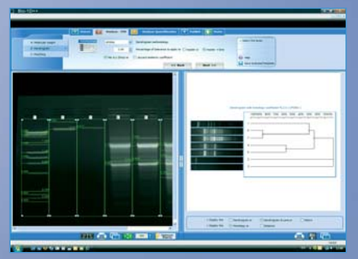
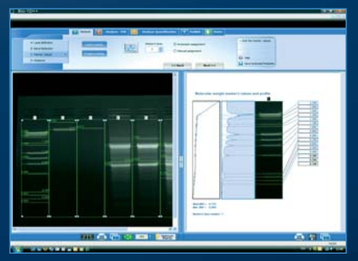




VILBER

BIO-1D++

Bio-1D++ = Bio-1D + Bio-Gene

Bio-1D++ combines all the features of Bio-1D and Bio-Gene. This integrated software package offers the very best of 1-D gel analysis. The quantitative results are based on state of the art algorithms controlled through a very user-friendly interface.

Bio-1D++ can be used for any 1-D fluorescent or chemiluminescent sample.

Detect

Analyse

Store and sort

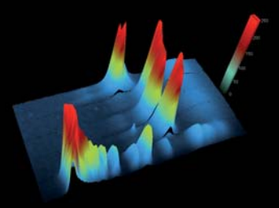
Publish

> KEY FEATURES

- Transform your 1D gel into 3D results with our unique 3D Power system™
- Detect automatically the lanes and the bands with the one click Detector™ feature
- Exclusive Next™ tutorial mode for an incredible ease of use
- Work with different kind of samples such as DNA, RNA, protein, polynucleotide, Petri dish, microtitration plates, plants and in-vivo images
- Ease your analysis by using the same template for the analysis of different images
- Use state of the art analysis algorithms

> SOFTWARE MODULE

- Molecular weight / Volume quantification for 1D sample
- Band matching rectangular matrix
- Matrix / Dendrogram / Multiprobe analysis
- Database management
- Microtitration plate analysis
- Array analysis
- Free form object analysis
- Colony counting
- Image enhancement
- Results publishing



SPECIFICATIONS

	BIO-1D	BIO-GENE	BIO-1D ++
Volume quantification (optical density)			
• Transform your 1D gel into 3D results	+		+
• Select one out of several background subtraction methods (ie: horizontal, valley to valley, rolling ball, ...)	+		+
• Calculate the spot volume, height and area and compare the profiles by superposition	+		+
• Use a quantification threshold to distinguish the bands from the smears on the lane	+		+
• Calculate the volumes using a reference, an average, or the sum of spots (100%)	+		+
• Calculate the volume by interpolation, using a calibration curve	+		+
• Modify the heading unit (%, ng,...)	+		+
• Export your result to Excel™	+		+
Molecular weight calculation (electrophoretic distance)			
• Transform your 1D gel into 3D results	+	+	+
• Detect automatically the gel's band and lane	+	+	+
• Control the detection parameters or adjust manually the detection	+	+	+
• Realign the band position for gels using several marker lanes	+	+	+
• Correct the band and front distortion (smiling effect)	+	+	+
• Correct the marker's value assignment using the marker migration curve	+	+	+
• Calculate the molecular weight, the pH or the RF values	+	+	+
• Calculate and display dendrogram using Nei & Li (Dice) or Jaccard similarity coefficients	+	+	+
• Recalculate the volume using a master or a calibration curve	+	+	+
• Export your result to Excel™	+	+	+
Volume quantification using a free form or a grid for microtitration plate			
• Transform your 1D gel into 3D results	+		+
• Define your area of interest using the flexible predefined grid or a free form	+		+
• Calculate the volume, the height and the area and compare	+		+
the volume of one or several spots to a reference	+		+
• Recalculate the volume by interpolation with a calibration curve	+		+
• Export your result to Excel™	+		+
Colony counting			
• *One-click mode for automatic counting and total-control mode for manual counting*	+		+
• *Colony characterization (volume, area, perimeter, gravity, compacity, eccentricity...)*	+		+
• *Exclusion folder which define contaminated areas in which no colony will be counted*	+		+
• *Overlay display of the colony number/Full GLP compliance/Export your data to Excel™*	+		+
Flexible database management			
• Store unlimited number of samples and create/edit a master lane		+	+
• Store each lane with its band Molecular weight, R.F. or fragment size values		+	+
• Identify each sample with a specific name and a reference for the initial image		+	+
• Protect your data with a password for each user		+	+
Identification of a lane from a database			
• Select the reference lane and the lanes to be compared		+	+
• Define a confidence interval for the band matching		+	+
• Export your result to Excel™		+	+
Matrix / Dendrogram			
• Gather the clusters and display the list of patterns		+	+
• Select one dendrogram calculation method such as UPGMA, single linkage, complete linkage,			
average linkage, centroid, median or ward.		+	+
• Define a similarity coefficient (Nei and Li or Jaccard) and a confidence interval		+	+
Multiprobe analysis			
• Extract lanes from a specific database and select the lanes to be compared		+	+
• Select a lane of reference		+	+
• Export your data to Excel™		+	+
Creation of a band matching rectangular matrix			
• Create a group of lanes and define a similarity coefficient (Nei and Li or Jaccard)		+	+
• Display the results in a matrix format using a confidence interval		+	+
• Export your data to Excel™		+	+
Image enhancement			
• Modify the image format to TIFF, BMP, GIF, MAC, PICT, WPG, PCX, TGA, or JPEG	+	+	+
• Zoom in or out / Add comments or symbols	+	+	+
• Rotate the image using a defined angle or a vertical/horizontal axis of symmetry (as seen in a mirror)	+	+	+
• Invert the image to obtain a negative or a positive display	+	+	+
• Replace grey levels by pseudo-colours	+	+	+