

# AmpFℓSTR™ SGM Plus™ PCR Amplification Kit

Catalog Number 4307133

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**Note:** For safety and biohazard guidelines, see the “Safety” appendix in the *AmpFℓSTR™ SGM Plus™ PCR Amplification Kit User Guide* (Pub. No. 4309589). Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

**IMPORTANT!** Reagents that are used for amplification must be isolated from any source of contaminating DNA, especially from previously amplified AmpFℓSTR™ PCR products and the AmpFℓSTR™ Allelic Ladders.

Thaw reagents completely before first use. To avoid freeze/thaw cycles, store components at 2°C to 8°C after initial use. Store enzyme at –15 to –25°C.

The AmpFℓSTR™ SGM Plus™ Primer Set and Allelic Ladder contain primers that are labeled with light-sensitive dyes. Protect the primers and allelic ladder from light. Do not leave them exposed on the laboratory bench.

To obtain optimal amplification and typing results, follow the procedures in the *AmpFℓSTR™ SGM Plus™ PCR Amplification Kit User Guide* (Pub. No. 4309589).

## Contents and storage

Cat. No.	Contents	Quantity	Storage conditions
361680	AmpFℓSTR™ PCR Reaction Master Mix Contains MgCl <sub>2</sub> , dATP, dGTP, dCTP, and dTTP, bovine serum albumin, and 0.05% sodium azide in buffer and salt.	2 tubes, 1.1 mL/tube	–15 to –25°C upon receipt. 2 to 8°C after initial use.
4307984	AmpFℓSTR™ Control DNA 007, Contains 0.1 ng/μL human male genomic DNA in 0.05% sodium azide and buffer. The profile of this male DNA is D3S1358 15, 16; vWA 14, 16; D16S539 9, 10; D2S1338 20, 23; Amelogenin X, Y; D8S1179 12, 13; D21S11 28, 31; D18S51 12, 15; D19S433 14, 15; TH01 7, 9.3; FGA 24, 26.	1 tube, 0.3 mL	
4307136	AmpFℓSTR™ SGM Plus™ Primer Set Contains locus-specific 5-FAM™, JOE™, and NED™ dye-labeled and unlabeled primers in buffer. The primers amplify the STR loci D3S1358, vWA, D16S539, D2S1338, D8S1179, D21S11, D18S51, D19S433, TH01, FGA, and the gender marker Amelogenin.	1 tube, 1.1 mL	–15 to –25°C upon receipt. 2 to 8°C after initial use. Store protected from light.
4373671	AmpFℓSTR™ SGM Plus™ Allelic Ladder Contains the following amplified alleles: <ul style="list-style-type: none"> <li>• 5-FAM™ dye (blue): D3S1358 12–19; vWA 11–24; D16S539 5, 8–15; D2S1338 15–28.</li> <li>• JOE™ dye (green): Amelogenin X, Y; D8S1179 8–19; D21S11 24, 24.2, 25–27, 28, 28.2, 29, 29.2, 30, 30.2, 31, 31.2, 32, 32.2, 33, 33.2, 34, 34.2, 35, 35.2, 36–38; D18S51 7, 9, 10, 10.2, 11–13, 13.2, 14, 14.2, 15–27.</li> <li>• NED™ dye (yellow): D19S433 9–12, 12, 12.2, 13, 13.2, 14, 14.2, 15, 15.2, 16, 16.2, 17, 17.2; TH01 4–9, 9.3, 10, 11–13, 13.3; FGA 17–26, 26.2, 27–30, 30.2, 31.2, 32.2, 33.2, 42.2, 43.2, 44.2, 45.2, 46.2, 47.2, 48.2, 50.2, 51.</li> </ul>	1 tube, 0.05 mL	–15 to –25°C upon receipt. 2 to 8°C after initial use. Store protected from light. <b>IMPORTANT!</b> The allelic ladder contains PCR products. Do not amplify. To avoid contamination, store the allelic ladder separate from the other kit components and unamplified DNA.
4385214	AmpliAq Gold™ DNA Polymerase, enzyme activity 5 U/μL	2 tubes, 0.05 mL/tube	–15 to –25°C

## Materials required but not supplied

Cat. No.	Component
401734	GeneScan™ 500 ROX™ Size Standard, 2 tubes, 200 µL/tube
4309589	<i>AmpFℓSTR™ SGM Plus™ PCR Amplification Kit User Guide</i>

## Performance characteristics

The AmpFℓSTR™ Kits are developed and manufactured by Thermo Fisher Scientific. We test each lot of kits to ensure that the kits perform according to specifications and are free from interfering contaminants.

Each AmpFℓSTR™ SGM Plus™ PCR Amplification Kit contains reagents that are optimized to amplify and type 2 ng of AmpFℓSTR™ Control DNA 007.

The recommended range of input sample DNA is approximately 1.0 ng to 2.5 ng of human DNA. However, we have successfully typed samples containing less than 1.0 ng of human DNA.

Follow the protocol in the *AmpFℓSTR™ SGM Plus™ PCR Amplification Kit User Guide* to collect and analyze data on the instruments and software that is supported for use with this kit.

## Limited product warranty

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**Revision history:** Pub. No. 4307143

Revision	Date	Description
J	19 October 2018	Updated branding and trademarks, no technical changes. Revision "I" was skipped to avoid confusion with the number "1".
H	August 2012	Basis for this revision.

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