Agilent ProSize Data Analysis Software

April 2019
New Features

– Many features you grew to know and like about the ProSize 2.0 Data Analysis Software are still available in the new ProSize data analysis software package, along with some exciting new features including:

– Expandable electropherogram image
– Adjustable gel/electropherogram sizes during analysis
– Inclusion Regions - analyze only the portion(s) of the sample you want
– New DQN (DNA Quality Number) in DNA and NGS analysis modes; a purity-based metric for rapid assessments of sample quality
– Molarity calculation options; settings to use Peak Maxima or Average Size of a Smear
– Concentration/Molarity units; view data in ng/µL / nmole/L or in pg/µL / pmole/L
– % Concentration based on either mass concentration or molarity
– Image resolution; easily change the exported image resolution to be higher for publication work
– Y-Axis; set the Y-axis to units of molarity with a simple right-click function
– X-Axis; set a start time for the data to display
– Add annotations to the gel image and/or the electropherogram
– Logo function; add your company logo to reports
– Recent file viewer; easily load the most recent runs you’ve looked at.
Main Screen

Once data is opened, the main screen appears similar to previous ProSize versions. Notable feature changes are below.

A – Y-Axis Molarity

B – X-Axis Electropherogram Start Time

C - Expandable Electropherogram Image

D – Gel Image Annotation

E – Option Menu
A – Y-Axis Molarity

Change Y-Axis Value

Right-clicking on the Y-Axis now opens an option to show the Y-Axis in either RFU, a traditional scale based upon sample mass, or in Molarity (nmole/L), which is based upon the relative # of molecules in the sample.
B – X-Axis Electropherogram Start Time

Right-clicking on the X-Axis and selecting Set Display Starting Time (min) will open the popup window shown on the right.

In this window you can select a new Starting Time to show for the electropherogram view. This will change the view as shown in the next slide.
Start time shifted after using the Set Display Starting Time option.

Original Start Time

Personalized Start Time
C – Expandable Electropherogram Image

Selection of the blue arrow indicated on the left will extend the electropherogram encompassing the entire bottom portion of the screen.

To minimize the electropherogram to original size and view the Peak Table select the blue arrow again.
D – Gel Image Annotation

ProSize data analysis software now contains Annotation options for the Gel Image as well as the Electropherogram view.

Adding an Annotation
Selecting of this icon will open the Add Annotation box seen below.

Annotation Editor
Selecting this icon will open the Annotation Editor screen, shown below, allowing you to change colors or edit your annotations.
E – Option Menu

Selecting the Option Menu
Selection of the Option menu from the top tool bar will open a new window shown below. An extended description of each option is to the left.

- **The DQN (DNA Quality Number):** A purity-based QC metric available in DNA and NGS modes. Similar to the GQN, this setting can be enabled or disabled, is adjustable by the user, and can be useful for quickly determining if samples are of suitable quality for downstream applications.

- **Molarity Calculation:** Set to Use Peak Maxima or Average Size of a Smear.

- **Concentration Unit:** Settable to the range you are interested in for your samples (ng/µL or pg/µL).

- **% Concentration based on:** Setting to base % Conc. value on Mass Concentration or Molarity.

- **Image Resolution:** Adjust the exported image resolution higher for publication work.

- **Edit Configuration:** Make changes to your Global Configuration if needed.
Adjustable Gel/Electropherogram Size

Adjusting Size

Hovering anywhere over the center bar will display a symbol. You can then left-click/hold the mouse key and draw the line up or down to increase or decrease the size of the electropherogram relative to the Gel Image size.

Examples of each option are shown on the next slide.
Adjustable Gel/Electropherogram Size
Inclusion Regions

Under the Option – Edit Configuration window or the Individual Parameters window shown on the left you can now enter Inclusion Regions based on size. When entering a Start and End Size the Peak Table will show only the region(s) of interest.

Inclusion Regions can be applied to All or just Selected sample wells.
Add your Company Logo

Under the *Generate PDF* option you can now enter a logo for your company that will be shown at the top of each page of the PDF Report, example below.
Recent Files

Quick Access to Recent Files

Selection of File-Recent Files will show the most recent files you have opened allowing for quick access to the last few runs you’ve viewed.
As in previous ProSize versions, a complete User Manual and numerous Tutorial Videos are available for viewing on demand, under the Help – User Manuals and Help - Tutorial Videos options on the main screen.

Users are encouraged to view this material to further learn about the various features and functions of the ProSize software.