

LabImage 1D Application

LabImage 1D is the most advanced solution in 1D gel analysis. It offers the full analysis tool set with automatic lane and band detection, automation of analysis, combined with adjustable background reduction to achieve reliable results. More than 30 analysis values, significant reports and 3D images provide a complete view on your experiment. LabImage 1D comes in different versions to fit users demand and price level.

Interface and Handling

- Easy to use workflow-guided Analysis
- Fully customizable User Interface
- Context-sensitive Tutorial
- Video tutorial, Web support

Preprocessing

- Image editing Tools
- Five adjustable Image Filters

Lane and Band Detection

- Multiple ROI's
- Full automatic Lane and Band Detection with adjustable Parameters
- Manual Lane and Band Correction
- Manual editing of Band Peaks and Edges

Background Reduction

- Six adjustable Methods: Valley to Valley, Base Line, Image Rectangle, Rolling Ball, Rubber Band, Minimum Profile
- Apply method for single or all Lanes
- Preview Profile without Background

Molecular Weight

- Set of predefined Standard Templates
- Six calibration Curve Types
- Standard editor to create Templates
- Multiple Standards for one Gel
- Use Rf correction to assign Standard

Image Import

- Import common Image Formats
- Load 8/16 bit Image Files
- Import Images from Camera or Scanner

Quantification

- Assign amounts for Bands and Lanes
- Six calibration Curve Types
- Range of Calibration Units
- View interpolated and extrapolated Values in Data Table

Normalization

- Assign Values for single Band or Group of Bands
- Calculation based on Sum/Mean Volume

RF Calibration

- Add Rf Lines to equalize Lanes
- Adjust and bend Rf Lines
- Snap Rf Line to Bands

Automation

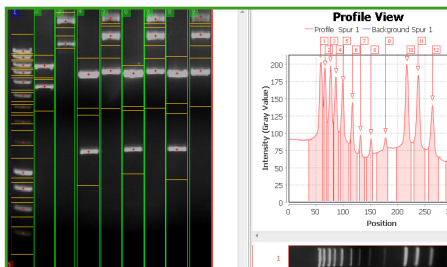
- Create and Edit Macros
- Apply Macros for single Images
- Apply Macros on Image Stacks

Additional Features

- 3D Profile and Gel View
- Stand-alone and Network Licenses
- Included Network License Server
- Flexible License updates
- Individual Lane and Band Naming

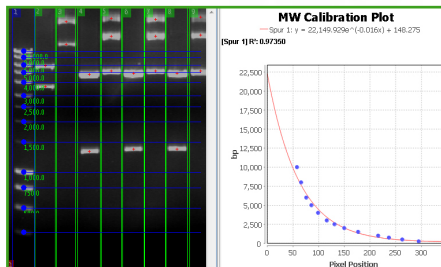
Imaging Platform

- Based on powerful Bio-Imaging Platform
- Online/Offline Updates
- Runs on Windows/Mac/Linux
- Database Storage
- Undo/Redo Concept



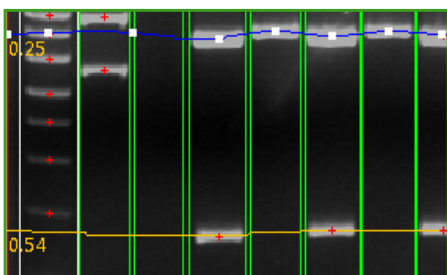
Lane and Band Detection

Minimize the time you spend on finding bands and lanes with the automatic and manual mode. Even bent or non vertical lanes can be detected by optimized algorithms. Adjustable parameters and manual correction support the process.



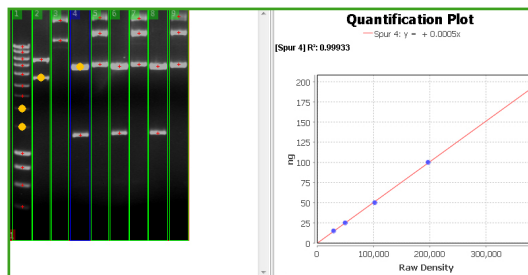
Molecular Weight Calibration

Use the supplied standard library to assign molecular weights to the gel. The MW calibration view lets you find the best out of six curve fittings for the gel. You can define own standards or download new standards from the web site.



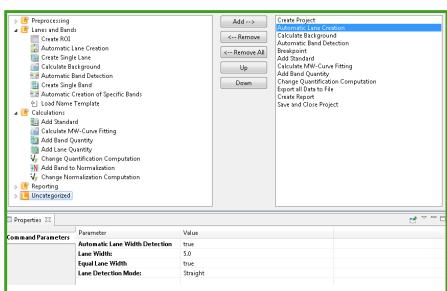
RF Calibration

Rf lines can be used to correct distorted lanes. By defining Rf lines in the gel bands or inter band areas can be levelled to a given value. In result the tracking of bands can be corrected to compare different bands by their Rf value.



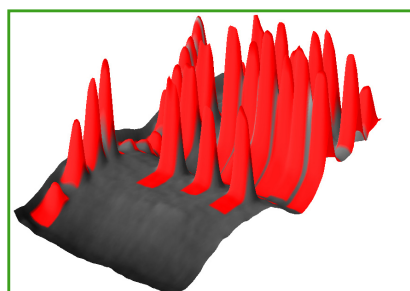
Quantification and Normalization

You can assign quantity values to known bands to calculate masses. Select either a single band, a group of bands or lanes to create a mass calibration using different types of fittings. Normalization is provided for a single band or a group of bands.



Automation

LabImage 1D provides Macro features to fully automate the analysis of 1D gels. Macros can be applied to either single images or image stacks providing you the power of high throughput analysis.



Reporting

Present your results to others! A 3D gel view allows to interpret the results easily. To summarize your data you can create significant reports and documentations. Every report or data can be exported to other applications in standard formats.