

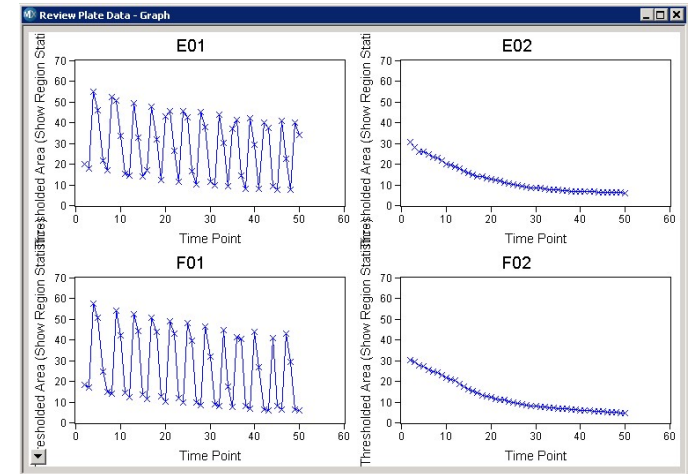
# MetaXpress® 6.5 Software Guide

## Peak Analysis

January 2019



# Chapter Purpose



The purpose of this chapter is to introduce the user to the new **peak analysis** feature added in MetaXpress 6.5.

Peak Analysis uses the same peak-finding algorithm as the Peak Pro tool in the SoftMax Pro and ScreenWorks software.

This feature requires purchase of the following part:

**5058772**

**CURVE FITTING APPLICATION MODULE.  
Includes Peak Pro Analysis.**



# Review Plate Data

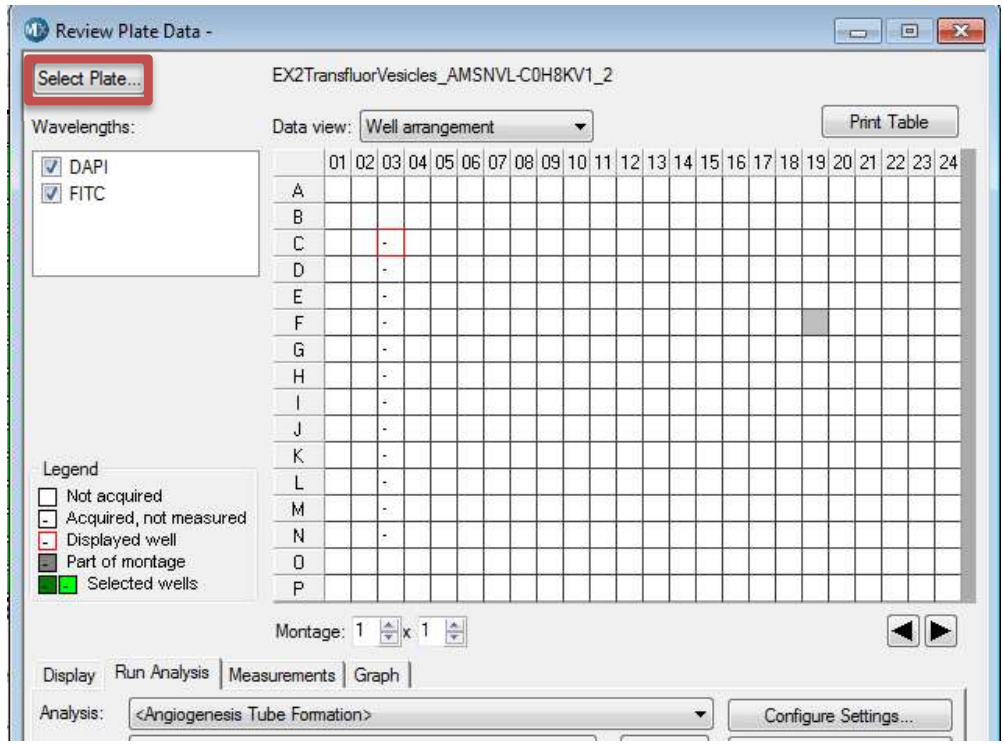
## 1. Open **Review Plate Data**

- In the main toolbar click on



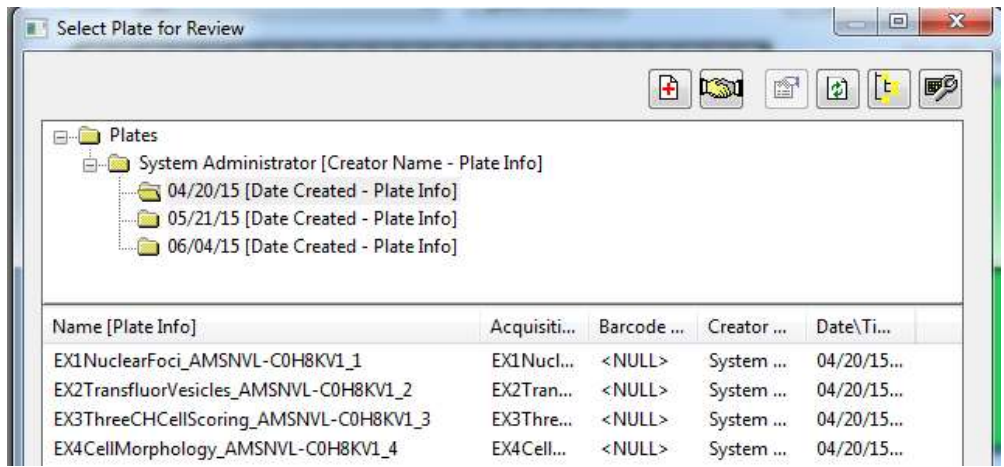
OR

- Under the **Screening** menu, select **Review Plate Data**

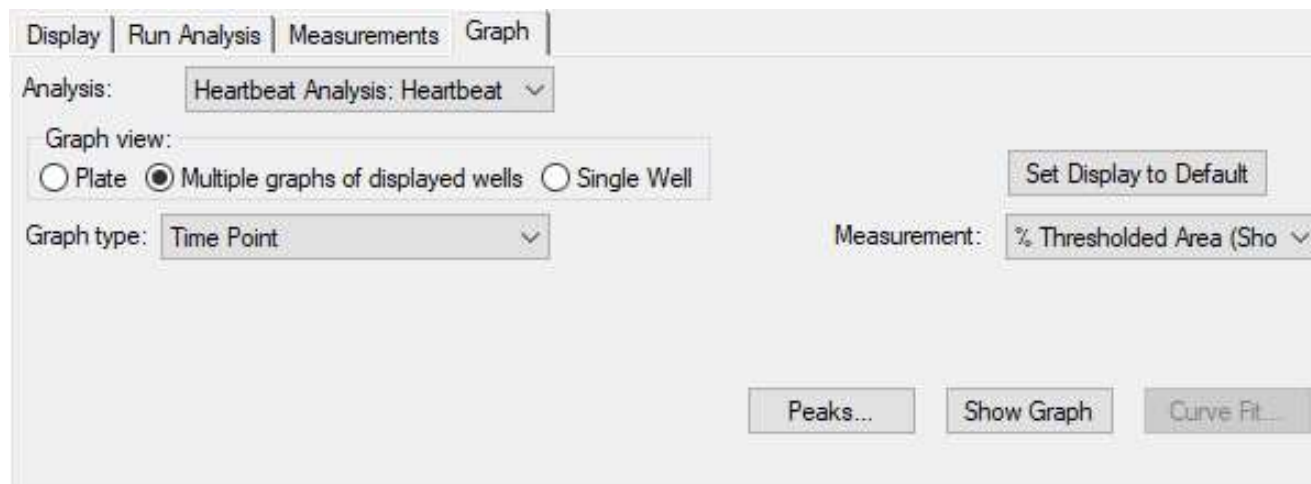


## 2. Click on the **Select Plate** button

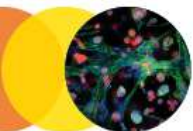
## 3. Browse through the folders to open the plate of interest



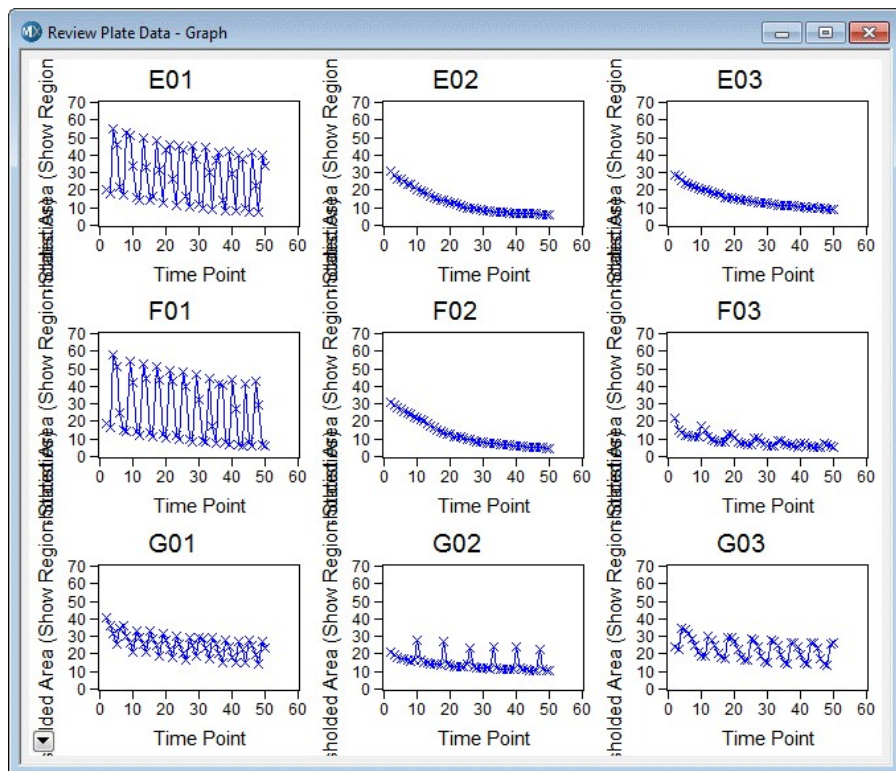
# Peak Analysis Steps



1. Analyze the timelapse plate with an appropriate analysis journal.
  - a) The journal must output an Amplitude measurement (e.g. intensity or % thresholded).
  - b) The journal must output a time measurement (e.g. elapsed time).
  - c) Example journals are available.
2. Optionally annotate the plate (**Screening > Plate Annotation**).
3. In the Review Plate Data dialog, go to the **Graph** tab and select the analysis.
4. Select **Multiple graphs of displayed wells > Time Point**
5. If viewing graphs, keep the well display montage small (e.g. 2x2 or 3x3), then click **Show Graph**.
6. Click **Peaks** to display the Peak Analysis results for currently displayed wells.



# Peak Analysis Steps



The 'Peak Analysis' dialog box has the following settings:

- Time: ElapsedTimeInSec (Log Variable)
- Intensity: % Thresholded Area (Show Region Sta)
- Smooth Width: 1 points
- Amplitude Threshold: 0
- Dynamic Threshold
- Fit Width: 3 points
- Slope Threshold: 0.001 (0-1)/s

Well	Group	Compound	Concn	Count	Peaks/min	Amplitude	Amplitud...	Baseline	W
E01	TEST	Isopropanol	10 $\mu$ M	13	87.8223	20.2331	5.06627	27.1118	0.
E02	TEST	Digoxin	10 $\mu$ M	0				6.11846	
E03	TEST	Lidocaine	10 $\mu$ M	0				9.03562	
F01	TEST	Isopropanol	1 $\mu$ M	12	85.1877	32.4702	5.95966	17.3201	0.
F02	TEST	Digoxin	1 $\mu$ M	0				4.76341	
F03	TEST	Lidocaine	1 $\mu$ M	3	41.2188	5.4485	3.30666	8.43172	0.
G01	TEST	Isopropanol	0.1 $\mu$ M	12	85.7663	6.44504	2.70027	24.2406	0.
G02	TEST	Digoxin	0.1 $\mu$ M	5	35.1106	9.30178	3.94648	13.6521	0.
G03	TEST	Lidocaine	0.1 $\mu$ M	8	50.7924	13.2273	2.81953	17.0538	0.

Buttons: Configure..., Open Log, Reset to Default

7. In the Peak Analysis dialog, select the **Time** and **Intensity** measurements.
8. Use **Open Log** and **Log Data** to export results to Excel or a text file.



# Peak attributes

