



Powered by 6-dye Chemistry™

## Powerful discrimination plus optimal performance with the Yfiler® Plus PCR Amplification Kit

### What is it?

The Yfiler® Plus PCR Amplification Kit enables multiplex amplification of the 17 Y-STR set included in the AmpFℓSTR® Yfiler® kits, as well as 10 new Y-STRs. Powered by breakthrough 6-dye Chemistry™ technology, the Yfiler® Plus kit was designed for optimal performance and unprecedented discrimination power, helping you obtain accurate results for challenging samples in less time. The kit also enables direct PCR amplification with single-source samples.

The Yfiler® Plus PCR Amplification Kit is available in two convenient sizes—100 and 500 reactions—to meet specific forensic laboratory workflow needs.

### Why choose the Yfiler® Plus PCR Amplification Kit?

- Improved discrimination capacity through new, highly discriminating markers, including seven rapidly mutating Y-STRs\*
- Improved performance with degraded samples and PCR inhibitors
- Improved genotyping accuracy through expanded allelic ladder and virtual bins
- Concordance with existing data in reference haplotype databases
- Increased workflow efficiency with faster time-to-results than previous Y-STR kits

\*Rapidly mutating Y-STRs have mutation rates above  $1 \times 10^{-3}$  per marker per generation. 17 Yfiler® Y-STRs show mutation rates between  $1 \times 10^{-4}$  and  $1 \times 10^{-5}$  per marker per generation.

## Yfiler® Plus PCR Amplification Kit performance for casework samples

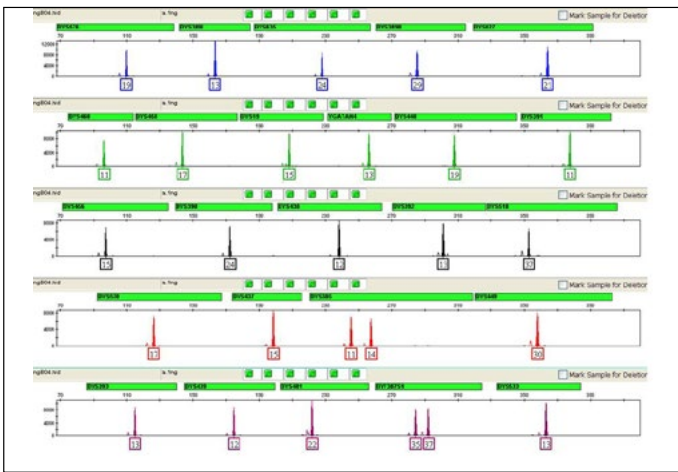


Figure 1. Control DNA 007 at 125 pg, using the Yfiler® Plus PCR Amplification Kit and 30 cycles on a 3500 Series Genetic Analyzer.

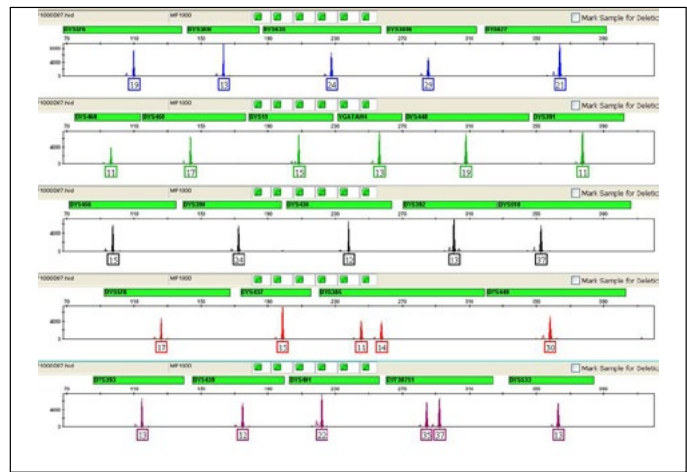


Figure 2. A 1:1,000 male:female mixture, using the Yfiler® Plus PCR Amplification Kit and 30 cycles on a 3500 Series Genetic Analyzer.

## Yfiler® Plus PCR Amplification Kit performance using the direct amplification protocol for single source samples

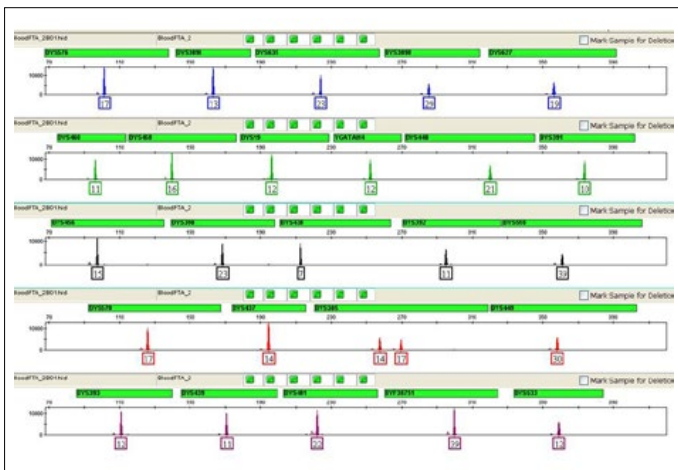


Figure 3. Direct amplification using the Yfiler® Plus PCR Amplification Kit on a 1.2 mm FTA® punch of blood cells and 27 cycles on a 3500 Series Genetic Analyzer.

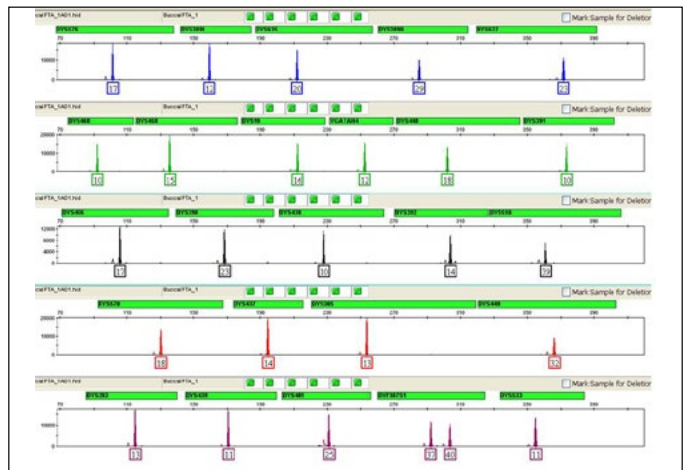


Figure 4. Direct amplification using the Yfiler® Plus PCR Amplification Kit on a 1.2 mm FTA® punch of buccal cells and 27 cycles on a 3500 Series Genetic Analyzer.

### Ordering information

Product	Size	Cat. No.
Yfiler® Plus PCR Amplification Kit	100 rxns	4484678
Yfiler® Plus PCR Amplification Kit	500 rxns	4482730

Find out more at [lifetechnologies.com/yfilerplus](http://lifetechnologies.com/yfilerplus)

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