

# GlobalFiler™ IQC PCR Amplification Kit

Catalog Number A43565

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**Note:** For safety and biohazard guidelines, see the “Safety” appendix in the *GlobalFiler™ and GlobalFiler™ IQC PCR Amplification Kits User Guide* (Pub. No. 4477604). Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

## Important guidelines

- Thaw reagents completely before first use. Store components at 2–8°C after first use to avoid freeze/thaw cycles.
- Keep reagents away from any source of contaminating DNA, especially from previously amplified PCR products and the allelic ladder.
- The 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 results, follow the procedures in the *GlobalFiler™ and GlobalFiler™ IQC PCR Amplification Kits User Guide* (Pub. No. 4477604).

## Contents and storage

Contents	Amount (200 reactions)	Storage
GlobalFiler™ Master Mix Contains MgCl <sub>2</sub> , dATP, dGTP, dCTP, and dTTP, bovine serum albumin, enzyme, and 0.05% sodium azide in buffer and salt.	1 × 1.5 mL	–25°C to –15°C on receipt. 2 to 8°C after first use for up to 6 months or up to the expiration date stated on the kit (whichever comes first).
GlobalFiler™ IQC Primer Set Contains locus-specific 6-FAM™, VIC™, NED™, TAZ™, and SID™ dye-labeled and unlabeled primers in buffer. The primers amplify the STR loci D3S1358, vWA, D16S539, CSF1PO, TPOX, D8S1179, D21S11, D18S51, DYS391, D2S441, D19S433, TH01, FGA, D22S1045, D5S818, D13S317, D7S820, SE33, D10S1248, D1S1656, D12S391, D2S1338, the sex-determining markers, Y indel and Amelogenin; and two internal PCR control markers, IQCS and IQCL.	1 × 0.5 mL	–25°C to –15°C on receipt. 2 to 8°C after first use for up to 6 months or up to the expiration date stated on the kit (whichever comes first). Store protected from light.

Contents	Amount (200 reactions)	Storage
GlobalFiler™ IQC Allelic Ladder Contains the following amplified alleles: <ul style="list-style-type: none"> <li>• 6-FAM™ dye (blue): IQCS 1–2; D3S1358 9–20; vWA 11–24; D16S539 5, 8–15; CSF1PO 6–15; TPOX 5–15; IQCL 1–2.</li> <li>• VIC™ dye (green): Y indel 1, 2; Amelogenin X, Y; D8S1179 5–19; D21S11 24, 24.2, 25–28, 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; DYS391 7–13.</li> <li>• NED™ dye (yellow): D2S441 8–11, 11.3, 12–17; D19S433 6–12, 12.2, 13, 13.2, 14, 14.2, 15, 15.2, 16, 16.2, 17, 17.2, 18.2, 19.2; TH01 4–9, 9.3, 10, 11, 13.3; FGA 13–26, 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, 51.2.</li> <li>• TAZ™ dye (red): D22S1045 8–19; D5S818 7–18; D13S317 5–16; D7S820 6–15; SE33 4.2, 6.3, 8, 9, 11–20, 20.2, 21, 21.2, 22.2, 23.2, 24.2, 25.2, 26.2, 27.2, 28.2, 29.2, 30.2, 31.2, 32.2, 33.2, 34.2, 35, 35.2, 36, 37.</li> <li>• SID™ dye (purple): D10S1248 8–19; D1S1656 9–14, 14.3, 15, 15.3, 16, 16.3, 17, 17.3, 18.3, 19.3, 20.3; D12S391 14–19, 19.3, 20–27; D2S1338 11–28.</li> </ul>	1 tube, 0.065 mL	–25°C to –15°C on receipt. 2 to 8°C after first use up to the expiration date stated on the kit. 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.
DNA Control 007 Contains 0.1 ng/μL of human male genomic DNA in 0.05% sodium azide and buffer. The profile of this male DNA is IQCS 2; D3S1358 15, 16; vWA 14, 16, D16S539 9, 10; CSF1PO 11, 12; TPOX 8; IQCL 2; Y indel 2; Amelogenin X, Y; D8S1179 12, 13; D21S11 28, 31; D18S51 12, 15; DYS391 11; D2S441 14, 15; D19S433 14, 15; TH01 7, 9.3; FGA 24, 26; D22S1045 11, 16; D5S818 11; D13S317 11 D7S820 7, 12; SE33 17, 25.2; D10S1248 12, 15; D1S1656 13, 16; D12S391 18, 19; D2S1338 20, 23.	1 tube, 0.3 mL	–25°C to –15°C on receipt. 2 to 8°C after first use up to the expiration date stated on the kit.

## Required materials not supplied

Unless otherwise indicated, all materials are available through [thermofisher.com](http://thermofisher.com).

Item	Cat. No.
GeneScan™ 600 LIZ™ Size Standard v2.0, 2 tubes, 200 μL each <b>IMPORTANT!</b> Do not use GeneScan™ 350 ROX™, GeneScan™ 500 ROX™, or GeneScan™ 500 LIZ™ Size Standards with this kit.	4408399
Low-TE buffer (10 mM Tris, 0.1 mM EDTA, pH 8.0)	Teknova T0223

## Performance characteristics

The GlobalFiler™ IQC kits are developed and manufactured by Thermo Fisher Scientific. We test each lot of kits to ensure that the kits perform according to specifications.

Each Applied Biosystems™ GlobalFiler™ IQC PCR Amplification Kit contains reagents that are optimized to amplify and type 1 ng of DNA Control 007.

The recommended range of input sample DNA is approximately 0.5 ng to 1.5 ng of human DNA. However, we have successfully typed samples that contain less than 0.5 ng of human DNA.

Follow the protocol in the *GlobalFiler™ and GlobalFiler™ IQC PCR Amplification Kits User Guide* (Pub. No. 4477604) to collect and analyze data on the instruments and software that are supported for use with this kit.

## Limited product warranty

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**Revision history:** Pub. No. 4477604

Revision	Date	Description
A	23 July 2019	New document for new kit.

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