

Table S1. Three multiplexed panels of forensically-relevant body fluid targets were designed and validated by Albani *et al.* [36]. Each panel is comprised of fluorescently-tagged messenger RNA primers that are specific for each fluid and create fragments that are less than 200 bp.

Multiplex	Target Body Fluid	mRNA	Primer Sequence	Final Concentration in PCR assay (μ M)
Duplex	Saliva / Buccal	FDSCP	F - HEX-CTCTCAAGACCAGGAACGAGAA	0.05
			R - GGCAGATTCAGGTATTGGAATAG	
		HTN3	F - HEX/AAGCATCATTACATCGAGGCTAT	0.03
			R - ATGCGGTATGACAAATGAGAATACAC	
Quadruplex	Circulatory Blood	HBD	F - ACTGCTGTCAATGCCCTGTG	0.05
			R - FAM/ACCTTCTTGCCATGAGCCTT	
		SLC4A1	F - HEX/AACTGGACACTCAGGACCAC	0.04
			R - GGATGTCTGGGTCTTCATATTCCT	
	Menstrual Fluid	MMP10	F - HEX/CCCACTCTACAATCATTACAGAG	0.04
			R - GGTTCTCAGTAGAGGCAGG	
Pentaplex	Spermatozoa	PRM1	F - HEX/GCCAGGTACAGATGCTGTGCGAG	0.03
			R - GTGTCTTCTACATCTCGGTCTG	
		TNP1	F - GATGACGCCAATCGCAATTACC	0.04
			R - FAM/CCTTCTGCTGTTCTTGTTGCTG	
	Seminal Fluid	KLK2	F - TTCCTCCATCGCCTTGCTG	0.14
			R - HEX/AGTGTGCCCATCCATGACTG	
		MSMB	F - CTTTGCCACCTTCGTGACTTTATG	0.03
			R - FAM/ACAGTTGTCAGTCTGCCACT	
	Vaginal Material	CYP2B7P	F - CCGTGAGATTCAGAGATTGCTGAC	0.02
			R - HEX/TGAGAAATACTCCGTGTCCTTGG	

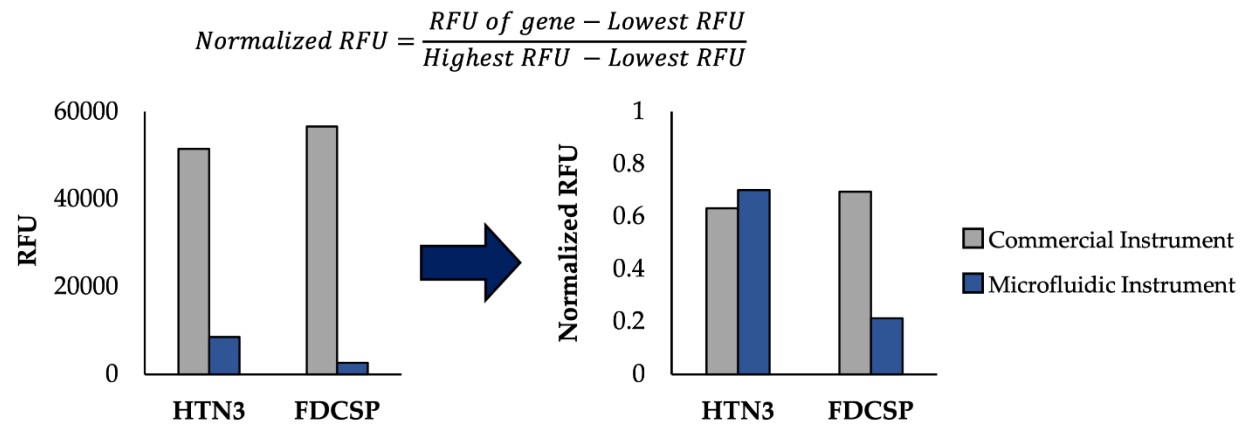


Figure S1. Process of minimum-maximum normalization to compare peak heights in terms of relative fluorescence units (RFU) across different electrophoresis platforms.

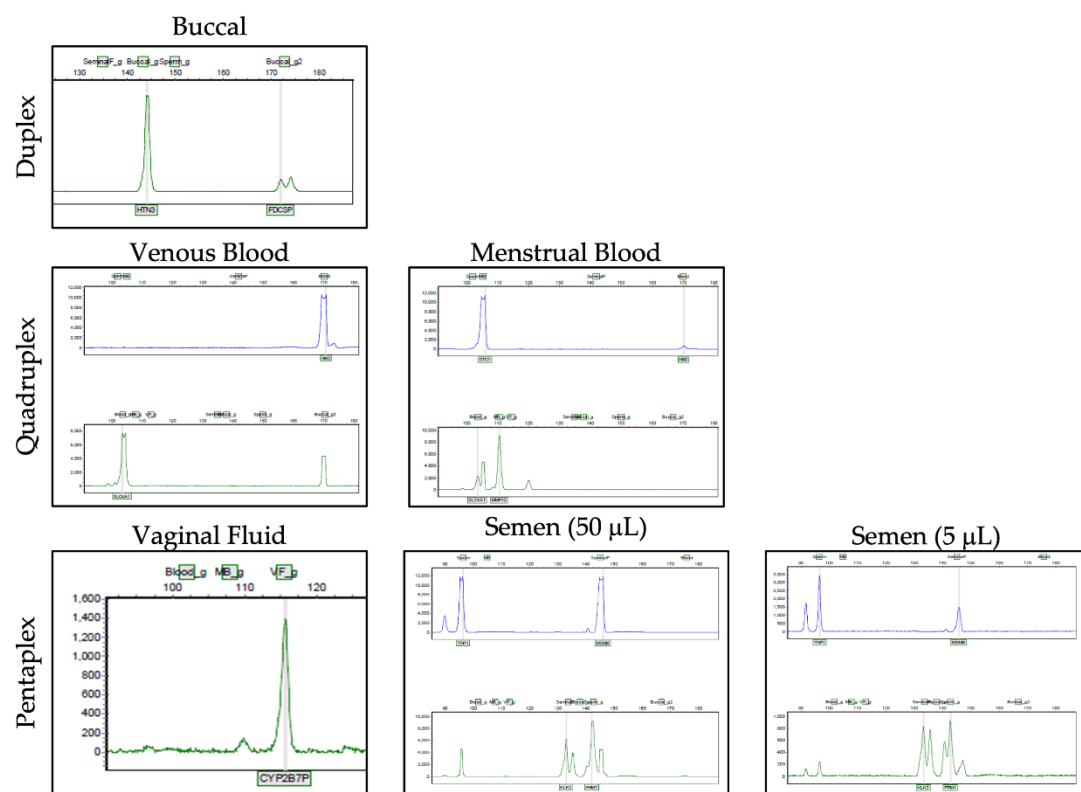


Figure S2: Representative electropherograms from single-source body fluid samples after microchip electrophoresis. Electropherograms are grouped based on the three panels of mRNA targets.