

0) Load plane (Fsig\_<AnimalID>\_<Date>\_plane#\_ch#\_MinClust#.mat)

- 1) Left click to select an ROI, inspect its fluorescent trace.
  - 2) Find Cellbody with good F-trace. Ctrl-Left to select multiple of them.
  - 2.1) Register as Cellbody by clicking [CellBody] button in SVM panel.
  - 2.2) Find noise as well and register as noise by clicking [noise].
  - 3) [Update] to reflect changes.
- Repeat 2-3 until all selected ROIs have good F-trace.

4) Right click to force flip the selection, if the fluorescence pattern does not look correct/incorrect. This Right-clicked ROIs are labeled as "manually selected", and it overwrites the filtering conditions.

5) If there is any suspicious ROI, load movie and check the F-trace. Press [m] to load movie.

6) If there is an ROI that needs to be split, click [split-ROI] button.

click once to select a potential one ROI. Cross + cursor appears, then click the other potential ROI to split an ROI.

7) Save processed data [Save proc]. Fsig\_<AnimalID>\_<Date>\_plane#\_ch#\_MinClust#\_proc.mat is generated.

8) Back to HDBCellSCAN\_Master and finalize signal.

Note: Skewness of F-trace is one of the features used to classify ROIs into soma, dendrite, noise. Splitted ROI does not have this value. So, they have skewness=1 by default.

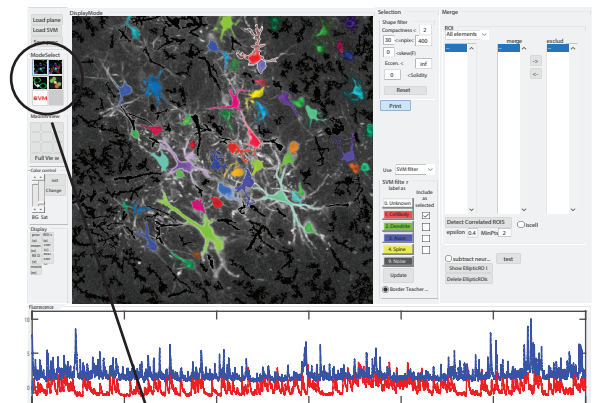
==== Keyboard and mouse click, short cut keys =====

Left click: select this ROI and show F(t).

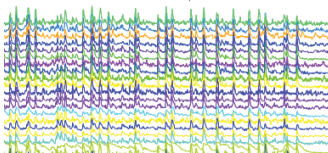
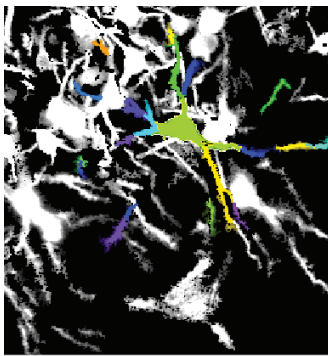
Right click: flip selection (selected <-> non-selected ROI)

<Keyboard short cuts>

- s flip selected view/ unselected view
- q ROI view
- w mean (p=0) or normalized (p=1) image view.
- p flip mean <-> normalized mode.
- m load movie
- < role back movie
- > role forward movie
- ? accerlate movie frame rate.
- move one frame forward
- ← move one frame backward
- c show correlated cluster.



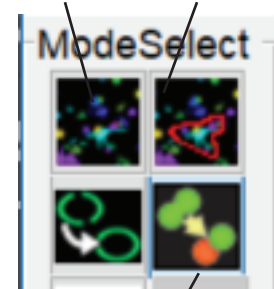
Correlaed cluster view [c]



elliptic ROI mode:

It allows user to inspect potential ROI area. It requires movies to load. Press [m] to load movie before hand.

Display elliptic ROI



split ROI