

# Investigator<sup>®</sup> Quantiplex<sup>®</sup> Pro FLX Kit

## Unprecedented flexibility and convenience in forensic quantification

Do you need higher sensitivity for low-level DNA casework samples? Do you want to speed up your processes with less hands-on time? How can you take sexual assault screening to the next level in your lab? Investigator Quantiplex Pro FLX has the answers. The Investigator Quantiplex Pro FLX Kit combines trusted multicopy markers for advanced assessment of quantity, degradation and inhibition with novel lyophilized chemistry in 96-well optical plates. The Investigator Quantiplex Pro FLX Kit is the next generation of quantification in human identification testing.

### So, why FLX?

- Ready-to-use 96-well optical plates pre-filled with lyophilized qPCR Master Mix
- Trusted multicopy markers for assessment of quantity, degradation and inhibition
- Full flexibility with option to scale input volume from 1  $\mu$ L to 18  $\mu$ L for highest sensitivity
- Breakable plates and convenient seal removal to size for the throughput needed
- Sustainable room temperature storage to free-up freezer capacity



#### Sexual assault screening

Make the right decision. Triaging your sexual assault samples is easy when you can confidently screen your samples for male DNA even in the presence of high levels of female DNA. Breakable plates and perforated seals avoid reagent waste by supporting the throughput you need.



#### Challenging samples that require increased sensitivity

Find the needle in the haystack. Sometimes higher sensitivity is needed. Scale up the template input volume to 18  $\mu$ L and don't miss any sample that may be THE investigative lead.



#### High-throughput applications

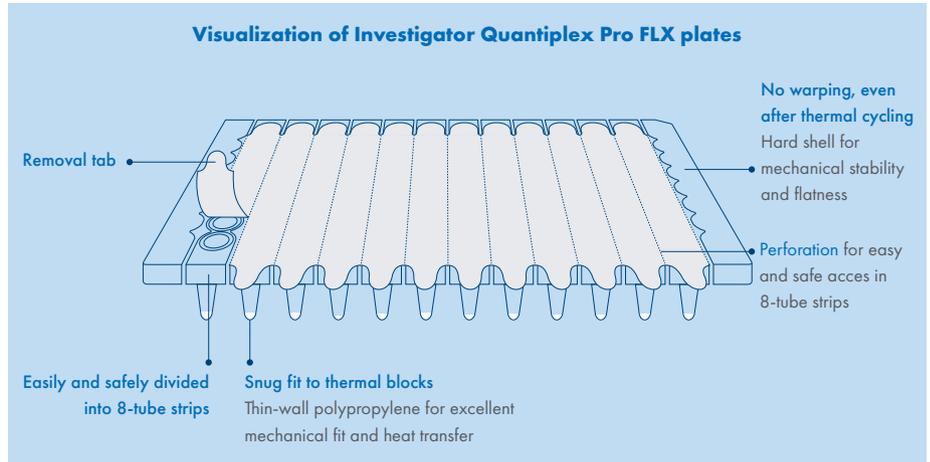
Speed up your process, increase productivity and reduce hands-on time without compromising quality. Easy seal removal from ready-to-use optical plates enables samples to be put straight on your liquid handler for assay setup, further boosting throughput and convenience.

# A new era in forensic sample quantification

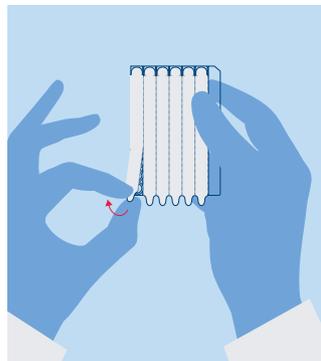
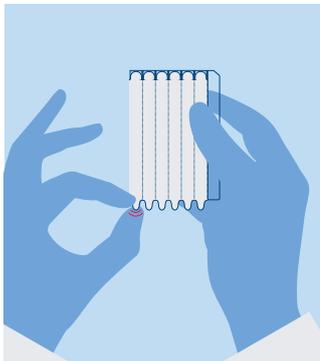
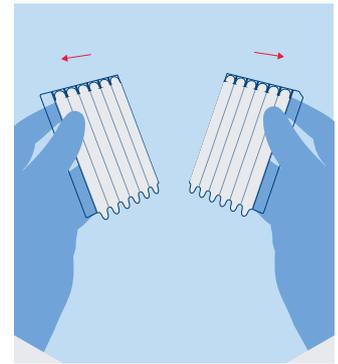
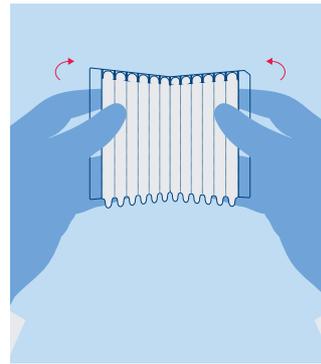
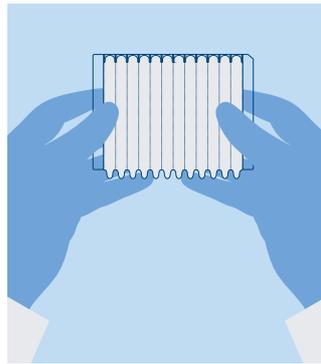
## Investigator Quantiplex

### Pro FLX features

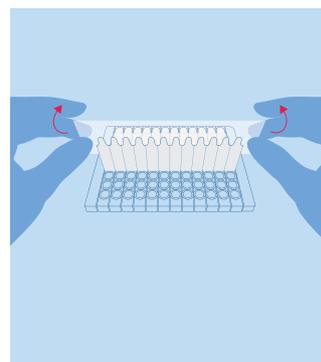
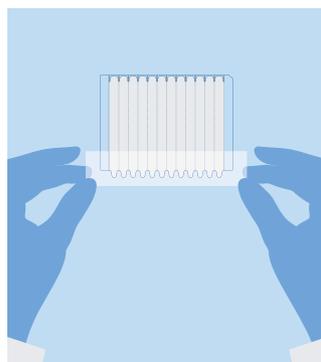
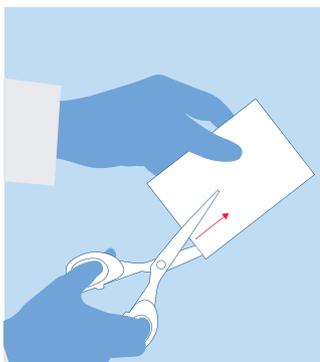
- Easy and safe, breakable into 8-tube strips
- Enhanced mechanical stability for manual or automatic robotic handling
- Validated with Applied Biosystems® 7500 and QuantStudio® 5 series
- ISO 18385 compliant



**Scalability.** Avoid reagent waste and maximize efficiency. Choose the number of samples needed for your throughput and snap an x-fold of 8 samples together from the breakable optical plate.



**Peelability.** Seal perforation and removal tabs provide convenient and easy access to the Master Mix in 8-tube strips.



Alternatively, just add 1/3 of an adhesive film to easily peel the seal from the entire plate.

**Sensitivity.** The capability for increased sample input up to 18  $\mu\text{L}$  enables unprecedented higher sensitivity of approximately 10-fold compared to conventional quantification in human identification (see Figure 1).

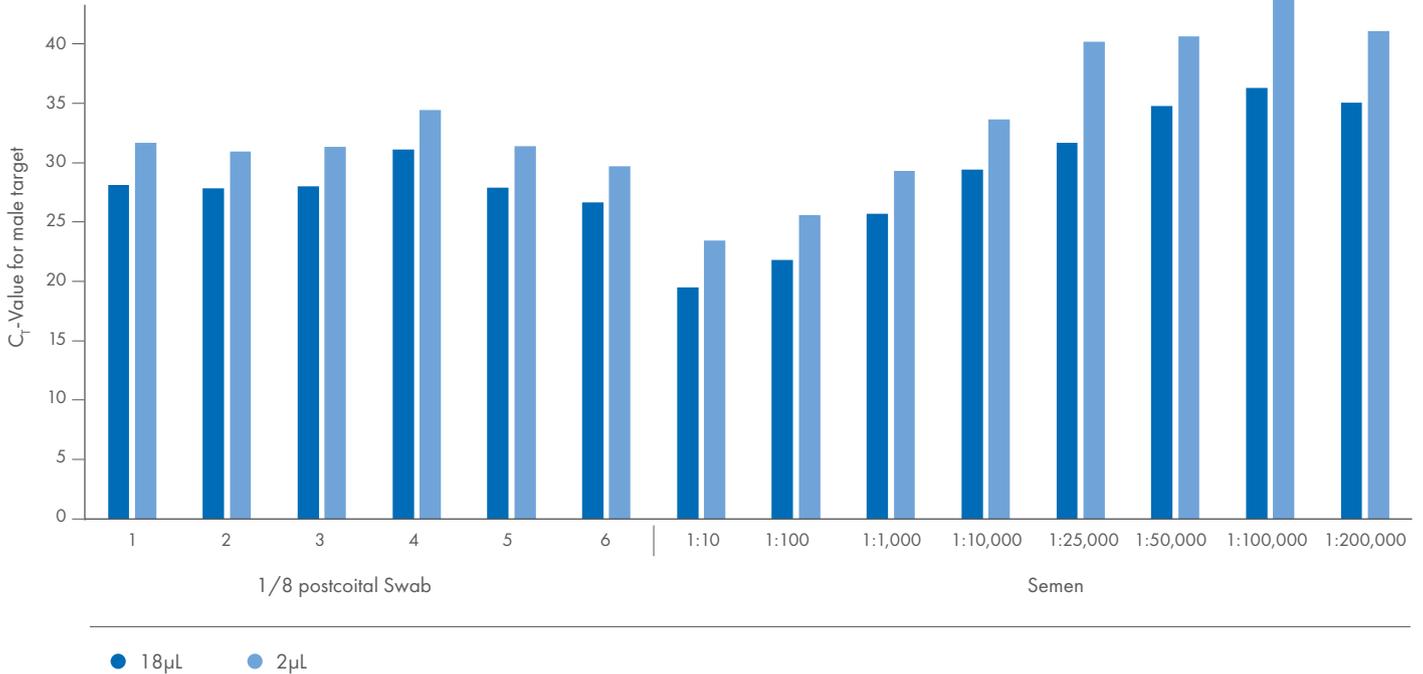


Figure 1. Quantification with a larger input sample volume is consistently approximately 10-fold higher. A sample of 1/8 swab was cut from postcoital swabs and processed with the Investigator Casework GO! Kit (A). Dilutions of a semen sample were spotted directly onto swabs and the whole swab was processed with the Investigator Casework GO! Kit (B). After lysis, 2  $\mu\text{L}$  or 18  $\mu\text{L}$  volumes were analyzed with the Investigator Quantiplex Pro FLX Kit.

**Compatibility.** The novel, optimized qPCR chemistry used in the Investigator Quantiplex Pro FLX Kit is fully compatible with standard buffers available for purified DNA (e.g., nuclease-free water, TE, ATE) or casework direct kits, such as the Investigator Casework GO! Kit (data not shown).

**Convenience.** Ready for cycling? Implementing the Investigator Quantiplex Pro FLX Kit couldn't be easier or more flexible. Clear adhesive foils are available for runs of full qPCR plates. Perforations give you the option of tearing the foil into 8-well strips.

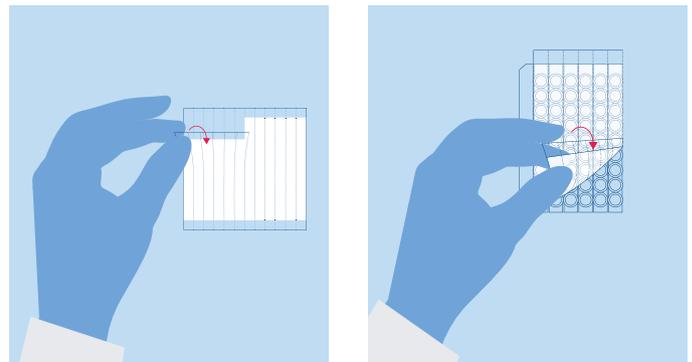


Table 1. Targets, amplicon lengths and channels for the Investigator Quantiplex Pro FLX Kit

Target	Amplicon length	Channel	Ploidy	Copy number
Human target, small autosomal (Human)	91 bp	FAM™	Diploid	Multi-copy
Human target, large autosomal (Degradation)	353 bp	ATTO 550/TAMRA	Diploid	Multi-copy
Human male target (Male)	81 bp	ATTO 647N/Cy®5	Haploid	Multi-copy
Internal PCR control	434 bp	JOE™	N.A.	Synthetic fragment

**Table 2. Comparison of technical specifications**

Features	Investigator Quantiplex Pro FLX Kit	Investigator Quantiplex Pro Kit
Chemistry format	Lyophilized Master Mix in 96-well optical plate	Liquid kit components
Volume per PCR	20 µL	20 µL
Reactions per kit	576	200
Template Volume	1–18 µL	2 µL
Probe	TaqMan®	TaqMan

## Ordering Information

Product	Contents	Cat. no.
Investigator Quantiplex Pro FLX Kit (576)	For use on Applied Biosystems Real-Time Systems: 6x single blistered 96-well optical plates with Master Mix, Control DNA M1, QuantiTect® Nucleic Acid Dilution Buffer	387516
Investigator Quantiplex Pro Calibration Kit	For use on Applied Biosystems Real-Time Systems: Calibration Standard FAM (60 µL), Calibration Standard JOE™ (60 µL), Calibration Standard ATTO 550 (60 µL), Calibration Standard ROX (60 µL), Calibration Standard ATTO 647N (60 µL), Quantiplex Pro Calibration Buffer (30 mL)	387416
Investigator Casework GO! Kit	Casework GO! Lysis Buffer, Proteinase K Solution, and Nuclease-Free Water	386546
qPCR adhesive plate foil, perforated (100)	Clear adhesive foils for qPCR plates, perforated for tearing into 8-well strips	386055
qPCR adhesive plate foil (100)	Clear adhesive foils for qPCR plates	209003
PCR Water (10 x 1 mL)	Water certified to be free of DNA, DNase and RNase contamination	17000-10

The Investigator Quantiplex Pro FLX Kit meets ISO 18385 requirements.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.



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