

DNA: Interpretation Guidelines- Overview

Introduction The interpretation of results in casework is a matter of professional judgment and expertise. Not every situation can or should be covered by a pre-set rule; however, it is important that the laboratory develops and adheres to minimum criteria for interpretation of analytical results. These criteria are based on validation studies, literature references, and casework experience.

Purpose The purpose of these guidelines is to establish a general framework and outline minimum standards to ensure that:

- conclusions in casework reports are scientifically supported by the analytical data, including data obtained from appropriate standards and controls
- interpretations are made as objectively as possible, consistently from analyst to analyst, and within previously agreed limits.

Evaluation and interpretation of STRs The goal of the evaluation and interpretation of amplified STR data is to determine the DNA profile(s) of the donor(s) of the evidence samples for comparison to reference sample profiles. This includes evaluating the run and each sample associated with the run and the subsequent interpretation of the samples.

Terminology A glossary defining DNA terms is available within the manual.

Procedures Refer to the following procedures for information on interpreting DNA results:

- *DNA: Run Evaluation*
 - *DNA: Sample Evaluation*
 - *DNA: Profile Quality*
 - *DNA: Profile Interpretation*
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DNA: Interpretation Guidelines- Overview, Continued

DNA Manager *DNA Manager* is an *Excel* based workbook used to manage samples and document the steps of DNA analysis.

The workbook is located in a limited-access shared drive.

The embedded worksheets are not reviewed or approved by the Director as they are considered components of the examination documentation for the case file.
