#### Comparable or better performance compared with similar products

Figure 4. Compared with product of a famous brand (Company A). The result shows that the CT values of high, medium, and low concentration extraction by using DAAN reagent kit are consistent or smaller. The repeatability is good, especially in the amplification of the medium and low concentration extracts.

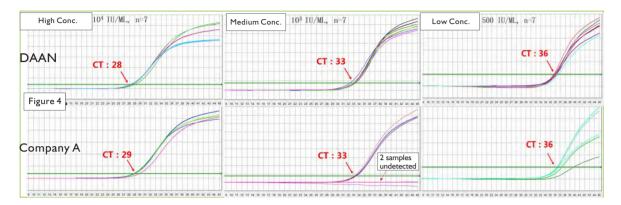


 Figure 5. Comparison with extraction reagent kits of Company A. Extracted HBV, HCV, Flu, HFMD or other virus pathogens nucleic acid by using DAAN extraction reagent kits. Some of the CT values of amplification extracts are consistent, some are smaller.

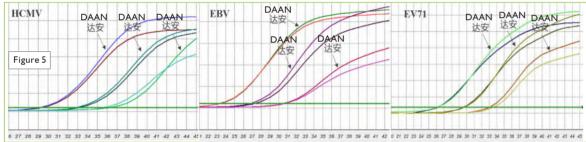
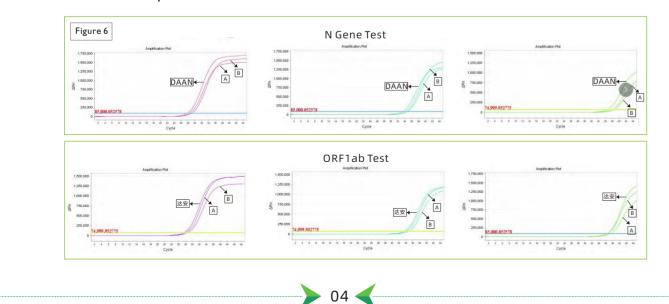


Figure 6. Comparison with 2019-nCoV fast extraction reagent kit of Company A and company B. Extracted high, medium, and low concentration of 2019-nCoV nucleic acid respectively with DAAN fast extraction reagent kit. The result shows that the CT values of amplification extracts are smaller or consistent.



### Drder Information

| Model No./<br>Description   | Specification<br>(Tests/<br>Kit) | Sample Type   | Sample<br>Volume | Applications                  | Certific<br>-ate |
|---|----------------------------------|---|------------------|-------------------------------|------------------|
| DA062X<br>Nucleic Acid<br>Isolation or<br>Purification<br>Reagent                     | 20, 32, 96,<br>32 double<br>hole | Serum, Plasma,<br>Throat swab,<br>nasopharyngeal<br>secretion, Cervical<br>Exfoliated Cell,<br>etc. | 200ul-600ul      | Hepatitis Virus,<br>HSV, etc. | CE,<br>NMPA      |
| DA063X<br>RNA/DNA<br>Purification Kit<br>(Magnetic Bead)                              | 20, 32, 96                       | Serum, Plasma,<br>Throat swab,<br>nasopharyngeal<br>secretion, Cervical<br>Exfoliated Cell,<br>etc. | 200ul-400ul      | HCV, Flu, etc.                | CE,<br>NMPA      |
| DA065X<br>Nucleic Acid<br>Isolation or<br>Purification<br>Reagent<br>(Hypersensitive) | 20, 48                           | Serum, Plasma   | 600ul-2000ul     | HBV, HCV, HIV                 | NMPA             |
| DA090X<br>Nucleic Acid<br>Isolation or<br>Purification<br>Reagentt (Whole<br>blood)   | 32 double<br>hole                | Whole blood   | 600ul            | EBV, HCMV,<br>HPV, etc.       | NMPA             |



CHINA(Headquarters) Daan Gene Co., Ltd. Address: No. 19 Xiangshan Road, Science Park, High&New Technology Development District, Guangzhou, Guangdong, P. R. China, 510665 Tel: +86 20 32068126 Fax: +86 20 32068352 Email:marketing@daangene.com Overseas service:overseas\_service@daangene.com

#### www.en.daangene.com

Canada office Daan Diagnostic Ltd. Address: #200- 5050 Kingsway, Burnaby, B.C., Canada, V5H 4H2 Tel.: +1 604 451 7588 Fax: +1 604 451 5787 Email: gbai@daangene.net



# Automatic Nucleic Acid Extraction and Purification Solutions (Magnetic Bead)



Extensive applications, classic and trustworthy.

### **Features**

- + Simple and convenient to operate 2-3 steps from sample handling to extraction instrument
- + Rapid and high-efficiency

Handling 96 samples within 17 minutes with magnetic bead fast extraction reagent

+ Safe and non-toxic

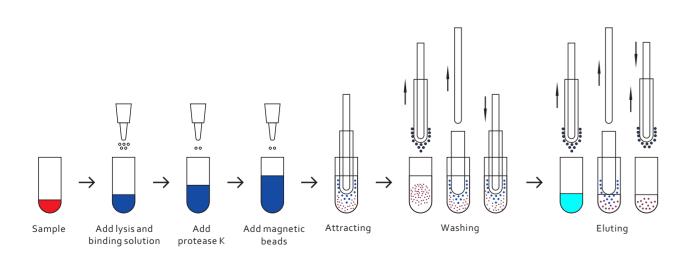
No phenol or chloroform, environmental friendly and healthy

+ Compatible with wide range of sample type

Such as whole blood, serum, plasma, all kinds of swabs, secretion, sputum, tissue, bronchoalveolar lavage fluid, etc.

## Principle

The nucleic acid extraction and purification is performed in four steps-lysis, binding, washing and elution. Under the action of lysis buffer, the cell is cracked and the nucleic acid is released. The released nucleic acid binds to the magnetic beads while contaminants pass through. PCR inhibitors, such as divalent cations and proteins are completely removed in wash steps, leaving pure nucleic acid to be eluted in buffer provided with the kit.



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## Procedure



01 Sample Handling

02 Extracting

## **Compatible Instrument**





Smart 32

DA3500

## **Application**

| DNA                        | RNA                                 |  |
|----------------------------|-------------------------------------|--|
| Pathogens                  | Pathogen                            |  |
| • HBV                      | 2019-nCoV                           |  |
| HPV                        | • HCV                               |  |
| • NG                       | • Flu                               |  |
| • HSV                      | • HIV                               |  |
| Adenovirus                 | RSV                                 |  |
| <ul> <li>Others</li> </ul> | <ul> <li>Cal6, Ev71</li> </ul>      |  |
|                            | Others                              |  |
|                            |                                     |  |
|                            | Pathogens HBV HPV NG HSV Adenovirus |  |

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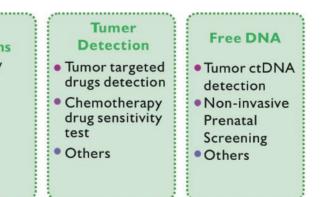


03 Amplification



Stream SP96

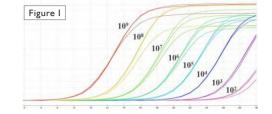
Swift 96



### Performance

#### + High sensitivity, wide linear range

Figure 1. Extracted HBV samples nucleic acid with concentration from 100 IU/ML to 1.0E+09 IU/ML respectively with DAAN nucleic acid extraction reagent kit. The samples proceed to FQ-PCR. The result shows that the amplification rate of extraction within these concentrations is highly efficient. The amplification performances for high, medium and low concentration are well.

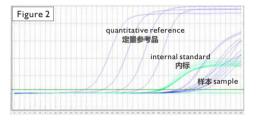


### + High nucleic acid extraction rate, good linear correlation

Figure 2. Extracted HBV samples nucleic acid with different concentration respectively with DAAN nucleic acid extraction reagent kit (extracted positive quantitative reference simultaneously). The samples proceed to FQ-PCR. The result shows that the amplification rates of samples and internal standard are similar. The reproducibility of the extracted positive quantitative reference is good with stable plateau and high linear correlation (R2>0.9999).

### + Stable amplification, high repeatability of linear

Figure 3. Extracted HCMV and EBV samples nucleic acid with the concentration from 500 IU/ML to 1.0E+08 IU/ML respectively by using DAAN nucleic acid extraction reagent kit, the samples proceed to FQ-PCR. The result shows that the amplification rate is stable, plateau is consistent and repeatability of linear is high.



| Figure 3 | 108 | 107 |        |                 | -  |
|----------|-----|-----|--------|-----------------|----|
| HCMV     | 1   | 106 | 105    |                 | 4  |
|          | /   |     |        | 103             | 00 |
| 10 15    | 20  | 33  | 20     | 35              | -  |
|          | 108 | 107 | K      | 1               |    |
| EBV      | //  | 100 | 105 10 |                 | Ŵ  |
| EDV      |     |     |        | 10 <sup>3</sup> | 0  |
|          |     |     |        |                 |    |

| High purity                | The rate of OD260/OD280 is between 1.8-2.0 (human genome nucleic acid)   |  |
|----------------------------|--|--|
| High acquisition rate      | The recycle rate of magnetic beads is up to 99%  |  |
| Good repeatability         | CV less than 5%  |  |
| Wide range of applications | The extracted nucleic acid meets the molecular detection requirement of PCR probe hybridization, electrophoresis, sequencing, etc. |  |