

Super High Sensitivity
Patho Gene-spin™ HS
DNA/RNA Extraction Kit



FIND iNtRON

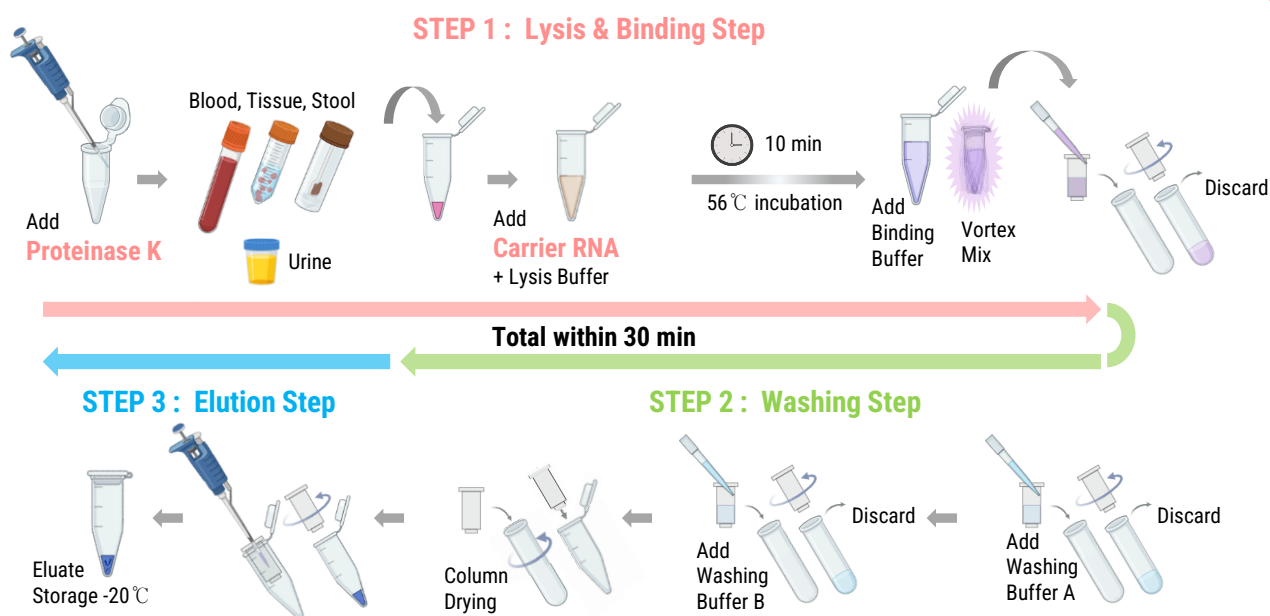
Patho Gene-spin™ HS DNA/RNA Extraction Kit

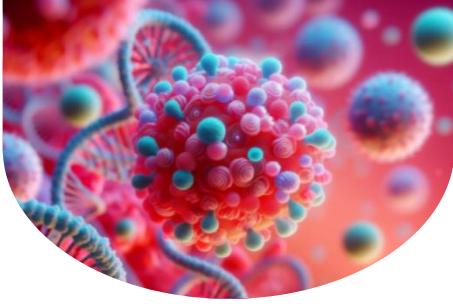
Products Overview

Extracting high-quality DNA and RNA from pathogenic viruses and bacteria increases the success rate and reproducibility of the experiment, and provides accurate results for molecular biology research. To meet these needs, the **Patho Gene-spin™ HS DNA/RNA extraction kit** effectively extraction samples in an optimized product configuration, making them highly effective in extraction of various forms and types of clinical samples

Patho gene-spin™ HS DNA/RNA extraction Kit ensures excellent extraction efficiency with optimized buffer configuration and simplified protocol. The **Proteinase K**, the transport RNA included in the product, enables high-efficiency nucleic acid extraction from various pathogenic clinical samples and reduces the loss of purified nucleic acids from low-titer viruses and bacteria to provide accurate test results. These properties are useful for increasing the accuracy and reproducibility of experiments for various pathogenic viruses and bacteria.

ANALYSIS WORKFLOW





Patho Gene-spin™ HS

DNA/RNA Extraction Kit

- Suitable for various pathogens
- High-Sensitivity Extraction
- Simple composition
- Freeze-dried **Proteinase K** and **Carrier RNA**
- Ease of Use, within **30 minutes**

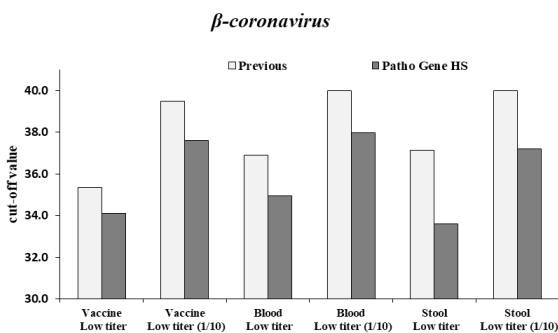


Cat. No. 17156, Size : 50 Tests

Enhancing high-sensitivity extraction performance for a variety of low-titer samples

To verify the performance of the Patho Gene-spin™ spin DNA/RNA Extraction Kit, extraction effectiveness was evaluated using low-titer pathogenic viruses and bacteria. Testing with pathogens (*β-Coronavirus* and *C. chauvoei*) shows a **more than 20% improvement** in extraction sensitivity compared to previous compositions in clinical samples of vaccines, whole blood, and stool. (samples(n): 42, previous 74% < Patho Gene HS 95%)

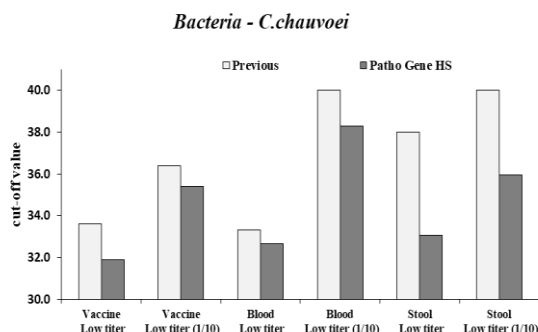
A



A. High-efficient extraction of viral RNA (*β-Coronavirus*)

The Patho Gene-spin™ HS DNA/RNA Extraction Kit showed high extraction efficiency for a variety of clinical samples for low-titer *β-coronavirus*. In particular, enhanced detection results were found in whole-blood and stool samples. (Enhanced Cut-off value, >2)

B

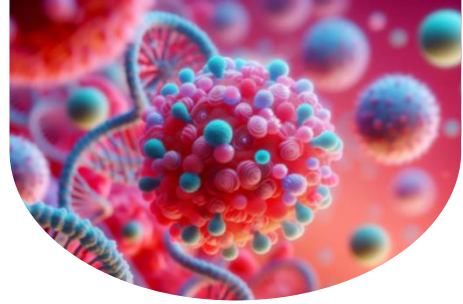


B. High-efficient extraction of Bacterial DNA (*C.chauvoei*)

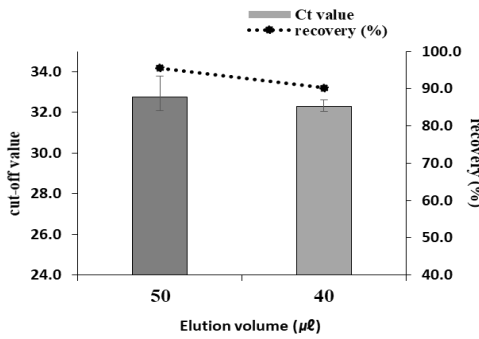
The low-titer samples of the gram-positive bacteria-*C.chauvoei* also showed high extraction sensitivity, especially in stool, and a relatively significantly enhanced detection value was observed, indicating strong extraction performance. (Enhanced Cut-off value, >3)

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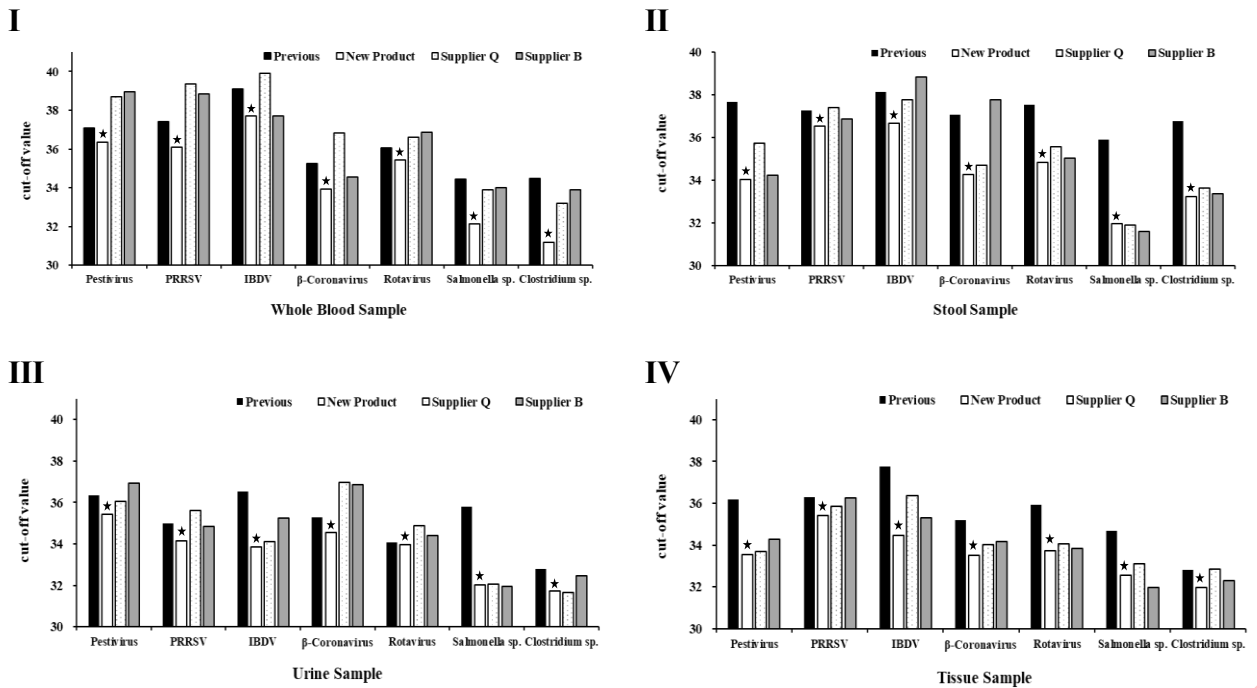
Technical Data



Flexible Elution Volume Adjustment

The elution can be adjusted from 40 μℓ to 50 μℓ depending on the desired volume. Generally, 50 μℓ is recommended, but if you need to increase the nucleic acid concentration to increase the extraction sensitivity, you can use 40 μℓ.

After extracting viral nucleic acids using *pestivirus* sample, the detection results was checked by qPCR, indicating an enhanced cut-off value when the elution was 40 μℓ compared to the results obtained using 50 μℓ.



Provides optimized Extraction performance for variety of pathogenic samples

The extraction test used 3 enveloped viruses (*pestivirus*, *β-coronavirus*, and PRRSV) and 2 non-enveloped viruses (IBDV, *rotavirus*), Gram-positive bacteria (*Clostridium sp.*), and Gram-negative bacteria (*Salmonella sp.*) on a low-titer basis, and was performed on 4 spiked biological samples: (I) whole blood, (II) stool, (III) urine, and (IV) tissue. The Patho Gene-spin™ HS DNA/RNA extraction Kit showed high-sensitivity extraction from a variety of samples and showed the same or superior extraction performance as other products.

The product has excellent nucleic acid extraction performance in a variety of clinical samples with low nucleic acid content and high extraction difficulty. These results provide optimal results for downstream applications such as molecular biology research.