

DNA 商品 多樣性

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博微生物科技股份有限公司

Biowell Technology Inc.



Niches of DNA-Living Products

1. **DNA Anti-counterfeit Products**
2. **DNA Testing Services**
3. **DNA Fashion Products**
4. **DNA Passports**

DNA Anti-counterfeit Products

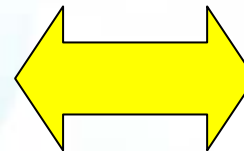


DNA

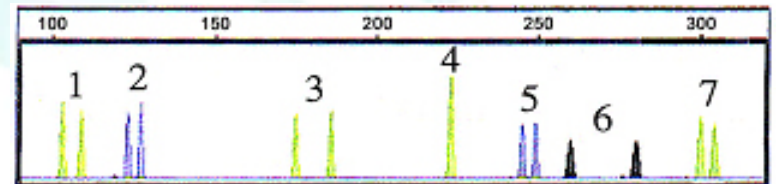
The image features a stylized DNA double helix structure in the background, rendered in shades of green and blue. The helix is composed of thick, curved bands. Interspersed among the bands are several glowing, semi-transparent spheres in various colors (red, green, blue, white). The overall aesthetic is futuristic and scientific.

Core Techniques of Biowell DNA Technology

- DNA Extraction
- DNA Purification
- DNA Longevity
- DNA Mixing
- DNA Detection



Inorganic



DNA 型別檔案比對圖



Introduction of DNA Anti-counterfeit Products

- **Mixing DNA with or attach to specific media**
 - such as paint, glue, polymer, and ink
- **Utilizing the unique and hard to replicate characteristics of DNA to protect products from counterfeits**



Function of DNA Anti-counterfeit Products

- **Increase the counterfeit barrier**
- **Reduce piracy/theft**
- **Protect brand value**
- **Increase enterprise profits**



Characteristics of DNA Anti-counterfeit Products

- **Unique and impossible to counterfeit - with high security and specificity**
 - Derived from DNA unique characteristics and one-of-a-kind special sequence design
- **Customized design**
- **Easy to be identified**
- **Wide application area**
 - It can be applied to almost any product on the market



Classification of DNA Anti-counterfeit Products

- I. DNA Anti-counterfeit Ink**
- II. DNA Anti-counterfeit Labels**
- III. DNA Anti-counterfeit Paint**
- IV. DNA Anti-counterfeit Chip**



I. Introduction of DNA Anti-counterfeit Ink

- **Specially processed DNA fragments are combined with various types of ink for ultimate protection.**



I. Characteristics of DNA Anti-counterfeit Ink

- **Low cost great application**

Can be applied to all kinds of products to meet customer's need.

- **Highly difficult to counterfeit**

Unique and impossible to counterfeit - with high security and specificity

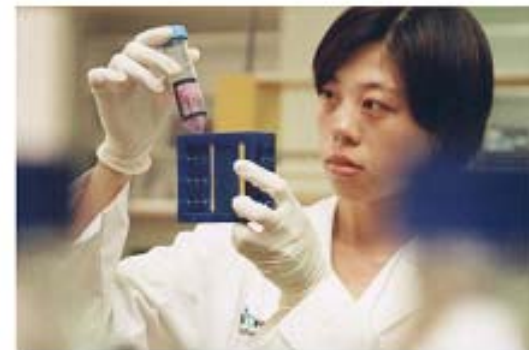
- **High added-value**

* Minimum cost with maximum Returns

* The best choice for legitimate businesses to protect their rights and to promote their brand status

I. Authentication Procedures of DNA Anti-counterfeit Ink

A、 DNA of tested subjects are extracted with Molecular Biology techniques



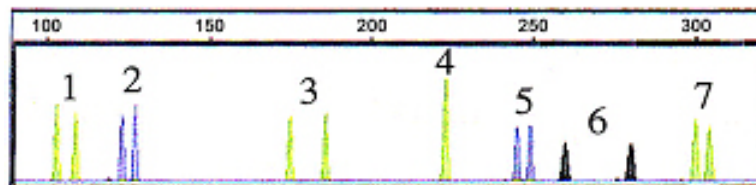
B、 DNA purification



C、 Analysis with DNA Analyzer



D、 Verify results with files



DNA 型別檔案比對圖

I. DNA Anti-counterfeit Ink Applied on Stock





II. Introduction of DNA Anti-counterfeit Labels

- **Mix encapsulated DNA with ink in order to print labels**
- **The detection is based on a chromophore-derived reaction on DNA coat.**



II. Characteristics of DNA Anti-counterfeit Label

- **Instant color detection**
- **Cross spectrum color change**
- **Difficult to imitate**
- **Can integrate with other anti-counterfeit technology according to the client's needs**
- **Double detection, ultimate anti-counterfeit mechanism**



II. Authentication of DNA Anti-counterfeit Label

- **An anti-counterfeit pen is used to instantly detect color reaction in DNA ink for authentication.**
- **DNA sequence analysis in the lab will provide 100% accuracy.**

II. DNA Anti-counterfeit Label- Wine application



II. DNA Anti-counterfeit Label-Pharmaceutical Application



II. DNA Anti-counterfeit Label- Cosmetics Application





III. Introduction of DNA Anti-counterfeit Paint

- **Specially processed DNA fragments are combined with various ink for ultimate protection.**



III. Applications of DNA Anti-counterfeit Paint

- **Personalized**
- **Painting**
- **Antique**
- **Pottery**
- **Other Fine Arts**



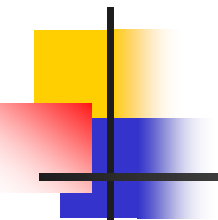
IV. Introduction of DNA Anti-counterfeit Chip

- **Specially processed DNA fragments are combined with Biowell chips**



IV. Characteristics of DNA Anti-counterfeit Chip

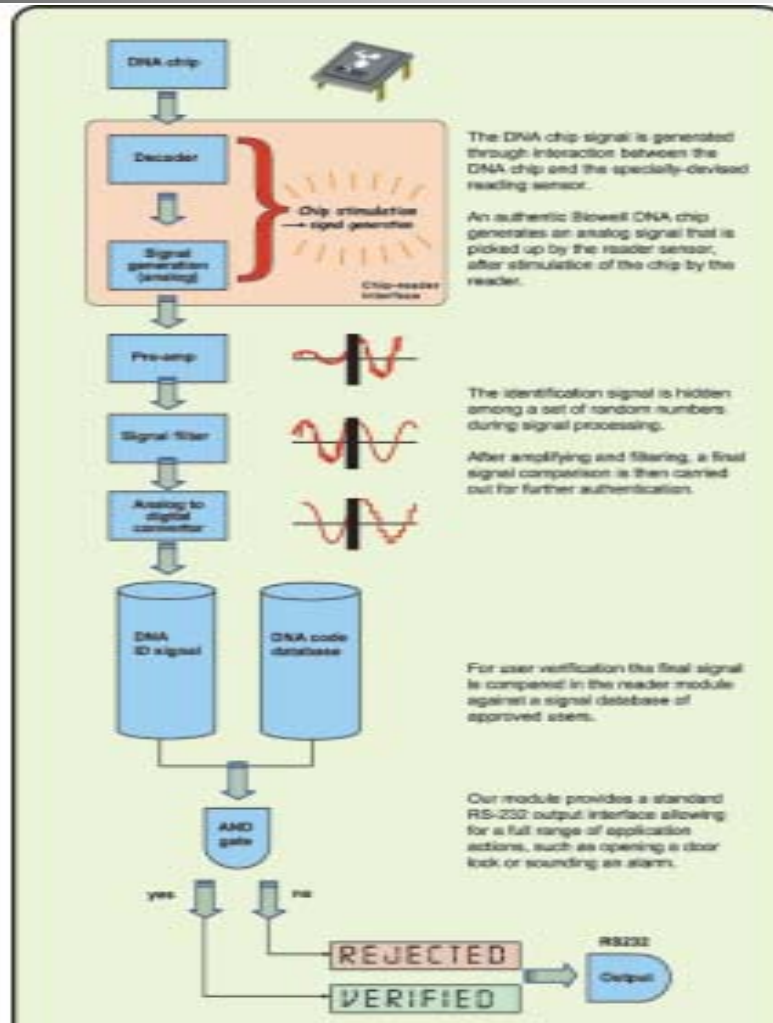
- **Compatible with IC chip**
- **Impossible to counterfeit**
- **Effective prevention of duplication**
- **Equipped with memory function**
- **Instant authentication**



IV. Authentication of DNA Anti-counterfeit Chip

- **Signal is detected by
Biowell designed reader for
instant detection.**

IV. DNA Anticounterfeit-Chip Real-Time Detector



IV. Product Description of DNA Anti-counterfeit Chip

- Accuracy: > 99.9999%
- Authentication time: < 1 seconds
- DNA chip life time: > 5 years
- Reader life time: > 3 years
- Chip size: 5mm x 3mm x 0.625 mm
- Reader dimension: 75mm x 75mm x 160mm
- Reader power supply: 9V DC or AC



IV. DNA Anti-counterfeit Chip

全球第一枚
DNA防偽晶片



BIowell
Technology

IV. DNA Anti-counterfeit Chip-Reader



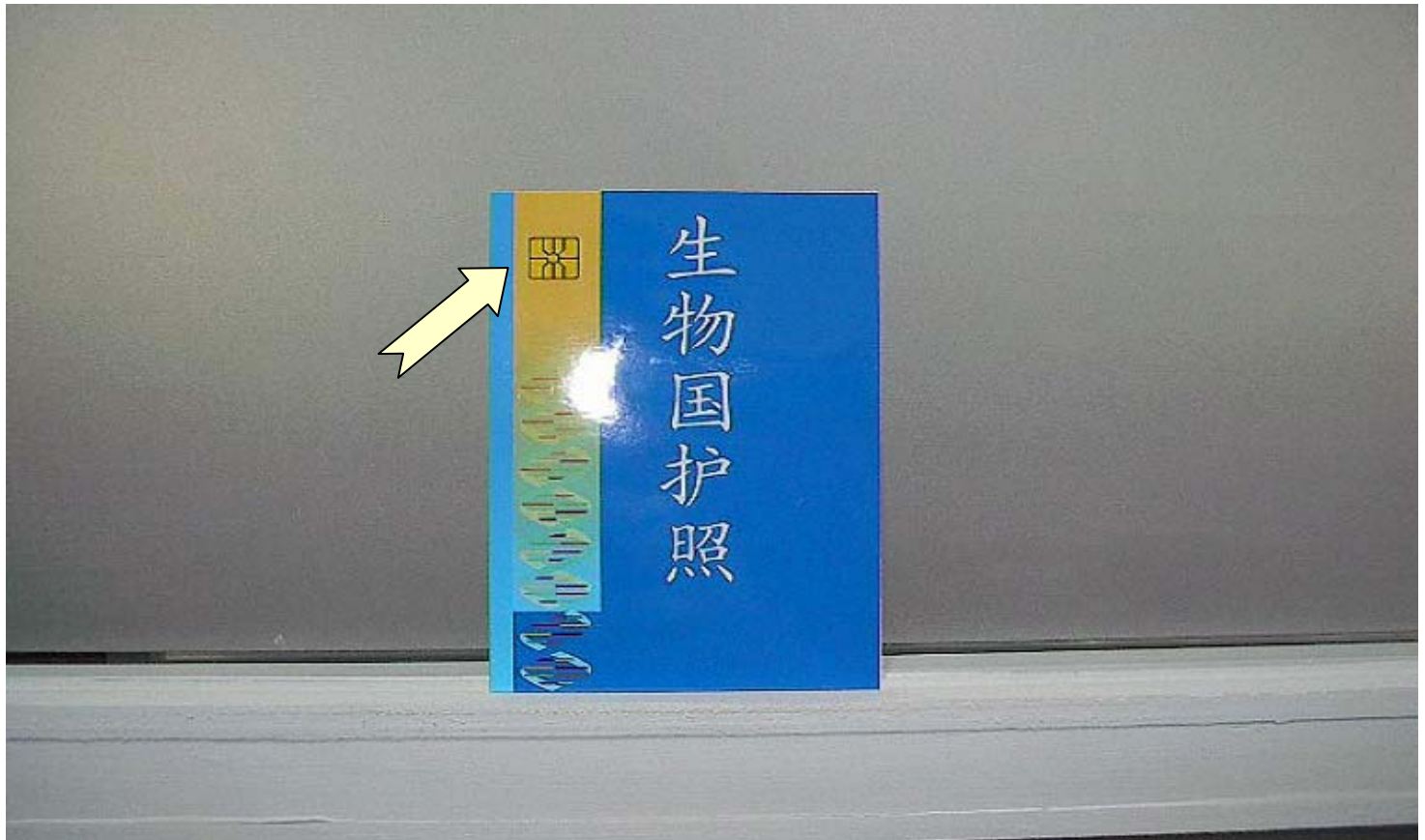
IV. Credit Card Application of DNA Anti-counterfeit Chip



IV. ID Card Application of DNA Anti-counterfeit Chip



IV. Passport Application of DNA Anti-counterfeit Chip



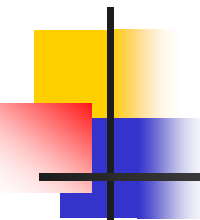
IV. License Plate Application of DNA Anti-counterfeit Chip



DNA Testing Service



DNA



I. Parentage Testing

- Service characteristics

- **Professional**
 - Laboratory designed according to AABB standard
 - In accordance with FBI testing techniques and equipments
 - Complied with FBI CODIS 13 standard and accuracy
- **Quickness**
 - Testing will be complete within 5 days after receiving the sample
- **Accuracy**
 - Employing world-class automatic DNA STR analysis system with automatic, fast, accurate and zero error
- **Privacy**
 - Maintaining customer privacy is our utmost belief
 - Sample will be used only for parentage testing
 - Anonymous samples are acceptable
- **Convenience**
 - Single parent testing acceptable
 - Special oral swab for sampling, no need to draw blood



II. Genotype Filing

- Human genetic DNA can be genotyped and filed for personal ID and parentage comparison. Filing DNA genotypes in advance can eliminate the need to search for close relatives for comparison in the event of major disaster.

II. Genotype Filing - Applications

- New born baby filing
- Personal ID filing
- High risk workers filing
 - Such as aviation attendants, fire fighters, miners, soldiers and policemen
- High premium insurant filing
- Foreign labor management
- DNA will
- DNA family pedigree book

DNA Fashion Products



DNA

The image features a stylized DNA double helix structure in shades of green and blue. The helix is composed of thick, curved bands. Interspersed along the structure are several semi-transparent, glowing spheres in various colors, including purple, blue, and green. At the top of the page, a dark blue banner with a red-to-white gradient contains the text 'DNA Fashion Products' in white, bold, serif font. At the bottom, the word 'DNA' is written in large, light blue, serif letters with a slight shadow. Two small clusters of colorful spheres (red, white, blue, green) are positioned near the 'D' and 'A' of the 'DNA' text.



DNA Fashion Products

- Every individual is unique in the universe. A combination of **life technology** and **human individual** will convey the meaning of life to the utmost limit and promote and long lasting value of the product
- **DNA Fashion Product**, employing life technology emphasizing **creating life everlasting value** is a pioneering, fashionable and cool **product concept**, with one of a kind product characteristics

DNA Fashion Products - Presentations



- Microcapsules
- Dry DNA powder
- Mixing with various media (liquid, solid)
- Can also combined with dye or fluorescence to enhance visual effects

DNA Trendy Products - Category



- **Idol DNA Products**
- **Celebrity DNA Products**
- **Personal DNA Products**




DNA 流行商品

Baby DNA Passport



DNA



Baby DNA Passport

- Although foot print from 40 years ago is memorable, but prints do change as body grows. DNA genotyping is the only unique and irreplaceable personal ID technology
- It only takes 2 minutes, **baby DNA passport** products can safeguard your baby's safety. A preventive measure for the unexpected in the future



Baby Passport - Product Function and Characteristics

- Worry-free future

- As genetic biotechnology progresses, the era of genetic testing and gene therapy is coming. Preservation of young and healthy DNA can very possible save your baby in the future.

- Prevention in advance

- **Baby DNA Passport** provides vital physical and medical records of your baby. When emergency occurs, time is precious. Quickness of response can mean differences between live and death.



DNA 護照