

# prepGEM Bacteria



Image shows 100, 500 & 1,000 reaction kits.

**Effortless, DNA extraction from a wide range of bacterial samples... in minutes not hours.**

MicroGEM's prepGEM Bacteria kit provides a simple automated approach to studying a wide range of microbial cultures. Every aspect of the MicroGEM method ensures the samples are processed quickly and gently. Minimal sample prep, closed tube processing, and gentle lysis ensure that cross contamination and DNA fragmentation are drastically reduced, making MicroGEM's extraction process streamlined while preserving the integrity of low abundance species.

**Sample types:** colonies, biofilms, liquid cultures, sputum, swabs, soil & stool

**Downstream applications:** PCR, qPCR, Amplicon Sequencing

**Key advantages:**

- Single-tube extraction
- Minimal transfer steps - opportunities for mistakes and contamination are minimized
- Improved community representation in metagenomic samples
- No ionic detergents or chaotropic salts
- 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

*prepGEM Bacteria is for research use only (RUO), not intended for in-vitro diagnostic (IVD) use.*

# Typical Workflow

*prepGEM* Bacteria protocols can be scaled up or down as needed.



1. Prepare the sample.
2. Mix sample and reagents.
3. Heat to 37°C (Gram +ves only) to degrade cell wall.
4. Heat to 75°C to activate *prepGEM* enzyme.
5. Heat to 95°C to denature *prepGEM* enzyme.
6. DNA is now ready for analysis using PCR-based applications

Each kit contains:

- *prepGEM*
- **GREEN+** Buffer
- Lysozyme
- **WASH+** Buffer
- Enhancer

