

*forensic*GEM Universal

Effortless Ultra Fast DNA extraction for Human Identification

*forensic*GEM Universal kit uses Exymes's novel thermophilic proteinase to offer a perfect solution for forensic sample processing where speed, sample size and sample integrity are critical.

Sample Types: saliva (liquid, swab, stains, storage card – FTA, cigarette butts), blood (liquid, swab, stains, storage card – FTA), & tissue (solid, hair)

Downstream applications: STR, PCR, qPCR

Key Advantages

- Single-Tube DNA extraction in less than 15 minutes
- No need for inhibitory chemicals, such as SDS, mercaptoethanol and DTT
- No transfer steps - yield is maximized and opportunities for mistakes and contamination are minimized
- High DNA recovery – Minimal loss of nucleic acids during extraction
- No magnetic beads – No spin-columns
- Reduced handling protects the integrity of the sample
- 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

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

Typical Workflow

forensicGEM Universal protocols can be scaled up or down as needed.



1. Place or pipette the sample into a thin-walled PCR tube or plate.

2. Mix sample with *forensicGEM* reagents.



3. Heat mixture to lyse sample, extract DNA and denature *forensicGEM* enzyme.



4. DNA is now ready for PCR, qPCR and STR analysis.

forensicGEM Universal is an excellent tool for DNA extraction for STR profiling.

Each kit contains:

- *forensicGEM*
- **BLUE** Buffer
- **RED+** Buffer
- **ORANGE+** Buffer
- *Histosolv*