





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 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



forensicGEM Universal is for research use only (RUO), not indended 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 thinwalled PCR tube or plate.
- 2. Mix sample with forensic GEM reagents.



- 3. Heat mixture to lyse sample, extract DNA and denature *forensic*GEM 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



