

# forensicGEM Universal



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

## **forensicGEM Universal – effortless, DNA extraction for Human Identification**

forensicGEM Universal kit utilizes MicroGEM'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

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

# 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*

