

AmpFISTR® SGM Plus® PCR Amplification Kit

The AmpFISTR SGM Plus PCR Amplification Kit amplifies 10 STR loci plus the gender marker Amelogenin. The specific combination of highly informative loci amplified by the SGM Plus kit affords, on average, a 1-in-5 trillion probability of identity, making it a powerful STR system for human identification applications. Six of the STR loci (D8S1179, D18S51, D21S11, FGA, TH01, vWA) were developed and popularized by the Forensic Science Service (FSS) in the Second Generation Multiplex system (Kimpton, C.P., et al. 1996). To create the AmpFISTR SGM Plus kit, a new PCR multiplex was developed to include the six core SGM Plus kit loci and Amelogenin, and four additional STR loci (D2S1338, D3S1358, D16S539, D19S433). The AmpFISTR SGM Plus kit significantly enhances the information obtained from a single PCR amplification.

The SGM Plus kit was designed to employ the rapid, multicolor detection capabilities of the ABI PRISM® genetic analysis instrumentation. One primer for each of the loci amplified by the SGM Plus kit is labeled with either the 5-FAM™, JOE™, or NED™ dyes, which are detected as blue, green, and yellow, respectively, on ABI PRISM® genetic analysis instrumentation. The three different dye labels allow loci with overlapping size ranges to be co-amplified and analyzed in the same lane or injection, which provides highly informative results with minimal sample consumption.

References

1. Kimpton, C. P., et al., 1996. Validation of highly discriminating multiplex short tandem repeat amplification systems for human identification. *Electrophoresis* 17:1,283–1,293.

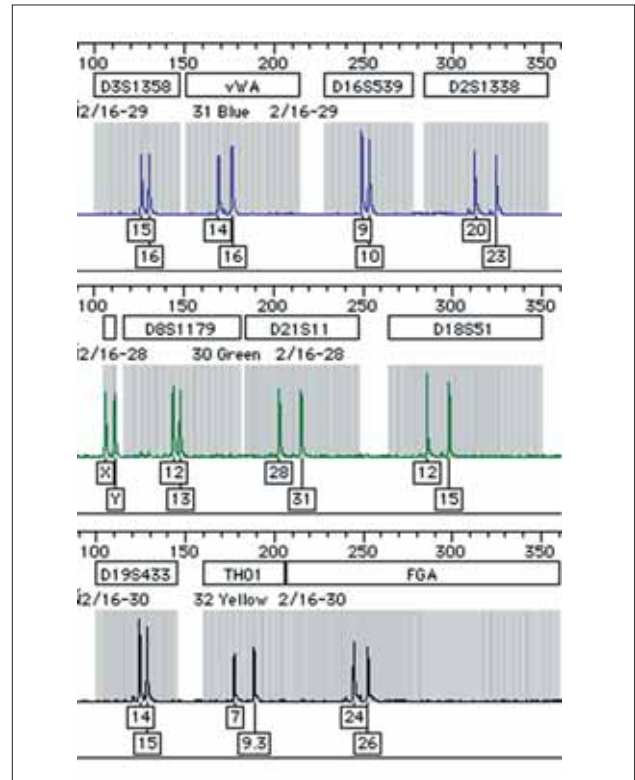


Figure 1. Genotyper® software analysis showing the AmpFISTR SGM Plus kit results generated with AmpFISTR® Control DNA 007.

Probability of Identity

African American (n=195)	7.91×10^{-14}
US Caucasian (n=200)	2.99×10^{-13}

Ordering Information

Description	Quantity	P/N
AmpFISTR® SGM Plus® PCR Amplification Kit*	100 tests, 50 µL/test	4307133
AmpFISTR® SGM Plus® PCR Amplification Kit User's Manual	1 manual	4309589
GeneScan™-500 ROX™ Size Standard Kit	800 reactions	401734
Matrix Standard Set DS-32 (5-FAM™, JOE™, NED™, ROX™ dyes) for use on 310 and 377 systems	1 tube of each dye	4312131
Matrix Standard Set DS-32 (5-FAM™, JOE™, NED™, ROX™ dyes) for use with 3100 and 3100-Avant systems	1 tube of each dye	4323018

*Storage conditions: 2–8°C (-20°C for enzyme)



iScience. To achieve accurate, reproducible results, life scientists are taking advantage of advanced analysis systems that unite technology, informatics, and traditional laboratory research. In partnership with our customers, Applied Biosystems provides the innovative products, services, and knowledge resources that make this new, **Integrated Science** possible.

Worldwide Sales Offices

Applied Biosystems' vast distribution and service network, composed of highly trained support and applications personnel, reaches 150 countries on six continents. For international office locations, please call the division headquarters or refer to our Web site at www.appliedbiosystems.com

Applera is committed to providing the world's leading technology and information for life scientists. Applera Corporation consists of the Applied Biosystems and Celera Genomics businesses.

Headquarters

850 Lincoln Centre Drive
Foster City, CA 94404 USA
Phone: 650.638.5800
Toll Free: 800.345.5224
Fax: 650.638.5884

**For Research, Forensic or Paternity Use Only.
Not for use in diagnostic procedures.**

The PCR process is covered by patents owned by Roche Molecular Systems, Inc. and F. Hoffmann-La Roche Ltd.

AB (Design), iScience and iScience (Design), 5-FAM, JOE, NED and ROX are trademarks; and ABI PRISM and its design, AmpFISTR, Applied Biosystems, Applera, GeneScan, Genotyper and SGM Plus are registered trademarks of Applera Corporation or its subsidiaries in the US and/or certain other countries.

©2004 Applied Biosystems. All rights reserved.
Information subject to change without notice.

Printed in the USA, 06/04
Publication 112PB06-03