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About VeriFiler Express 3730 v1x Analysis Files for GeneMapper ID-X
Software v1.6
Release Notes
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January 2021
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OVERVIEW
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VeriFiler_Express_3730_Panels_v1x Analysis Files may be imported into
GeneMapper ID-X Software v1.6 to assist in automated genotyping of data
generated using the VeriFiler Express PCR Amplification Kit and 3730xl
Genetic Analyzer with POP-7.

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SOFTWARE CONTENTS
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This software package consists of two files:
- VeriFiler_Express_3730_Bins_v1x
- VeriFiler_Express_3730_Panels_v1x

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CHANGES IN THIS RELEASE FROM VERIFILER_EXPRESS_v4.1x
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VeriFiler_Express_3730_v1x are stand-alone panel and bin files and do not
include a stutter file. The bin set was customized for running on the
3730xl instrument with POP-7 polymer.

There are two major changes to the bin set: inclusion of non-centralized
bins at the Penta D marker and removal of all virtual bins from Penta D
and Penta E. Both updates account for allele migration variation seen in
these two markers when running on POP-7.

Physical bin off-sets for the Penta D alleles in the table below were
updated from centered ±0.5 bp off-sets to the non-centered off sets as
listed.

Allele	Size	Left Off-Set	Right Off-Set
3.2	382	0.4	0.6
7	400	0.6	0.4
10	415	0.65	0.35
12	425	0.75	0.25
14	435	0.6	0.4
16	445	0.65	0.35

To implement more standardized spacing system between bins the following rules are in place:

- If a real bin is 2 bp from another real bin, the bin width is 0.5 on either side.
- If a real bin is 1 bp from another real bin, the bin width is 0.45 on the adjacent side.
- If a virtual bin is 2 bp from another real or virtual bin, the bin width is 0.5 on either side.
- If a virtual bin is 1 bp from another real bin, the bin width for the real bin is unchanged but the bin width for the virtual bin is .4 on the adjacent side.
- If a virtual bin is 1 bp from another virtual bin, the bin width for the virtual bin is .45 on the adjacent side.

Adherence to the above rules has resulted in the following adjustments to bins:
At D2S441: Changed right width of bin 11.3 from 0.4 bp to 0.45 bp
At D2S441: Changed left width of bin 12 from 0.5 bp to 0.45 bp

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VALIDATION SUMMARY

The VeriFiler_Express_3730_v1x Analysis Files was checked for correct file structure. The panel file was also confirmed for correctness in marker details including name, dye, size, control and ladder alleles, and repeat length. The physical bin and virtual bin sizes were checked against the theoretical values to ensure the correctness. New bin off-sets were confirmed.

In addition, the genotyping results for allelic ladder, samples, and Control DNA were verified using GeneMapper ID-X Software v1.6. It was demonstrated that the VeriFiler_Express_3730_v1x Analysis Files were implemented properly.

FILE INSTALL INSTRUCTIONS

Place the three files in the software package in the appropriate folder on the computer. If you used the default install configuration, this default Panels folder should be located at
C:\AppliedBiosystems\GeneMapper\Panels

Installation of the Panel File:
1. In the GeneMapper ID-X software, select Tools from the menu bar
2. Select Panel Manager
3. Single Click on "Panel Manager" in the left hand window pane
4. Select File and Import Panels from the menu bar
5. A dialogue box will appear. Navigate the location of the Panel file on your computer. If you placed them in the default Panels folder, the dialogue box should open to the correct folder.
6. Select the file titled: VeriFiler_Express_3730_Panels_v1x
7. Select the appropriate Security Group
8. This will install the Panel in the left window pane

Installation of the Bin File:
1. Single click on "VeriFiler_Express_3730_Panels_v1x" in the left hand window pane
2. Select File and Import Bin Set from the menu bar
3. A dialogue box will appear. Navigate to the location of the Bin file on your computer. If you placed them in the default Panels folder, the dialogue box should open to the correct folder.
4. Select the file titled: VeriFiler_Express_3730_Bins_v1x
5. This will install the Bins in the pull-down menu at the top titled "Bin Set"

LEGAL STATEMENTS