

# xxxGEM

## Effortless Ultra Fast RNA extraction

xxxGEM is a simple, fast, and efficient method for the extraction of total nucleic acids (DNA, RNA) from a wide range of sample types. The process is highly reproducible and yields high-quality nucleic acids suitable for downstream applications. The method is designed to be easy to use, requiring minimal equipment and reagents.

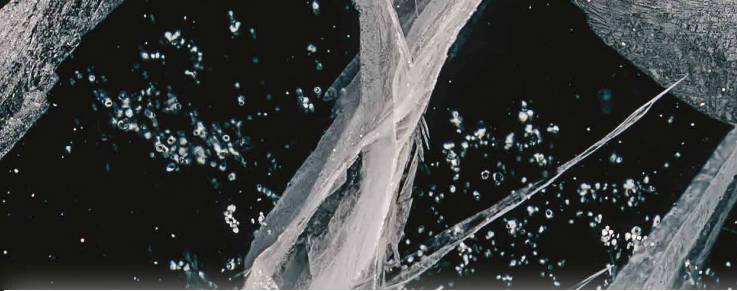
Sample types: solid tissue, cell culture, single-cell & exosomes

Downstream applications: PCR, RT-PCR, RT-qPCR, LAMP & RT-LAMP, Nano-string

## Key Advantages

- Single-Tube Nucleic acid extraction in less than 25 minutes
- Simultaneous Total Nucleic Acid Extraction – genomic DNA, mRNA, long non-coding RNA, small non-coding RNA
- No ionic detergents or chaotropic salts
- High nucleic acid recovery – Minimal loss of nucleic acids during extraction
- No magnetic beads – No spin-columns
- Flexibility – suitable for low-throughput to high-throughput extraction with a single protocol
- Easily automated using standard liquid handling solutions
- Minimal plasticware required – Reduced waste and supply chain issues

xxxGEM Universal is for research use only (RUO), not intended for in-vitro diagnostic (IVD) use.



# Typical Workflow

RNAGEM protocols can be scaled up or down as needed.



1. Prepare sample.
2. Mix sample and reagents.
3. Heat mixture at 75°C to activate RNAGEM enzyme.



4. (Optional) DNA digestion at 37°C.
5. Denature RNAGEM enzyme at 95°C.



6. This solution now contains viral nucleic acid ready for PCR based applications.

Each kit contains:

- RNAGEM
- BLUE Buffer
- DNase I
- DNase Buffer
- TE Buffer