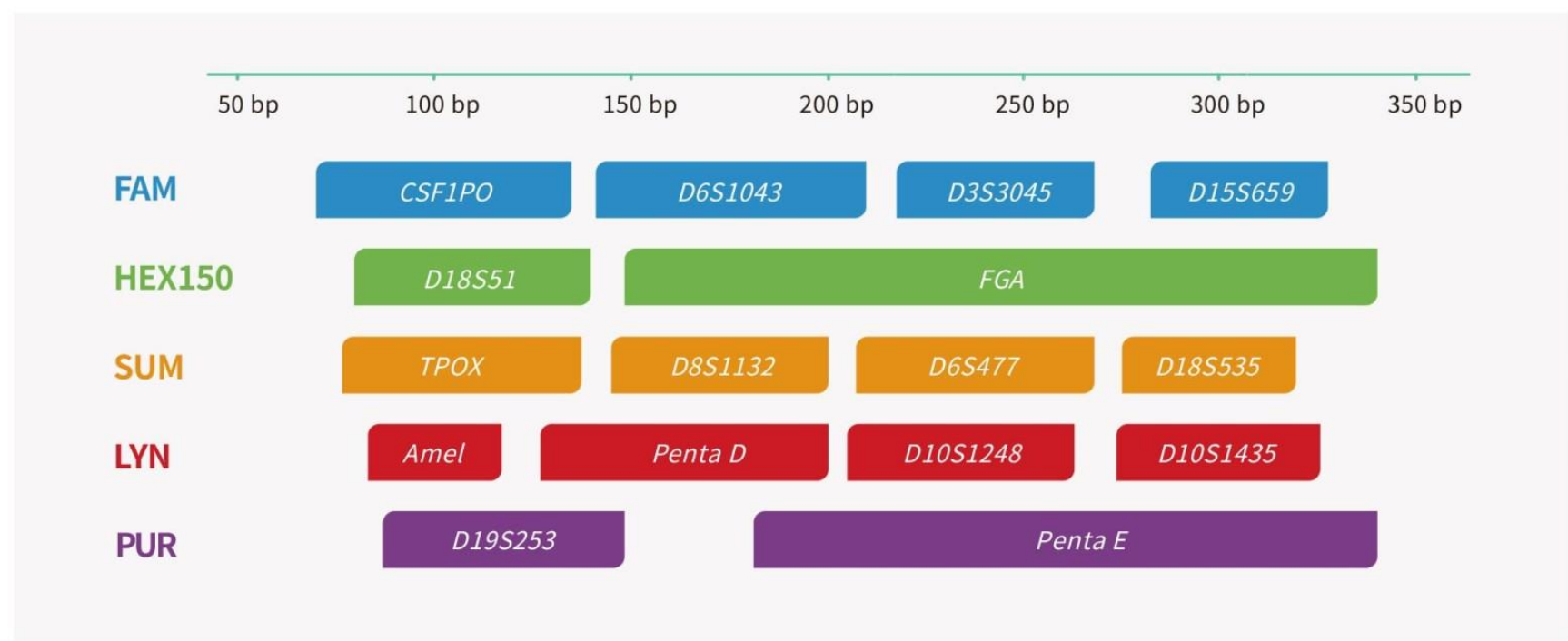
With a sensitivity of 6.25pg/ 25uL, this assay is suitable for both on-site biological trace evidence and degraded samples analysis.

Short Amplification Fragment

All amplified fragments fall within 330 base pairs, thereby enhancing the detection rate of trace and degraded specimens.

SF Mini A Kit

This kit uses a six-color fluorescent labeled system to amplify 15 autosomal STR loci and 1 sex locus in the human genomic DNA, with the maximum detection fragment being less than 340bp, which can effectively supplement the information of loci lost in large fragments. When used in conjunction with SF 28CS, it can detect 29 autosomal STR loci, 1 Y-indel, and 1 sex locus.



PRODUCT FEATURES

Superior Performance

High-performance PCR premix system, with strong inhibition and high sensitivity up to 50pg/25ul.

Applicable for Degraded Evidence

All amplified gene fragments are less than 340bp, which is especially suitable for trace and degraded samples.

Large Volume Sampling

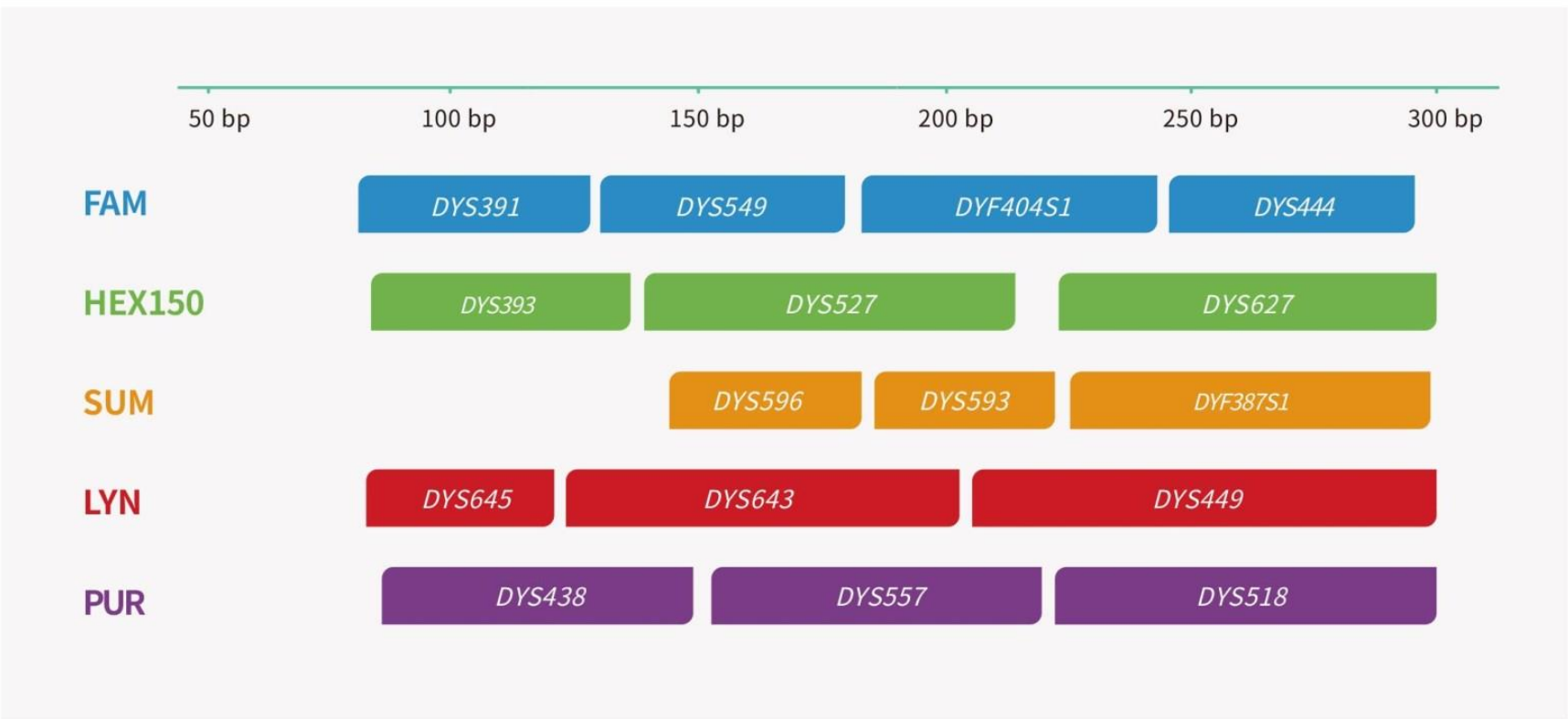
Supports the addition of samples up to 70% of the volume, greatly improving the detection rate of trace materials.

Optimization of Gene Locus Arrangement

The coverage of gene loci is wider, reducing the risk of allele crossover.

SF Mini Y Kit

This kit uses a six-color fluorescence labeled system to simultaneously amplify 19 Y-STR loci in the human genomic DNA, with the maximum detection fragment being less than 300bp, suitable for trace and degraded samples, and can effectively supplement the information of loci lost in large fragments. When used in conjunction with SF Y43 CS, it can detect 39 Y-STR loci and 5 yindel loci.



PRODUCT FEATURES

Superior Performance

High-performance PCR premix system with strong anti-inhibition ability and high sensitivity.

Applicable for Degraded Evidence

All amplified fragments at genetic loci are less than 300bp, making it particularly suitable for degraded samples.

High Compatibility

Adapting to various types of blood cards and extracted samples, with strong adaptability.

SF Human DNA Quantification Kit

This kit uses real-time fluorescence quantitative PCR technology to simultaneously quantify and qualitatively assess human total DNA and male DNA. It also contains an internal reference (IPC) to monitor the qPCR process and evaluate whether the sample has inhibitors. The human DNA quantitative detection kit is designed to determine whether there is sufficient and intact DNA in the sample, providing reliable information on the degradation or inhibition of the sample. It helps make key decisions in the STR analysis workflow, greatly improving the efficiency of the experiment and using precious samples more carefully.

The Detection Principle

Target Sequence	Effects	Fluorescent Groups
Small Fragment Amplification (SA)	Chromosomal target genes, with shorter design fragments, quantifying human genomic DNA	VIC
The Y Chromosome Target (M)	The Y chromosome target gene, quantified DNA samples from male individuals	FAM
Large Fragment Amplification (LA)	Chromosomal target genes often have longer designed fragments, with the ratio of SA to LA used as an indicator of DNA degradation	ROX
Internal Reference (IPC)	Testing for non-human origin DNA synthesis, assessing the validity of negative results, and examining PCR inhibitors.	CY5

PRODUCT FEATURES

✓ Good Specificity

This system contains multiple exclusive genetic markers, with better diversity and heterozygosity, and higher individual recognition and non-parental exclusion rates.

✓ High Efficiency

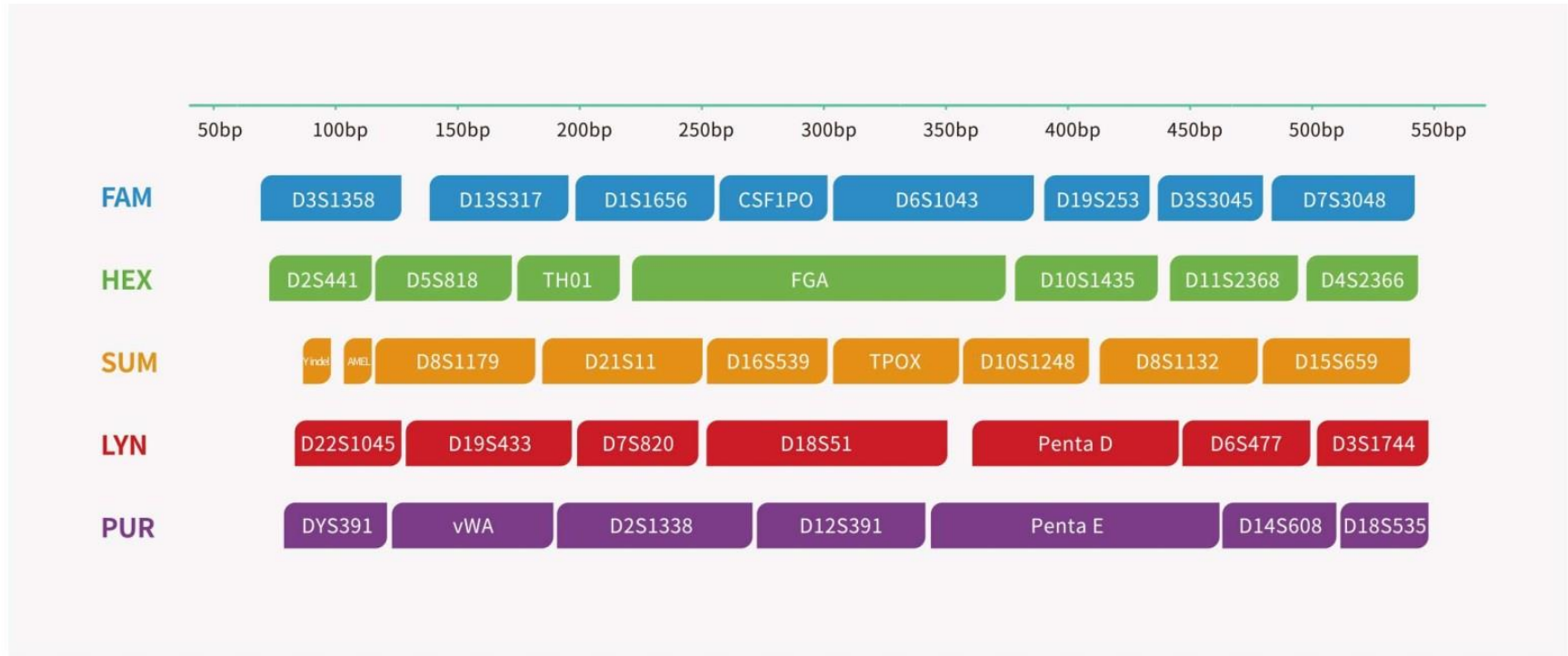
Minimizing sample consumption and simplifying workflows, detection results can be obtained within an hour.

✓ High Sensitivity

With its broad detection range spanning from 100ng/ uL to 0.5pg/ uL, the reliable detection limit is less than 1pg/ μL.

SF 38 STR Kit

This Kit employs six-color fluorescence labeling, enabling the simultaneous amplification of 35 autosomal STR loci, 1 sex loci, 1 Y-STR loci DYS391, and 1 Y indel loci. It is compatible with direct amplification of blood or saliva spots, adhering to the requirements of the National Public Security Bureau's DNA database and missing children database, and has already undergone certification by the China Public Security Product Certification Authority.



PRODUCT FEATURES

High Compatibility

A single test detects 38 genetic loci, covering the most commonly used autosomal loci in the market.

High Individual Recognition Rate

Includes 29 core genetic loci and Amelogenin loci required by the Public Security Ministry as well as six alternate loci with higher polymorphism.

Genome Positioning Optimization

Optimized arrangement of genetic loci, with maximum amplification fragment size less than 550bp, conducive to obtaining complete genotyping.

Good Balance

MIX's comprehensive upgrade facilitates large-scale expansion with better balance.

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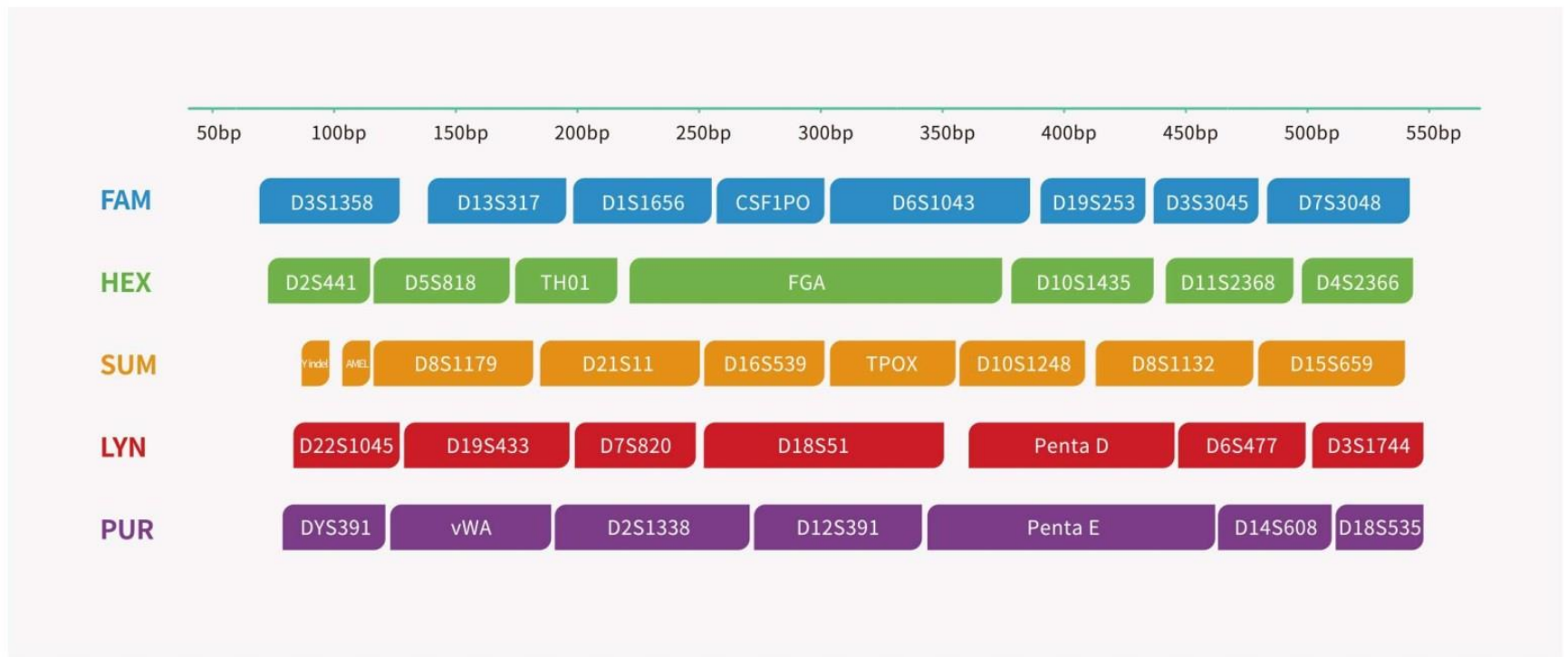
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PRODUCT FEATURES

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Optimized arrangement of genetic loci, with maximum amplification fragment size less than 550bp, conducive to obtaining complete genotyping.

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SF Y56+5 STR Kit

This product employs a six-color fluorescent labeling method to detect polymorphisms in 56 STR loci and 5 Y indel loci on the Y chromosome via multiple repeat amplification. It can directly amplify bloodstains or saliva stains, fulfilling the requirements for the construction and operation of the Public Security Ministry's Y Chromosome Database.

Highly Compatible

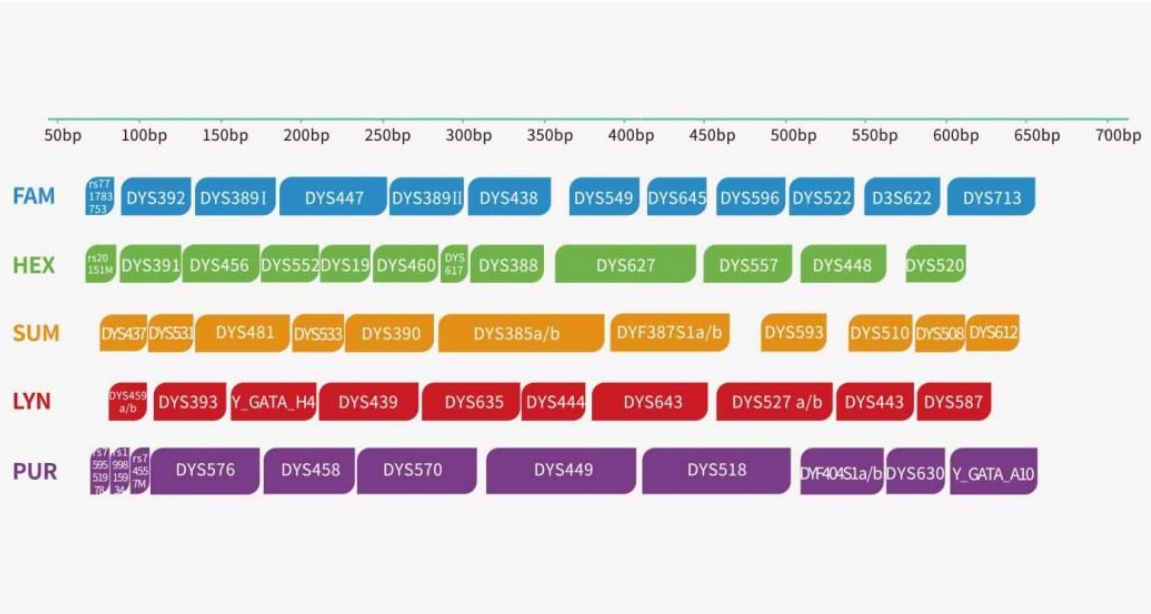
A kit encompassing all major Y database construction panels in the market, with the largest number of genetic loci among its peers, is more conducive to data comparison and family tracing.

High Capability for Haplotype Identification

With 5 Y indel loci in place, the kit's ability to discern haplotypes is significantly enhanced, assisting in family tree tracing.

Product Enhancement

Enhanced primer design and premix system. Innovatively employs SIZ-700. Anew enhanced performance.



SF Y37+5 STR Kit

This kit employs a six-color fluorescent labeling system and a multiple replicate amplification method for detection of polymorphisms in 37 STR loci on human Y chromosome and 5 Y indels that are highly polymorphic within the Chinese population, all core and preferred Y-STR loci recommended by GB/T 41009-2021.

Core Optimization

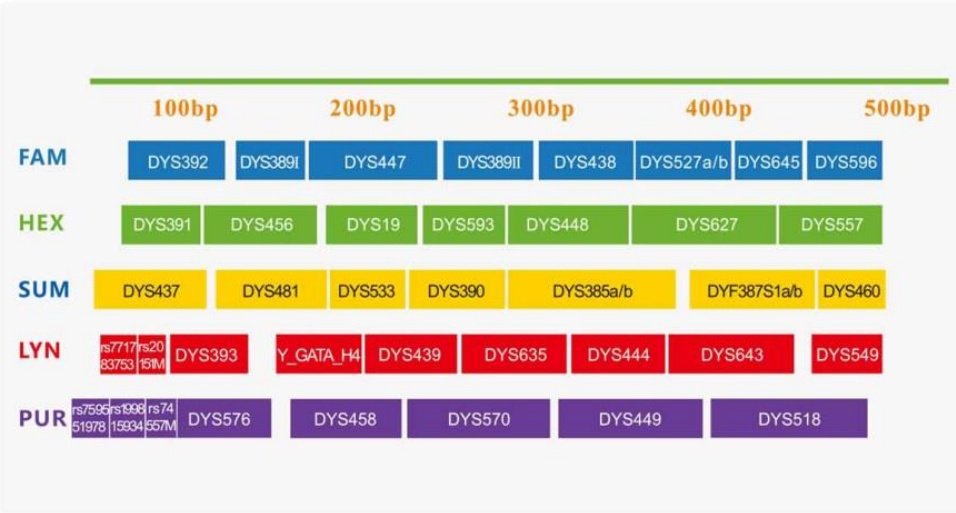
A maximum of 360 base pairs is allowed for the amplification fragments of 20 core genetic loci.

High Sensitivity

Offering a detection sensitivity of 50pg, this test is universally applicable to both on-site biological trace evidence and degraded samples for analysis.

Extraction Free Direct Amplification

Direct amplification of mainstream blood or saliva cards is possible without the need for template extraction and purification. Also suitable for extracted DNA templates.



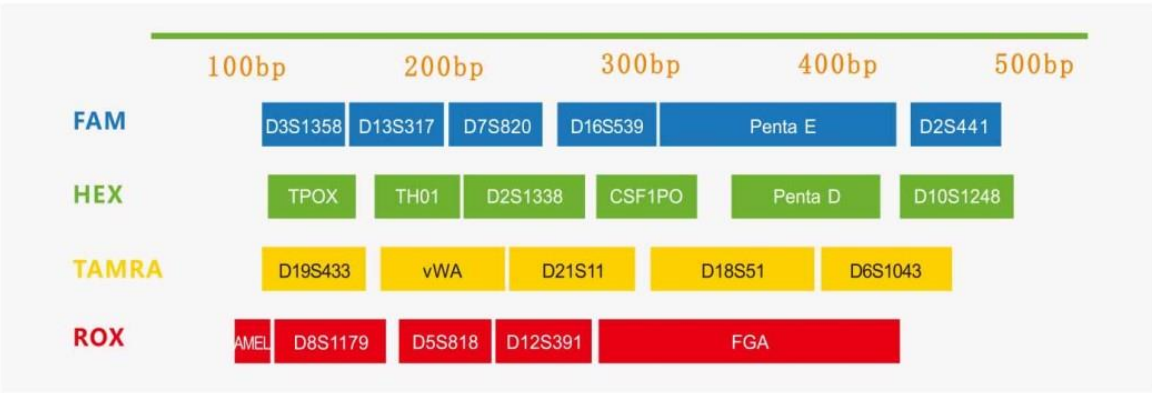
SF 22 STR Kit

This kit employs a five-color fluorescence labeling system, enabling simultaneous amplification of 21 autosomal STR gene as well as 1 sex chromosome gene.

A higher individual identification rate and non-paternity exclusion rate,

This kit boasts a maximum theoretical amplification time of 87 minutes.

Direct amplification of mainstream blood or saliva cards is possible without the need for template extraction and purification. Also suitable for extracted DNA templates.



SF 21+1FS STR Kit

This kit employs a five-color fluorescence labeling system, enabling simultaneous amplification of 21 autosomal STR loci, 1 X STR, 1 Y STR, and 1 sex-specific loci. The supplementary STR loci for biological full-sibling relationship authentication can now be provided. Seventeen additional autosomal loci essential for biological monozygotic relation identification were made available.

In conjunction with SF 22, the test kit allows for the acquisition of information on 39 autosomal genetic loci.

Direct amplification of mainstream blood or saliva cards is possible without the need for template extraction and purification. Also suitable for extracted DNA templates.



SF 21+1 STR Kit

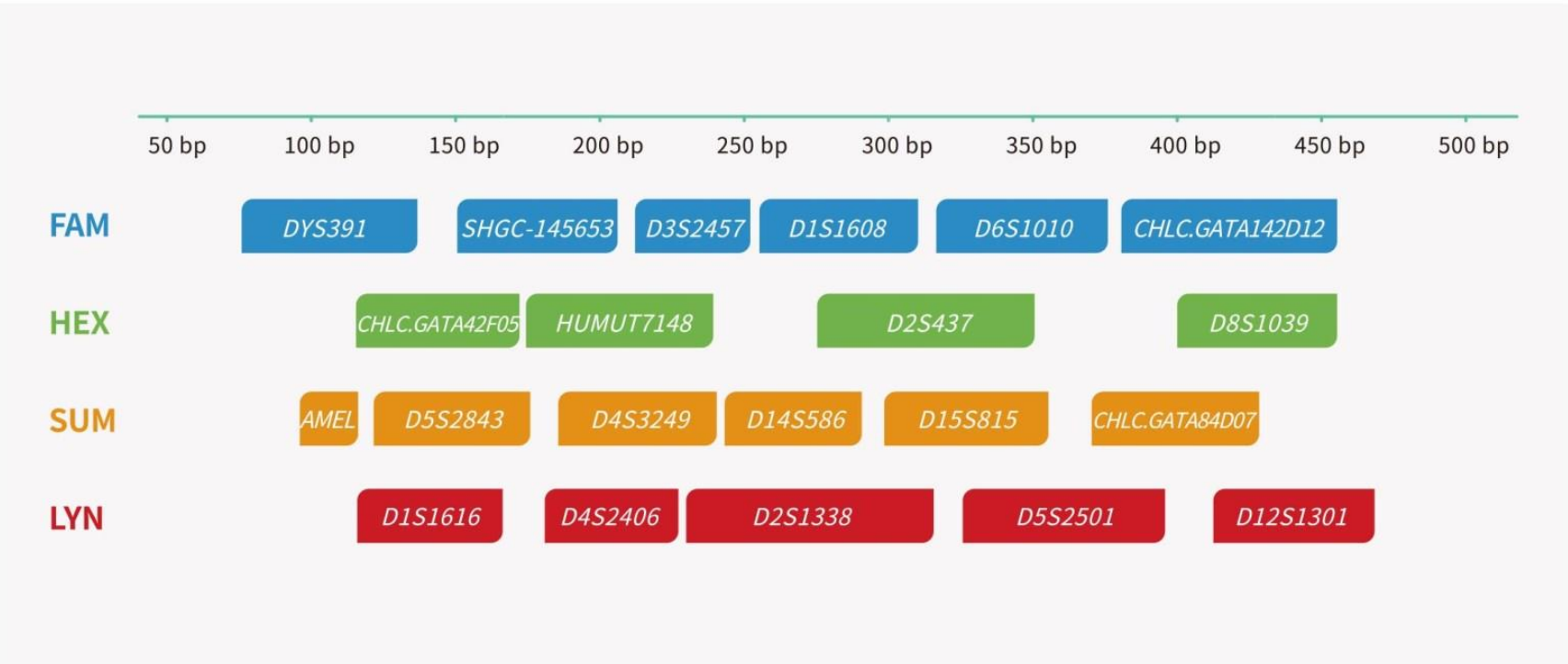
This kit employs a five-color fluorescent labeling system, enabling simultaneous amplification and detection of 4 CODIS and 17 non-CODIS autosomal STR genetic loci as well as 1 gender identification genetic loci. It can detect 22 loci simultaneously, of which 17 non-CODIS supplemental loci have played an important role in the determination of kinship.

Used in combination with SF 22, it can provide information of 39 autosomal loci. Direct amplification of mainstream blood or saliva cards is possible without the need for template extraction and purification. Also suitable for extracted DNA templates.



SF 21HS STR Kit

This kit contains 18 new autosomal loci, 1 CODIS loci, 1 sex loci, and 1 Y loci, which when used in conjunction with other company kits, can detect no fewer than 73 autosomal STR loci. It fulfills the new requirements outlined in the Biological Half-Sibling Relationship Identification Technology Standard (SF/T 0131-2023), thereby enabling more accurate and reliable half-sibling relationship identifications. New chromosomal loci offer numerous applications beyond siblinghood testing, opening up new avenues for familial authentication or forensic casework involving other types of forensic evidence.



PRODUCT FEATURES

Wide Applicability

Suitable for blood cards, oral cards, filter paper, cotton swabs, as well as extracted DNA templates.

High Specificity

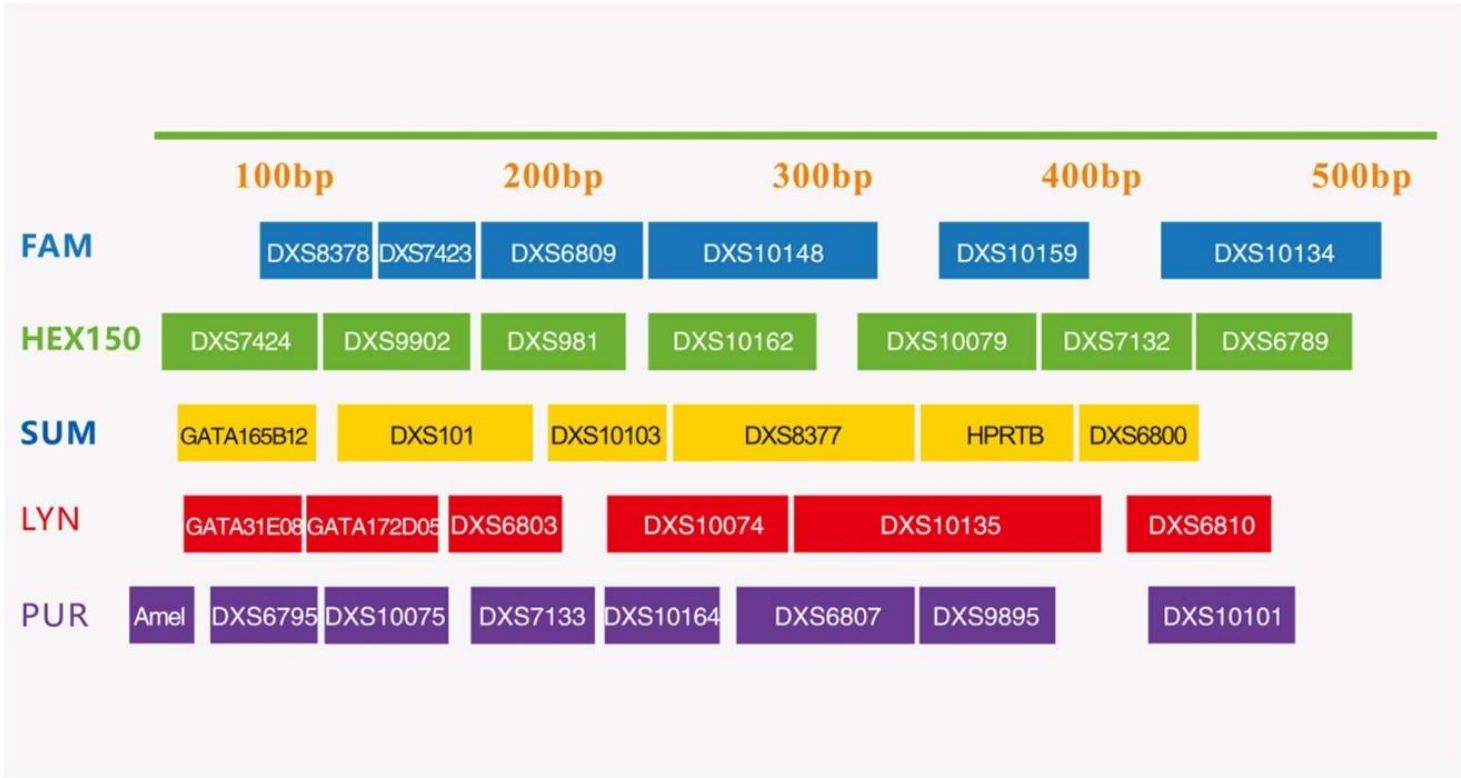
Examination of dog, pig, cow, chicken, horse, and fish samples revealed no specific DNA typing within their respective species range.

Genome Positioning Optimization

An amplification system of 125pg/ 25μL can detect all genotypic variants.

SF X PLUS STR Kit

This kit employs a six-color fluorescence labeling system that can amplify simultaneously 32 STR loci on the X chromosome as well as 1 sex-specific loci. Comprehensively encompassing all gene loci of current domestic and international mainstream X kits. Adhere to the latest requirements of the Public Security Ministry for combating abduction. Designed for X-chromosome inheritance tracking, particularly suited for special kinship verification in cases such as distant kinship verification, sibling-in-law verification, and fraternal-twin relationship determination.

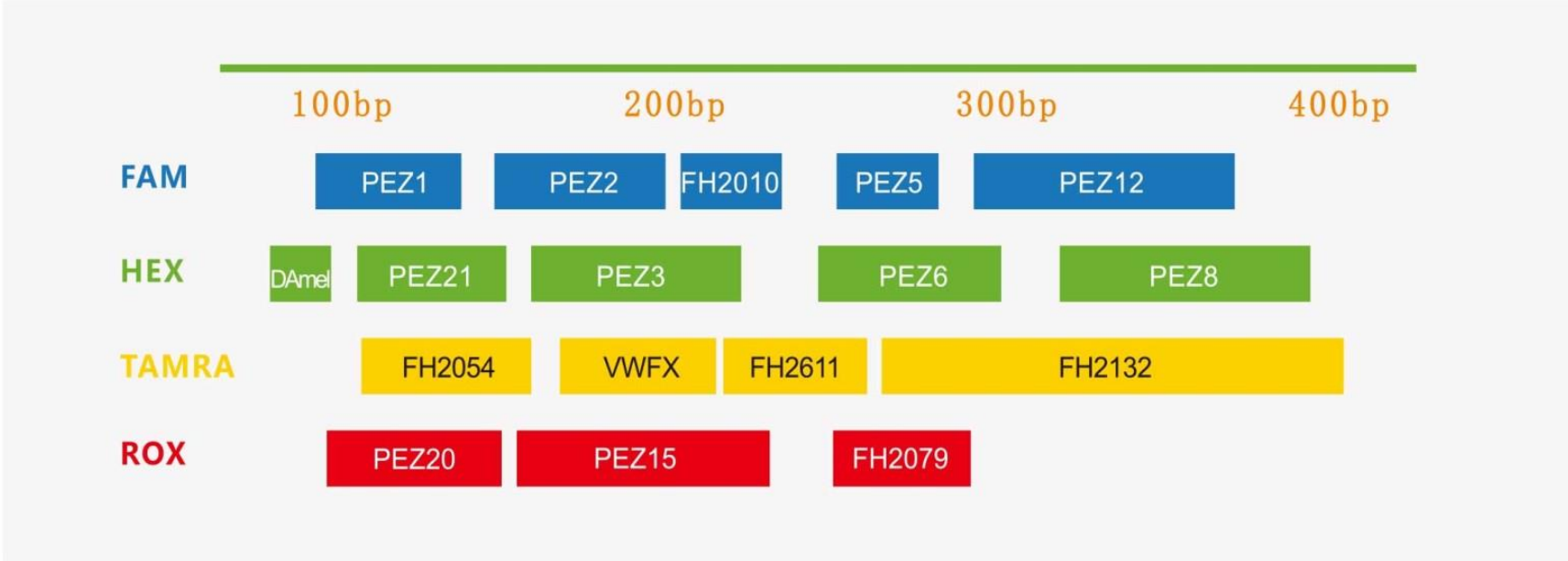


PRODUCT FEATURES

- High Resolution**
Selecting high polymorphic loci suitable for the Chinese population and using loci from different groups can effectively improve the resolution.
- Extraction Free Direct Amplification**
Direct amplification of mainstream blood or saliva cards is possible without the need for template extraction and purification. Also suitable for extracted DNA templates.

SF Canine 17A STR Kit

This kit has been jointly developed by the Public Security Ministry's Nanchang Police Dog Base, and it has already been utilized in multiple police dog bases across the country. The system exhibits high polymorphism, a fine balance, heightened sensitivity, making it apt for individual identification, parentage verification, as well as the construction of DNA databases. Winner of the "National Science and Technology Progress Prize for Second Class" as well as the "Ministry of Public Security Science and Technology Prize for Second Class," it is domestically advanced and commercialized "Canine DNA Detection Products."



- Advanced Technique**
It can detect 16 STR gene loci simultaneously, and the gender identification gene loci is introduced for the first time.
- Fast and Efficient**
This kit can directly amplify blood spots, saliva spots, oral swabs, hair follicles, and epithelial cells.
- Easy to Use**
The user interface is sleek and straightforward, with data analysis conducted utilizing GeneMapperID and GeneMapperID-X software.
- Widely Applicable**
Individual identification, breed management, purebred and breeding for police dogs.

SF Efficient Silica Bead DNA Extraction & Purification Kit

This kit harnesses the property of silicon beads selectively binding DNA, as well as the technique of washing DNA off the surface of the beads with an appropriate volume of elution buffer to purify genomic DNA from small sample volumes.



- A unique centrifugal basket design eliminates the need for sample carriers to be transferred, thus reducing DNA template loss.
- The scope of applicability is broad, with blood filter paper, FTA cards, saliva cards, blood gauze, fiber materials, tissues, bodily fluids, muscle, semen, hair, and others all suitable for extraction and purification.
- With its high sensitivity, it can extract DNA from extremely minute amounts of degraded cells, significantly enhancing the detection rate for trace samples.
- Of high purity, the typical ratios for OD260/OD280 reach as high as 1.7-1.9, making them directly suitable for PCR, Southern blotting, and various enzyme digestions.
- With its rapid pace and streamlined procedures, sample processing can usually be completed within 30 minutes for a single sample.
- Safety and environmental protection do not require the use of toxic phenol or other reagents, nor do they necessitate the steps of ethanol precipitation.

SF Mag FCS DNA Kit

This kit integrates the property of magnetic beads selectively binding to DNA with the technology of washing out DNA from the surface of beads using an appropriate volume of elution buffer, enabling the purification of genomic DNA from small sample volumes.

- Simplified operational steps, one tube through to the end, eliminating the need for transfer operations, thus reducing DNA template loss.
- Applicable samples are wide-ranging.
- Characterized by its high sensitivity, it is capable of extracting minute DNA templates from scanty cellular debris through a specialized formulation and design of the DNA extraction process, thereby enhancing the detection rate for trace samples.
- With its rapid processing capabilities, it can complete the extraction and purification steps in as little as half an hour.

Highly Efficient Crime Scene Forensic DNA Evidence Collector

The high-efficiency crime scene forensic DNA evidence collection device is an imported system with a military-grade standard that our company has brought in. It was developed and manufactured by MSI Collection Instrument Inc., a US-based firm. This system is commonly referred to as the MSI Collection Instrument.

MSI's sampling instrument employs an entirely novel technique for extracting biological samples from surfaces, relying on the principle of wet vacuum sampling to collect forensic DNA samples in situ. The basic principle of MSI collection involves spraying a sterile surface collection liquid onto the surface of forensic biological samples. This method utilizes the vacuum force to simultaneously collect the forensic biological sample along with some adhering substances into the collection container. Following passage through a filtration funnel, the forensic biological sample adheres to the filter membrane surface. The filter membrane undergoes standard processing procedures, thus enabling the retrieval of the forensic biological sample's DNA.

The MSI sampler's DNA extraction efficiency surpasses that of the double-swab technique by 200 times, with no detectable degradation of the sample DNA caused by the instrument. The collected DNA is of higher quality, enabling the acquisition of more accurate DNA profiles. The MSI sampling instrument is suitable for collecting biological samples from the surfaces of various materials such as white cotton fabrics, blue denim, nylon, polyester, tiles, cutting boards, conveyors, stainless steel, polypropylene, carpets, animal hides, wooden planks, and human skin.



Apparatus Features:

- A cutting-edge DNA retrieval technology platform
- The DNA quantity collected by the MSI sampler is up to 200 times higher than that obtained through the dual-swab method.
- The DNA collected by the MSI collector is without inhibition and degradation.

32-channel Automated Nucleic Acid Extraction Machine

32-channel Automated Nucleic Acid Extraction Machine is an efficient nucleic acid extraction and purification device based on nucleic acid front-end processing technology, featuring speed, convenience, reliability, and safety. By using a 96-well pre-dispensed reaction plate, the magnetic beads can be adsorbed, transferred, and released through a customized magnetic rod, avoiding the liquid handling process and achieving automated operation. The instrument is adaptable for various sample types, enabling rapid and high-purity extraction of nucleic acids from human tissues, animal tissues, plant tissues, and microorganisms. In forensic medical examination, molecular biology research, and clinical disease diagnosis, its applications have been widely prevalent.

Apparatus Features:

➤ Fully Automated Operations

The extraction and purification process is fully automated, eliminating differences and errors caused by manual operations, ensuring consistent and repeatable results. The ultraviolet decontamination function between batches minimizes cross-contamination among samples. Samples are isolated from the external environment during operation, minimizing operator contact with reagents and samples to prevent contamination. The intelligent operation system ensures minimal exposure to harmful substances, ensuring safety and reliability.

➤ A Systematic Experimental Plan

Supplying appropriate magnetic beads and reagent systems, featuring sample-specific extraction schemes incorporated; customizable individualized experimental protocols can be tailored for diverse samples and magnetic bead requirements; updates can promptly be implemented, accompanied by free software system upgrades.

➤ Easy to Use

With its large-format true-color LCD display and touch-screen operation, the process is fully automated. The sample size compatibility is strong, with a volume range for single-sample processing ranging from 20 to 1000 milliliters. The machine pre-sets multiple programs, allowing for editing and storage of dozens of programs, making it suitable for various magnetic bead extraction reagents.

➤ Operating with High Throughput and Efficiency

32 magnetic beads can simultaneously process 1 to 32 samples, with a broad processing volume range. It is particularly suitable for DNA/RNA extraction and purification, enabling high-throughput nucleic acid extraction: the shortest time required to extract 32 samples simultaneously is merely 30 minutes. The magnetic beads exhibit uniform magnetism, with an extraction rate exceeding 95%. True high-speed efficiency is attained.



24-channel Automated Nucleic Acid Extraction Machine

24-channel automated nucleic acid extraction machine employs a magnetic bead separation mode utilizing a pipetting-driven mechanism in lieu of traditional methods using magnetic sticks for automated nucleic acid purification. This significantly enhances the precision of nucleic acid extraction while minimizing sample cross-contamination and issues with residual beads, ensuring the optimal separation effect of waste liquid and residual beads. Independent washout heads are employed, enhancing the purity of extracted samples and enabling the automation of nucleic acid purification for various sample types.

Apparatus Features:

Fully Automated Operations

This apparatus can complete the sample digestion, transfer of digested liquid, nucleic acid binding, magnetic bead washing, and elution liquid transfer in an automated manner; the extraction process takes place in a fixed reaction dish, which ensures greater stability throughout and minimizes risks associated with magnetic bead loss, residue, or other contamination.

High-Throughput Work

The volume of liquid sample sampling is between 60-4000 μ L, and the nucleic acid elution volume is between 30-200 μ L. There is no need for a fixed volume of sampling or elution; extraction of 24 samples can be completed in as little as 30 minutes.

Fast and Efficient

Built-in heating block: room temperature~80°C, for sample heating, lysis, nucleic acid elution and incubation; using pre-packaged single-use reagent strips, with cellulose-coated magnetic beads. Can process 1-24 samples at a time without wasting reagent strips; extraction time is 30-70 minutes; pipetting accuracy: transfer volume <100 μ L, error range \leq 10%; transfer volume >100 μ L, error range \leq 4%.

Security and Reliability

An independent UV sterilization system, capable of operating between batches, can reduce batch contamination.

Other Product Series:

- 16-channel automated nucleic acid extraction machine
- 48-channel automated nucleic acid extraction machine



EQ9600 Real-Time qPCR System

Based on a global perspective in product design and manufacturing processes, the EQ9600 Real-Time qPCR System creatively combines the novel light signal acquisition technology of a Fresnel lens with time-resolution signal separation techniques and its unique temperature control technology. This has effectively addressed the issue of multi-channel inter-color fluorescence crosstalk among multiple samples, ensuring detection sensitivity, uniformity, and accuracy that match international advanced standards. It supports the application of all common QPCR detection modes.

Apparatus Features:

- Four-channel detection covers a wide range of fluorescence, enabling facile multi-PCR testing for 96 samples.
- Effectively mitigating multi-color crosstalk and edge effects, without the need for fluorescence correction.
- A pioneering scanning approach and time-resolution signal separation technique
- A novel optical scanning detection system, enhancing sensitivity and resolution, precisely discerns between positivity and negativity.
- The 96 holes sample module is composed of six separate temperature-controlled modules, with a minimum temperature difference of 0.4°C between adjacent modules.
- Unique zoning and edge temperature compensation technology ensures uniformity in temperature; an intuitive operation software with user-friendly design.



Technical Parameters

Temperature Control		Optical Detection	
The Sample Size	0.1mL, in 96 holes.	Radiant Fountanelight	4 monochrome high-efficiency LEDs
Reaction Volume	10-50 μ L	The Detector Device	PMT
Thermal Cycle Tecnique	Peltier	Detection Mode	Time-Resolved Real-Time Scanning
Maximum Temperature Rise/Fall Rate	6°C/s	The Range of Stimulation/Detection	455-650nm 510-715nm
The Temperature Range	4-100°C	Number of Fluorescence Channels	4 channels
Temperature Accuracy	\pm 0.2°C	Sensitivity	Single copy gene
Uniformity in Temperature	\pm 0.2°C(60°C); \pm 0.2°C(95°C)	Resolution	Can distinguish a 1.33-fold copy number difference in a single cell reaction
A Range of Temperature Gradients	30-100°C	Dynamic Range	10 magnitude
Temperature Gradient Temperature Difference range	1-36°C	Supportive Dyes	FAM/SYBR Green VIC/HEX/TET ROX/Texas Red Cy5/Quasar
Input Voltage	220V, 50/60Hz, Well grounded	Temperature Requirements	15-30°C
Dimensions	50*36*38cm	Weight	25kg

PEC280 Portable Electronic Cooler

This kit integrates the property of magnetic beads selectively binding to DNA with the technology of washing out DNA from the surface of beads using an appropriate volume of elution buffer, enabling the purification of genomic DNA from small sample volumes.

Apparatus Features:

Portable

Weighing in at 3.5 kilograms and measuring merely 8.8 centimeters tall; it cools down fast, reaching 4°C within 8-12 minutes upon activation. The battery capacity allows for 4°C temperature maintenance for 70 minutes.

Applicable in a Wide Range

In a standard laboratory setting, it is suitable for PCR sample preparation, addition of reagents, and preparation of solutions. It can also be utilized for slow thawing of frozen samples and transfer of samples. Suitable for use in field settings or as an ideal coolant for mobile PCR laboratories.

Compatible

Modules are replaceable and adaptable to various tubes and consumables.



Vortex Oscillation Centrifuge Integrated Machine

The vortex oscillation centrifuge integrates centrifugation and mixing, allowing for a single step operation to rapidly enhance the efficiency of PCR laboratory equipment. It can easily unlock the centrifugation + mixing task with a single button, and the apparatus is compact and portable with simple operation.

Apparatus Features:

- Centrifugal separation seamlessly dovetails with uniform mixing, a one-step operation that saves both time and effort.
- Rotation speed:** 1000 to 4500RMP
- Wedge oscillation intensity:** 1~4 grades
- Procedure:** strength, rotation speed, time can be set
- Safety:** Safety interlock device, use with confidence
- Application domain:** PCR and conventional molecular biology laboratories with confidence



The Ares Nucleic Acid Clearance System

Employing a proprietary blend of complementary nucleic acid clearing agents (powder dissolvent), after cutting through by the DryFog’s superior DryFog Cutting Action within the Ares System’s pinnacle, the misted clearing agents are further micro-particulated by supersonic air, colliding with another misted clearing agent emanating from the same nozzle in the center, while undergoing repeated cutting action, generating ultrasonic waves of 330,000 to 400,000 hertz that further minify and homogenize the clearing agents, forming the genuine DryFog. Super-homogenized sanitizers effectively capture PCR aerosols in the air through random Brownian diffusion motion, efficiently destroying the conjugated double bonds of purine and pyrimidine in DNA, thus achieving their removal objective. After undergoing oxidation treatment with PCR aerosol, Ares is purged through air, adsorbed by the DNA aerosol absorbing screen, under the illumination of LED UV lights within the device, titanium dioxide undergoes photocatalytic reaction, producing billions of hydroxyl radicals with immense oxidative capacity, further breaking down the PCR aerosol. In this manner, it eliminates the aerosol from multiple dimensions through collaborative elimination. Ares serves as a multifaceted guardian that dismantles bacteria and viruses, purifies the air, and ensures laboratory biosafety.

Apparatus Features:

- Efficiently:** The Ares System can address the overwhelming majority of PCR laboratory contamination issues within a fraction of the time-consuming 2-4-week-long purging anxieties.
- Convenience:** User-friendly interface, simple operation, fully automated clearance.



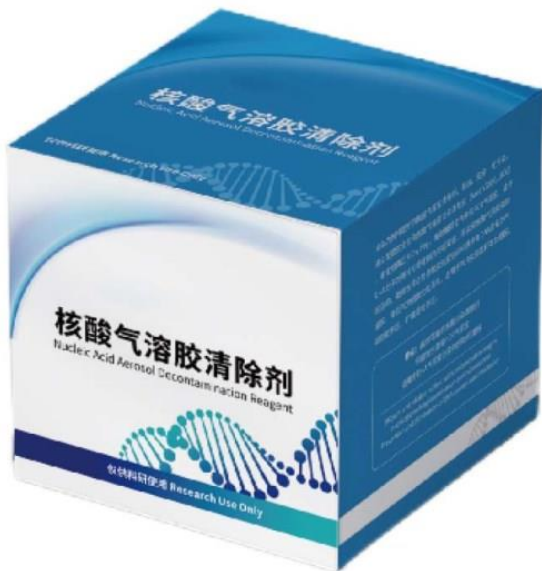
Models	Ares Y2000	Ares Y1000	Ares Y500
Applicable Space	≤ 250 cubic units	≤ 100 cubic units	≤ 50 cubic units
The Dry Fog Spray Nozzle Particle Size	<5μm	<10μm	<10μm
Atomization Speed	5-15ml/min	5-15ml/min	5-15ml/min
Photocatalytic Function	Yes, accelerate the decomposition of aerosol pollution	None	None
Air Purification Capabilities	Yes	Yes	None
The Aerosol Adsorption Screen	Yes	Yes	Yes
Distance-measuring Auto-pilot Function.	Yes	Yes	Yes

Nucleic Acid Aerosol Scavenger (Solid Tablets)

Designed for prevention and removal of DNA aerosol contamination, Ares General Supplies come in convenient four-pack bottles.

Product Characteristics:

- Packaging:** 4 bottles/ box, 20 tablets/ bottle.
- Convenienc:** Solid tablets, easily accessible.
- At Room Temperature:** do not require refrigeration conditions
- The Translated Paragraph Highly Efficient:** It effectively prevents and decontaminates laboratory spaces from aerosols carrying DNA fragments, thereby reducing the risk of false positives in PCR tests due to aerosol contamination.
- Safety:** Non-corrosive removal of PCR aerosol



Nucleic Acid Eraser Tissue

This product is a wipe containing nucleic acid scavengers, designed for wiping suspected contaminated surfaces in laboratories, such as laboratory countertops, floors, pipettes, and doorknobs. It boasts high efficiency, safety, and non-pollution, with easy use and significant clearing effects. Importantly, it does not affect PCR amplification efficiency. In conjunction with Ares series instruments, which generate dry misting for removal, the prevention and clearing effects are even more efficacious.

Product Characteristics:

- Packaging:** 40 Pieces/ packet
- Effective:** Made from non-woven fabric and a non-enzymatic nucleic acid remover, it degrades DNA & RNA molecules through contact catalytic synergism, effectively preventing or removing nucleic acid contamination from surfaces and PCR aerosols.
- At Room Temperature:** do not require refrigeration conditions



Fragment Separation polymer

The fragment separation polymer series products are a type of optimized separation polymer for DNA sequencing and fragment analysis, suitable for both long and short DNA sequencing as well as fragment analysis. They have superior read length and resolution capabilities, while providing strong dynamic protection for capillaries. This series of products undergo strict quality control, ensuring stable performance and reliable results. They break the import monopoly and reduce the cost of DNA detection. Store in a 2~8°C refrigerator, with a shelf life of 6 months.



Name	Specifications		Applicable models	Purpose
35 PO 4 Polymer	384N	960N	ABI 3500 Series Genetic Analyser	PO4 Polymer is used for HID or forensic applications
35 PO 7 Polymer	384N	960N		
31 PO 4 Polymer	3.5mL/ bottle	7mL/bottle	ABI 3130 Series Genetic Analyser	PO7 Polymer is used for wide-range sequencing applications from short reads to long reads and fragment analysis
31 PO 7 Polymer	/	7mL/bottle		
37 PO 7 Polymer	7mL/bottle	28mL/ bottle	ABI 3730 Series Genetic Analyser	The PO7 Polymer is suitable for broad-range sequencing applications spanning from short-reads to long-reads, as well as fragment analysis

Deionized Formamide

Deionized formamide, used for resuspension of samples before capillary electrophoresis injection and maintaining their single-stranded state during electrophoresis, also exhibits a protective effect in slowing down nucleic acid degradation. Manufactured in-house with superior read length and parsing capabilities, while simultaneously reducing testing costs.

Specification:25mL/ bottle

Applicable Apparatus Model: ABI3500/3730/3130 Series Genetic Analysis GA118-24B/16B/16A/4A Series Genetic Analysis Instruments

Storage Temperature: -25°C to -15°C in the freezer for storage, avoid repeated freeze-thaw

Validity Period: The product is valid for 1 year



Capillary electrophoresis standard buffer is an important component of the electrophoresis system, a conductor in the electrophoresis field, maintaining a certain ionic concentration, and also a necessary condition to maintain a constant pH value of the electrophoresis system.

The 10X Electrophoresis Buffer

Specification: 25mL/ bottle, recommend replacing the buffer solution once per week

Product Performance is Stable: long storage time

Wide Applicability: can be used for multiple models of gene sequencers

Validity Period: The product is valid for one year

Recommended Replacement Cycle: Replace weeklyone year



AC Buffer

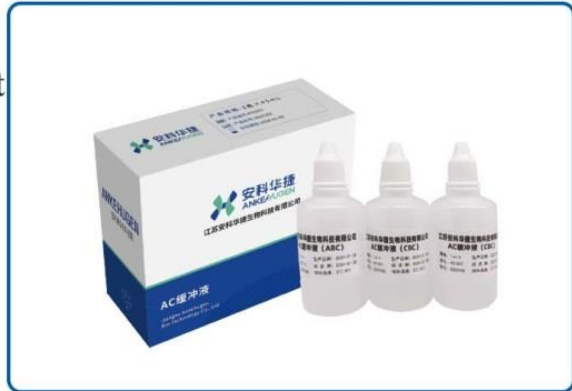
Specification: 3 bottles x 45mL (including one bottle of ABC buffer solution and 2 bottles of CBC buffer solution).

Applicable Apparatus Model: ABI3500 series genetic analysis instrument

Storage Temperature: Unopened products stored in a 2-8°C constant temperature refrigerator

Validity Period: The product is valid for one year

Recommended Replacement Interval: Replace every 2 weeks



The DNA Evidence Collection and Preservation Solution

The DNA Evidence collection and preservation solution is capable of efficiently capturing and transferring residual cells adhering to a wide variety of common solid materials. It also ensures the preservation of bodily fluids such as saliva, sweat, semen, and blood.

Product Features:

Capable of acquiring a wide range of biometric samples from the surfaces of common solid materials, thereby enhancing the success rate of collection.

Strong preservation capability: DNA collected can be securely stored.

Stable performance: Temperature stability over one year does not affect collection or preservation capacity.



Capillary Regeneration Kit

Specially designed for cleaning the inner wall of capillaries, it can thoroughly remove the dirt attached to the inner wall of the capillaries and restore it to its original state.

Product Specifications:

3130 Series: Buffer1, Buffer2, Buffer3, Buffer4 each 7mL (bottled)

3500 Series: Buffer1, Buffer2, Buffer3, Buffer4 each 7mL (bags)

Storage Conditions: 2-8°C

Product Features:

The complete set includes 7 different chemical cleaning and maintenance fluids; it is easy to operate and does not require the removal of the capillary during use. The instrument's own functions are used to achieve cleaning. Regular use can effectively extend the service life of the capillary and reduce the cost of instrument maintenance.

Applicable Apparatus Model: All sequencers on the market.

Using Recommendations:

In recent runs, capillaries showing broad peaks or tails during the sample-taking process are not suitable for clogged capillaries that have been in use for an extended period. It is recommended to use them after every 1500 cycles, enabling the capillaries to maintain optimal operating conditions.

Conditioning Reagent

Designed specifically for ABI3500 series gene analyzers. Used for flushing the pump during the change of fragment separation polymer and during the shutdown process of the apparatus.

Product Specifications: 20 mL/ bag

Storage Conditions: 2-8°C

Product Features:

A ready-to-use bagged design, convenient for operation, offers a quantity sufficient for one-time use in just one bag. The top of the packaging bag is sealed with plastic film; it should be torn off before installation onto the apparatus.

Applicable Apparatus Model: ABI3500 series genetic analyzers

Consumables

Blood Card/Saliva Cell Collection Set

This product is suitable for the collection, transportation, and storage of saliva samples, including sampling cards, bio-sample collecting sticks, sampling bags, and outer packaging bags (100 sets/box).

Blood Card Product Features:

At room temperature: nucleic acids fixed; suitable for storage and transportation at ambient temperature. Stable performance: Blood samples can be fixed with nucleic acids upon addition to sampling cards; only two buffer solutions are required for nucleic acid purification; sampling cards containing the sample can be shipped via mail. Safety: The chemical reagents on the card inactivate harmful pathogens, thus ensuring safer handling. Stability: Blood samples can be stored at room temperature and moderate humidity for up to 17.5 years, with the storage record period continually increasing over time.

Saliva Product Features:

Indicators may mark the sampling area: upon transferring samples to the sampling zone, indicators change color to indicate sample locations. Antimicrobial benefits abound: significantly reducing sample degradation and operator contamination. Jointly formulated reagents exhibit significantly enhanced amplification effects and can be stored at ambient temperature for an extended period.



DNA JH100 Puncher

This product is suitable for punching sampling with blood cards, saliva cards, and oral cell collection sticks.

Product specifications: 0.5 mm, 1.0 mm, 1.2 mm, 2.0 mm, 3.0 mm
Packing Straps: Size (210mm x 148mm x 2mm)

Product Features:

User-friendly: Its design has been refined and upgraded to better adhere to ergonomic principles. Convenient for punching: The punch has a round sharp tip, high hardness, sharp material, labor-saving and easy to cut. Strong resilience: the surface hardness of the puncher is large, and the service life is better than the foreign puncher.



Product Specification Catalogue

Product Nomenclature	Specifications	CAT.NO.
Crime Scene Detection Series		
SF 28CS STR Kit	200 reaction	G600072
SF Y43CS STR Kit	100 reaction	G600067
SF Y Plus STR Kit	100 reaction	G600053
SF mtDNA-SNP60 Kit	50 reaction	G600018
SF Human DNA Quantification Kit	200 reaction	G600240
DNA Database Series		
SF 38 STR Kit	200 reaction	G02001
SF 30 STR Kit	200 reaction	G600062-1
SF 25 STR Kit	200 reaction	G600048
SF YNFS Y STR Kit	100 reaction	G600069
SF Y56+5 STR Kit	100 reaction	G02002
SF Y37+5 STR Kit	100 reaction	G600050
Paternity Test Series		
SF 22 STR Kit	200 reaction	G600007
SF 21+1FS STR Kit	50 reaction	G600038
SF 21+1STR STR Kit	50 reaction	G600003
SF 21HS STR Kit	50 reaction	G02005
SF X PLUS STR Kit	50 reaction	G600071
Other Kit Series		
SF Canine 17A STR Kit	100 reaction	G600013
SF High-Efficiency Silica Bead DNA Extraction and Purification Kit	100 reaction	G610001
SF Mag FCS DNA Kit	100 reaction	G610002

Product Specification Catalogue

Product Nomenclature	Specifications	CAT.NO.
Instrument and Equipment		
Highly Efficient Crime Scene Forensic DNA Evidence Collector	platform	G980002
32-channel Automated Nucleic Acid Extraction Machine	platform	/
24- channel Automated Nucleic Acid Extraction Machine	platform	/
EO9600 Real-Time qPCR System	platform	/
PEC280 Portable Electronic Cooler	platform	/
Vortex Oscillation Centrifuge Integrated Machine	platform	/
Fully Automatic Nucleic Acid Aerosol Contamination Remover Ares Y2000	platform	YCDH-YD2000
Fully Automatic Nucleic Acid Aerosol Contamination Remover Ares Y1000	platform	YCDH-YD1000
Fully Automatic Nucleic Acid Aerosol Contamination Remover Ares Y500	platform	YCDH-YD500
Consumables		
Nucleic Acid Aerosol Scavenger (Solid tablets)	4bottles/box, 20tablets/bottle	YCDH-YH0120
Nucleic Acid Eraser Tissue	40 pumps/pack	YCDH-YH0240
31 PO4 polymer	3.5ml/bottle, 7ml/bottle	/
35 PO4 polymer	384N,960N	/
37 PO7 polymer	7mL/bottle, 28mL/bottle	/
AC Buffer	3 bottles x 45mL	G01007
Deionized formamide	25ml/bottle	G01008
10X Electrophoresis Buffer	25ml/bottle	G610004-1
DNA Evidence Collection and Preservation Solution	30ml/bottle	G600073
4/16 channel Capillary Regeneration Reagent kit	1 set/box	G01009
8/24 channel Capillary Regeneration Reagent kit	1 set/box	G01010
48/96 channel Capillary Regeneration Kit	1 set/box	G01011
Conditioning Reagent	1 set/box	G01012
Blood Card Collection Set	100sets/box	G917003
Saliva Cell Collection Set	100sets/box	G917004
DNA JH100 Puncher	0.5/1.2/2.0mm	G917006