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## AmpFLSTR® Kit Templates 7

This compact disk contains the following Genotyper® software template files for use on Windows NT® computers and Macintosh® computers with AmpFLSTR® products. Copy the appropriate template file(s) onto your computer. Genotyper® software version requirements for each template file are indicated below.

### TEMPLATES FOR WINDOWS NT® COMPUTER

### TEMPLATE NAME ON DISK

AmpFLSTR® Identifiler™ Kit Template v1	IDENTIFILER_V1
AmpFLSTR® Identifiler™ Kit CODIS Template v1	IDENTIFILER_CODIS_V1
AmpFLSTR® CODIS COPP Template v1	CODIS_COPP_V1
AmpFLSTR® SGM Plus® Kit Template v1	SGM_PLUS_V1
AmpFLSTR® Cofiler™ Kit Template v1	COFILER_V1
AmpFLSTR® Profiler Plus™ Kit Template v1	PROFILER_PLUS_V1
AmpFLSTR® Profiler™ Kit Template v1	PROFILER_V1
AmpFLSTR® Green™ I™ Kit Template v1	GREEN_I_V1
AmpFLSTR® Blue™ Kit Template v1	BLUE_V1

### TEMPLATES FOR MACINTOSH® COMPUTER

### TEMPLATE NAME ON DISK

AmpFLSTR® Identifiler™ Kit Template v2	IDENTIFILER_V2
AmpFLSTR® Identifiler™ Kit CODIS Template v2	IDENTIFILER_CODIS_V2
AmpFLSTR® CODIS COPP Template v2	CODIS_COPP_V2
AmpFLSTR® SGM Plus® Kit Template v2	SGM_PLUS_V2
AmpFLSTR® Cofiler™ Kit Template v4	COFILER_V4
AmpFLSTR® Profiler Plus™ Kit Template v4	PROFILER_PLUS_V4
AmpFLSTR® Profiler™ Kit Template v3	PROFILER_V3
AmpFLSTR® Green™ I™ Kit Template v3	GREEN_I_V3
AmpFLSTR® Blue™ Kit Template v3	BLUE_V3

•. AmpFLSTR® Identifiler™ Kit Template v1, AmpFLSTR® Identifiler™ Kit CODIS Template v1, AmpFLSTR® CODIS COPP Template v1, AmpFLSTR® SGM Plus® Kit Template v1, AmpFLSTR® Cofiler™ Kit Template v1, AmpFLSTR® Profiler Plus™ Kit Template v1, AmpFLSTR® Profiler™ Kit Template v1, AmpFLSTR® Green™ I™ Kit Template v1, and AmpFLSTR® Blue™ Kit Template v1 require Genotyper® Software v3.7. The computer requirement for Genotyper® Software v3.7 is a Windows NT®, 4.0, Service Pack 4 or 5 operating system.

• AmpFLSTR® Identifiler™ Kit Template v2 and AmpFLSTR® Identifiler™ Kit CODIS Template v2 require Genotyper® Software v2.5.2 or higher. The minimum system requirement for Genotyper® Software v2.5.2 is a Power Macintosh® computer running Mac OS 8.x or 9.1.

• CODIS COPP Template v2, AmpFLSTR® SGM Plus® Kit Template v2, AmpFLSTR® Cofiler™ Kit Template v4, AmpFLSTR® Profiler Plus™ Kit Template v4, AmpFLSTR® Profiler™ Kit Template v3, AmpFLSTR® Green™ I™ Kit Template v3, and AmpFLSTR® Blue™ Kit Template v3 require Genotyper® Software v2.5 or higher.

• The Kazam macros within a color have been rearranged so that the steps for loci with more stringent sample allele stutter filters are executed first. All

Kazam macros have stutter filters ordered to avoid removal of labels for preceding loci from subsequent filters (Kinsey and Hormann, 2000).

- Proximal filtering is 3.25 bp to 4.75 bp.

#### Filtering

Filtering is left to right along the electropherogram.

Filtering compares Peak A to next labeled peak, peak B. The label will be removed from Peak A if Peak B meets both criteria:

1. Peak B is higher than peak A by the specified percentage (F value).
2. Peak B is within the specified size (bp) proximity range relative to Peak A.

A = stutter peak

B = allele peak

$F = [(B-A)/A] \times 100$  where F is the filter value used in Genotyper® software

$S = A/B \times 100$  where S is the conventional calculation of stutter percentage

$F = (10,000/S) - 100$

$S = 100 / (0.01F + 1)$

- The Kazam macros for AmpFLSTR® Blue™ Kit, AmpFLSTR® Green™ I™ Kit, Profiler™ Kit, Profiler Plus™ Kit, COfiler™ Kit, SGM Plus® Kit, and CODIS COPP have consistent stutter filters such that the stutter percentage is the highest observed stutter at a particular locus plus three (3) standard deviations.

#### AmpFLSTR® Identifiler™ Kit Template

AmpFLSTR® Identifiler™ Kit Kazam macro uses stutter filters generated from AmpFLSTR® Identifiler™ PCR Amplification Kit products and are reflective of highest observed stutter value per locus.

TH01 virtual bin 14 has been removed as a category.

"Make CODIS Mixture Table" allows up to 4 alleles per locus to be displayed. (See Genotyper Software Manual for information on how to make this and other table changes).

#### AmpFLSTR® Identifiler™ Kit CODIS Template

The alleles from amplified samples that are less than or greater than the alleles included in the allelic ladder are designated with "<" or ">" symbols.

TH01 virtual bin 14 has been removed as a category.

"Make CODIS Mixture Table" allows up to 4 alleles per locus to be displayed. (See Genotyper Manual for information on how to make this and other table changes).

#### AmpFLSTR® SGM Plus® Kit Template

Minus A (-A) filtering is not included.

FGA offsets have been edited relative to previous versions.

50.2 offset (os) category range has been edited to +/- 1.75 bp.

#### AmpFLSTR® Profiler Plus™ Kit Template

"Make CODIS Mixture Table" allows up to 4 alleles per locus to be displayed. (See Genotyper Software Manual for information on how to make this and other table changes).

#### AmpFLSTR® COfiler™ Kit Template

"Make CODIS Mixture Table" allows up to 4 alleles per locus to be displayed. (See Genotyper Software Manual for information on how to make this and other table changes).

#### CODIS COPP Template

The alleles from amplified samples that are less than or greater than the alleles included in the allelic ladder are designated with "<" or ">" symbols.

The "Check Overlap Loci Table" automatically checks concordance at overlap loci, D3S1358, D7S820, and Amelogenin. The successful use of the "Check Overlap Loci Table" depends upon the specific directions for completing sample sheets.

When completing the Sample Sheet for use with the CODIS COPP Template files, enter the information as follows:

1. For samples:

Under Sample Info, type a unique sample description that is the same for both samples amplified with the Profiler Plus™ Kit and COfiler™ Kit; in order to distinguish which sample is amplified with which kit, type "Profiler Plus" and "COfiler" under the Comments section. Entries of sample names for comparison purposes between Profiler Plus™ and COfiler™ Kits must be entered exactly the same.

2. For allelic ladder:

Under Sample Info, type the word "ladder" for the allelic ladder samples. In order to distinguish which ladder is used for each lane/injection; type "PPL" and "COL" under the Comments section, this entry is case sensitive.

"Make CODIS Mixture Table" allows up to 4 alleles per locus to be displayed. (See Genotyper Manual for information on how to make this and other table changes).

#### Reference

Kinsey, P., and Hormann, S. 2000. "Modification of the stutter position label-filtering macro in the PE Biosystems Genotyper" Version 2.5 software package: Resolution of stutter-filter back talk." Forensic Science Communications 2(3).

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