FORENSIC BIOLOGY PROTOCOLS FOR FORENSIC STR ANALYSIS

Editing Codes		
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Artifacts listed below should be unlabeled using the comment "artifact" (code "a") For additional detail on artifacts, refer to the STR Results Interpretation Manuals for <u>PowerPlex</u> Fusion or Identifiler and YFiler, or relevant appendices.

> Artifacts pull-ups or pull-down of peaks in any color caused by a very high peak of another color in the same basepair range of a sample shoulder peaks approx. 1-4 bp bigger or smaller than main peak split peak due to "N" bands split peak due to matrix over-subtraction stutter in non-mixtures1 peak classified as +/-2 bp artifact² kit-specific artifact3 labels placed on elevated baselines spikes or peaks present in all colors in one sample dye artifact occurring at a constant scan position peak classified as primer front; low molecular weight artifacts appearing at the very beginning of a dye color initial peak labels of range removed (use code " \rightarrow ")

1. Stutter includes: Peaks in non-mixtures in a +/- 1 STR repeat positions for Identifiler®, YfilerTM or peaks in a +/- 1 STR repeat position in a Fusion® exemplar sample or positive control, or in a +/- 2 STR repeat position in a single source Fusion sample. The height of the possible stutter peak must be compared to the height of the parent allelic peak to determine if it is reasonable to consider it as stutter. Refer to the appendices for <u>PowerPlex Fusion</u> or <u>Yfiler</u> for stutter filter information for the relevant kit.

2. This edit is applicable for artifact peaks in the -2 bp position in Fusion® commonly seen in some locations such as D1S1656, D13S317, D18S51, D21S11, D7S820, D5S818, D12S391, and D19S433. For YfilerTM, this edit is applicable for artifacts in the +/-2 bp position at DYS19.

3. Refer to the appendix for Manual appendix for PowerPlex Fusion.

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