

## **DIRECT AMPLIFICATION OF DATABASE SAMPLES WITH 5X AMPSOLUTION™**

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Direct amplification is the preferred method for typing DNA database samples because of the significant time savings. While the Identifiler Plus™ (Life Technologies) kit offers some time savings over the Identifiler kit™ due to a shorter amplification time, it is not a direct amplification kit. A method was developed for the direct amplification of FTA® punches using the Identifiler Plus™ kit.

Direct amplification of FTA® punches with Identifiler Plus™ was performed by two methods. First, FTA® punches were added to 10 µL of Tris-EDTA (TE, 10mM Tris-HCl-0.1mM EDTA, pH 8.0) followed by the addition of 15 µL of Identifiler Plus™ Amplification Mix. Second, FTA punches were added to 5 µL of TE and 5 µL of AmpSolution™ (Promega Inc.) followed by the addition of 15 µL of Identifiler Plus™ Amplification Mix. In both cases, the samples were amplified at 26 cycles using the manufacturer's recommended cycling parameters.

Profiles developed from FTA® punches with and without the addition of AmpSolution™ were evaluated for first pass rate, concordance, peak height ratios, intracolor balance, stutter and artifacts. Superior results were obtained with the addition of AmpSolution™.

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