





Gel Analysis with Logger Pro

Launch Logger Pro and select **Gel Analysis** from the **Insert** pull down menu. You have the option of choosing a file photo or taking a photo using a ProScope. The buttons along the right side of the gel photograph are used during gel analysis. The first four are the primary Gel Analysis tools. Text above the photograph serves as a reminder of the next step in the analysis.

1. Indicate the position of the wells on the photograph.
 - a. Click Set Origin, .
 - b. Click the photograph just to the left of the first well. A yellow coordinate system will appear on the photograph.
 - c. Position the x-axis directly along the bottom edge of the wells. You can move the origin by clicking either axis and dragging it to the desired location. The axis can be rotated by clicking the round handle on the x-axis.
2. Convert the units of distance measured from pixel count into millimeters or centimeters.
 - a. Click Set Scale, .
 - b. Click and drag along a known distance on the photograph.
 - c. Enter the known distance. Click .
3. Identify the bands and base pair values of the standard ladder. Click Set Standard Ladder, .
 - a. Click the leading edge of the first band in the Standard Ladder lane.
 - b. Enter the number of base pairs for this band using known values. Click .
 - c. Click the next band in this lane and enter the base pair value. Click .
 - d. Repeat this process for each visible band of the standard ladder. Logger Pro will automatically create a standard curve on the graph.

4. Identify the experimental bands in the remaining lanes. Logger Pro will plot bands, record distance migrated and calculate the respective number of base pairs.

- a. Click Add Lane, , and choose Add Lane.
- b. Click the leading edge of the first band in the first experimental lane. Notice that when you click, three things happen: a marker with a distinct shape and color is placed on the photograph, a matching marker is placed on the standard curve of the graph, and the distance and number of base pairs are added to the data table (see Figure 2).
- c. Click the leading edge of the next band in this lane.
- d. Continue this process for each visible band in the experimental lane.

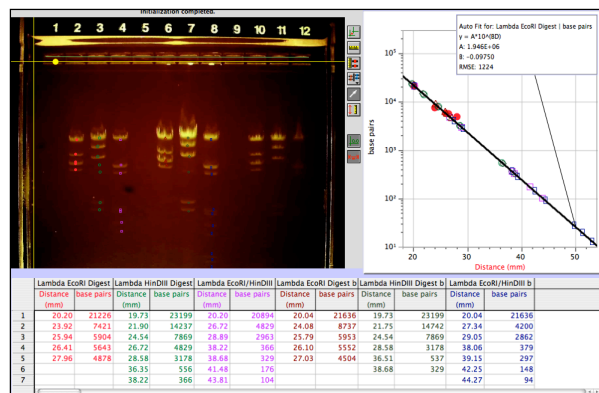


Figure 2

5. Repeat Step 4 for each remaining experimental lane.