

## REAL-Prep™ Blood Spots Nucleic Acid (DNA/RNA) Extraction Kit (Spin Columns)

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This kit is used for the nucleic acid extraction, enrichment, and purification steps of tissue, cell, blood, and dried blood spot samples. The kit consists of a nucleic acid lysis solution, a nucleic acid release solution, a protein precipitation solution, a nucleic acid precipitation solution, and a purification solution. The nucleic acid lysis solution is composed of lysozyme and Pluronic 300, the nucleic acid release solution is composed of guanidine isothiocyanate, sodium dodecyl sarcosinate, and purified water, the protein precipitation solution is composed of polyethylene glycol 6000, the nucleic acid precipitation solution is composed of isopropanol, and the purification solution is composed of anhydrous ethanol and purified water. The product does not contain antigens, antibodies, probes, or other components that specifically bind to the sample.

After lysing tissue, cell, blood, and dried blood spot samples with a nucleic acid release solution, a protein precipitation solution is added to remove impurities. A nucleic acid precipitation solution is then added to precipitate the nucleic acids, yielding crude extracted nucleic acids. The nucleic acids are then washed with a purification solution to obtain genomic DNA and RNA. The resulting genomic DNA and RNA are used for clinical in vitro diagnostic testing. The obtained nucleic acids can be used for quantitative PCR testing in conjunction with clinical manifestations and other laboratory results for clinical diagnosis. This method supports molecular testing such as quantitative PCR, whole-genome sequencing, transcriptome sequencing, NGS sequencing, metagenomic sequencing, and metatranscriptomic sequencing.

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| Catalog No.       | 120013                 |
| Size              | 50 preps               |
| Product Category  | Nucleic Acid Isolation |
| Storage/Stability | Ambient & -20°C/1 year |
| Shipping          | Ambient & Gel Packs    |

