LanthaScreen® Terbium Assay Setup Guide on the Molecular Devices Analyst® Multimode Reader

NOTE: The Molecular Devices Analyst® Multimode Reader was tested for compatibility with Invitrogen's LanthaScreen® Terbium-based TR-FRET Assay. The following document is intended to demonstrate setup of this instrument. For more detailed information and technical support of Invitrogen assays please call 1-800-955-6288, select option "3", then extension 40266. For more detailed information and technical support of Molecular Devices instruments or software, please call 1-800-635-5577 or by e-mail at info@moldev.com.

A. Recommended Optics

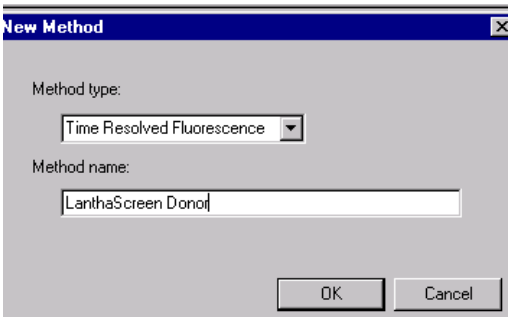
Invitrogen part number	wavelength (nm)	diameter (mm)
Excitation Filter (PV00225)	340/30 (or similar)	25
Emission Filter 1 (PV00325)	495/10	25
Emission Filter 2 (PV00325)	520/25	25
Dichroic Mirror *contact Molecular Devices	380 or 400	

B. Instrument Setup

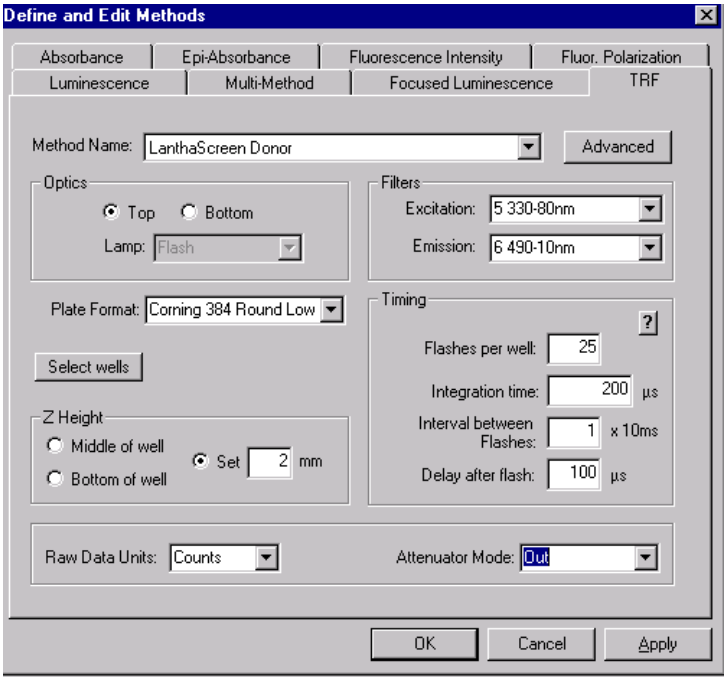
1. Make certain plate reader is turned on, and open the CriterionHost software

2. Choose Method/New.

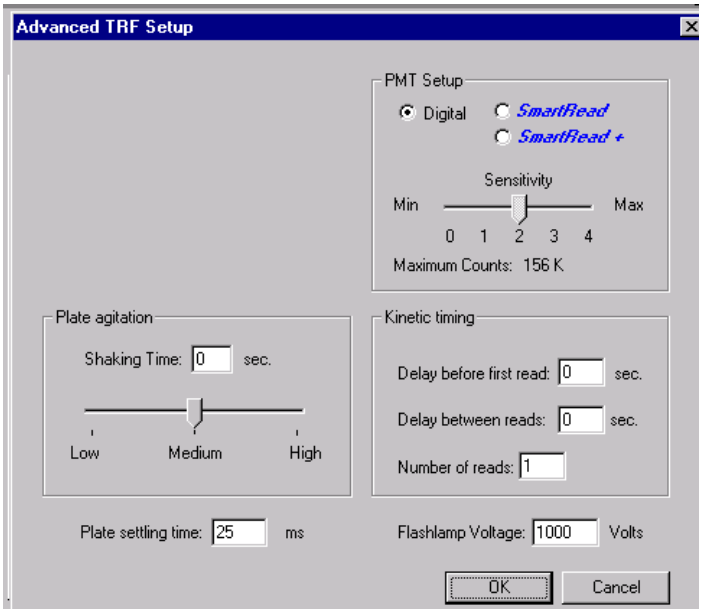
3. On the drop down menu, choose, Time Resolved Fluorescence. Type in the name of the Method (i.e. LanthaScreen® Donor). Click OK.



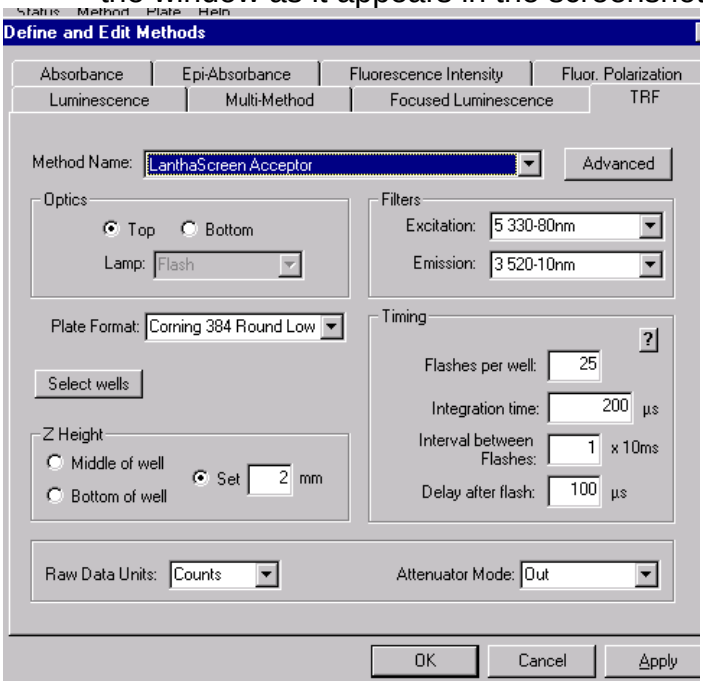
4. The Define and Edit Window appears. Note that the TRF tab is selected as default. Set up the window as it appears in the screenshot below. See the Appendix for plate and filter information.



5. Click on the Advanced button and set up the window as it appears in the screenshot below:

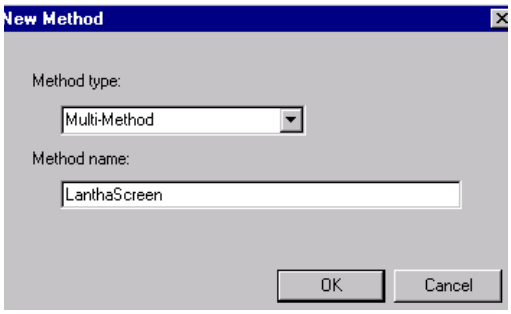


5. Repeat steps 2-4 to create another TRF Method called LanthaScreen® Acceptor. Set up the window as it appears in the screenshot below:

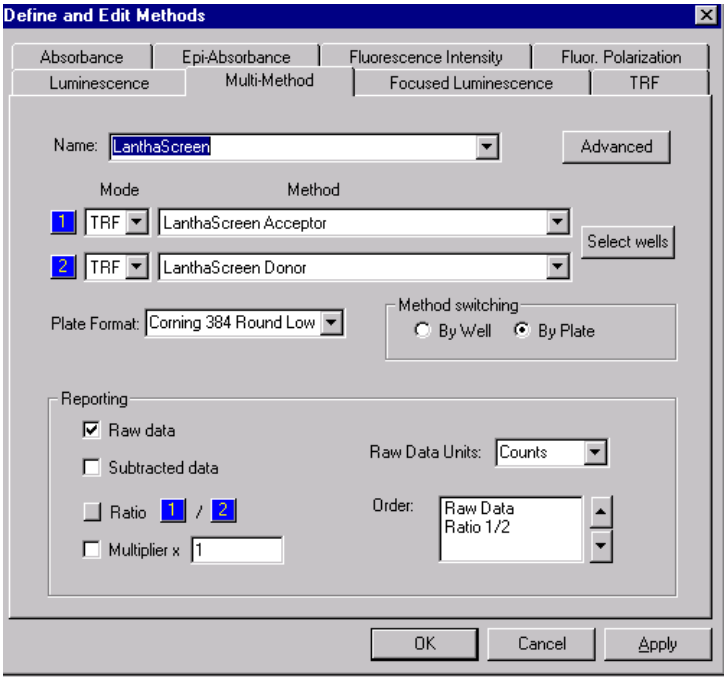


6. Click on the Advanced button and set up the window the same as in LanthaScreen® Acceptor. Click OK.

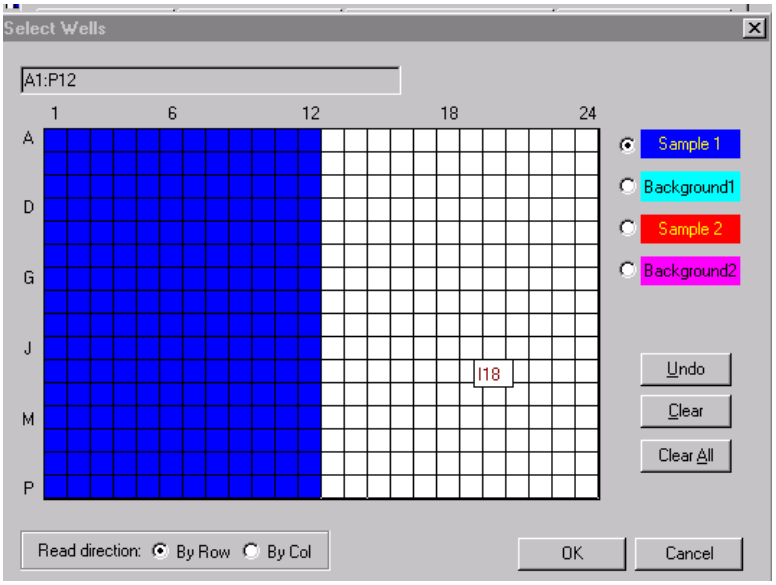
7. Return to the main window (Click OK in the Define and Edit window) and create a Multi-Method by choosing Method, New. Choose Multi-Method from the drop down menu and give your Multi-Method a name. Click OK.



8. The Define and Edit window appears. Set up the window as it appears in the screenshot below:

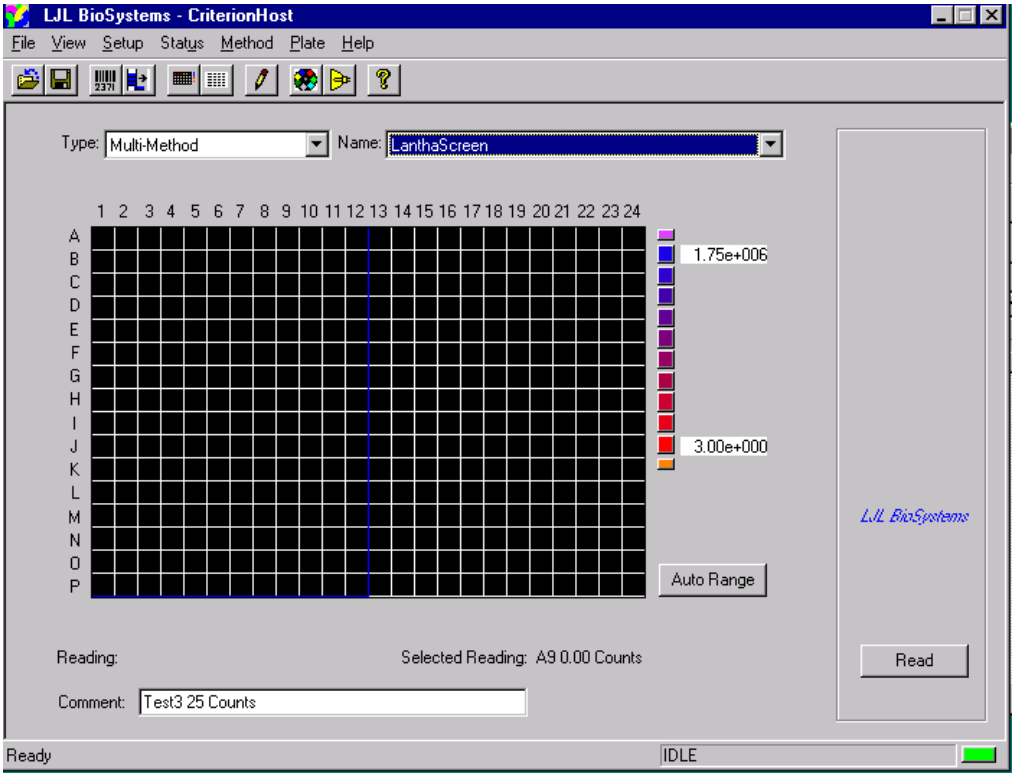


9. Click on the “Select wells” button to select the wells to be read. The example below shows one half of a 384 well plate to be read. Click OK.



10. Click OK in the Define and Edit window.

11. The plate layout window appears. You can enter a comment here describing your assay. This will appear on the final data page along with all the other parameters for assay set up.



12. You can switch between Plate view and Report view by clicking on the appropriate icons. These choices are also available in the View menu.

13. Click “Read.”

14. When reading is completed, you can use the Report view to see it. Save the data by using the “Save” icon. Depending on the software, you may