

New method may accurately identify body fluids at crime scenes

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A hairpin loop from a pre-mRNA. Highlighted are the nucleobases (green) and the ribose-phosphate backbone (blue). Note that this is a single strand of RNA that folds back upon itself. Credit: Vossman/ Wikipedia

Identifying different types of body fluids can help forensic experts reconstruct a crime scene, but it's difficult to do so. In a study published in *Electrophoresis*, researchers developed a method using two different

types of RNA—called microRNA (miRNA) and messenger RNA (mRNA)—to determine five common body fluids.

Compared with previously reported single mRNA or miRNA assays, the combination of several mRNAs and miRNAs showed significant advantages for labeling human body fluids.

"Our findings indicate that this combined mRNA and miRNA system may provide a scientific reference for RNA-based body fluid identifications," the authors wrote.

More information: Validation of a combined analysis of mRNA and miRNA markers for forensic-related body fluids identification by RT-qPCR, *Electrophoresis* (2023). DOI: [10.1002/elps.202300059](https://doi.org/10.1002/elps.202300059).
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