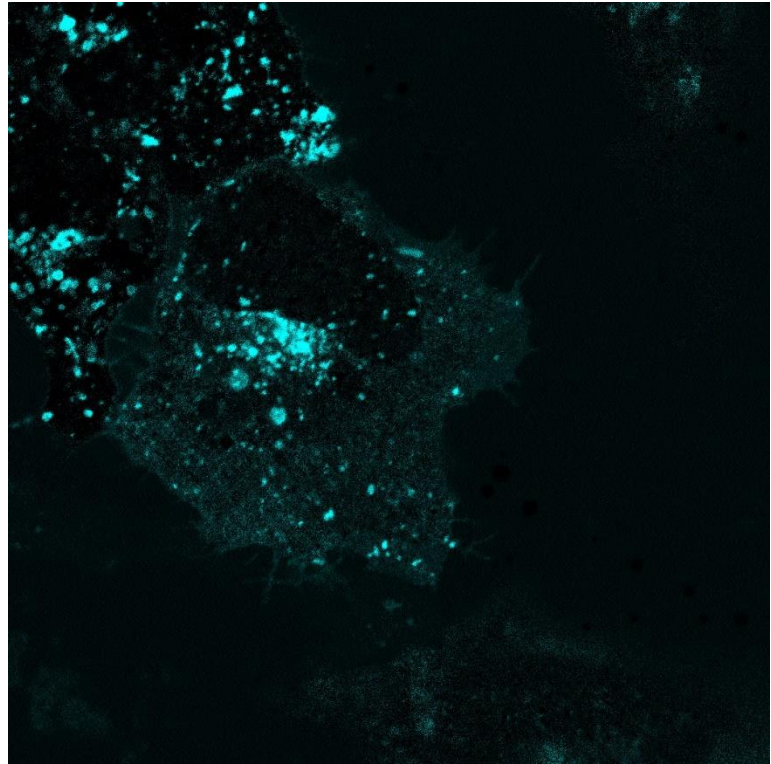


AnalyzeMultispectral Visual Guide

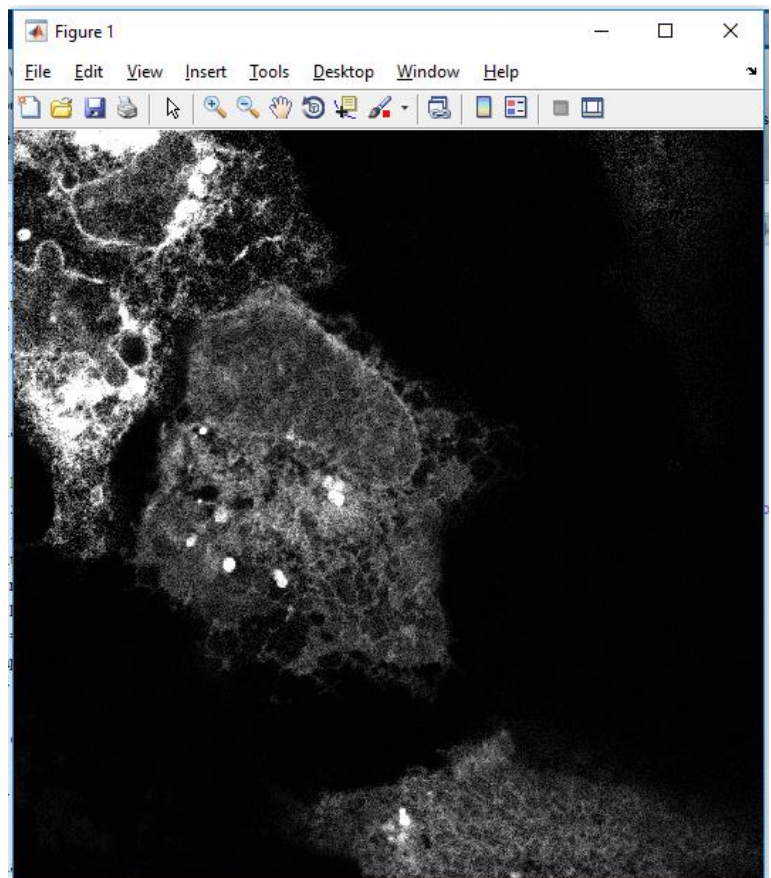
AnalyzeMultispectral is a modular image analysis pipeline designed for multispectral images, z-stacks, and time lapses. This is the accompanying visual guide for *rawSliceToMask*, a script that converts multispectral .tif files into individual, segmented images of each channel.

rawSliceToMask

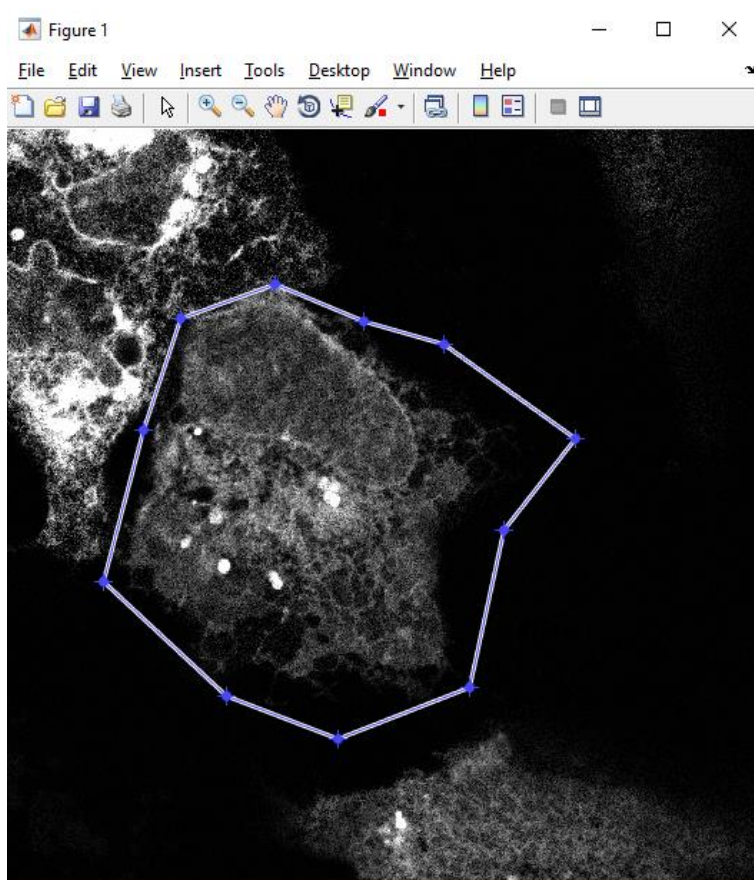
Raw image from lysosome channel, contrast adjusted.



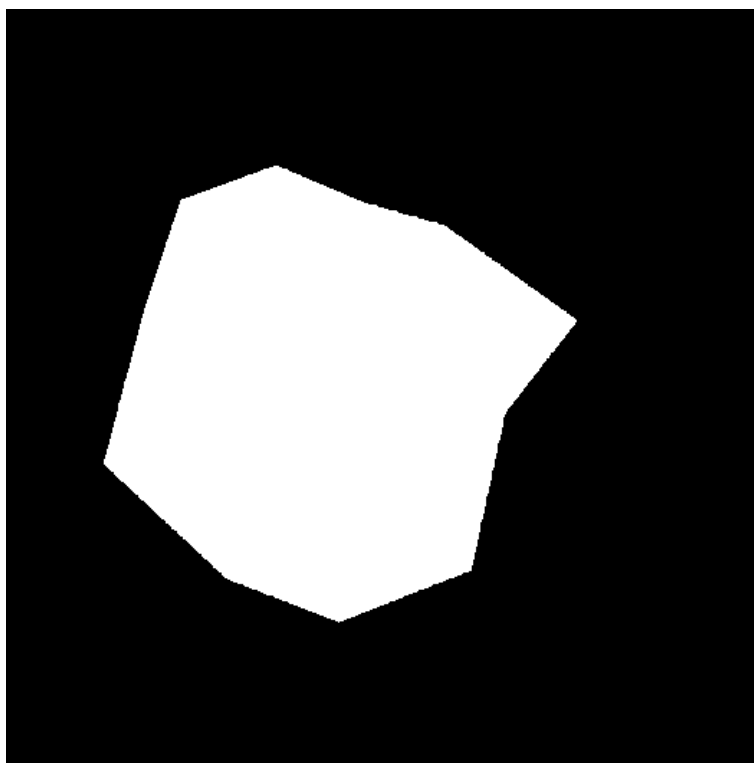
ROI selection GUI before drawing (contrast adjusted). Channel 3, containing the ER, was selected for this.



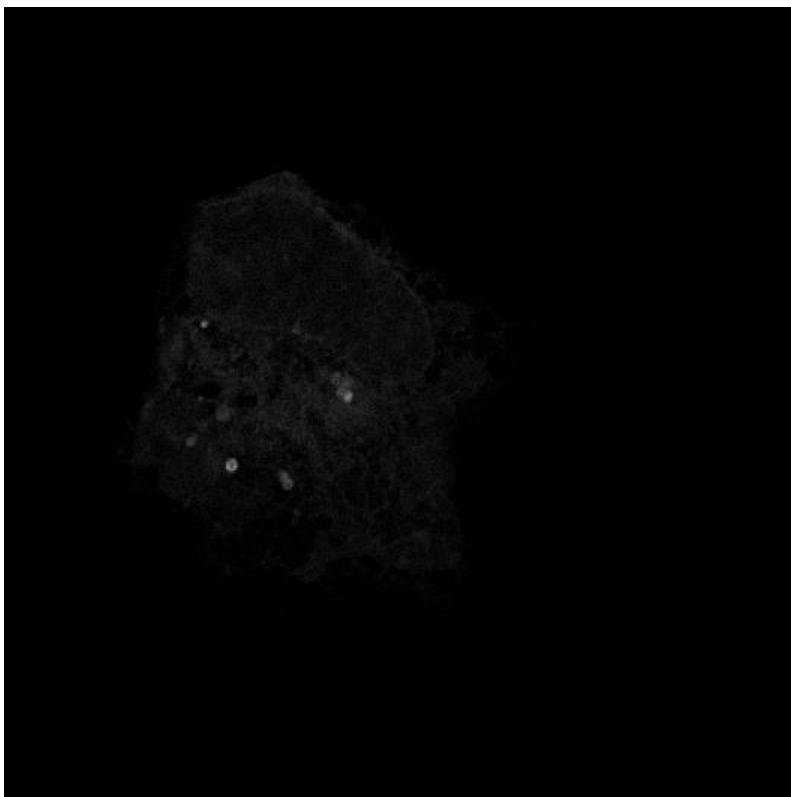
ROI selection GUI after drawing
(contrast adjusted).



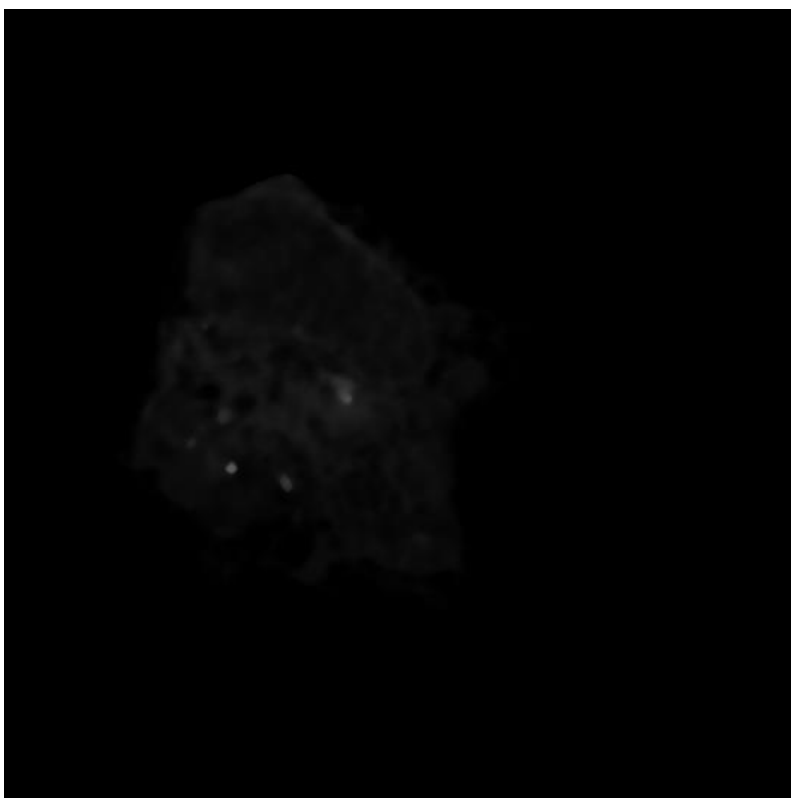
ROI binary mask



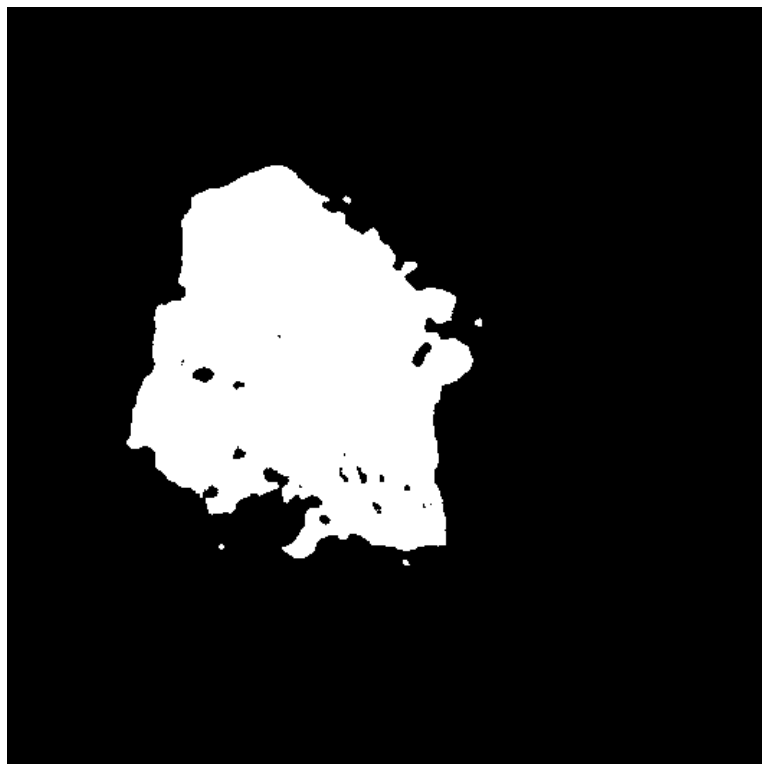
ER after applying ROI mask
(contrast adjusted).



ER channel after applying
median filter ($r = 1.5$).



ER mask after thresholding
based on multithresh.



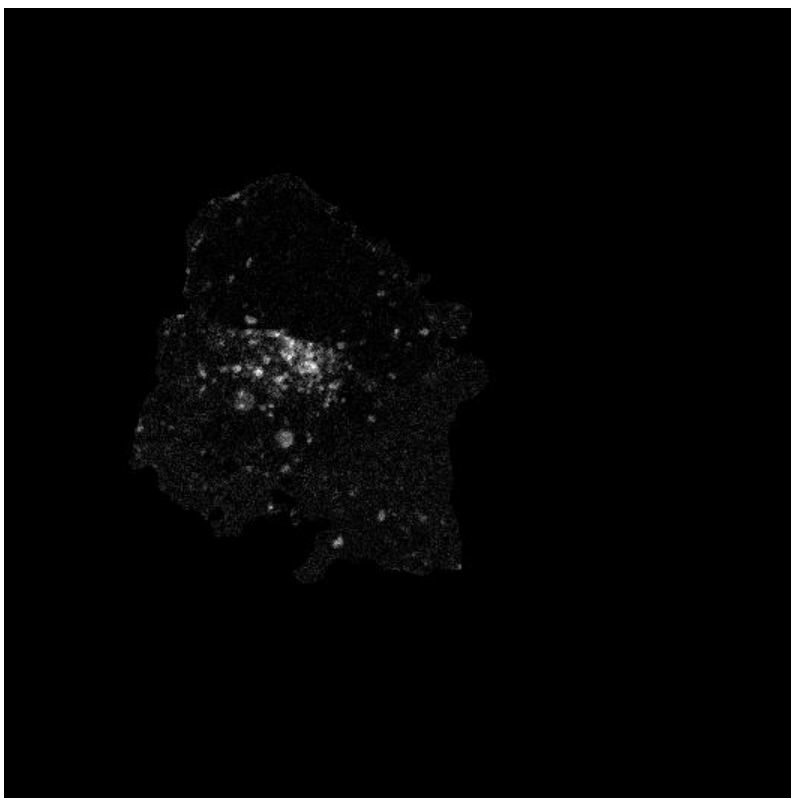
After filling holes.



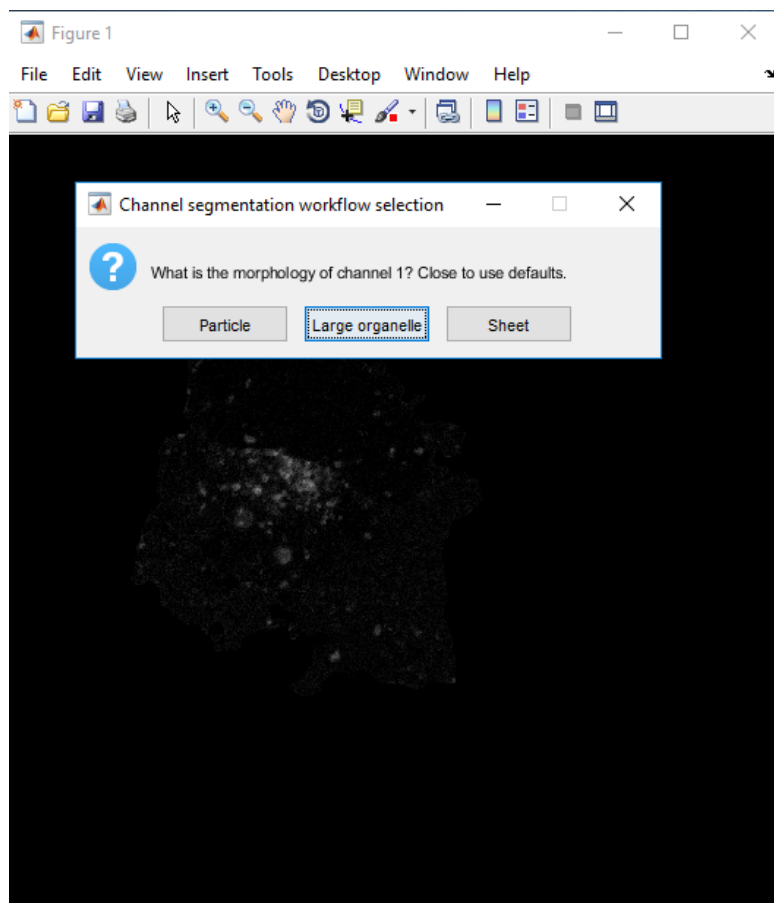
Final cell mask after deleting
objects smaller than 150 pixels.



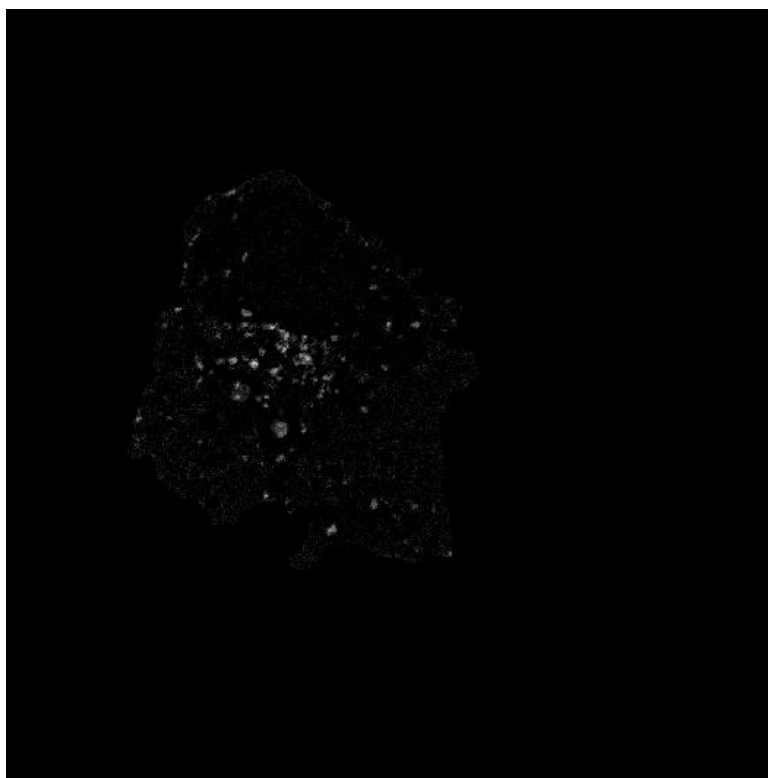
Lysosome channel (contrast
adjusted) after applying cell
mask.



Channel filter selection GUI.



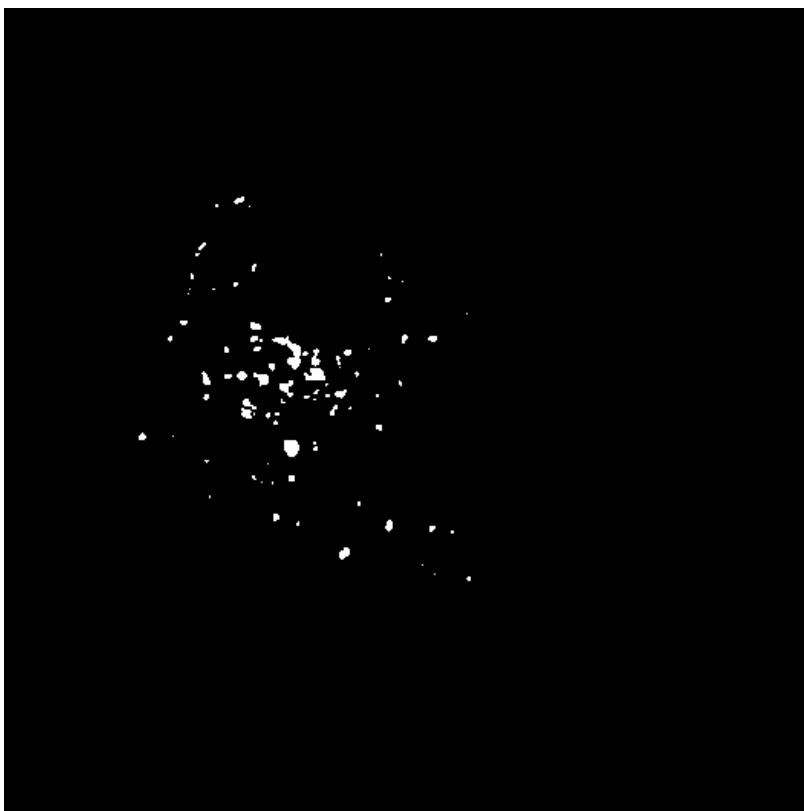
Lysosome channel after background subtraction (contrast adjusted).



Lysosome channel (contrast adjusted) after applying Gaussian blur filter ($\delta = 1.5$).





Lysosome mask after thresholding based on multithresh.



Lysosome mask after imopen
erosion-dilation.



Lysosome mask after watershed
segmentation and deleting
objects smaller than 10 pixels.

<input type="checkbox"/>	Name	Date modified	Type	Size
	cell 1	6/28/2019 2:54 PM	File folder	
	cell 1.tif	2/15/2019 11:04 AM	TIF File	13,263 KB



Subfolder generated by *rawMaskToCounts*.

Contents of subfolder.

☐

Name

^

Date modified	Type	Size
6/28/2019 2:54 PM	File folder	
2/15/2019 11:04 AM	TIF File	13,263 KB



cellmask.tif



ch01.tif



ch02.tif



ch03.tif



ch04.tif



ch05.tif



ch06.tif

b. *maskToCounts*
