

OSIRIS: Free Open-source STR Analysis Software

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<https://www.ncbi.nlm.nih.gov/projects/SNP/osiris/>

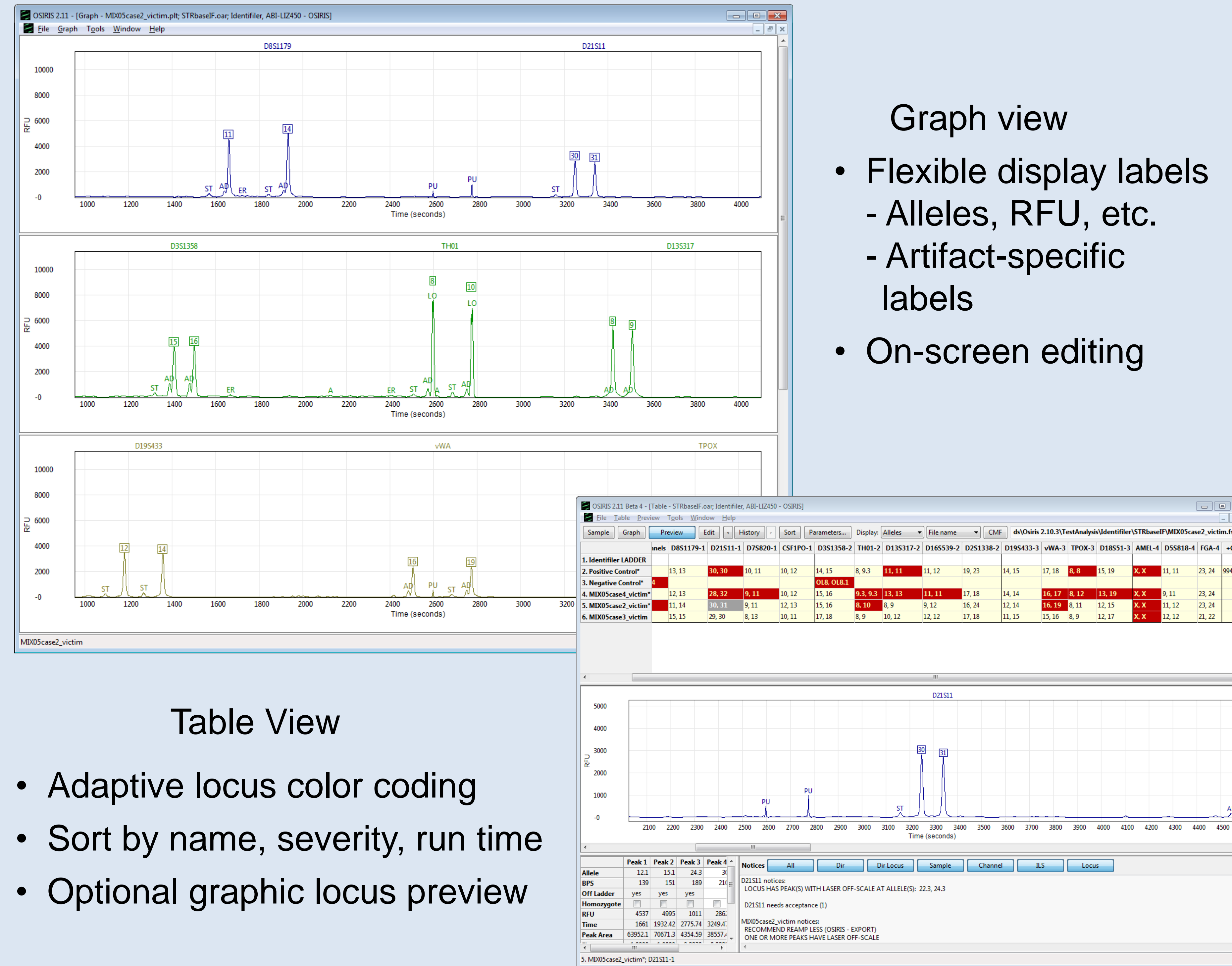


OSIRIS

- Free public domain software
- Expert system validated
- Sample Analysis and QC
- Cross-platform
 - Windows (XP/7/8/10)
 - Mac OS X
- Displays
 - Stacked graph
 - Table
 - Sample detail
- Pre-configured for 38 kits
- Customizable export
 - Spreadsheet, LIMS, graphics
- Analyzes .hid and .fsa files
- Rapid analysis
 - >200 sample/min

Standalone Graphical User Interface

- Multiplatform Graphical User Interface - Windows / Mac
- Flexible data export:
 - CSV/TSV tables of alleles, peak heights, other metrics
 - Subsets of samples analyzed



Graph view

- Flexible display labels
 - Alleles, RFU, etc.
 - Artifact-specific labels
- On-screen editing

Table View

- Adaptive locus color coding
- Sort by name, severity, run time
- Optional graphic locus preview

Current Users

- Cell line validation / authentication
- Bio Sample ID/fingerprinting
- Chimerism/Engraftment testing for stem cell transplants
- Kinship Analysis
- Biometric/Forensic ID

Command Line Analysis

- Perform analysis without the user interface as part of an automated pipeline
- Multiplatform analysis module – Windows / Mac / Unix -
- Written in C++ for exceptional performance
- Run-time parameters specified as simple name-value pairs
- Output files are in human and machine readable XML text

OSIRIS Analysis

- Identifies
 - Alleles
 - Baseline
 - Artifacts
 - Noise

Uses novel quality metrics
Novel peak and artifact signatures

Using OSIRIS

The OSIRIS program is a free download on the home page:

www.ncbi.nlm.nih.gov/projects/SNP/osiris/

Downloads include the OSIRIS User's Guide with a Tutorial. The program includes demonstration data.

Open Source Collaboration

Source code is in the NCBI GitHub repository. Collaborators welcome.

Questions or feedback, please contact:

forensics@ncbi.nlm.nih.gov

For announcements and tips:

www.ncbi.nlm.nih.gov/mailman/listinfo/forensics-announce



Email a question



Osiris Home page

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