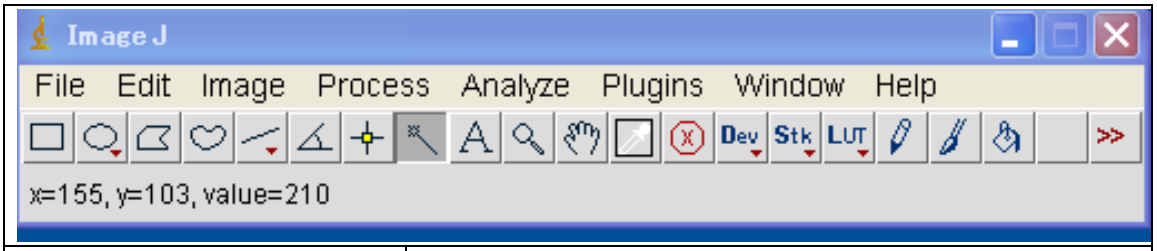
Download ImageJ on http://rsb.info.nih.gov/ij/

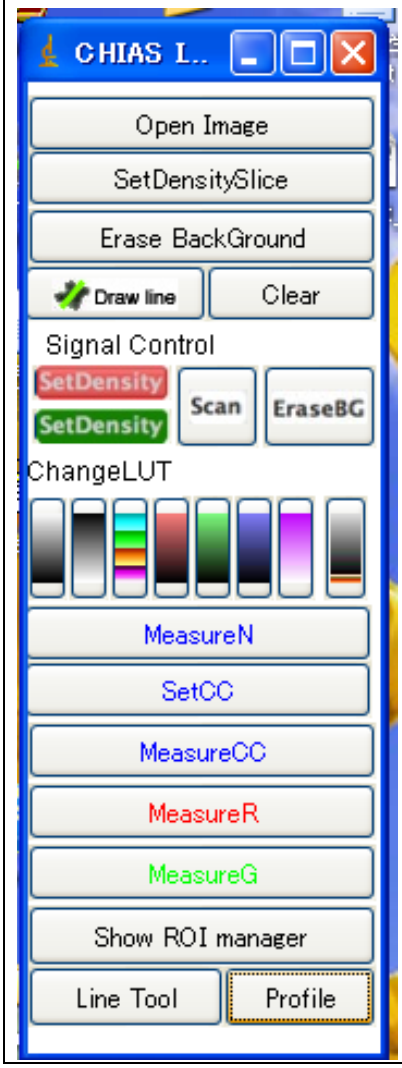
Put this attachment file " CHIASi_.jar " to the " plugins " folder, which is a subfolder of the ImageJ folder and restart ImageJ.

Open Image J

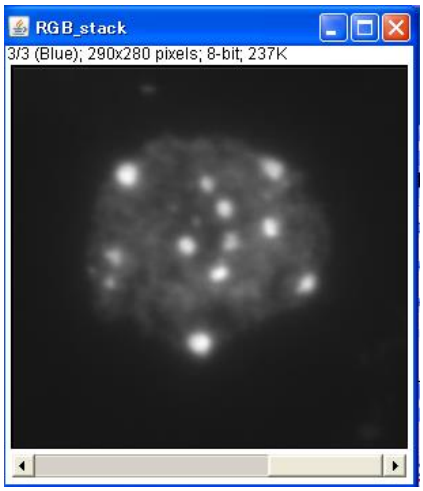
Open “Plugin”-“CHIAS interphase”



Left command menu

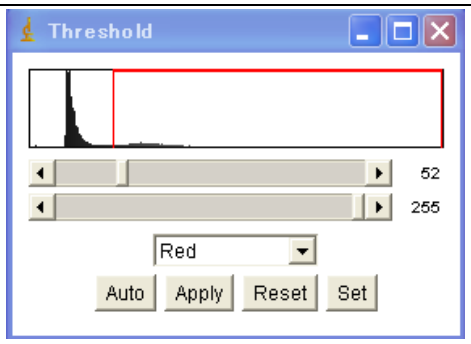


1.Open Image：Open your image of RGB colors

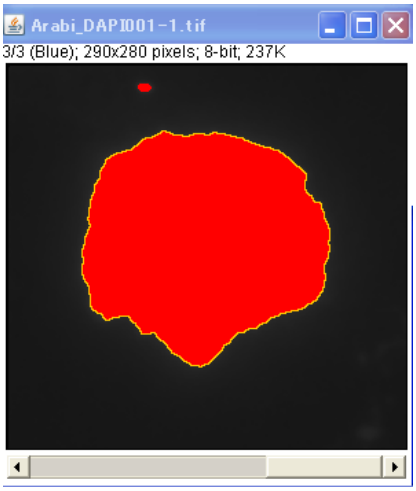


2. SetDensitySlice: Set the nucleus region you will measure

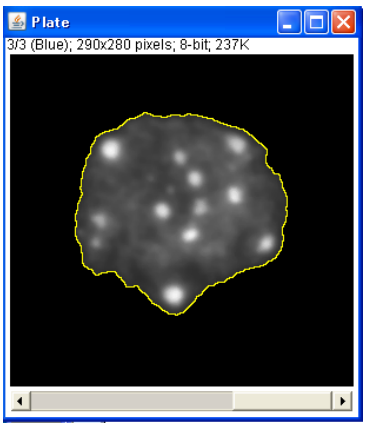
Set threshold and click the red region on the “temp” image. The selected the red region turning the shape to a yellow line.

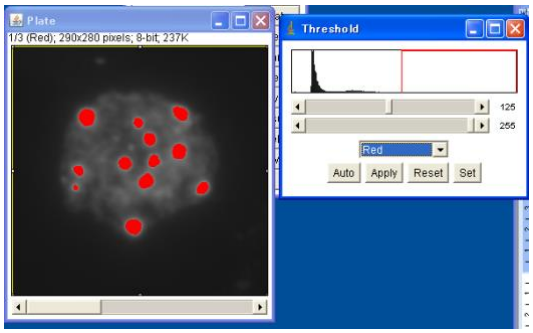
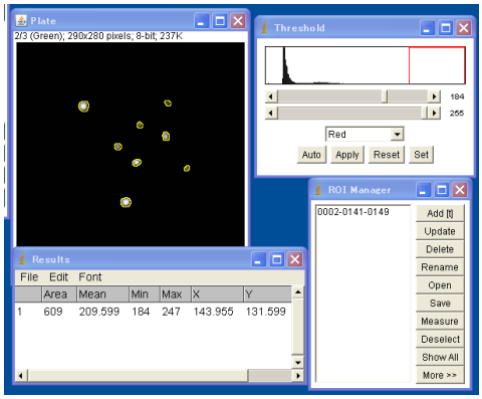


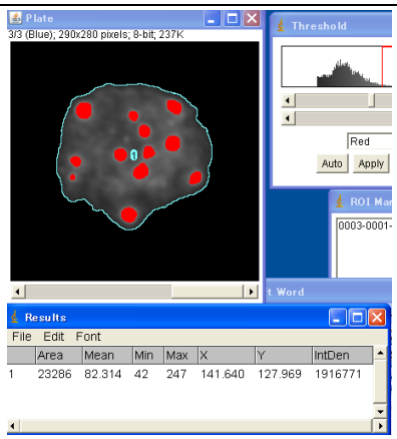
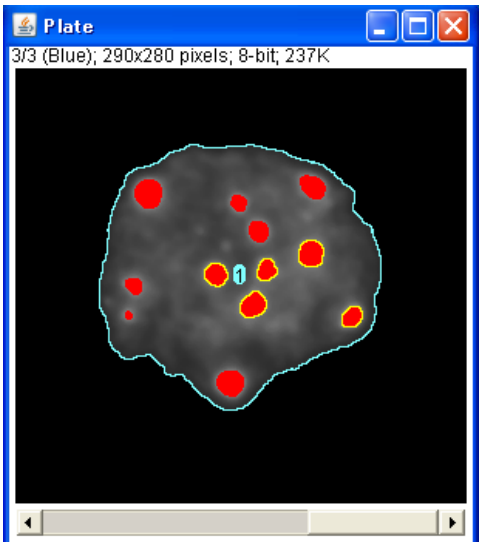
Note; Don't click any command: Auto, Apply, Reset, Set

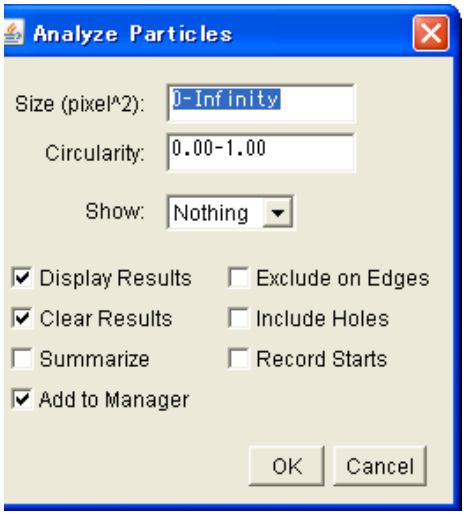
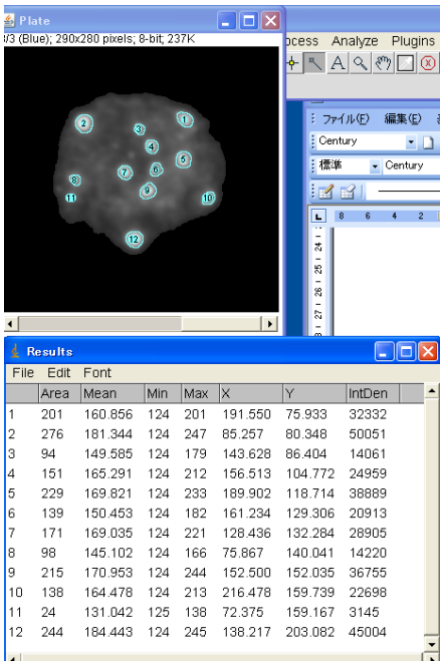


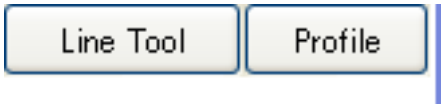
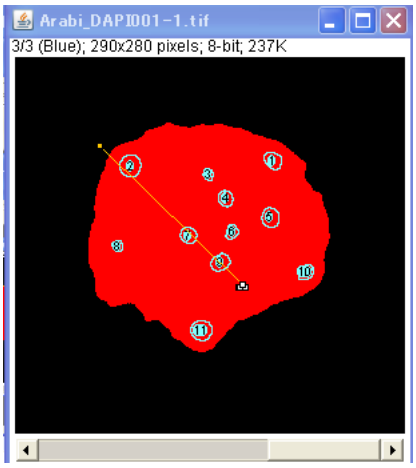
3. Erase BackGround: Erase the back ground noise or another image



	4. Signal control: Set the signal regions of each R (red) and G (green) for FISH or immunostaining signals Click “setDensity” (red color for red signal) 
 Repeat for green signal for green “SetDensity”	“Scan” “EraseBG” 
Measure N	Measurement for the Nucleus data

	 Results should be copied to the Excel's template file on the book of "N", and store the excel file to another name.
SetCC	Set chromocenter Set chromocenter by threshold Click the red region one by one with pushing "shift" key and selected chromocenter regions turning the yellow lines. 

Measure CC	Measure Chromocenter data  Click “OK” Note; Process all 3 slices? There is no Undo if you select “Yes”: Click “No”
	 Results should be copied to the Excel’s template file on the book of “CC”
Measure R Measure G	Measure R :Measurement for the red signal area Results should be copy to the Excel’s template file on the book of “R”

	Measure G :Measurement for the green signal area Results should be copy to the Excel's template file on the book of "G" Note; Process all 3 slices? There is no Undo if you select "Yes": Click "No"
Excel file	The plot of signals of CC and signals positions template_interphase0916.xls Look at the chart
	Line Tool and Profile: Get the condensation profile. Line Tool: Draw yellow line of your interest by a click  Profile: Show the profile curves of three images.