

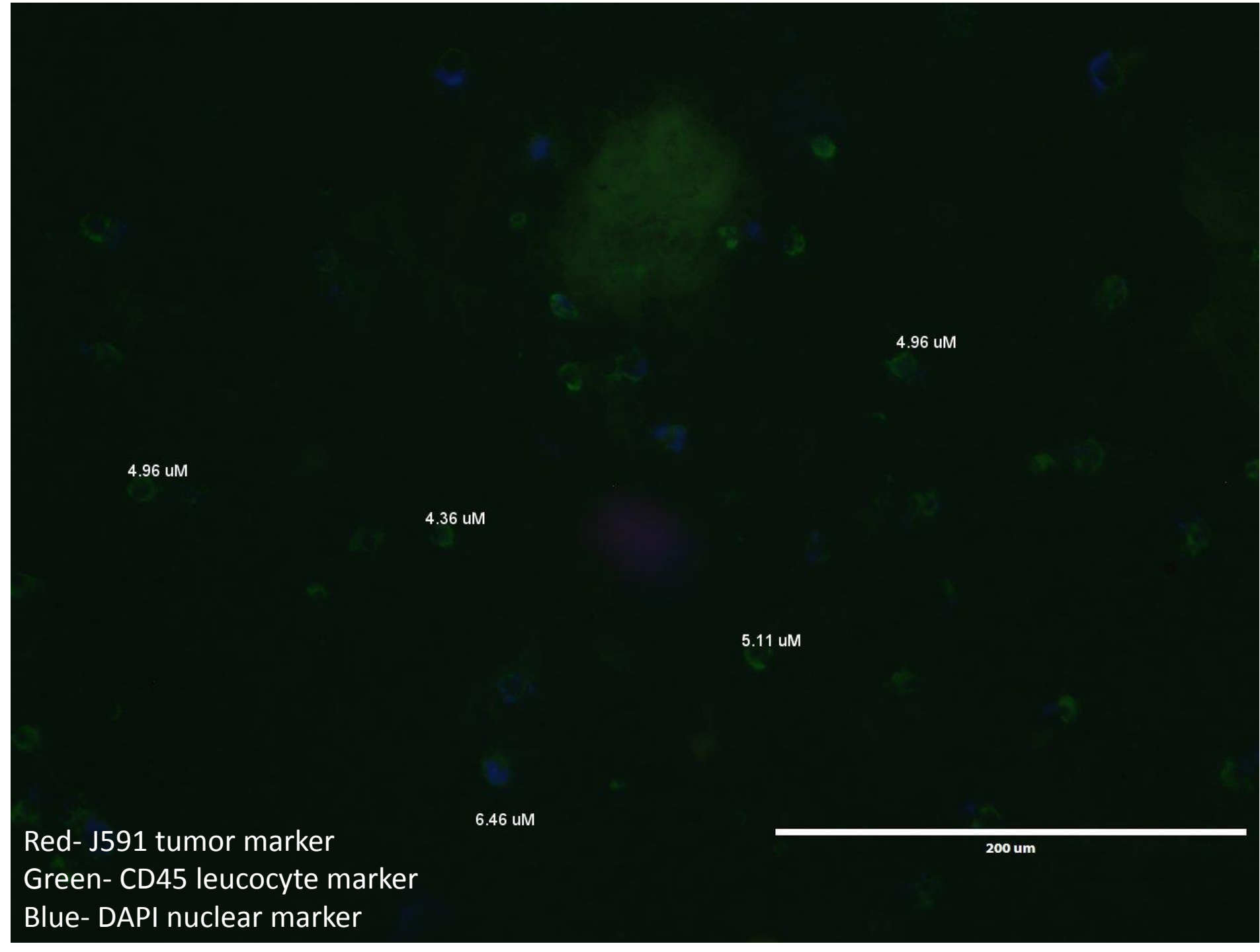
# Detection of small CTCs

there are many CTCs with diameter smaller than that of a normal prostate epithelial cell, which remain undetected by algorithms based on size selection assuming the tumor cells are larger than the normal, which they not always are – in particular when the disease becomes **androgen-independent**

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4/2014

collaboration with Neil Bander, MD

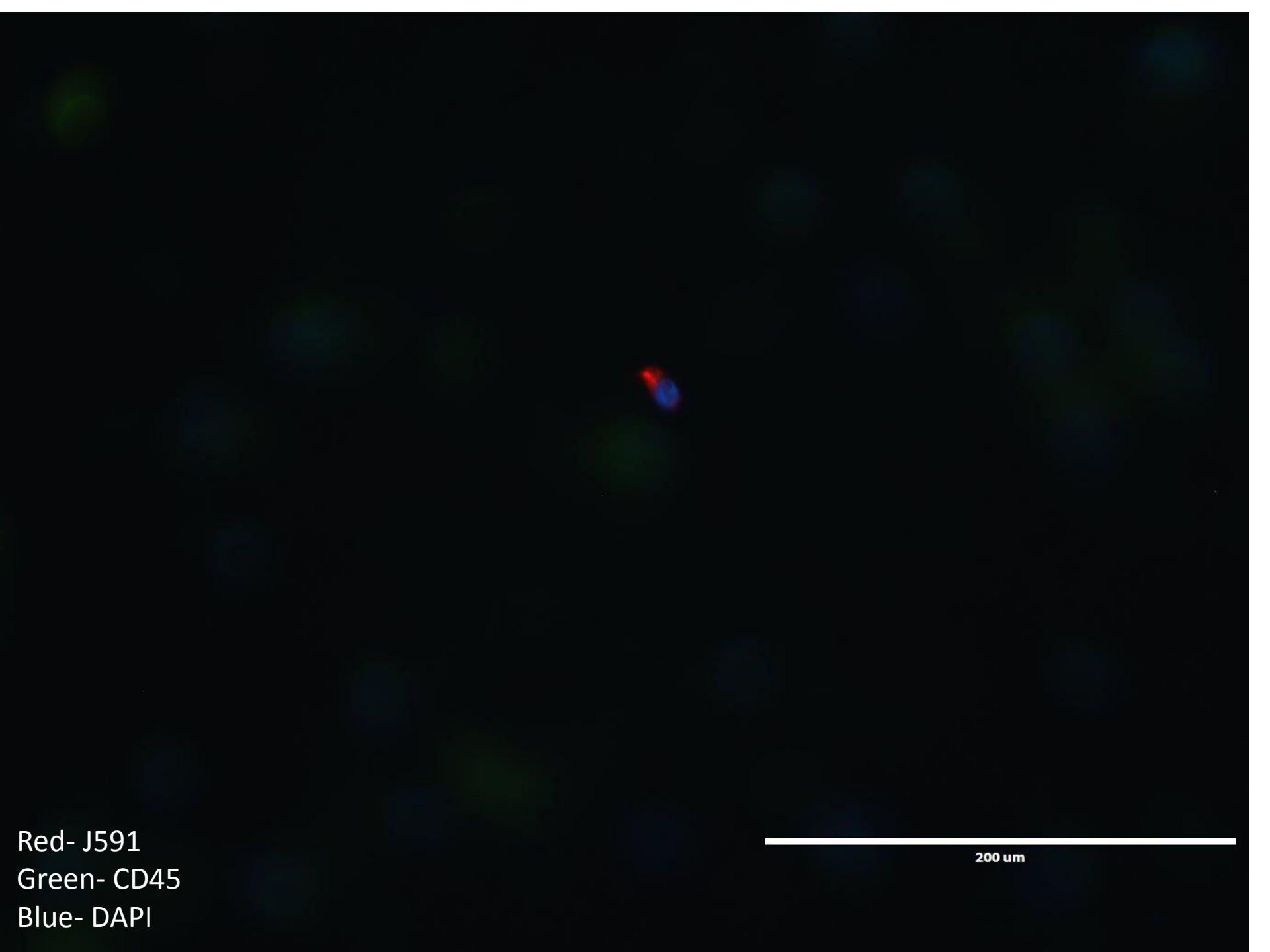


Red- J591  
Green- CD45  
Blue- DAPI

6.98  $\mu\text{M}$

6.22  $\mu\text{M}$

200  $\mu\text{m}$

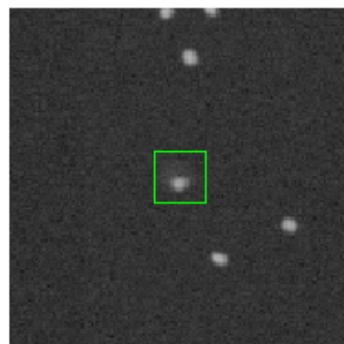
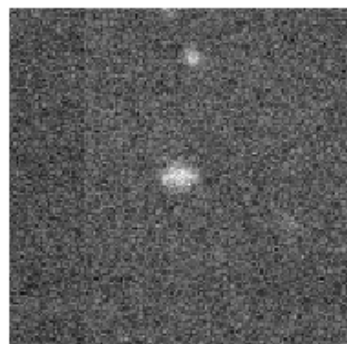


Red- J591  
Green- CD45  
Blue- DAPI

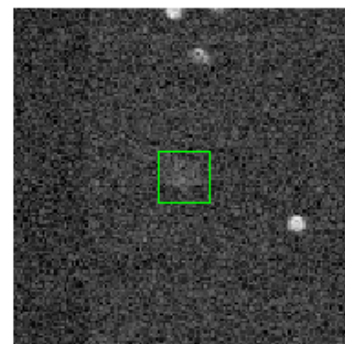
200 um



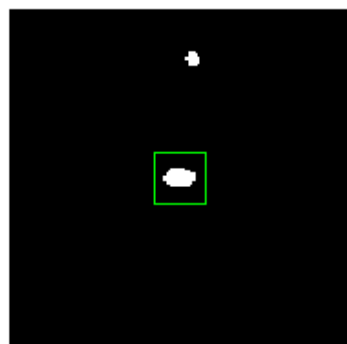
Contrast (not comparable with other patches) DAPI original Input



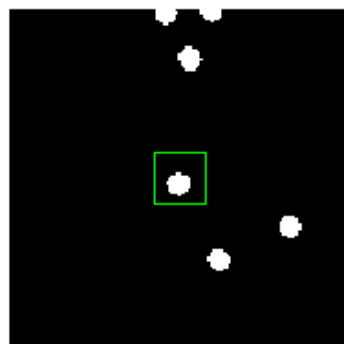
CD45 original Input



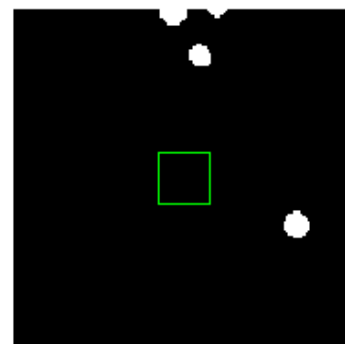
J591 Processed



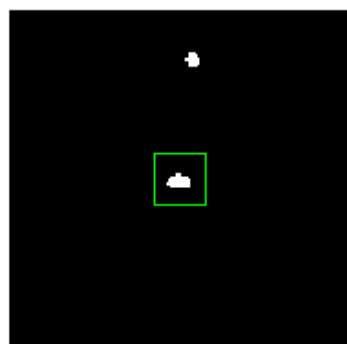
DAPI Processed



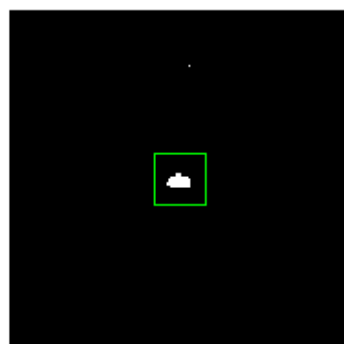
CD45 Processed



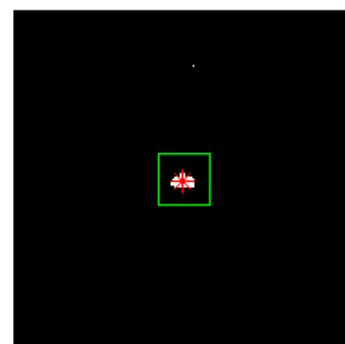
binary DAPI & binary J591



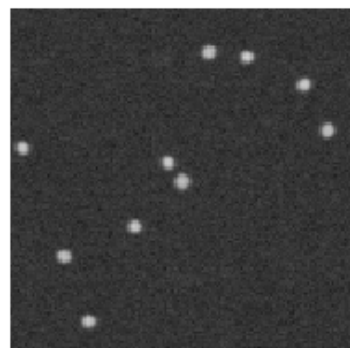
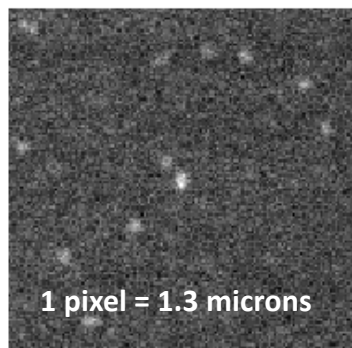
Detections



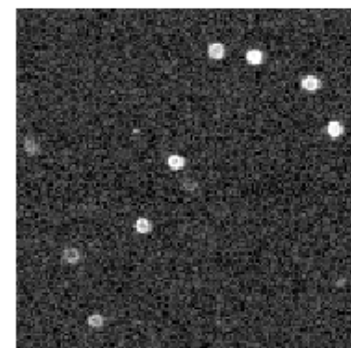
x = 4136, y = 4008



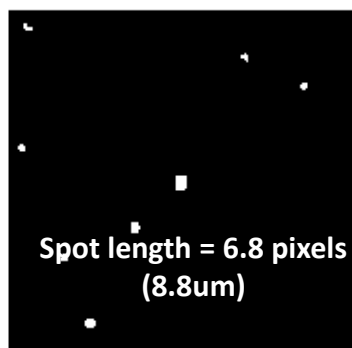
Contrast (not comparable with other patches) DAPI original Input



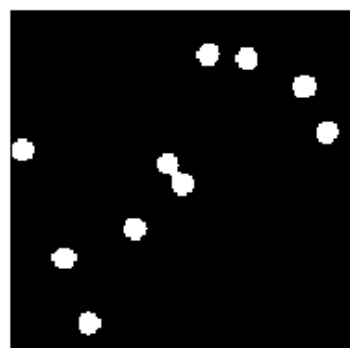
CD45 original Input



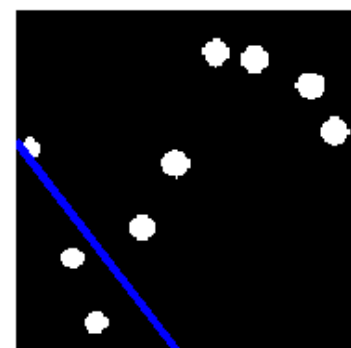
J591 Processed



DAPI Processed



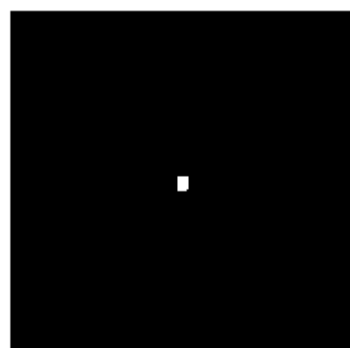
CD45 Processed



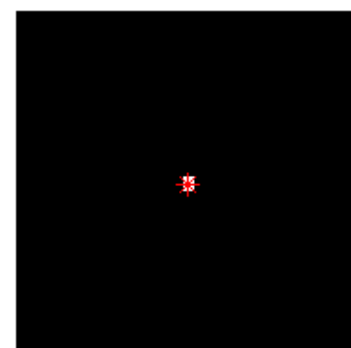
binary DAPI & binary J591



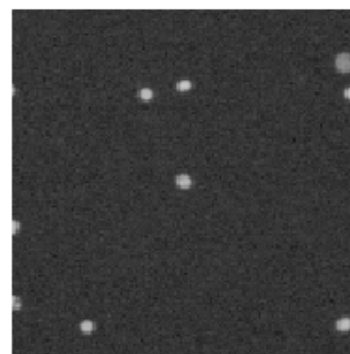
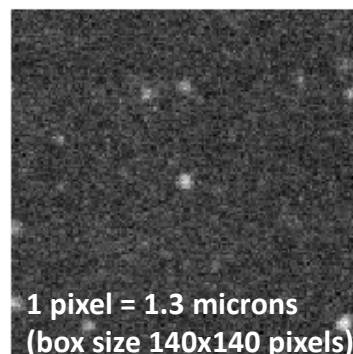
Detections



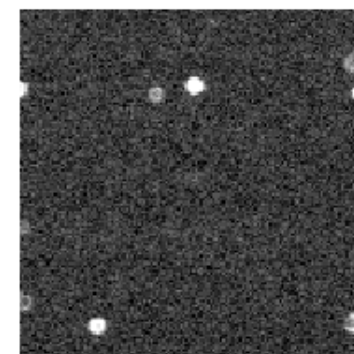
x = 928, y = 4406



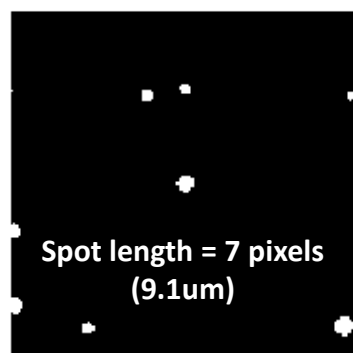
Contrast (not comparable with other patches) DAPI original Input



CD45 original Input



J591 Processed



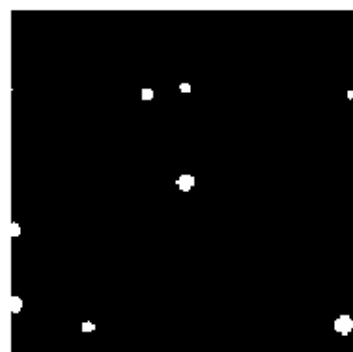
DAPI Processed



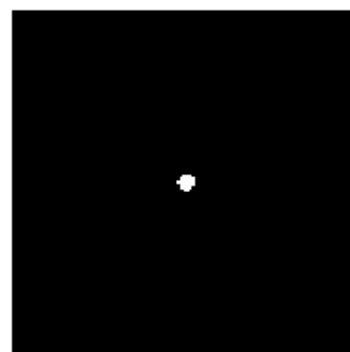
CD45 Processed



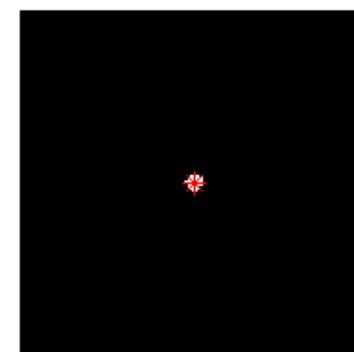
binary DAPI & binary J591



Detections

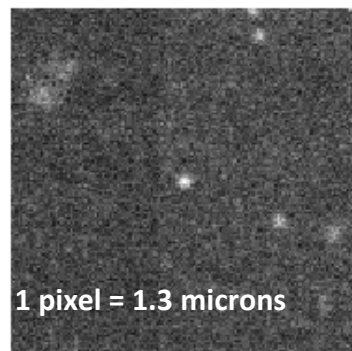


x = 1225, y = 3891

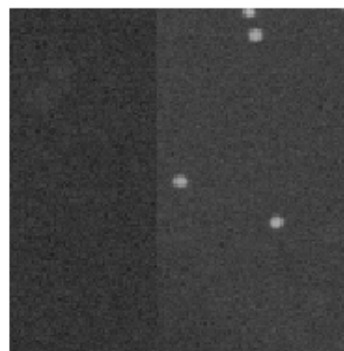




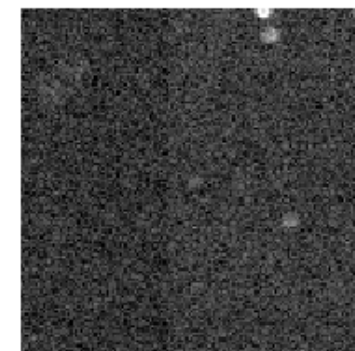
Contrast (not comparable with other patches)



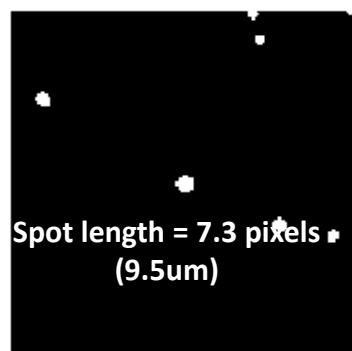
DAPI original Input



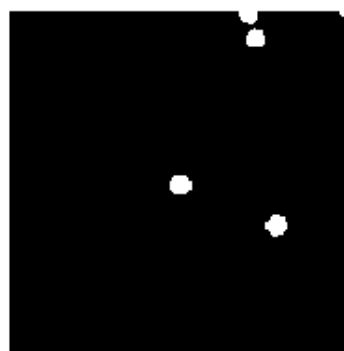
CD45 original Input



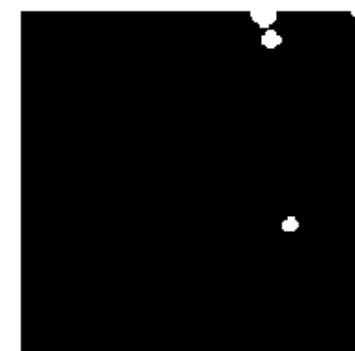
J591 Processed



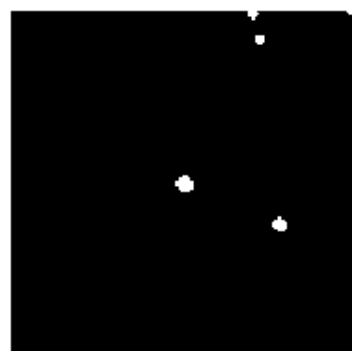
DAPI Processed



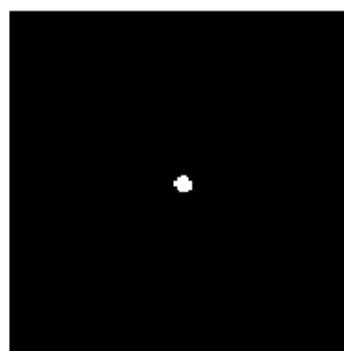
CD45 Processed



binary DAPI & binary J591



Detections



x = 2571, y = 2939

