//MACRO\_Min\_pIRT1\_LSM710\_PI-staining

run("Clear Results");

roiManager("reset");

dir1 = getDirectory("Choose Source Directory for Channel1 ");

dir2 = getDirectory("Choose Source Directory for Detected channel1\_Spot");

list1 = getFileList(dir1);

list2 = getFileList(dir2);

for (i=0; i<list1.length; i++) {

open(dir1+list1[i]);

name1= getTitle();

rename("channel1");

close("channel1");

rename("channel1");

run("Z Project...", "projection=[Average Intensity]");

selectWindow("channel1");

close();

run("Enhance Contrast", "saturated=0.35");

run("Duplicate...", "duplicate");

selectWindow("AVG\_channel1");

// boite de dialogue pour trouver les parametres

run("8-bit");

run("Auto Local Threshold", "method=Contrast radius=35 parameter\_1=0 parameter\_2=0 white");

setOption("BlackBackground", true);

run("Make Binary");

run("Despeckle");

run("Despeckle");

run("Erode");

run("Dilate");

run("Dilate");

//run("Dilate");

setTool("Polygone Selections");

waitForUser("dessiner contour zone");

run("Clear Outside");

roiManager("reset");

selectWindow("AVG\_channel1");

run("Analyze Particles...", "size=36-Infinity pixel show=Masks");

run("Invert");

run("Create Selection");

roiManager("Add");

saveAs("Tiff", dir2+list1[i]);

close("Mask of AVG\_channel1");

rename("channel1");

close("channel1");

selectWindow("AVG\_channel1-1");

run("Set Measurements...", "area mean integrated display redirect=None decimal=5");

roiManager("Measure");

close("AVG\_channel1-1");

close("AVG\_channel1");

}