

# *forensic*GEM Sperm

## Effortless Ultra Fast DNA extraction for Human Identification

*forensic*GEM Sperm kit uses Exymes's novel thermophilic proteinase and Acrosolv reagent to lyse sperm without the use of qPCR and STR inhibiting chemicals, such as SDS, mercaptoethanol and DTT.

Sample Types: semen swabs, stains & liquid semen

Downstream applications: STR, PCR, qPCR

### Key Advantages

- Single-Tube DNA extraction in 11 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 Sperm is for research use only (RUO), not intended for in-vitro diagnostic (IVD) use.



# Typical Workflow

*forensicGEM* Sperm 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 Sperm is an excellent tool for Y-screening of sexual assault samples prior to differential extraction*

Each kit contains:

- *forensicGEM*
- **ORANGE+** Buffer
- *Acrosolv*