

# Advanced Quantifier™ (AQ) for Microsoft<sup>®</sup> Windows<sup>®</sup>



Advanced Quantifier software lets you quickly and reproducibly analyze protein or DNA samples run in one-dimensional separations. The software automatically locates lanes and bands. On command, it determines band size and quantity of sample present in comparison to standards or reference lanes.

### Analyze

- Northerns, Southerns and Westerns
- RAPDs
- STRs (micro satellites)
- Paternity and forensic analysis using RFLPs or STRs
- Strain identification and comparison using RFLPs or STRs
- Other genetic mapping applications using 1-D molecular techniques

# The software

- Automatically finds the lanes, then finds and quantifies the bands even irregularly shaped bands such as biphasic, smiling, or saturated bands. Band edges are based on inflection point analysis and localized background
- Can accept TIFF, FUJI format, JPEG (JPG) and BMP images
- Provides image manipulation functions to crop, invert, rotate, flip and calibrate

- Size standards use known values to calculate sizes for all unknown bands, using one of five interpolation methods
- Concentration standards convert from intensity to mgs, CPMs or DPMs, using one of four interpolation methods
- Displays band data including peak height, area and volume for the whole band, relative volume and Rf
- Shows side-by-side band comparisons, lane densitometry profiles, 3-D surface plots, and image histograms
- Provides densitometry tool for quantifying bands which are indistinct or smeared
- Includes an on-line manual, tutorial, and demo images

### Features

- Specify, save and load user preferences (e.g., image annotation, report configurations, band-finding and matching parameters)
- Use the known size standards to automatically adjust for gel smiling
- Save frequently used known standards
- Calculate sizes outside the range of your knowns
- Assign labels (e.g., Treatment, Species or Gender) to lanes
- Import lane labels from ASCII files or other external databases

- Create a lane to match against using existing bands
- Enhance your view of images using different colors and zooming
- Display intensity in optical density (OD), counts per minute (CPM), FUJI photo stimulated luminescence (PSL), or Molecular Dynamics units of luminescence

### Matching

- Analyze data with powerful data management and database capabilities. Create and search databases and compare band patterns across large populations
- Compare fingerprints or band patterns within a single sample, or across thousands of samples
- Build DNA, RNA or protein-based taxonomy studies for many strains or organisms
- Make genomic identifications in agricultural, forensic, or paternity applications
- Determine matches using MW, interband spacing, or volume

- Choice of three methods for calculating band-sharing frequency
- Build similarity dendograms using one of five clustering techniques
- Use lane labels to match just lanes of interest (e.g., just match control lanes)
- Show matching lanes from any image, for easy verification

#### Powerful reporting capabilities

- Customize reports and display them on screen, print, save as a file, or copy to spreadsheet programs
- Illustrate image with circles, arrows, boxes, and text; combine an image with text for publication-quality work
- Show the size or concentration curves
- Overlay multiple densitometry profiles

# **System Requirements**

### **IBM** and compatible systems:

Operating System: Windows 10 and Windows 7

## **Ordering Information**

### **Microsoft Windows for PC**

Advanced Quantifier Catalog #100200

### Available Options include:

Full image and analysis systems including compatible image acquisition devices, CPU, Monitor and printer. To order, contact:

Bio Image Systems, Inc.. 721 Bloomfield, Jackson, MI 49203 USA Phone: +1.734.604.2623 Fax: +1.517.788.8869 email: info@bioimage.net http://www.bioimage.net

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