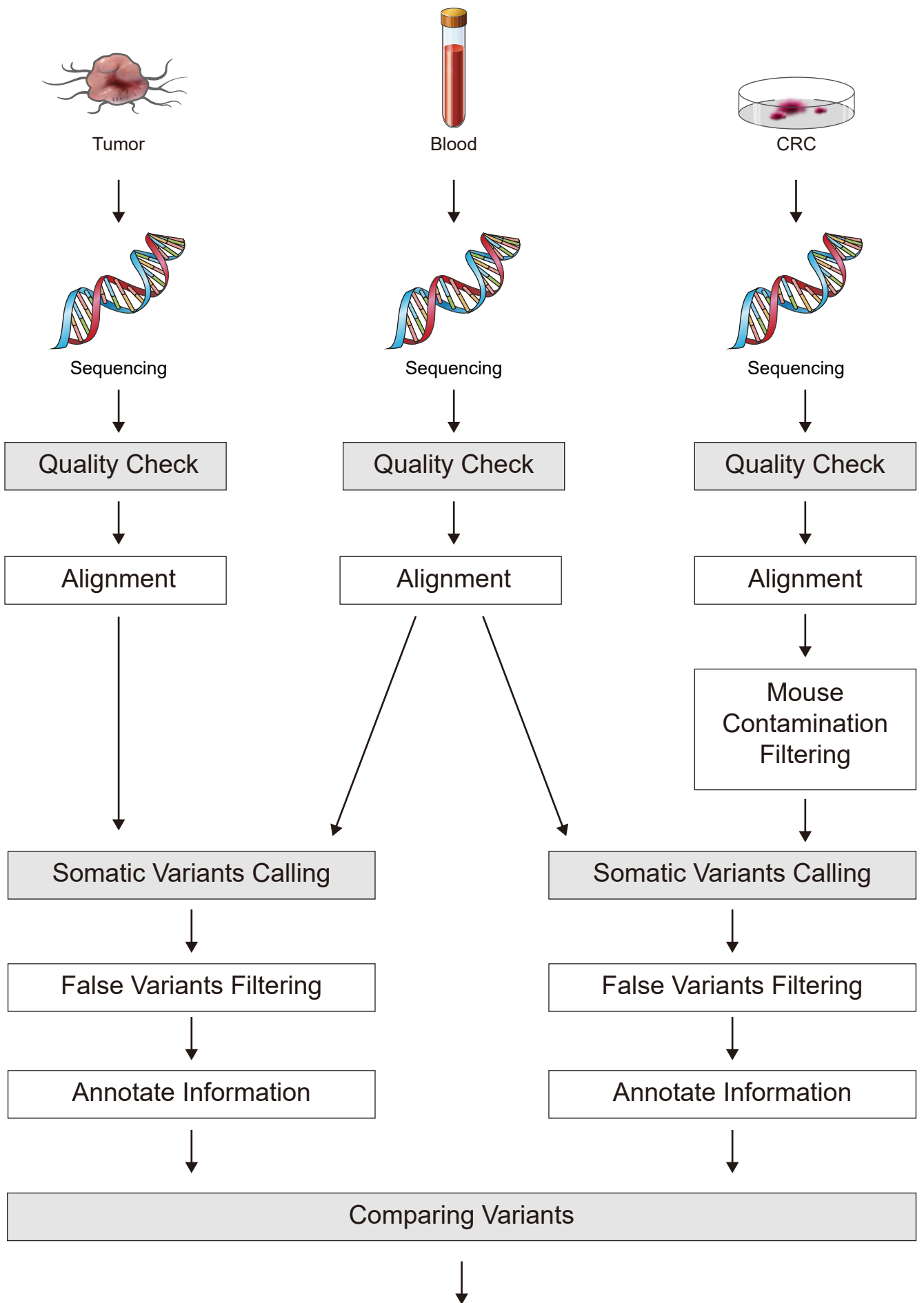


Supplementary Figure 1



***Evaluate the features and feasibility of the CRC method on NGS level***



# YPAC - IF

## **a-Amylase**

(santa cruz sc-25562, rabbit polyclonal)  
Dilution 1:100, resolution rate 200X

## **Cytokeratin 19**

( A53-B/A2 : santa cruz sc-6278, mouse monoclonal)  
Dilution 1:100, resolution rate 200X

## **Vimentin**

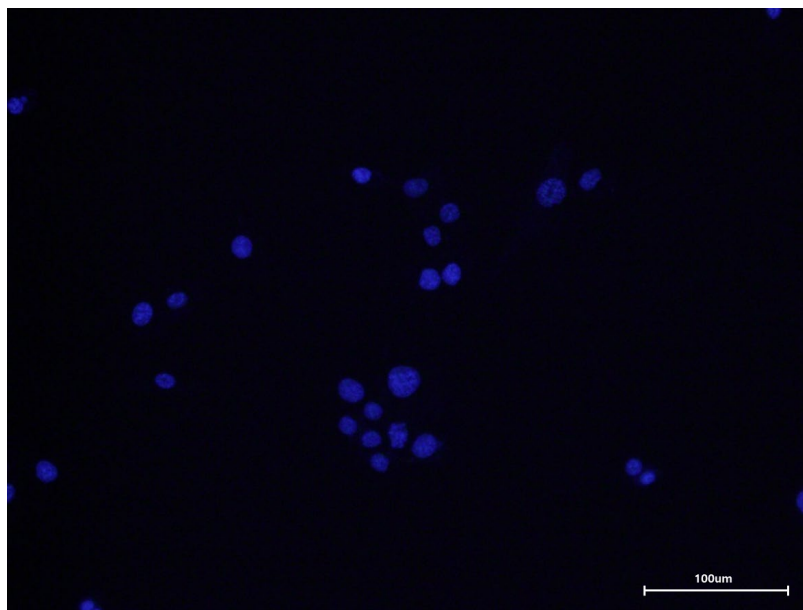
(D21H3 : #5741, Cell signaling technology, mouse monoclonal) Dilution 1:100, resolution rate 200X

## **Insulin**

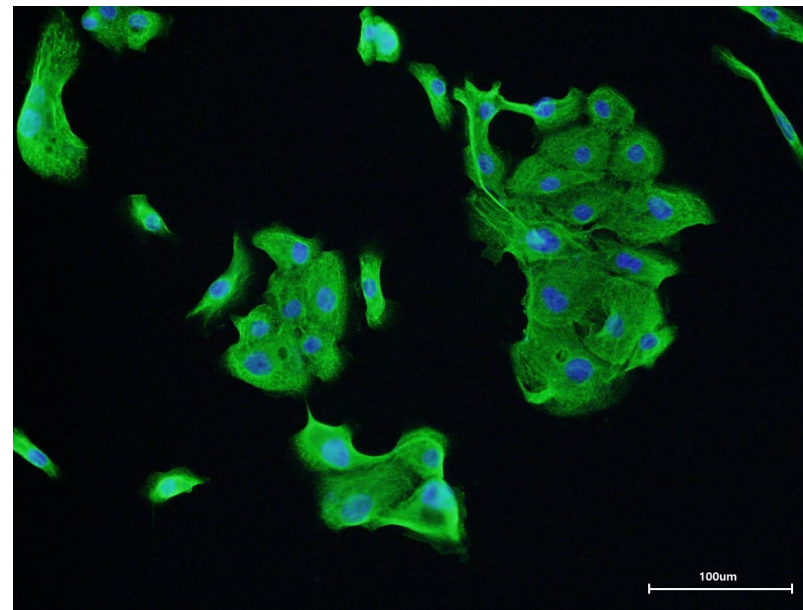
(santa cruz sc-8033, mouse monoclonal) Dilution 1:100, resolution rate 200X

# YPAC-2

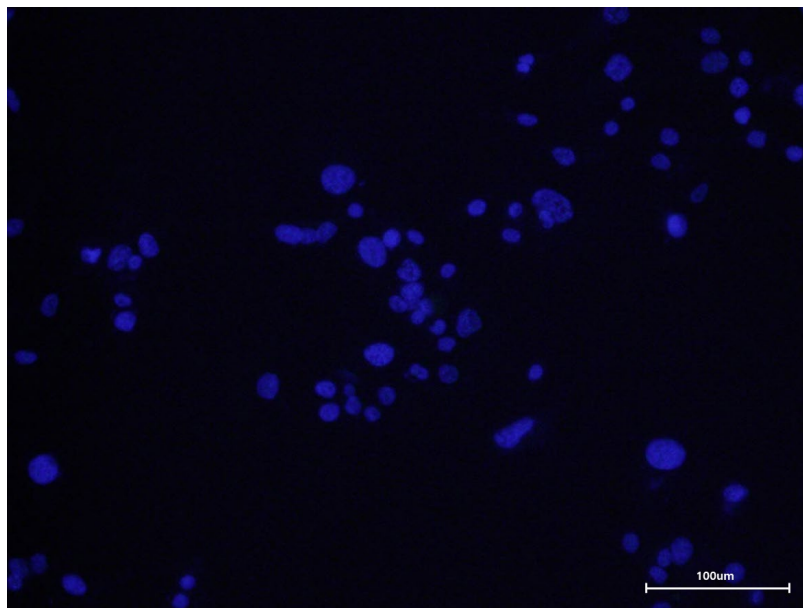
**a-Amylase**



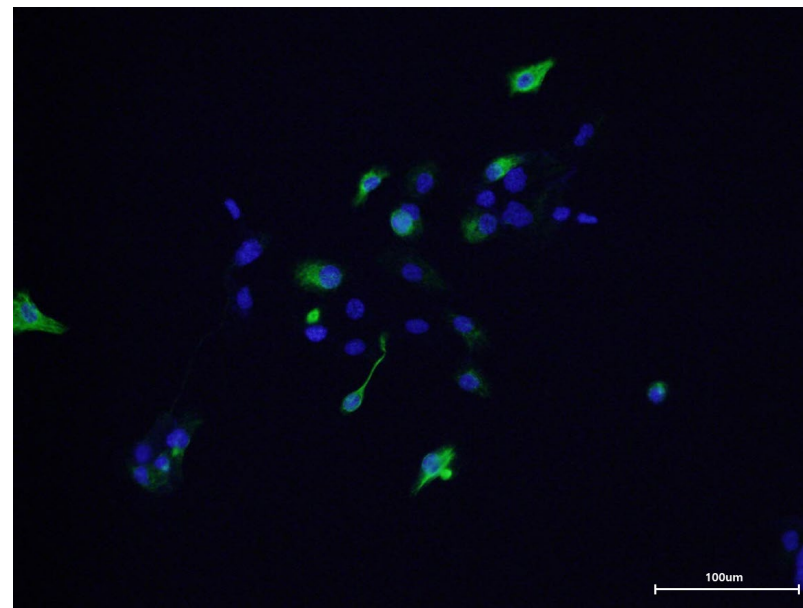
**Cytokeratin 19**



**Insulin**

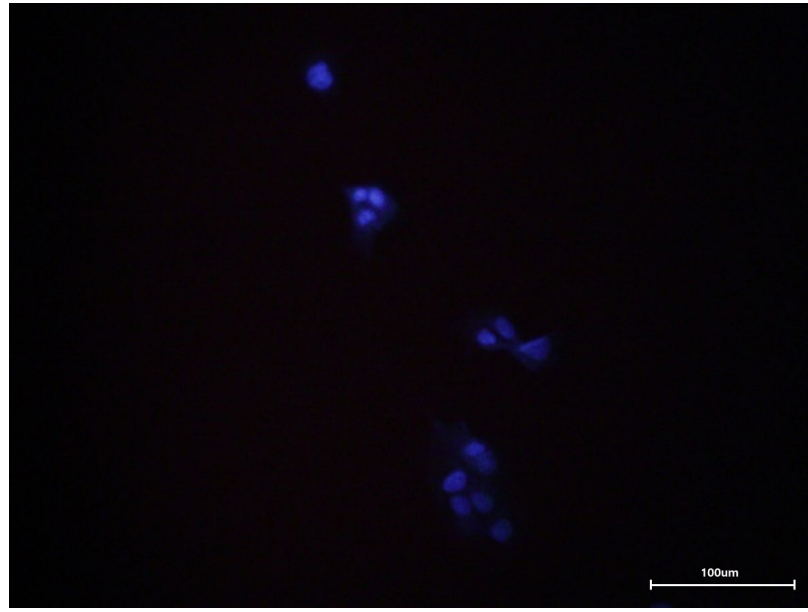


**Vimentin**

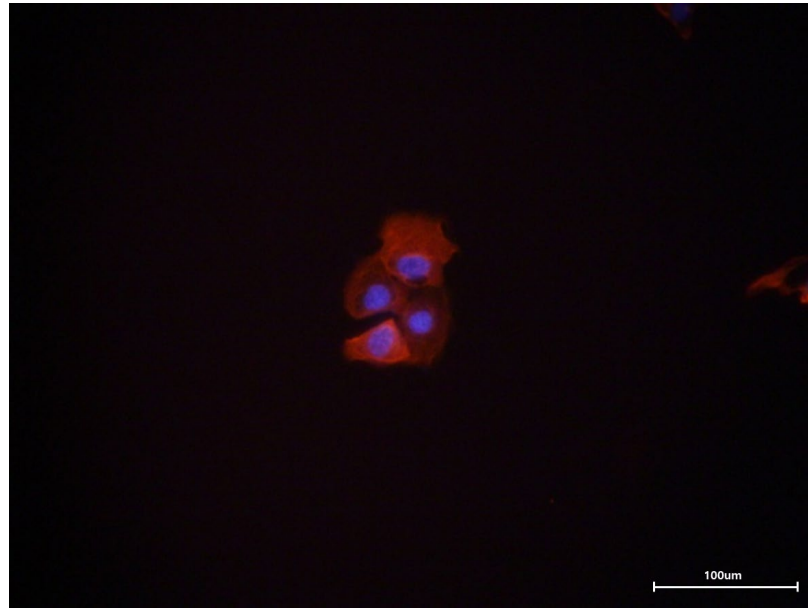


YPAC-5

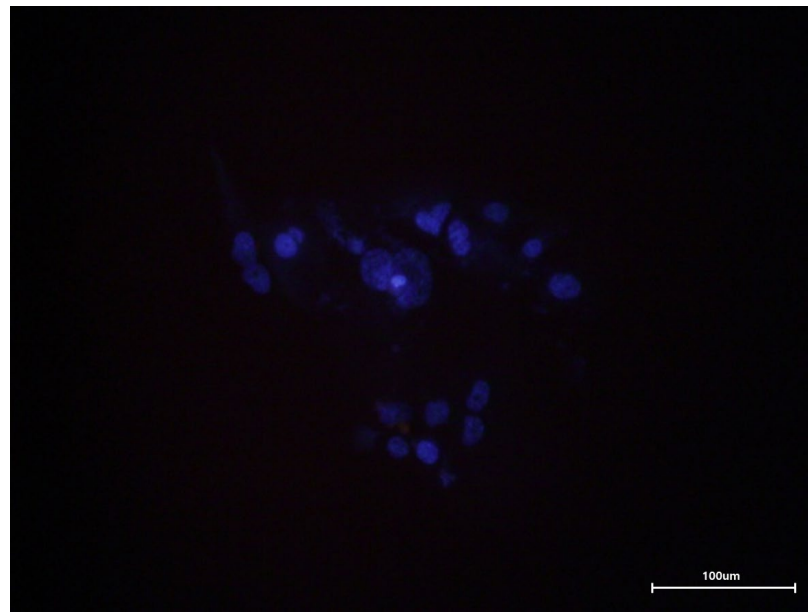
**a-Amylase**



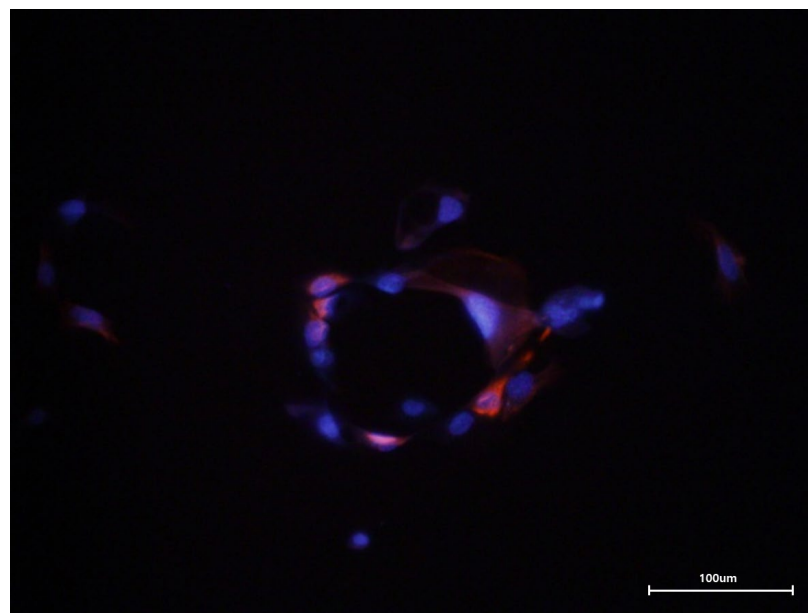
**Cytokeratin 19**



**Insulin**

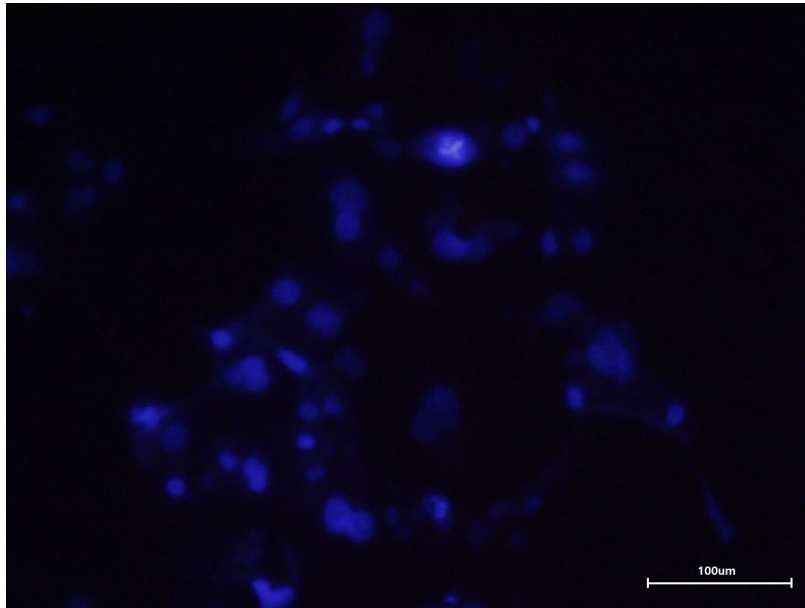


**Vimentin**

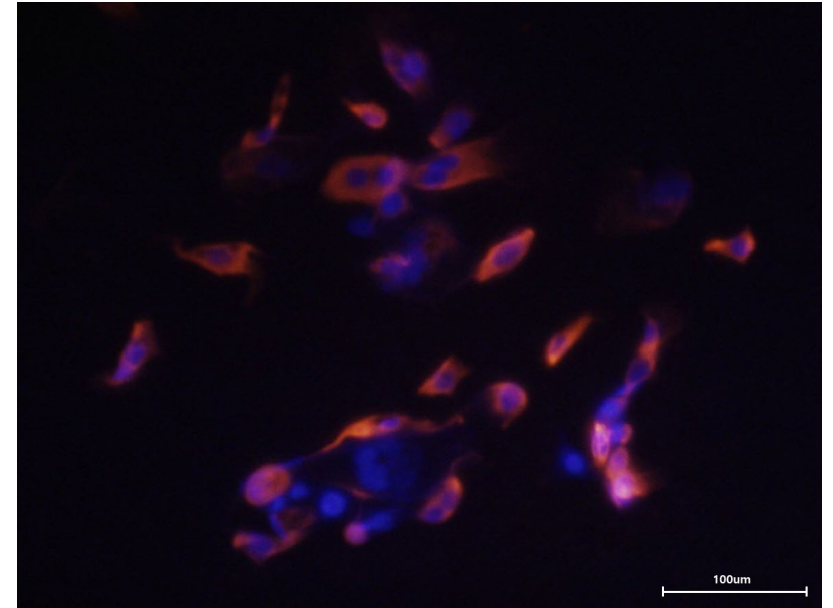


# YPAC-6

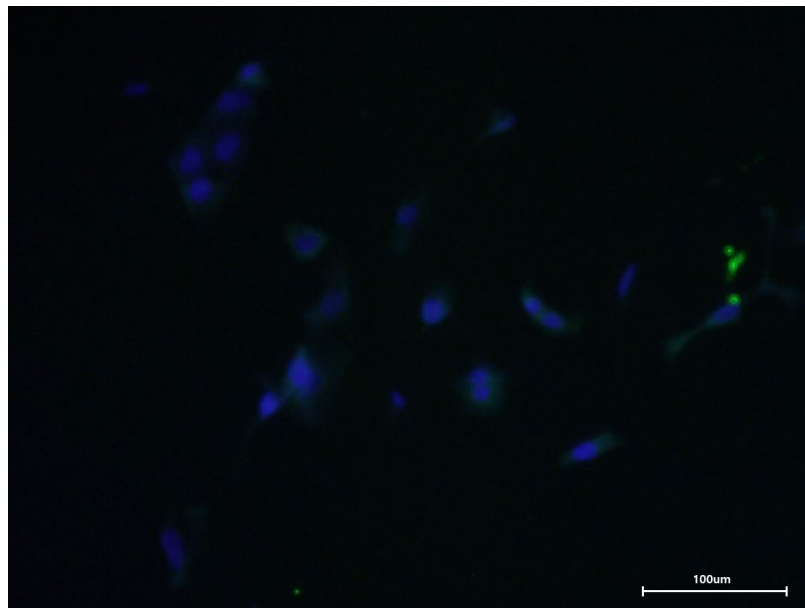
**a-Amylase**



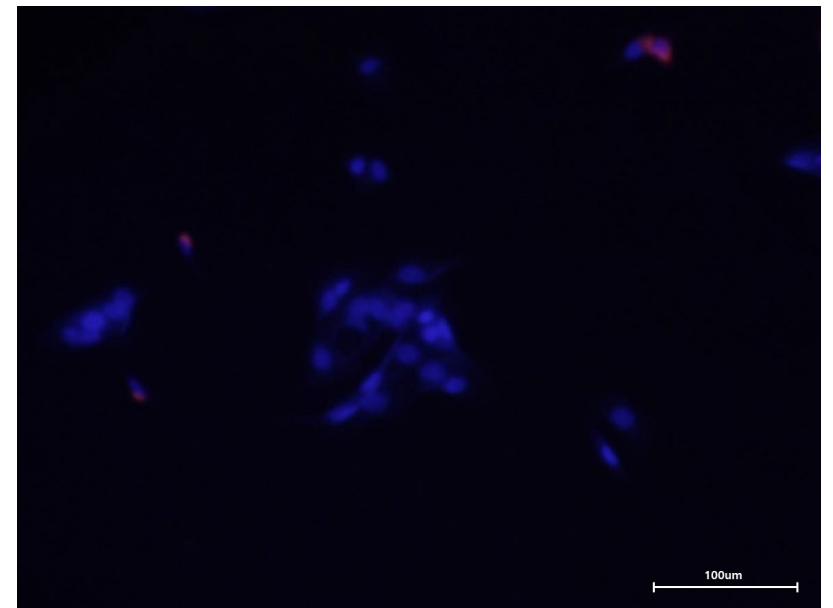
**Cytokeratin 19**



**Insulin**

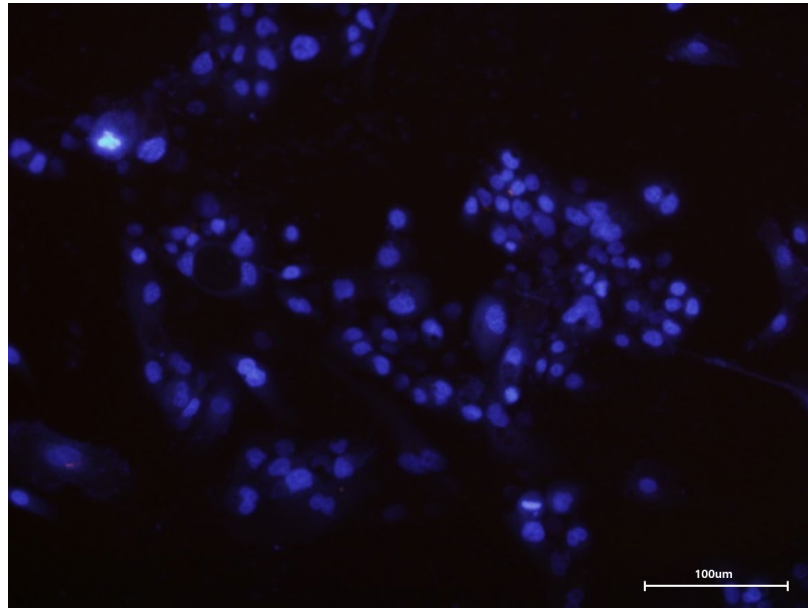


**Vimentin**

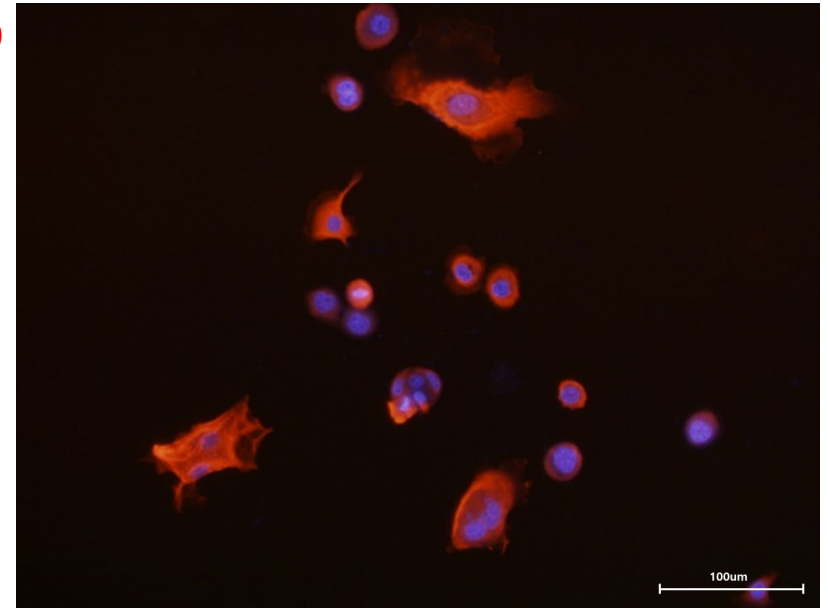


# YPAC-7

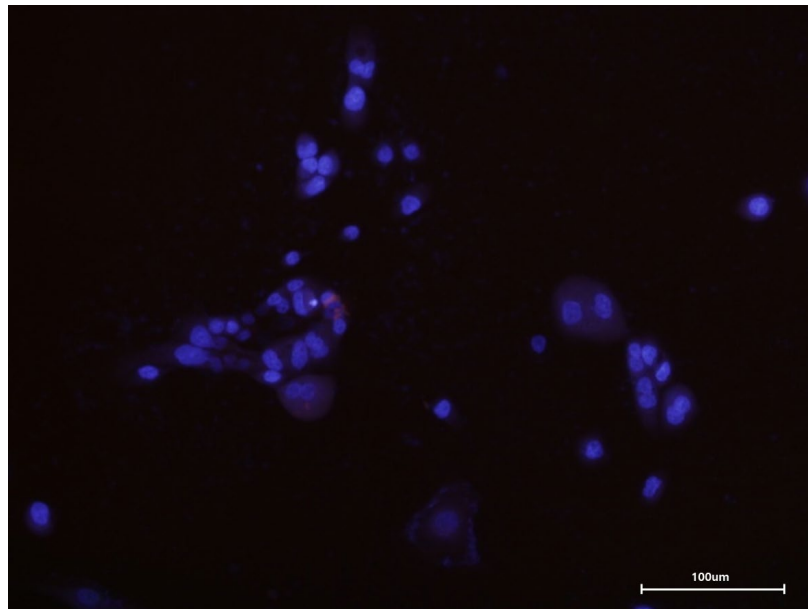
**a-Amylase**



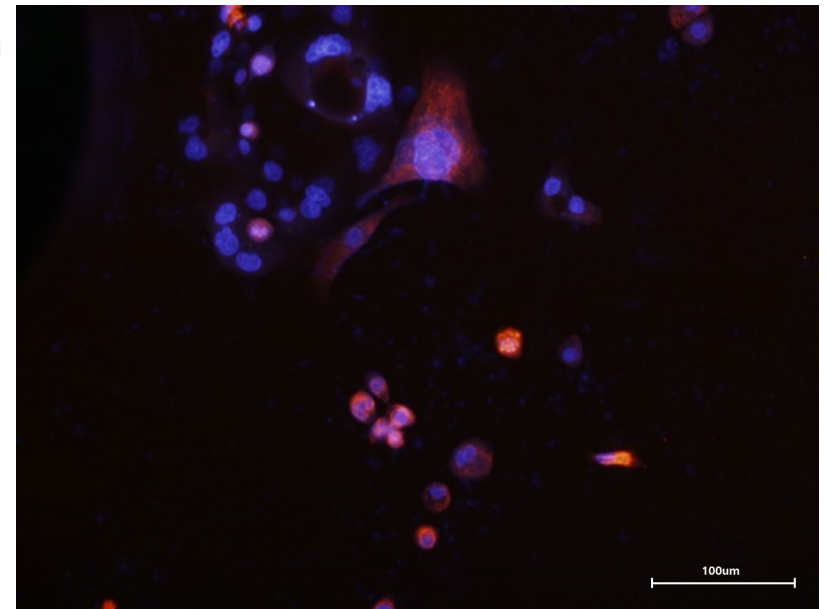
**Cytokeratin 19**



**Insulin**

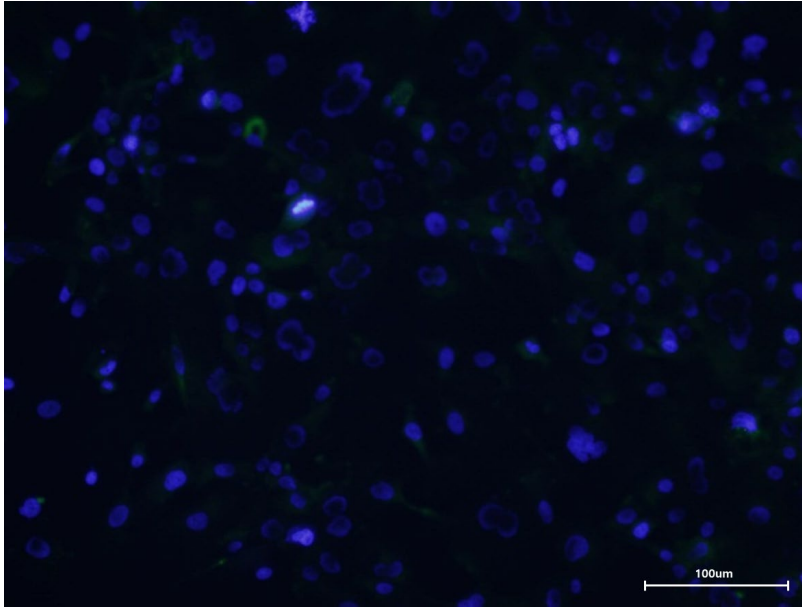


**Vimentin**

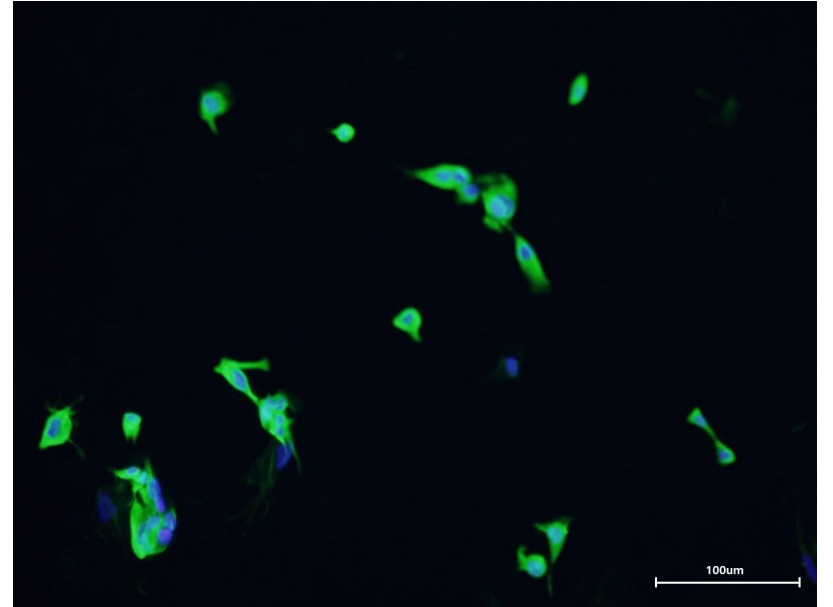


# YPAC-10

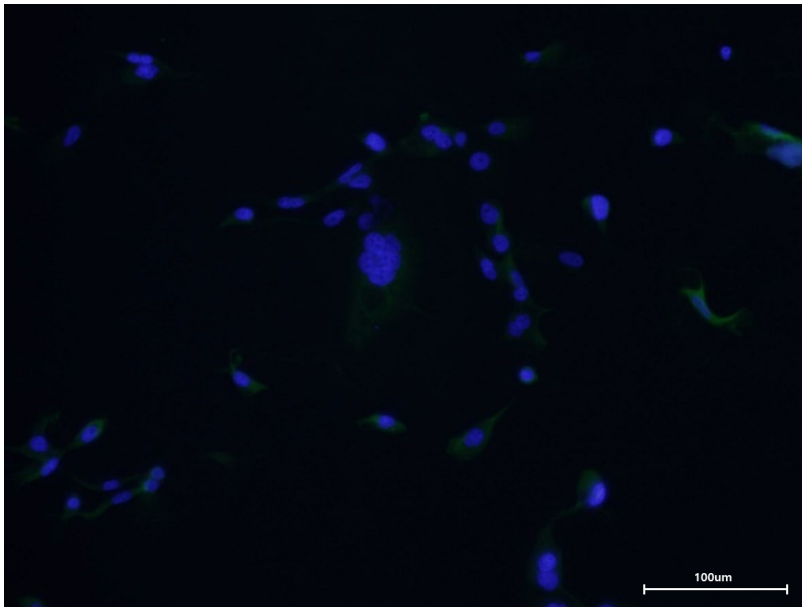
**a-Amylase**



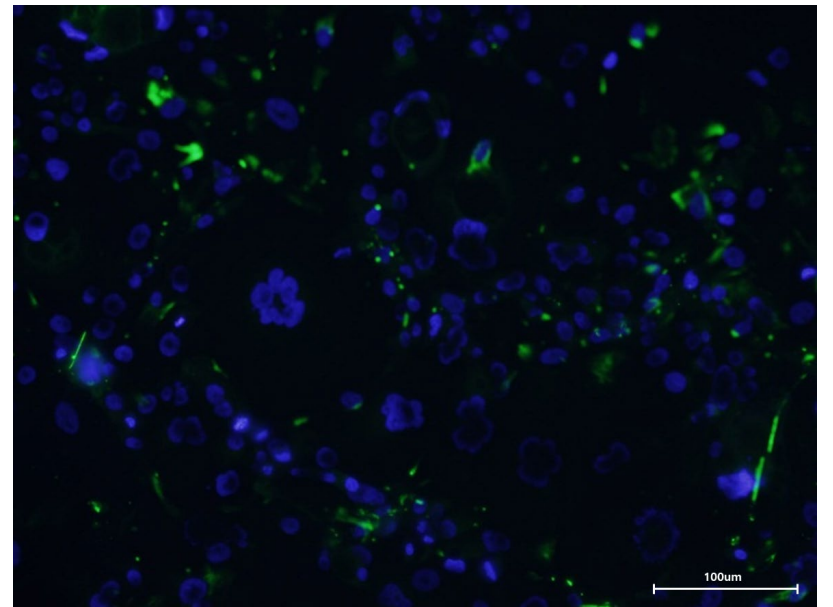
**Cytokeratin 19**



**Insulin**



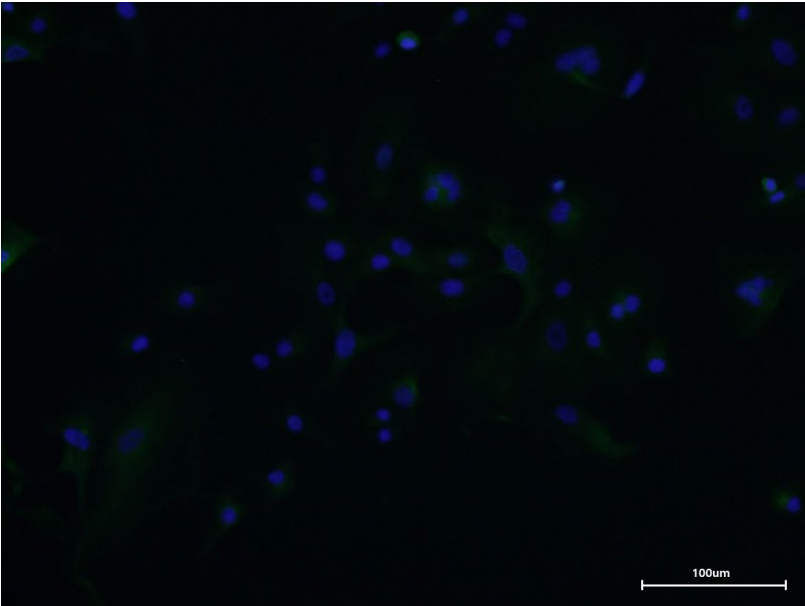
**Vimentin**



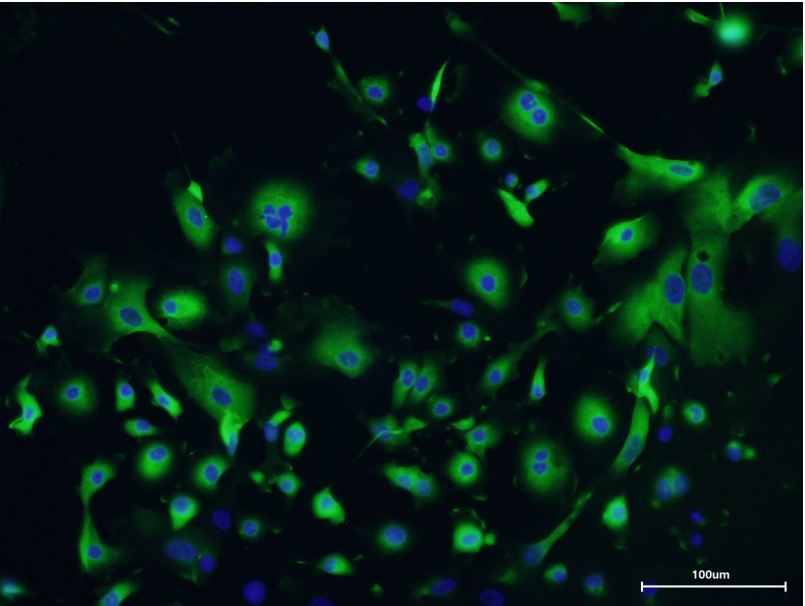


YPAC-13

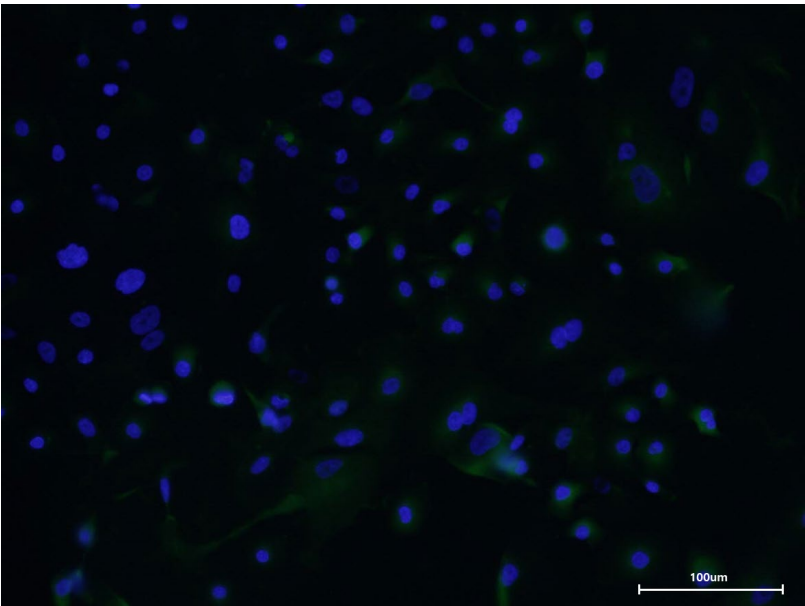
**a-Amylase**



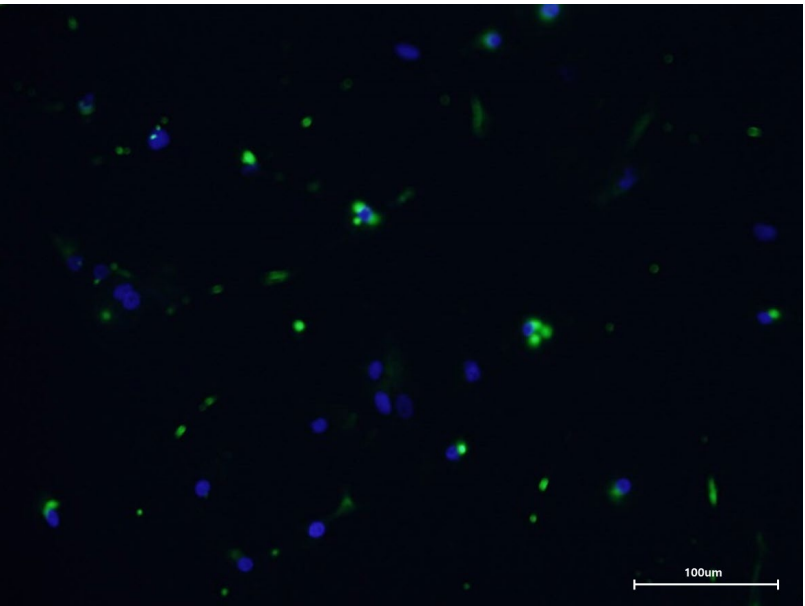
**Cytokeratin 19**



**Insulin**

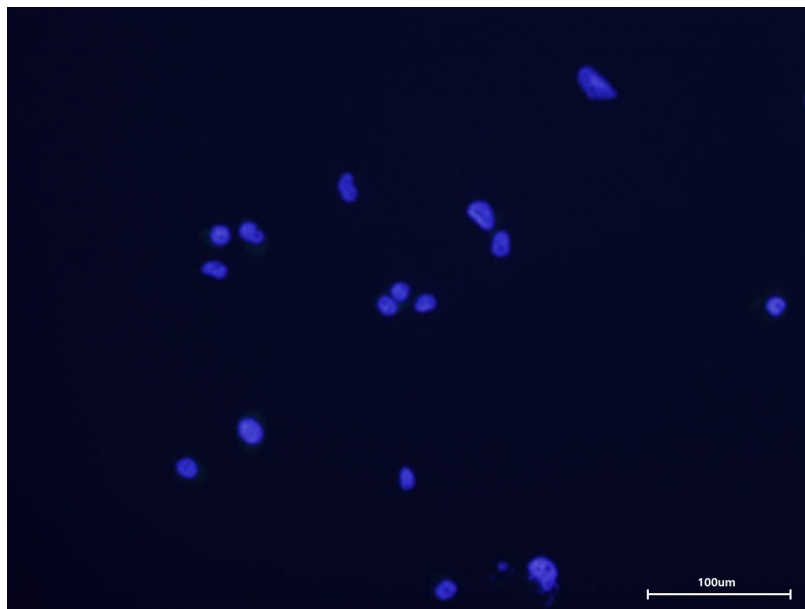


**Vimentin**

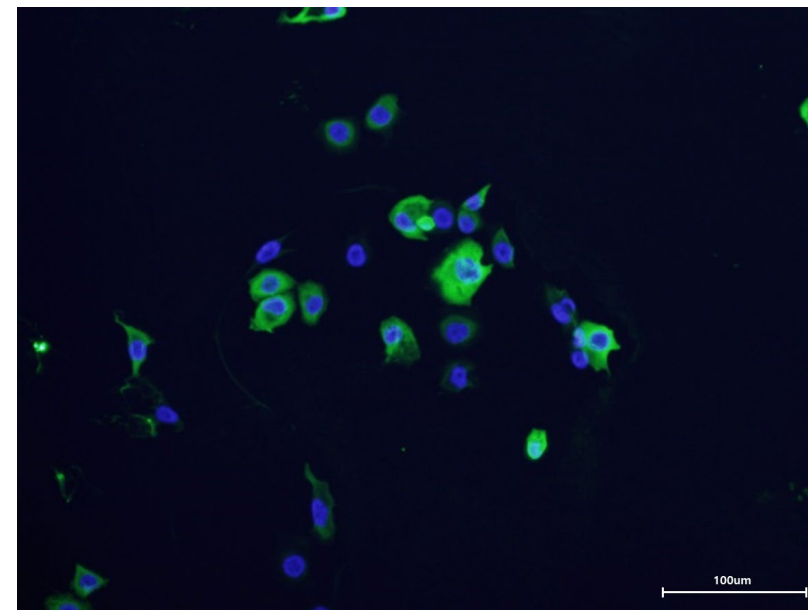


# YPAC-15

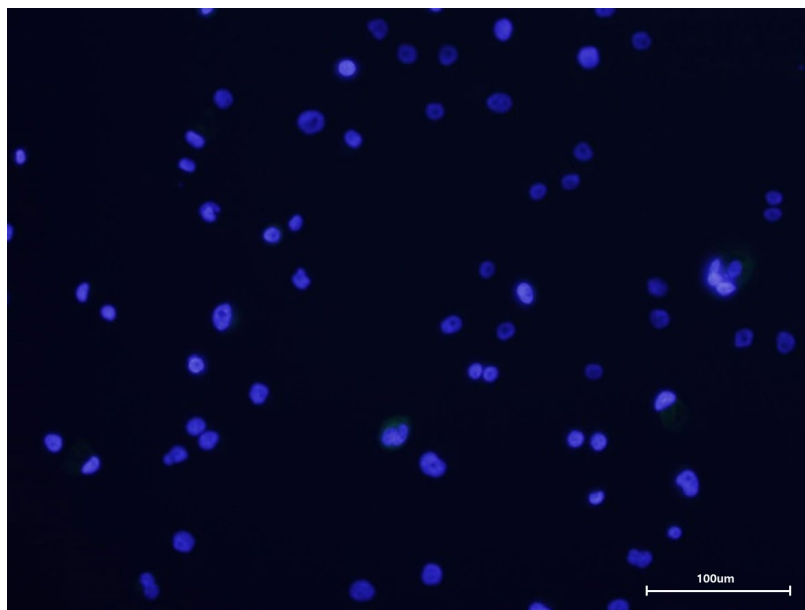
**a-Amylase**



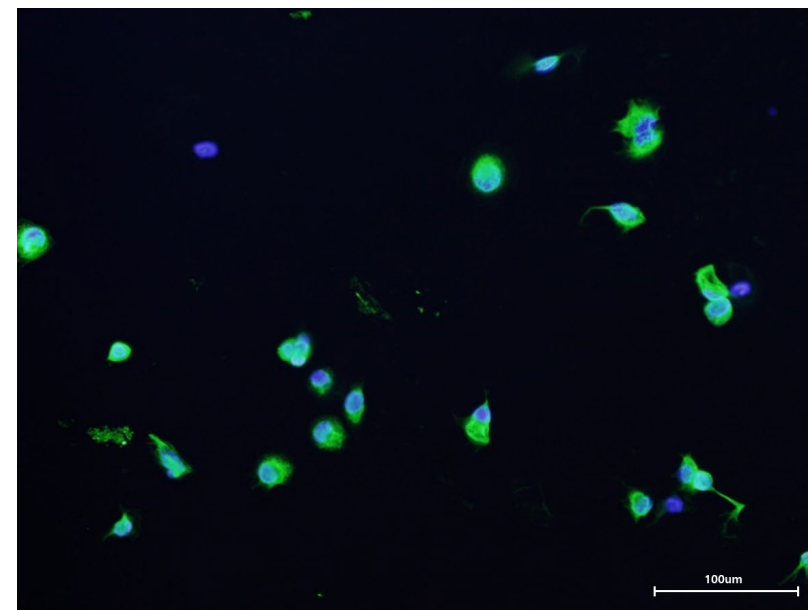
**Cytokeratin 19**



**Insulin**

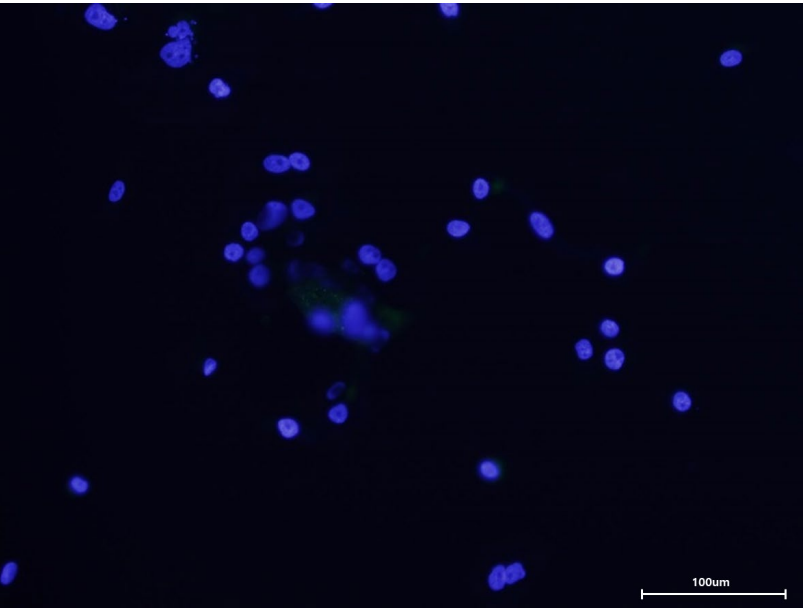


**Vimentin**

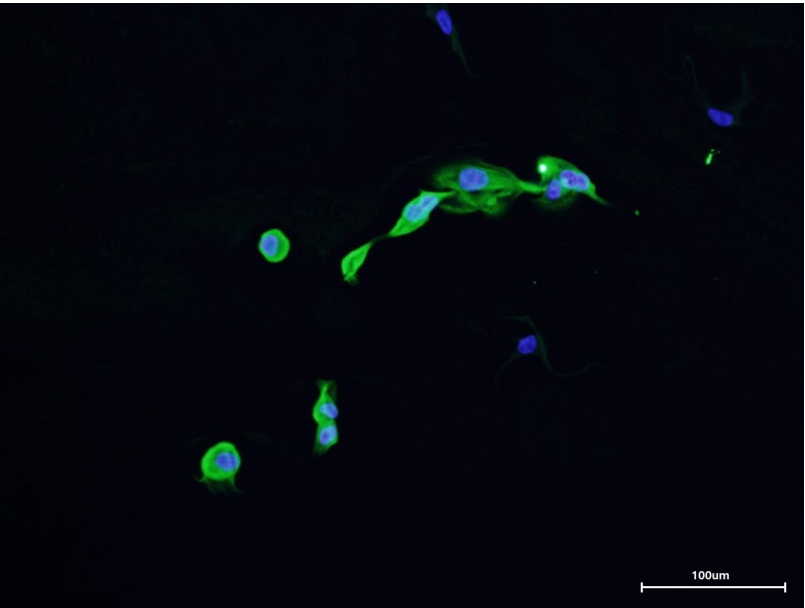


**YPAC-16**

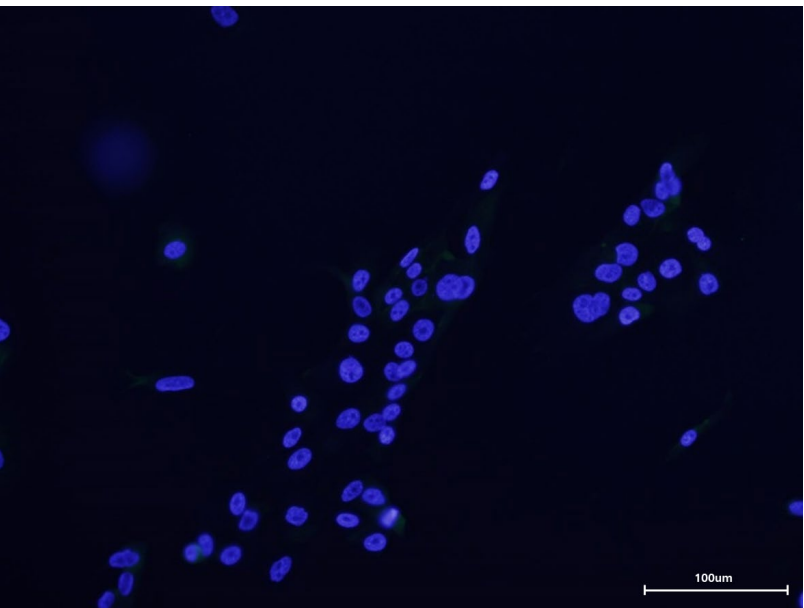
**a-Amylase**



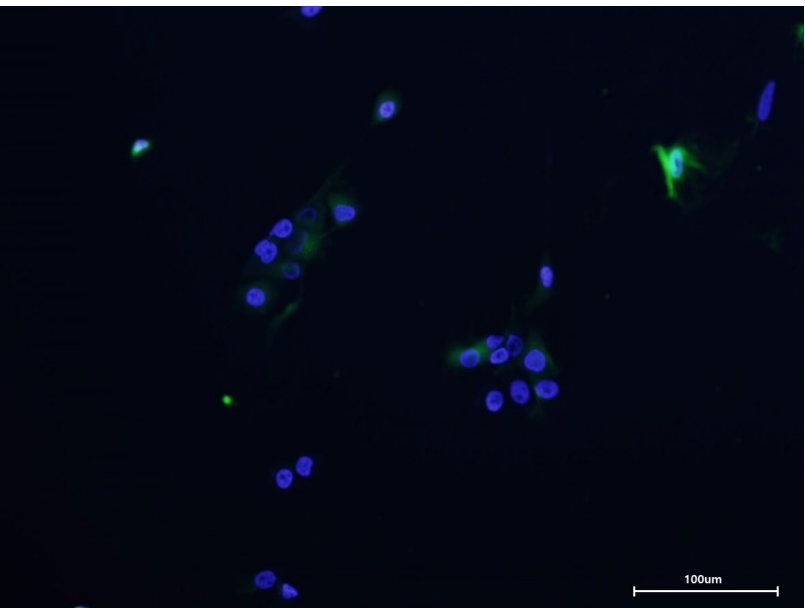
**Cytokeratin 19**



**Insulin**

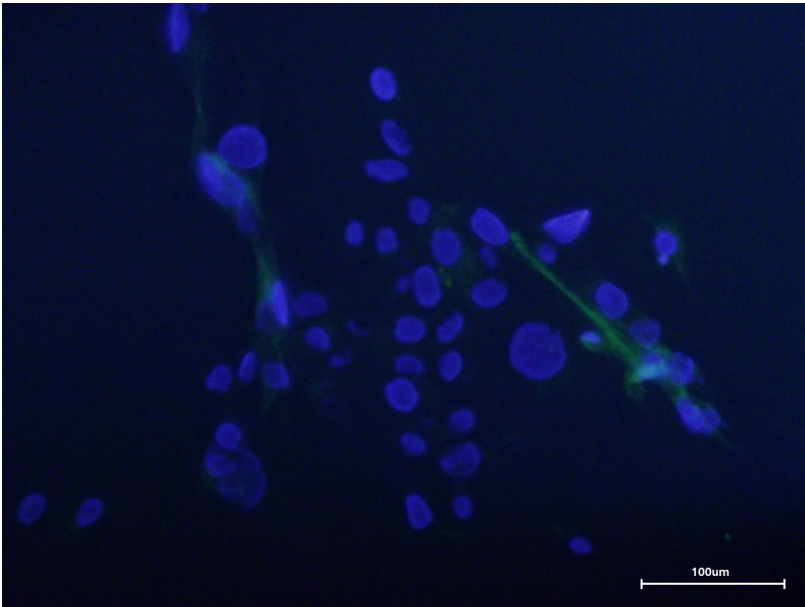


**Vimentin**

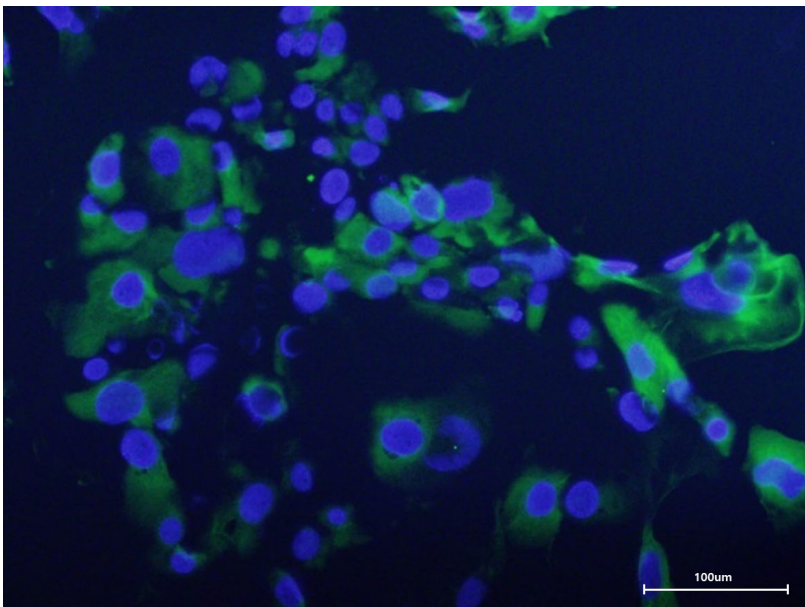


# YPAC-17

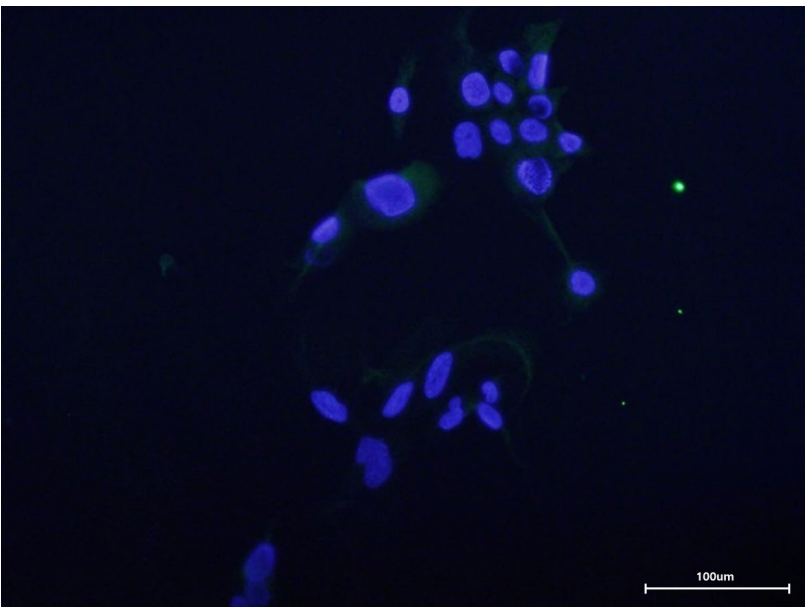
**a-Amylase**



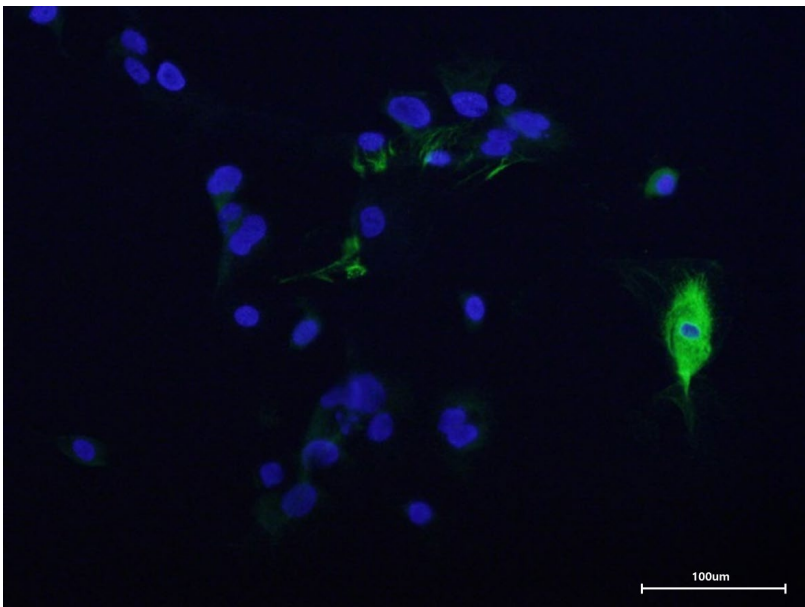
**Cytokeratin 19**



**Insulin**

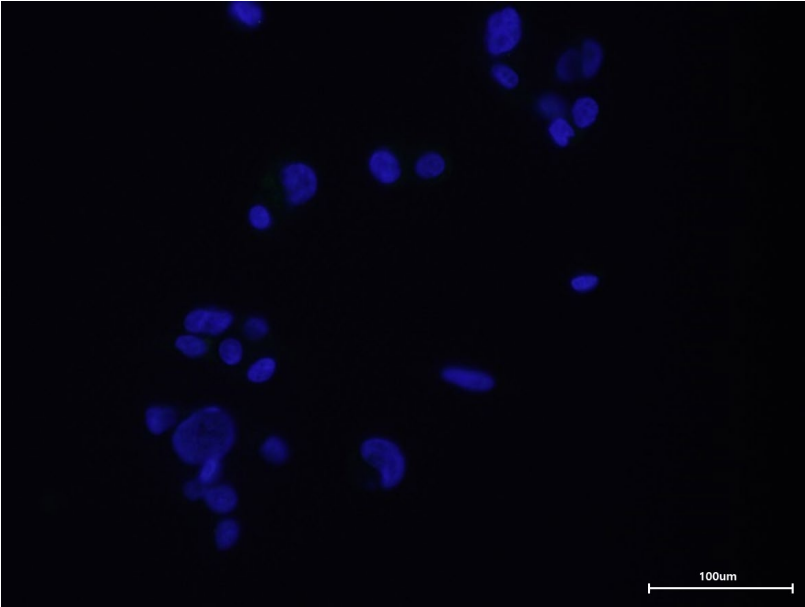


**Vimentin**

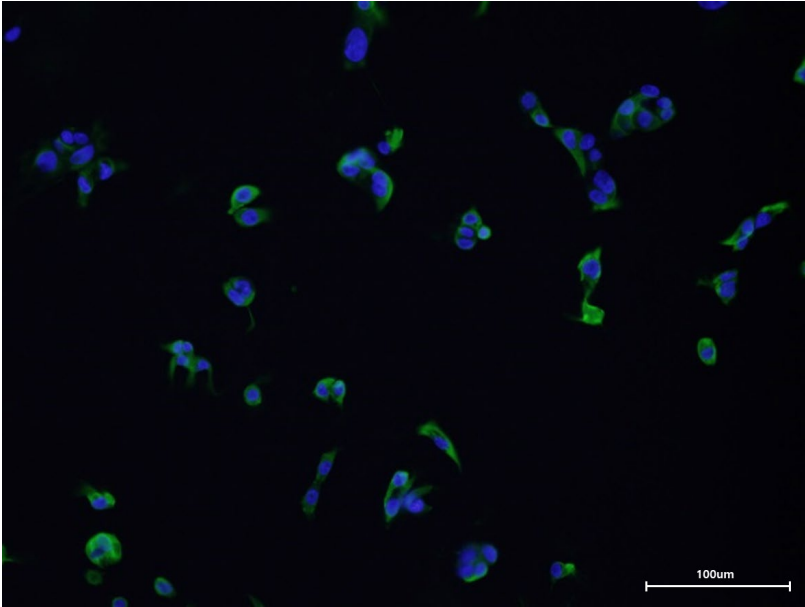


YPAC-20

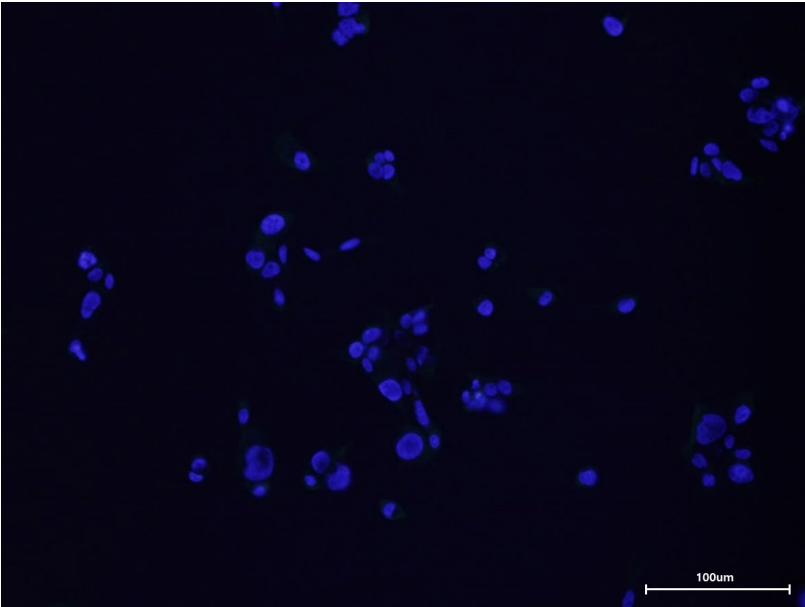
**a-Amylase**



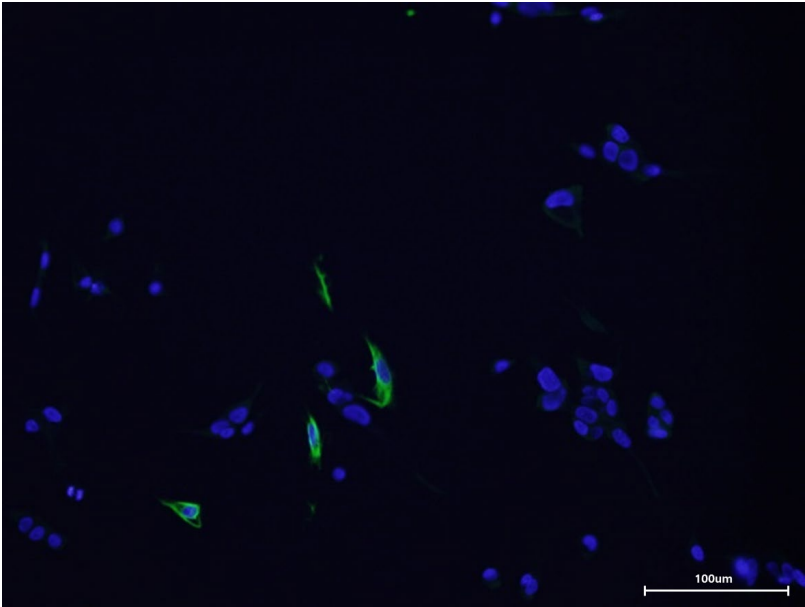
**Cytokeratin 19**



**Insulin**

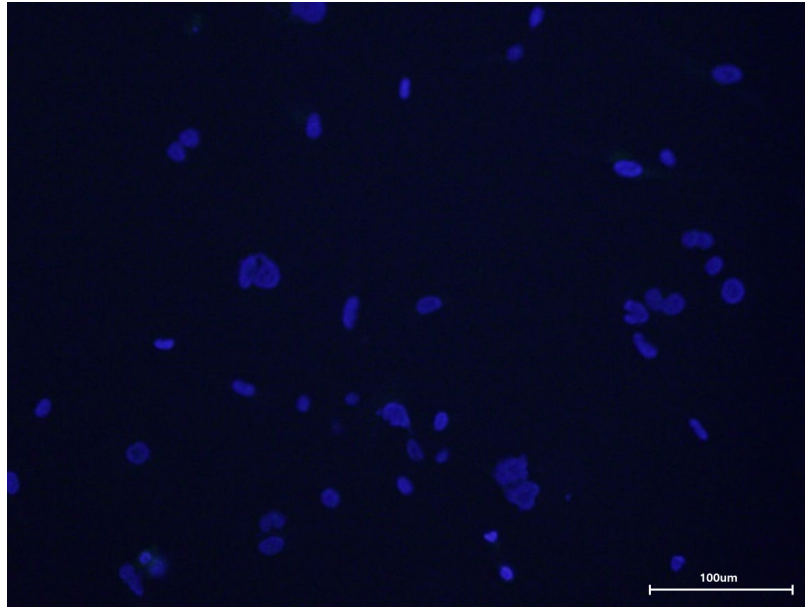


**Vimentin**

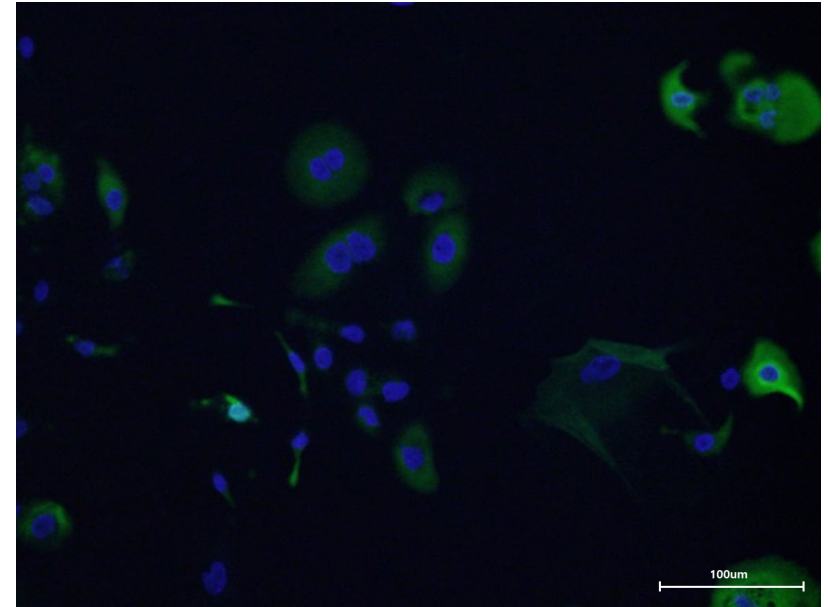


# YPAC-21

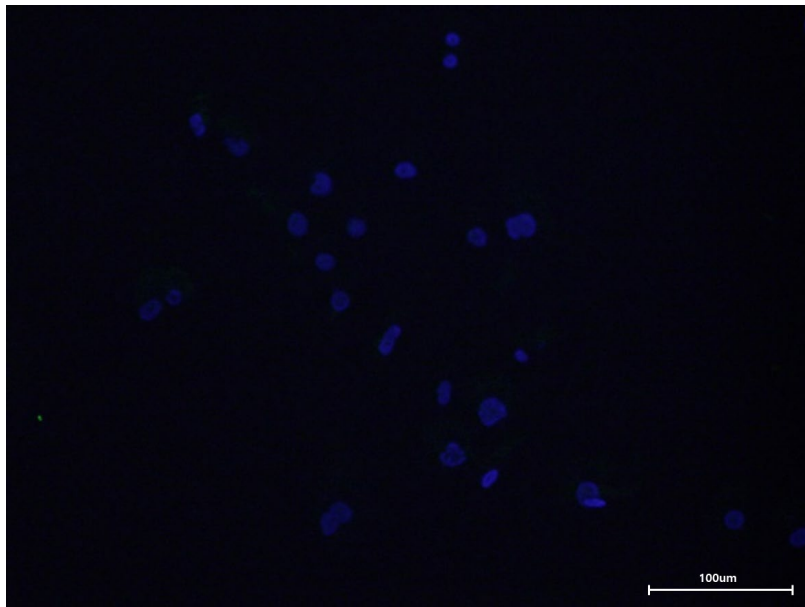
**a-Amylase**



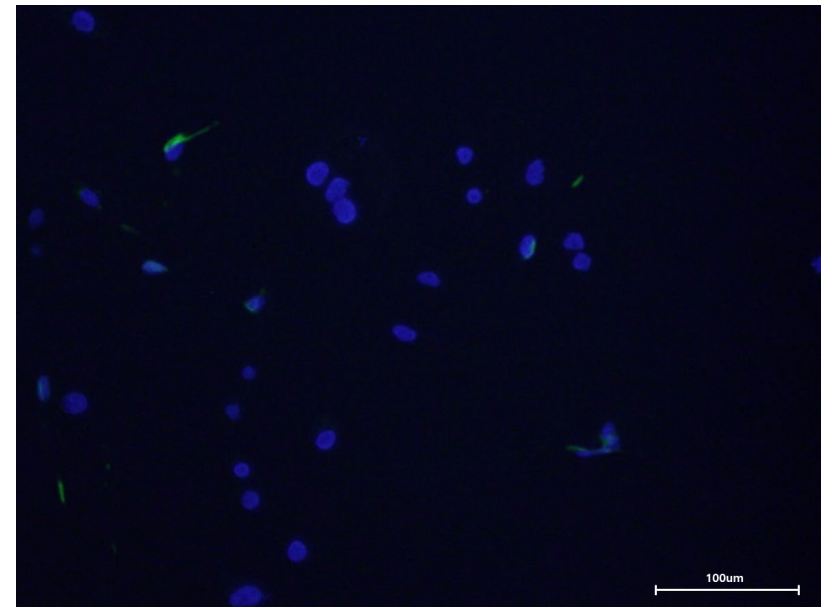
**Cytokeratin 19**



**Insulin**

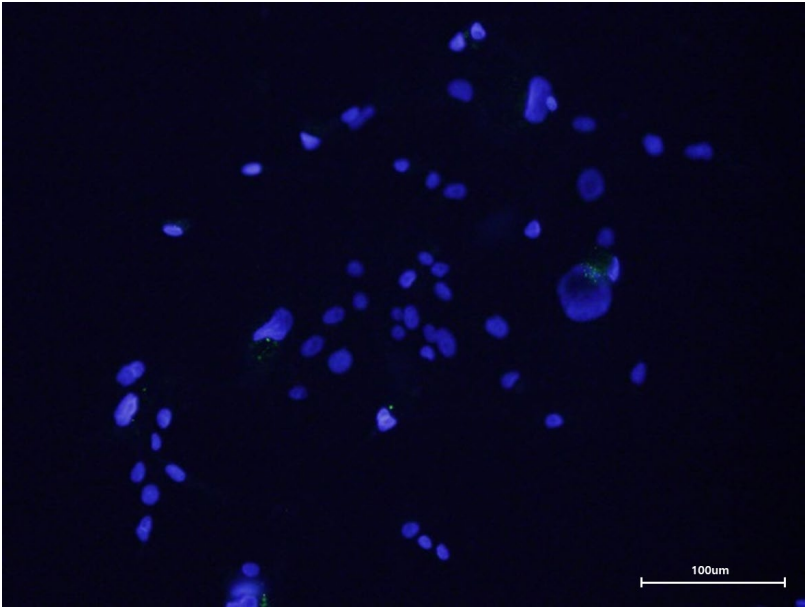


**Vimentin**

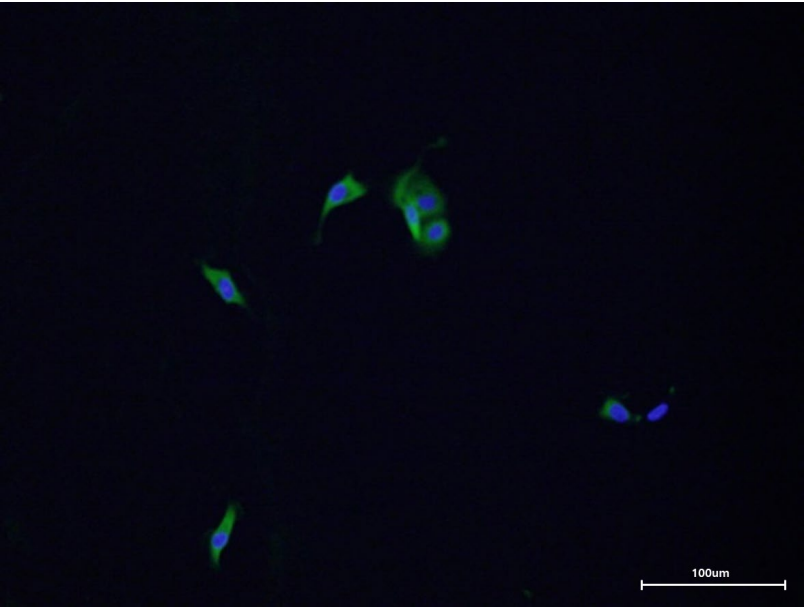


YPAC-23

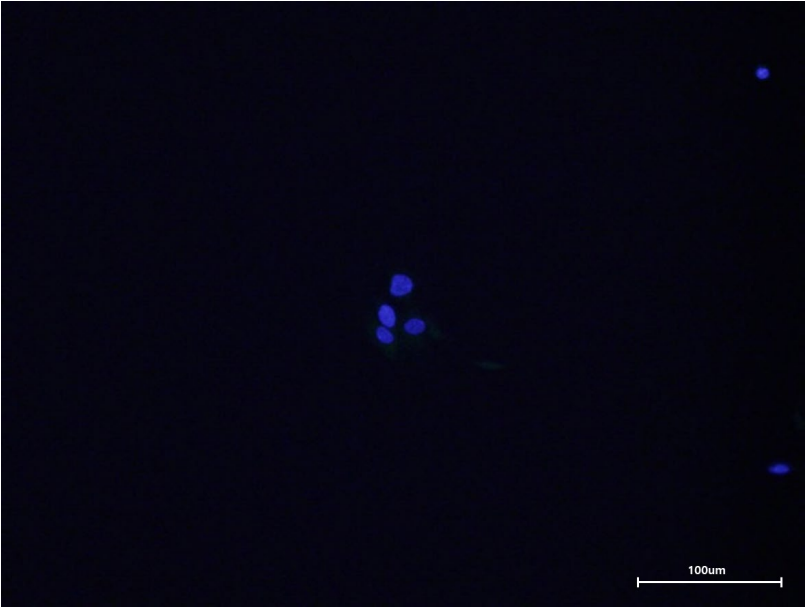
**a-Amylase**



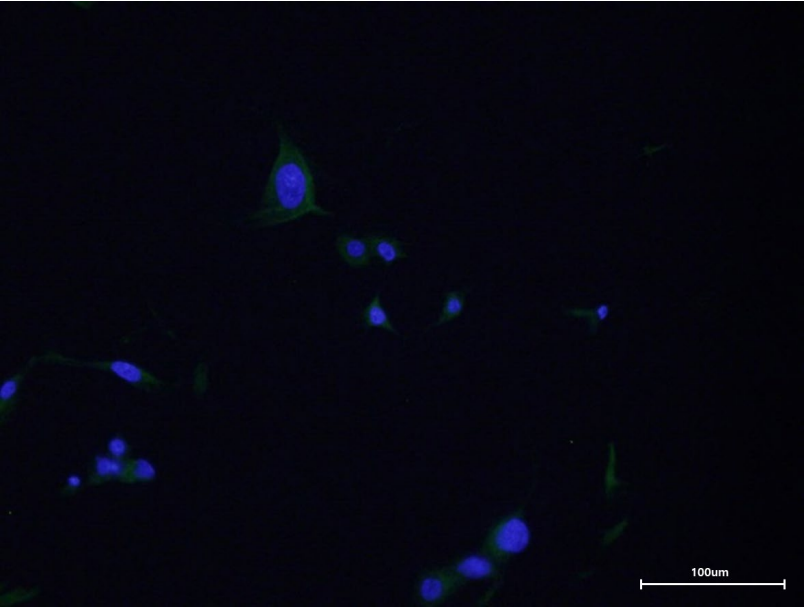
**Cytokeratin 19**



**Insulin**

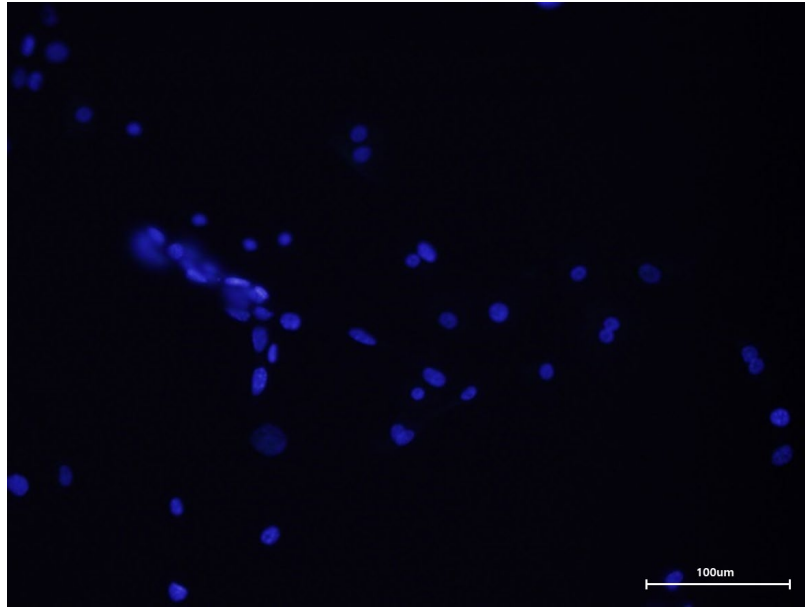


**Vimentin**

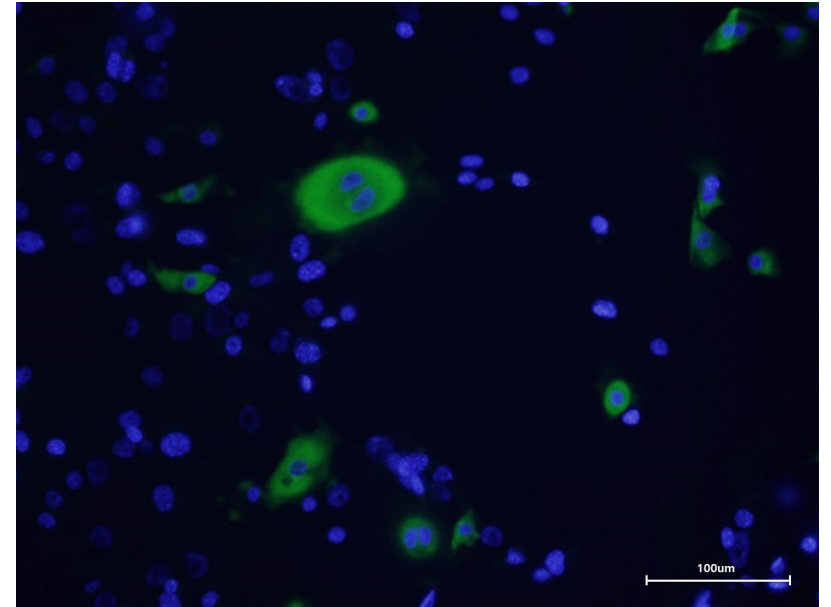


# YPAC-25

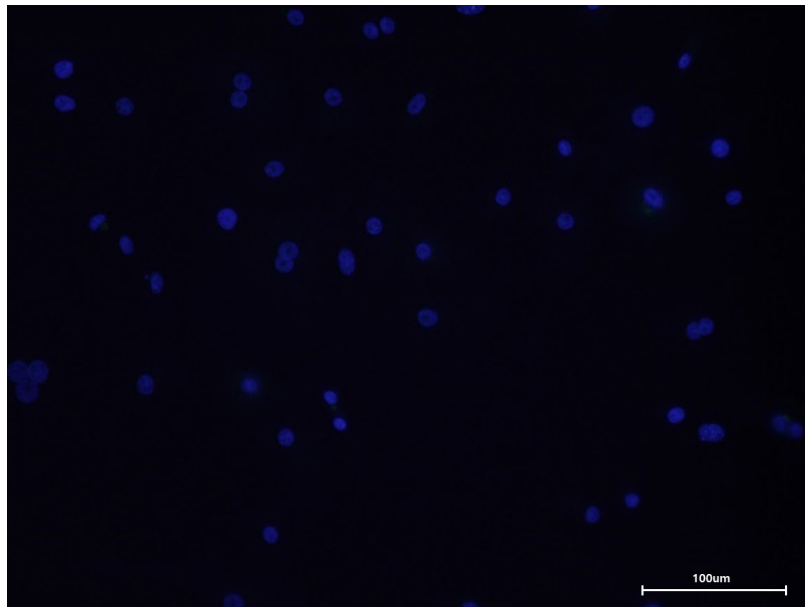
**a-Amylase**



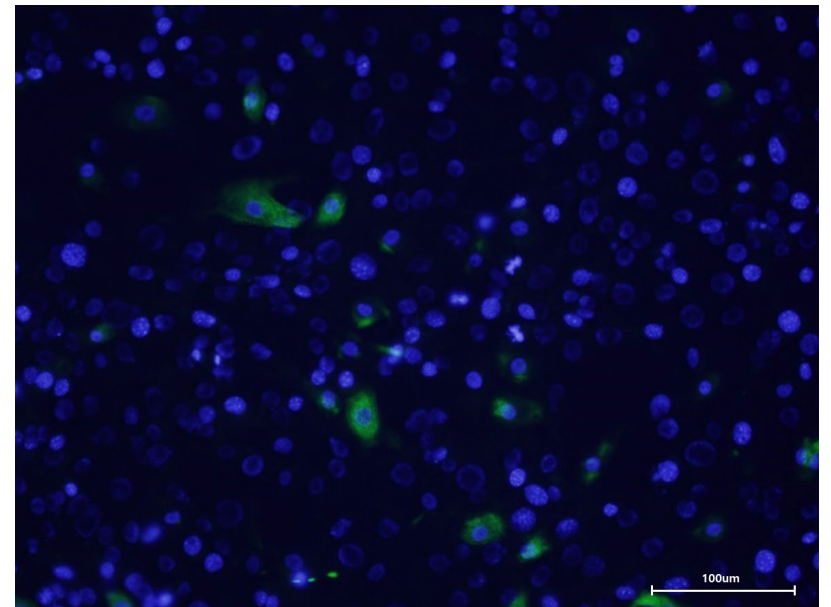
**Cytokeratin 19**



**Insulin**



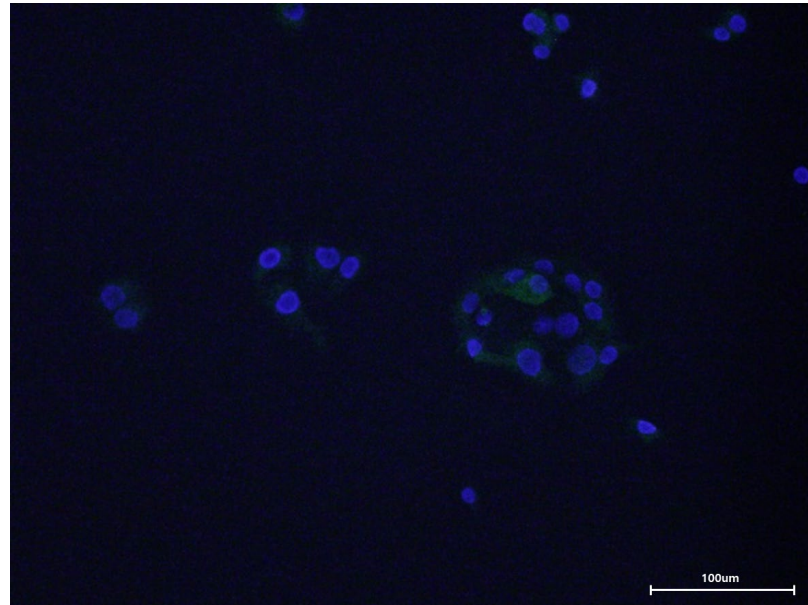
**Vimentin**



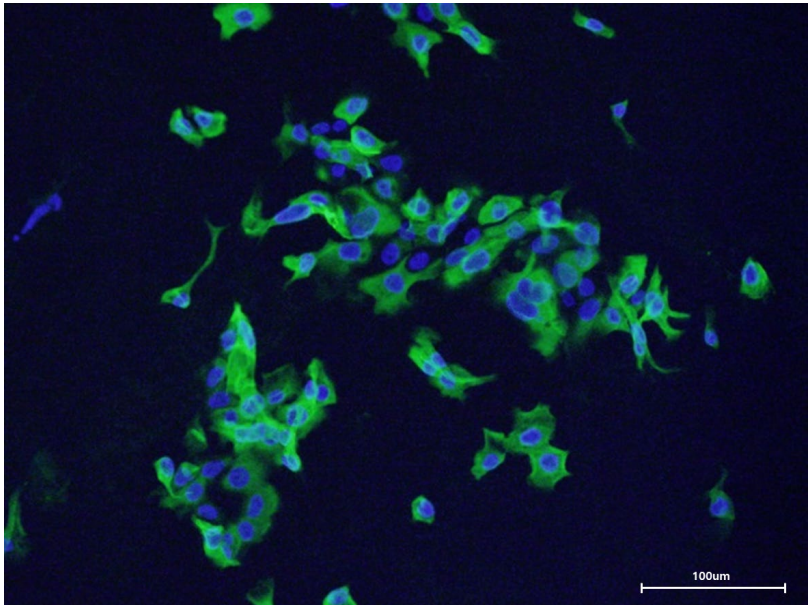


**YPAC-26**

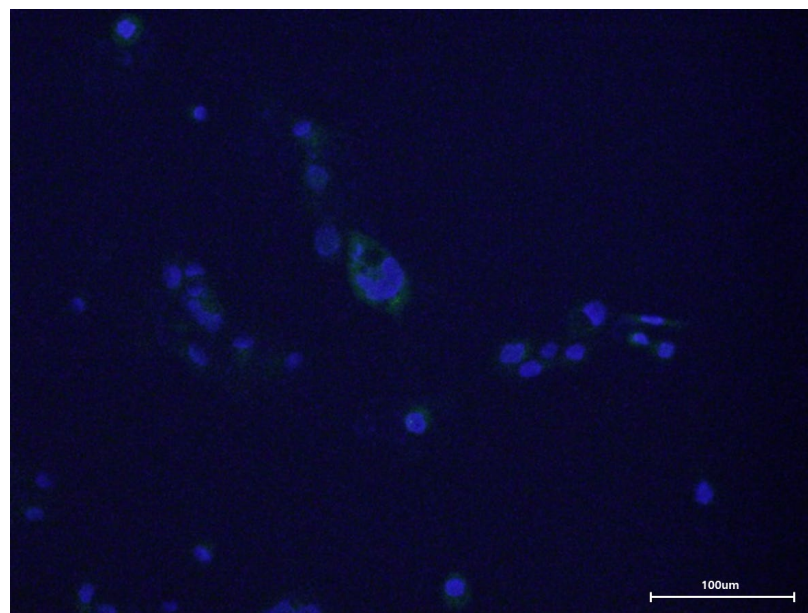
**a-Amylase**



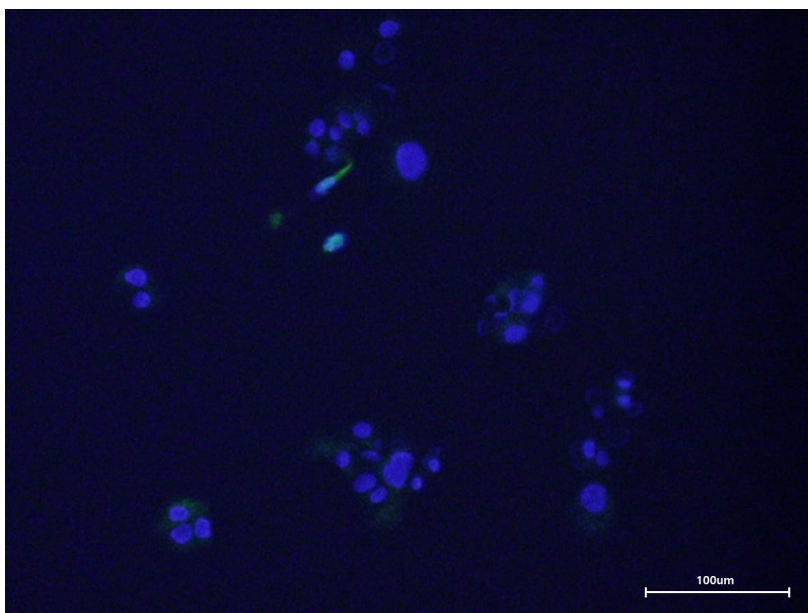
**Cytokeratin 19**



**Insulin**

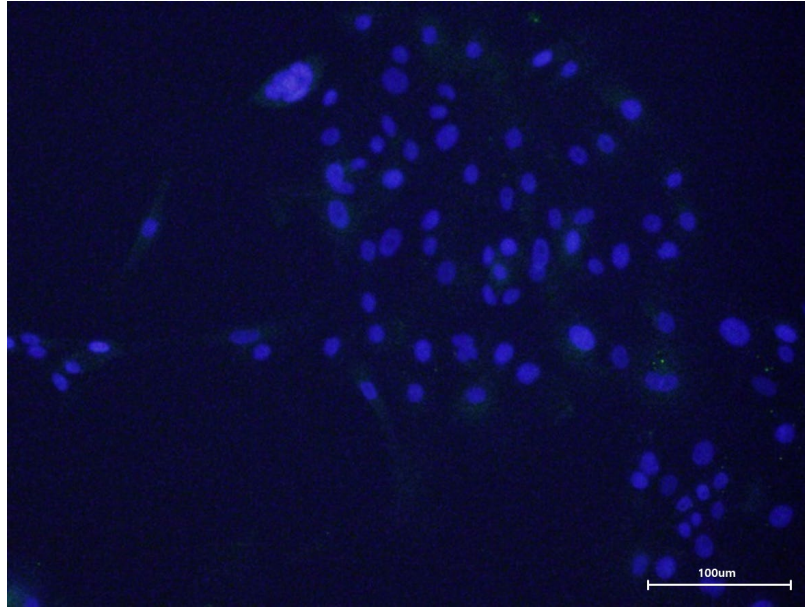


**Vimentin**

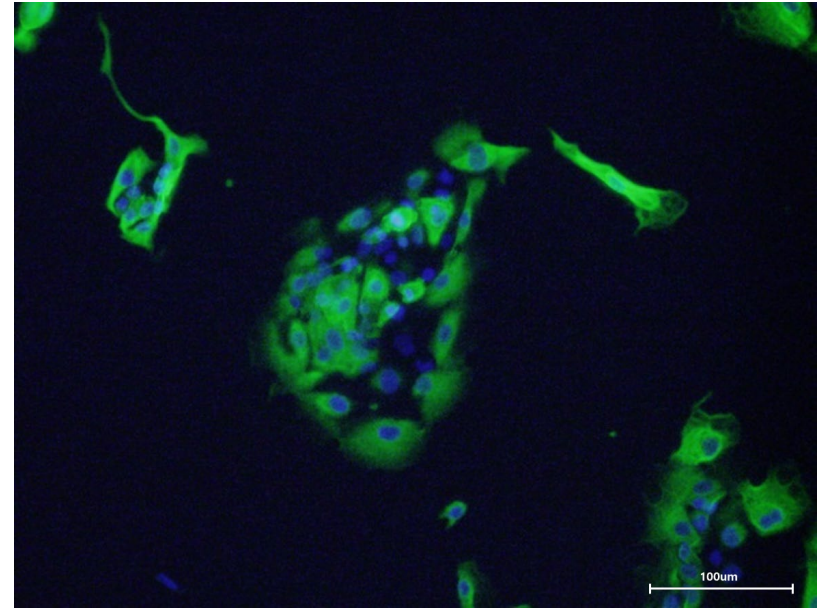


# YPAC-27

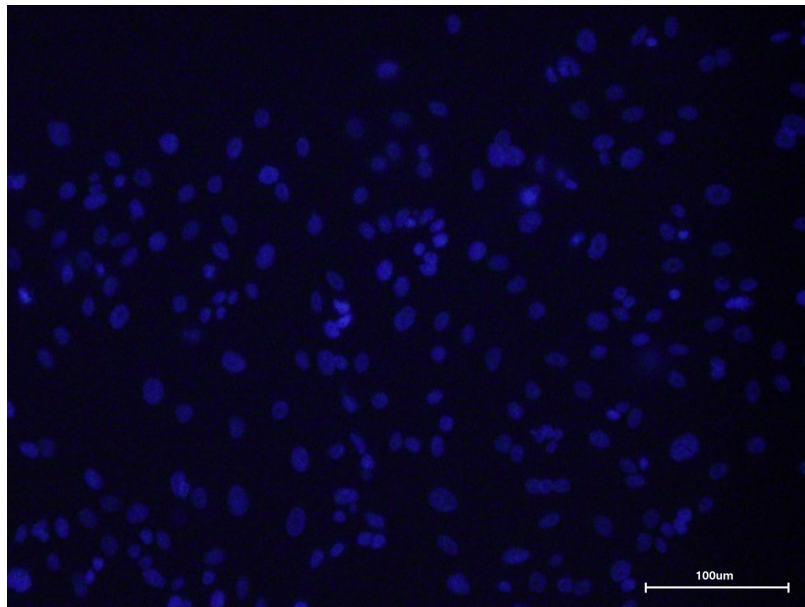
**a-Amylase**



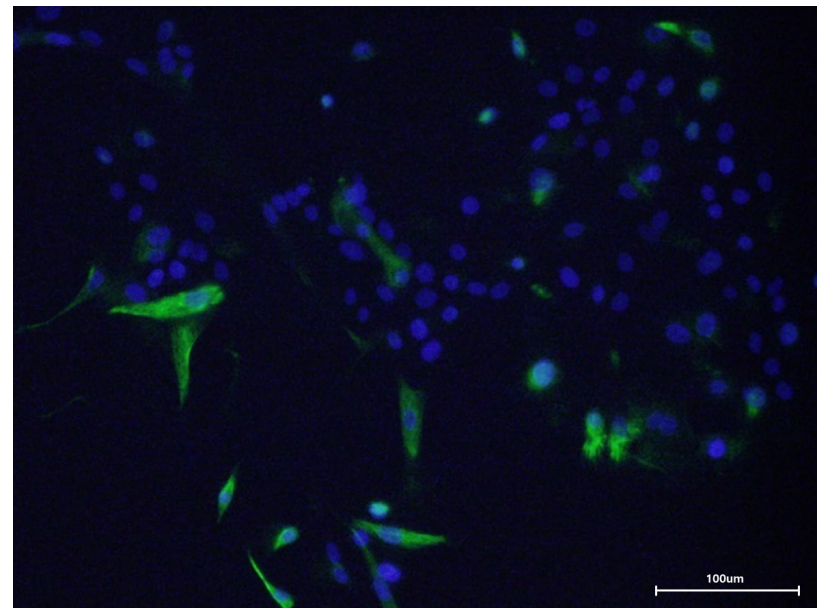
**Cytokeratin 19**



**Insulin**

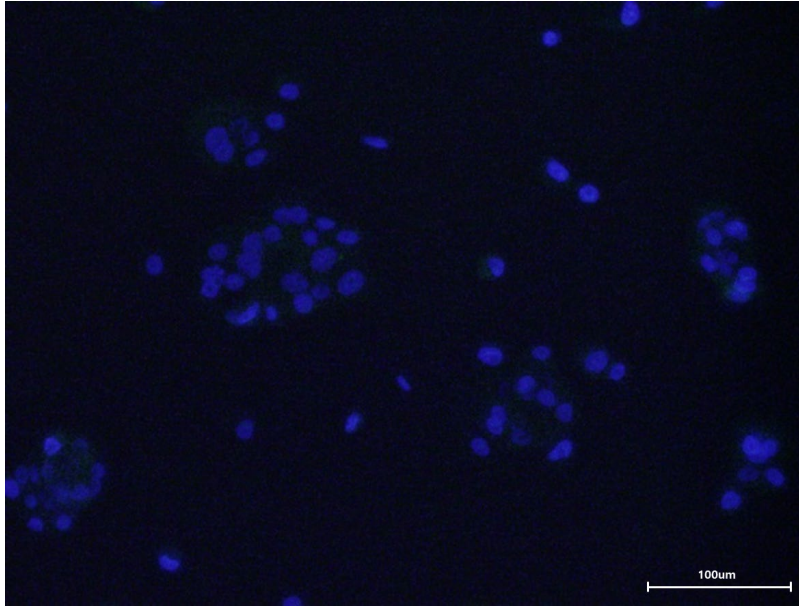


**Vimentin**

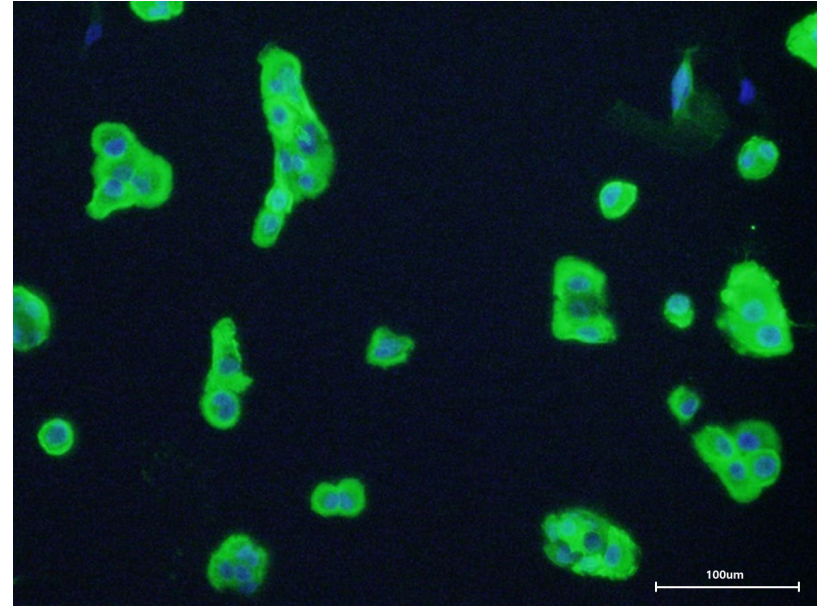


# YPAC-28

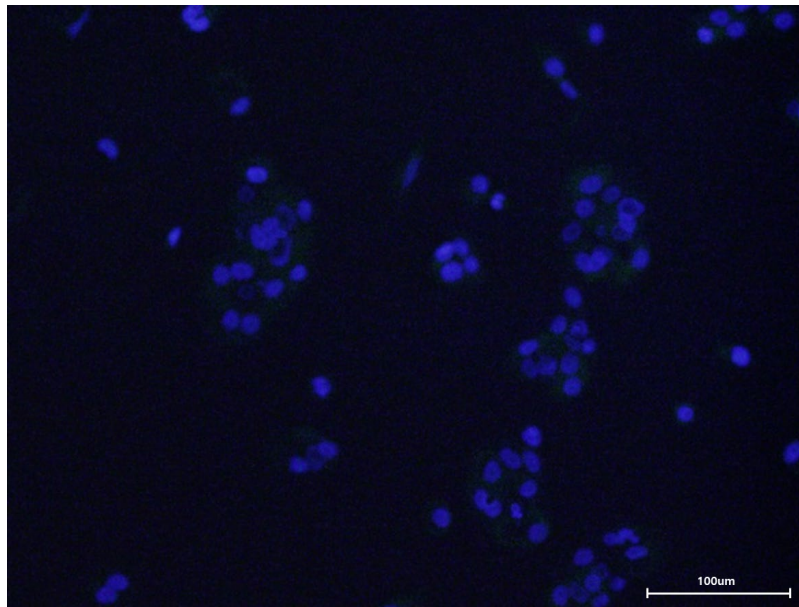
**a-Amylase**



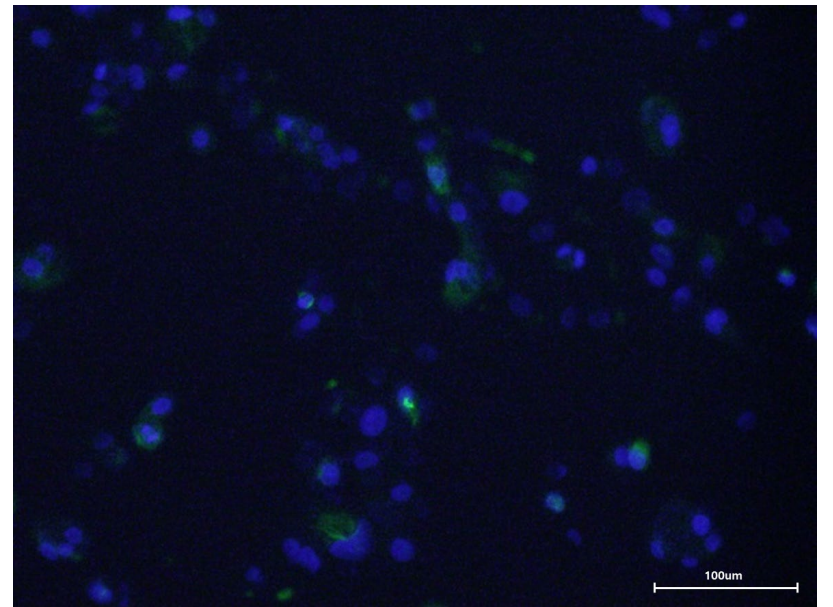
**Cytokeratin 19**



**Insulin**

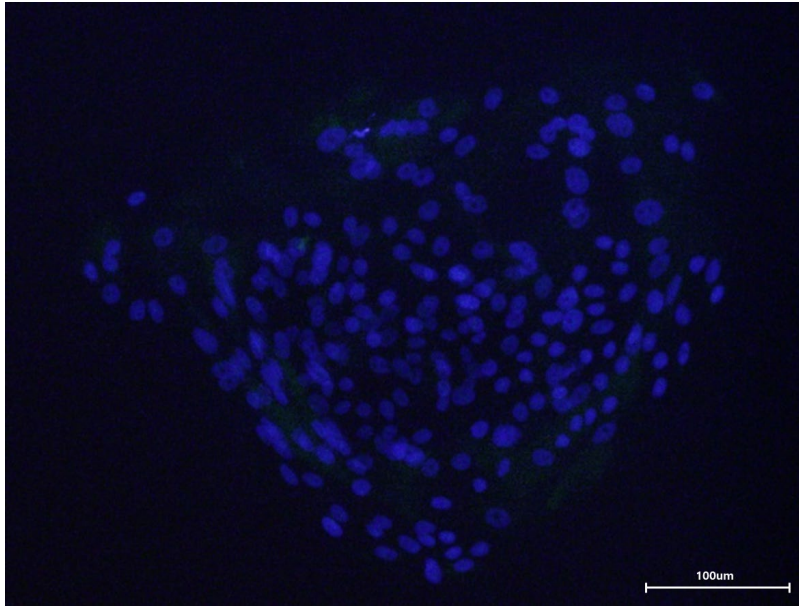


**Vimentin**

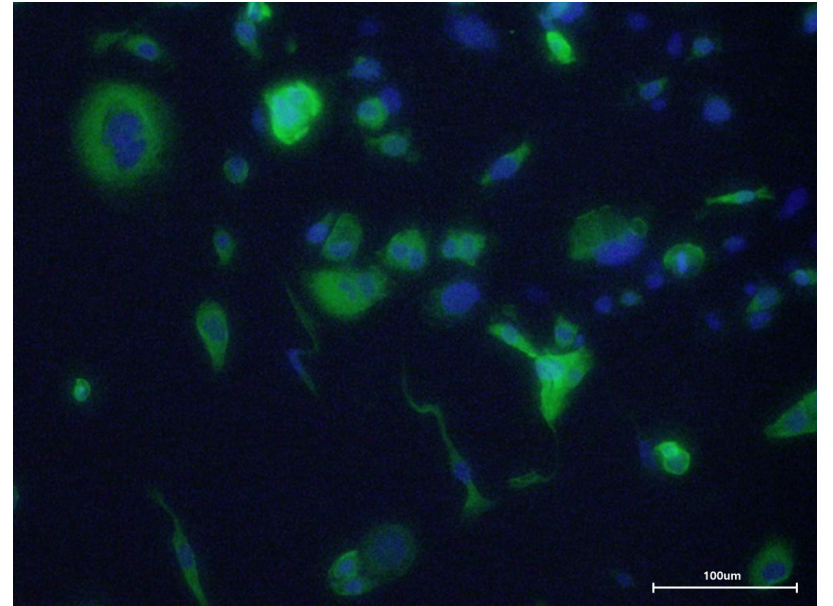


# YPAC-29

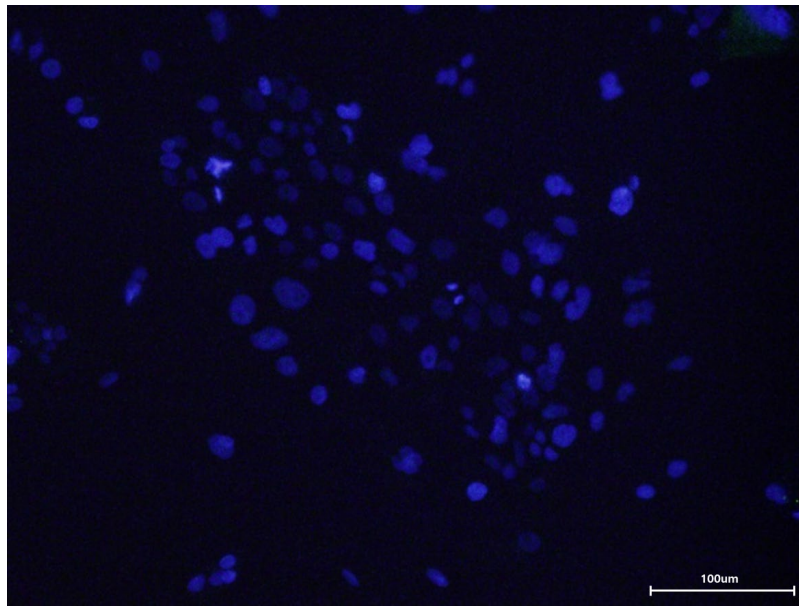
**a-Amylase**



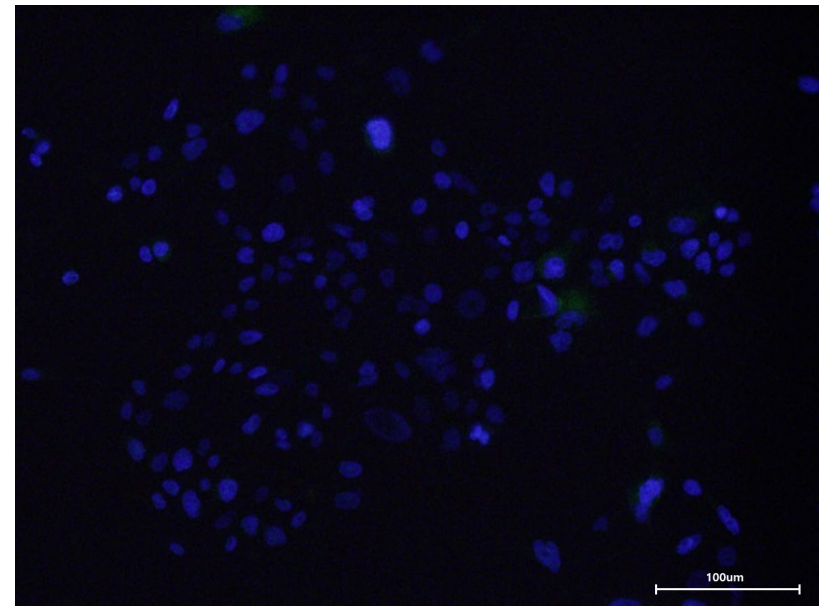
**Cytokeratin 19**



**Insulin**

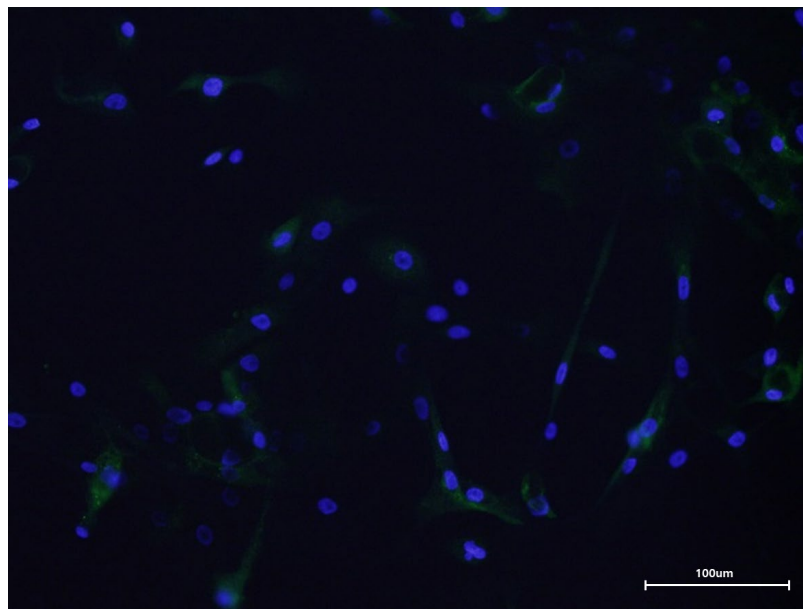


**Vimentin**

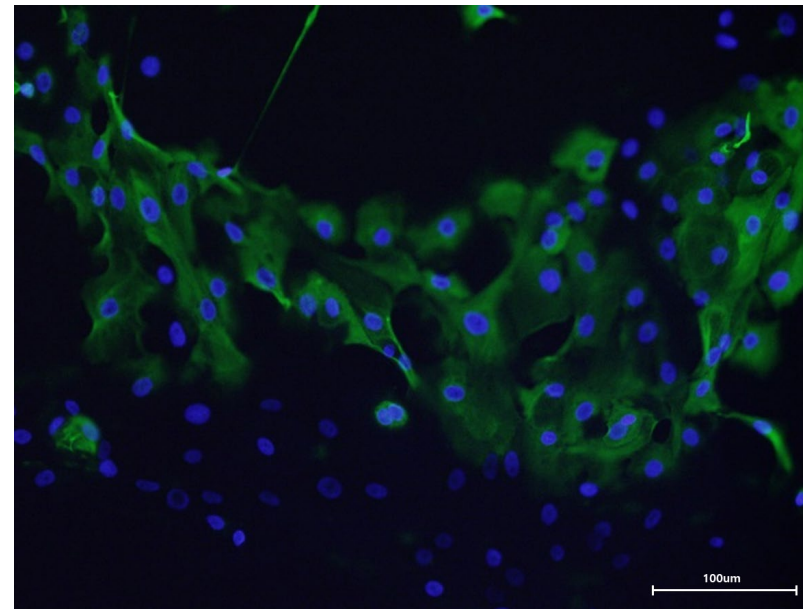


# YPAC-30

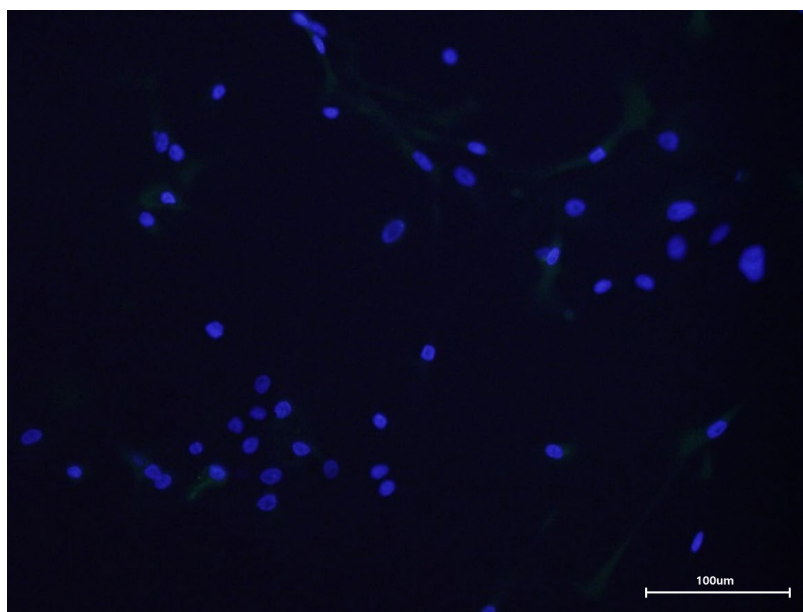
**a-Amylase**



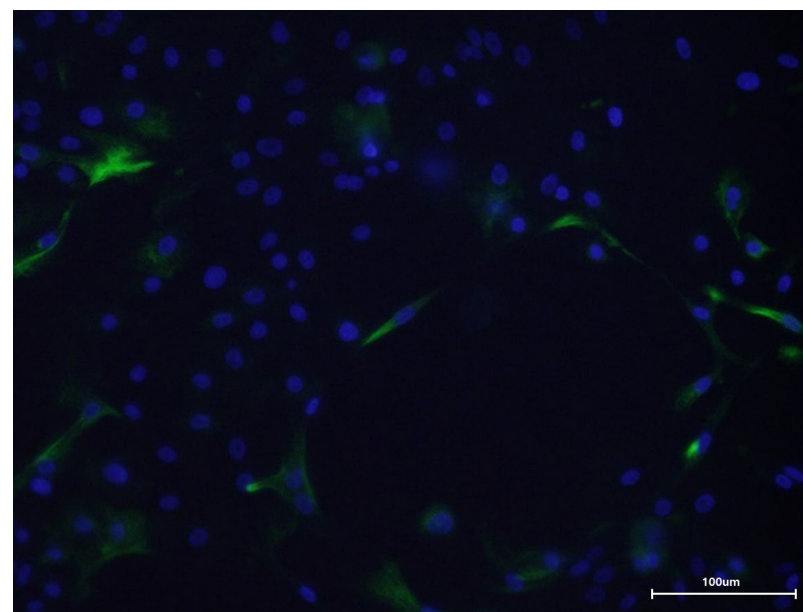
**Cytokeratin 19**



**Insulin**

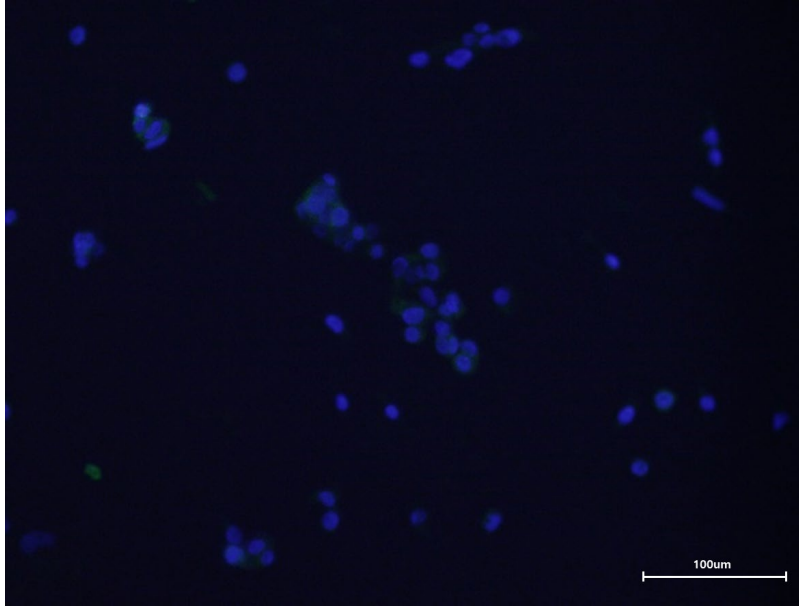


**Vimentin**

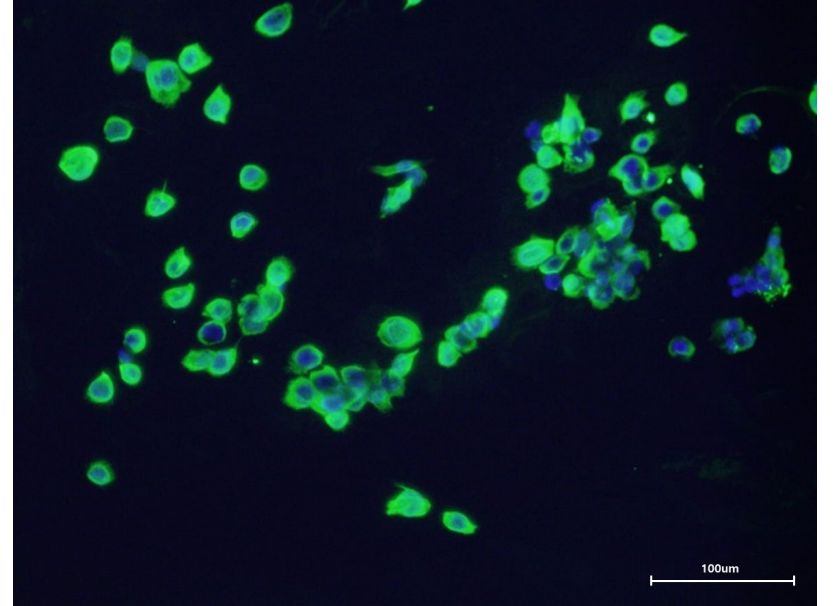


# YPAC-31

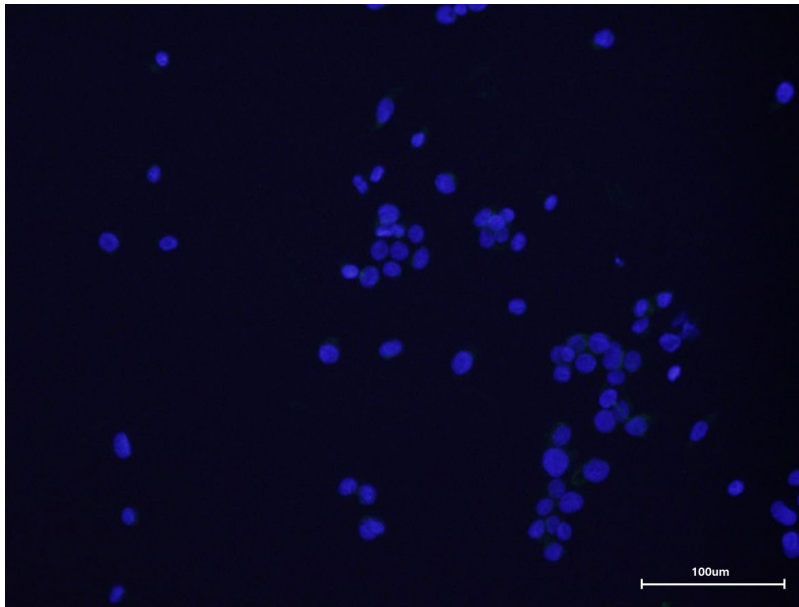
**a-Amylase**



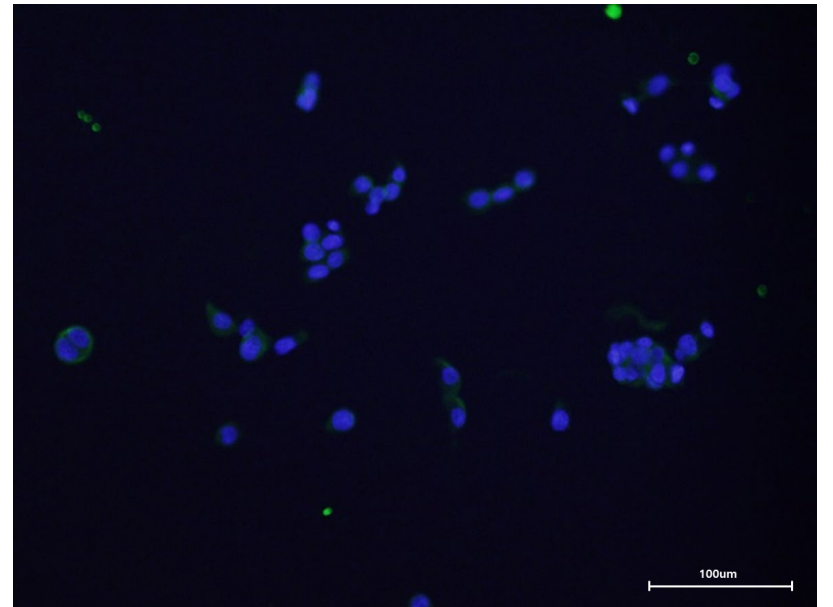
**Cytokeratin 19**



**Insulin**

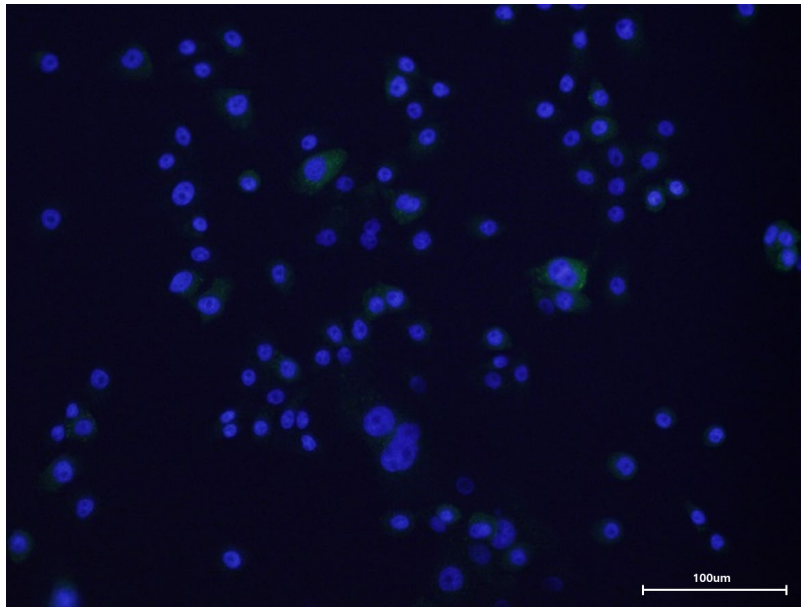


**Vimentin**

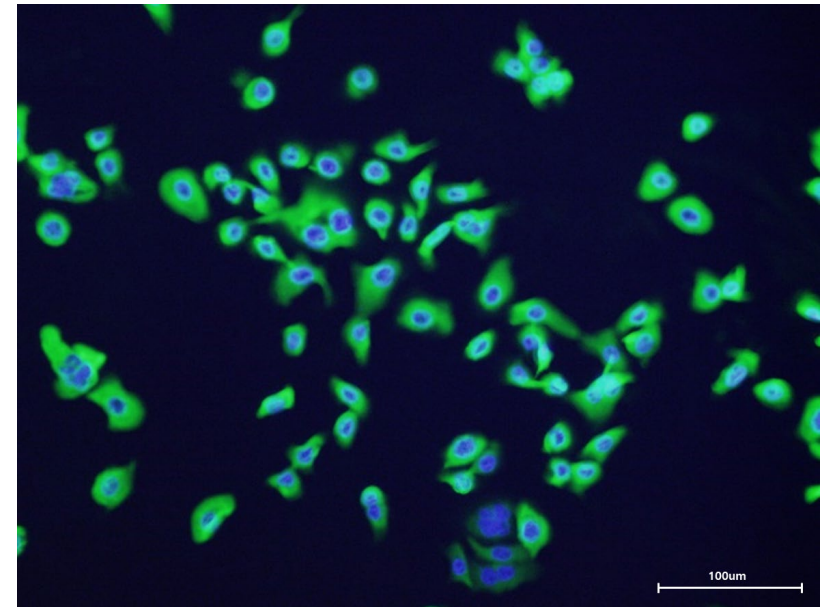


# YPAC-32

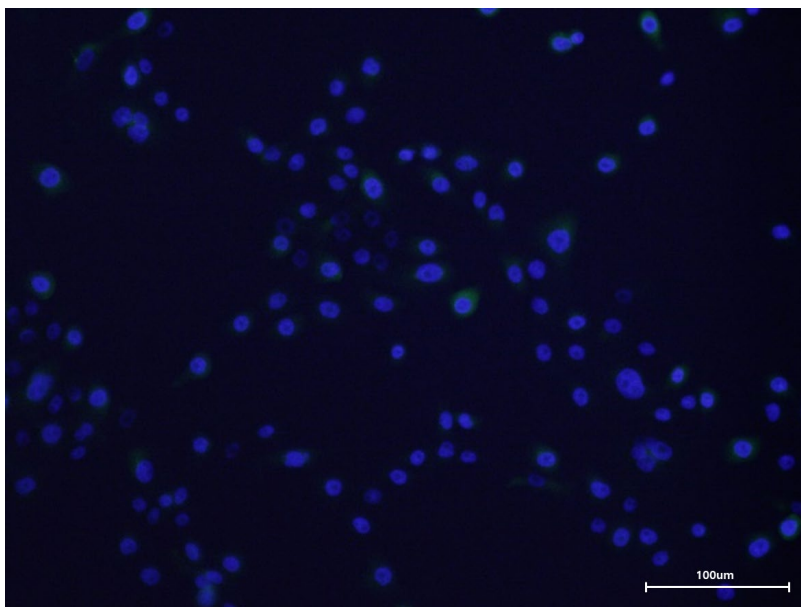
**a-Amylase**



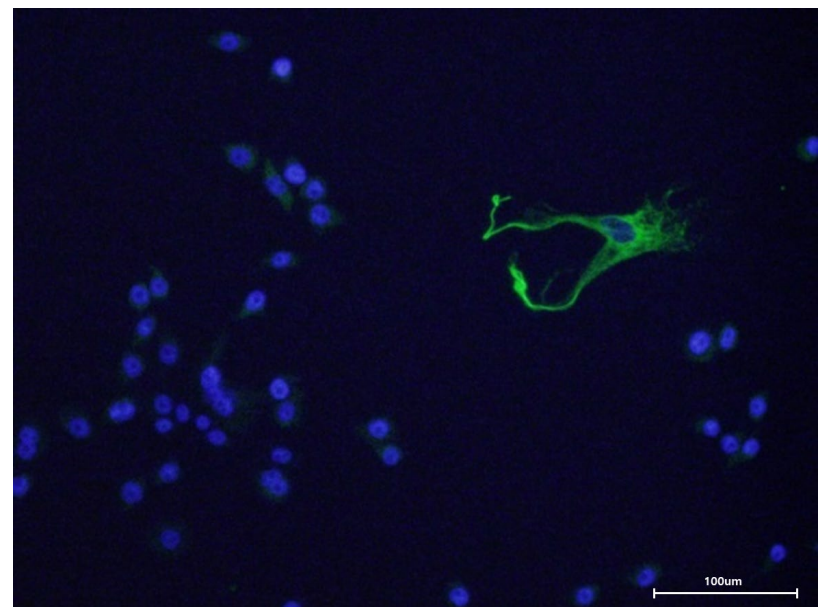
**Cytokeratin 19**



**Insulin**

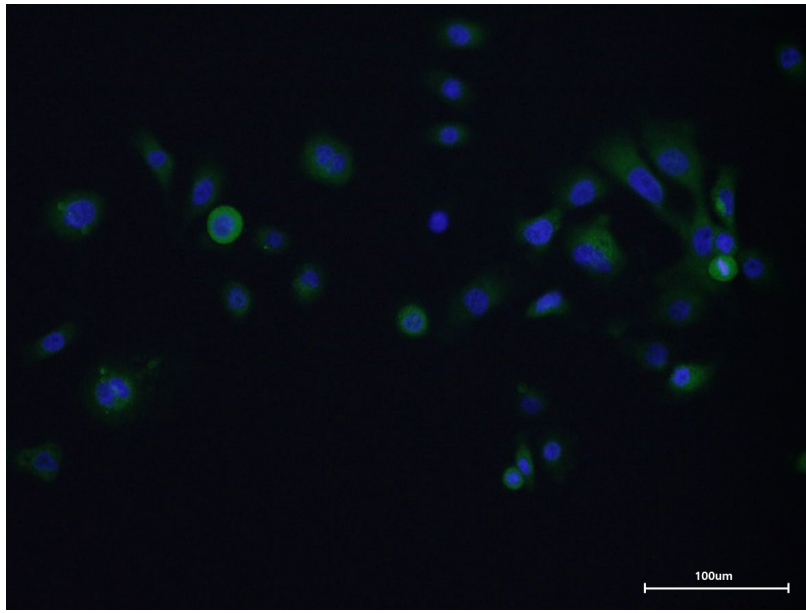


**Vimentin**

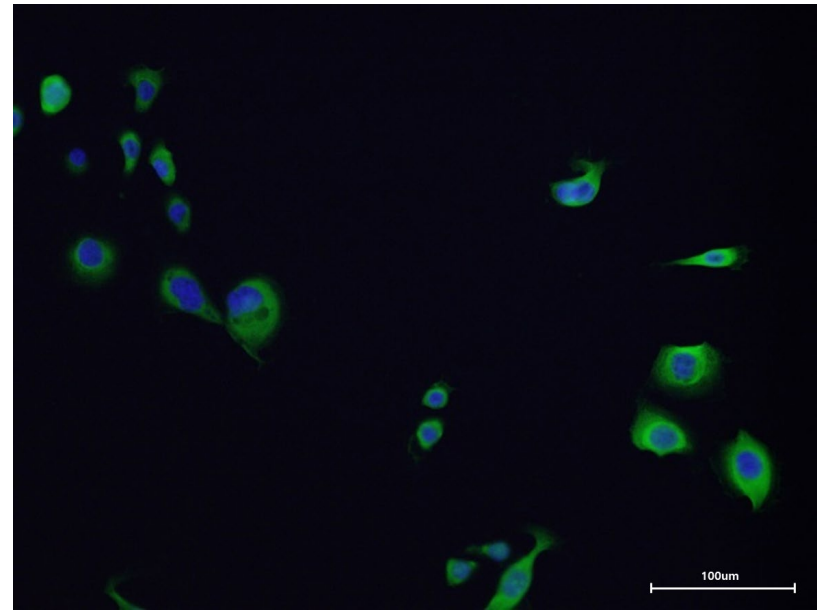


# YPAC-33

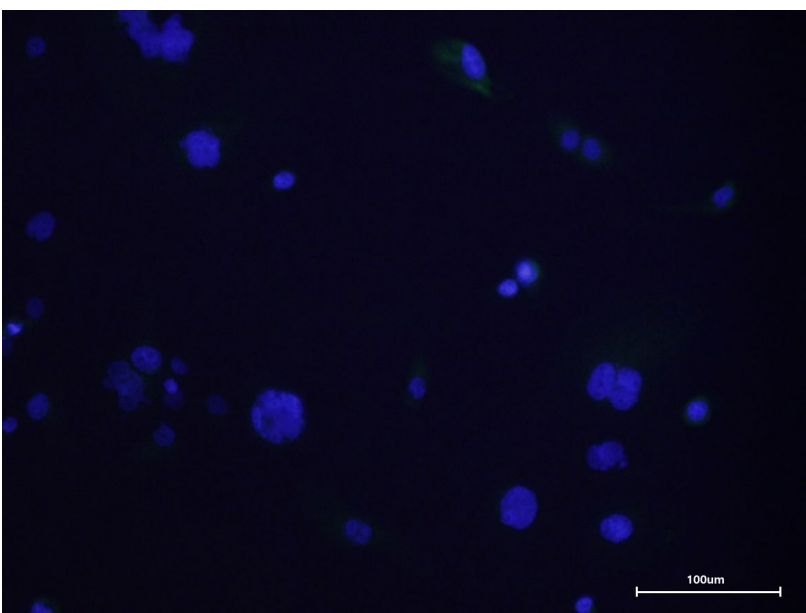
**a-Amylase**



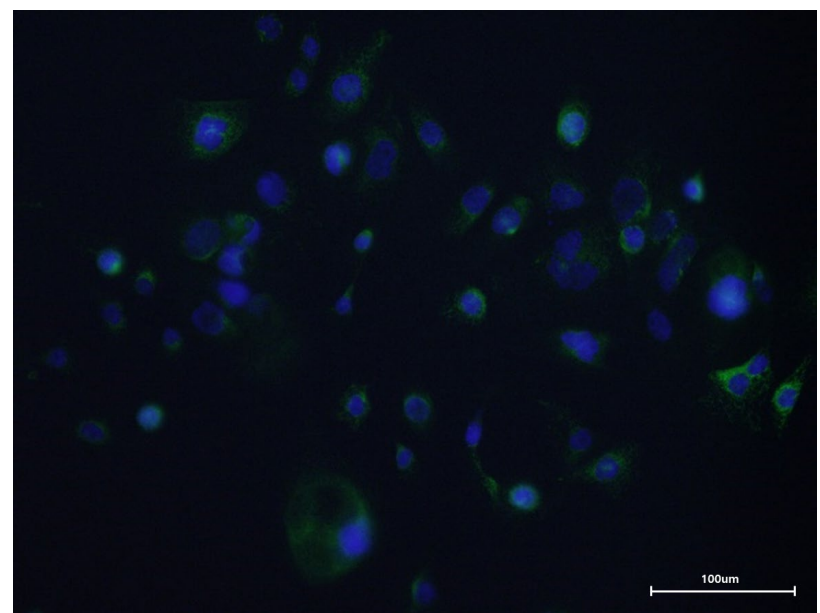
**Cytokeratin 19**



**Insulin**



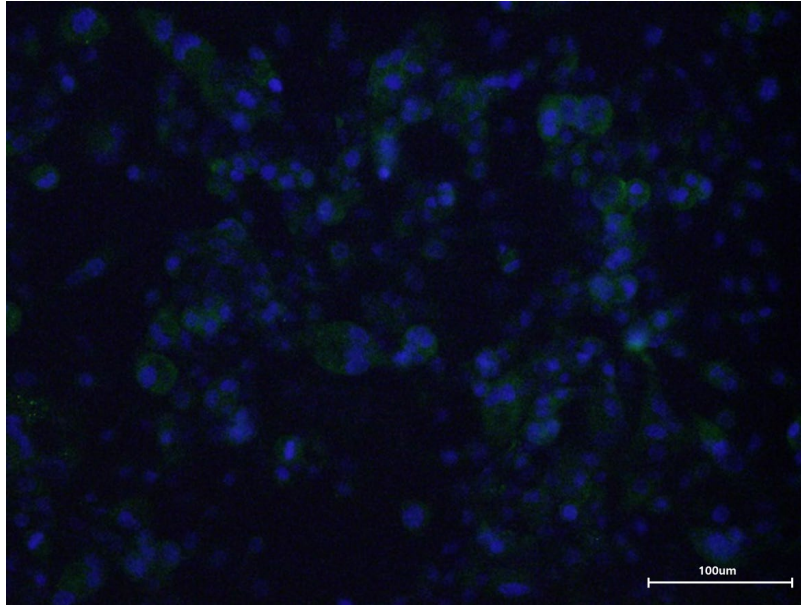
**Vimentin**



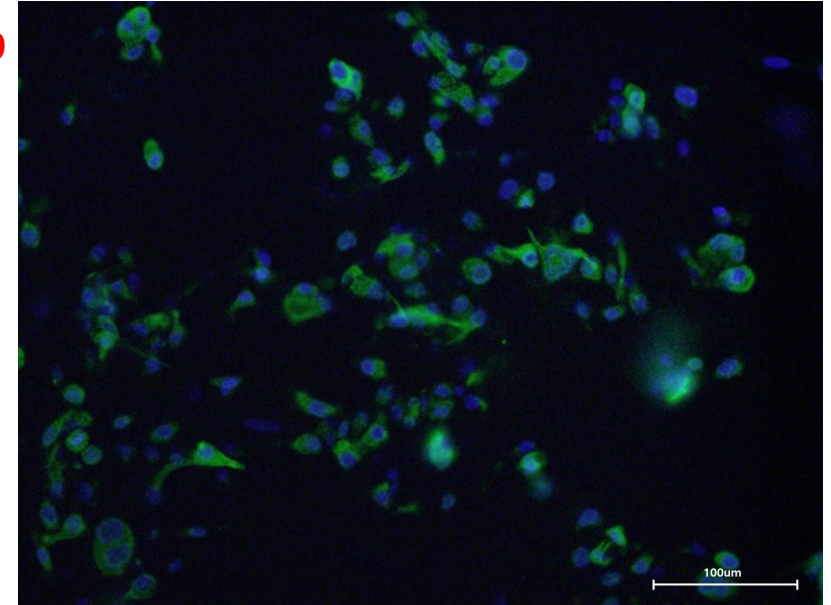


# YPAC-34

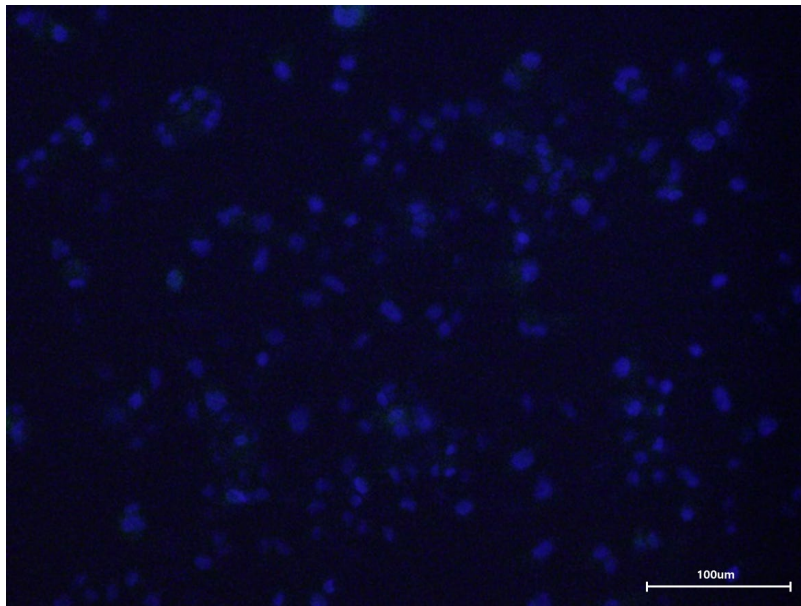
**a-Amylase**



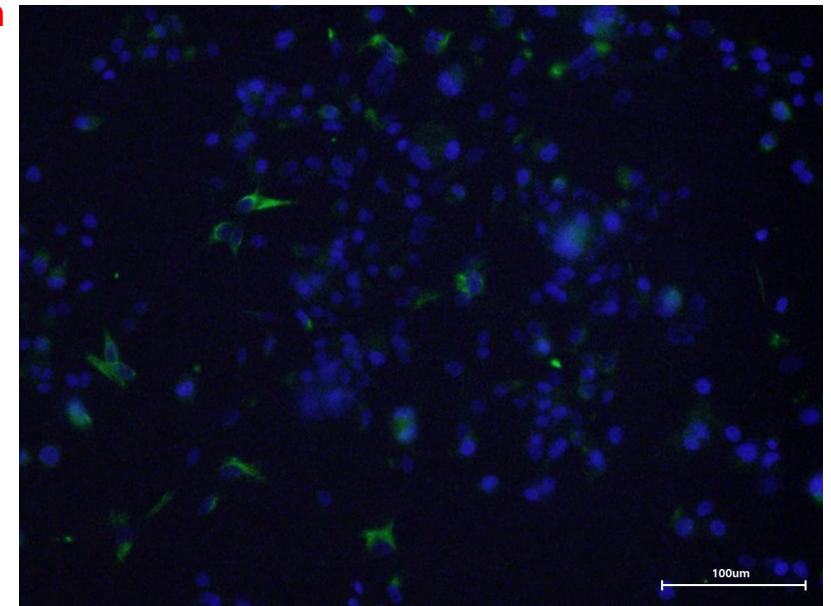
**Cytokeratin 19**



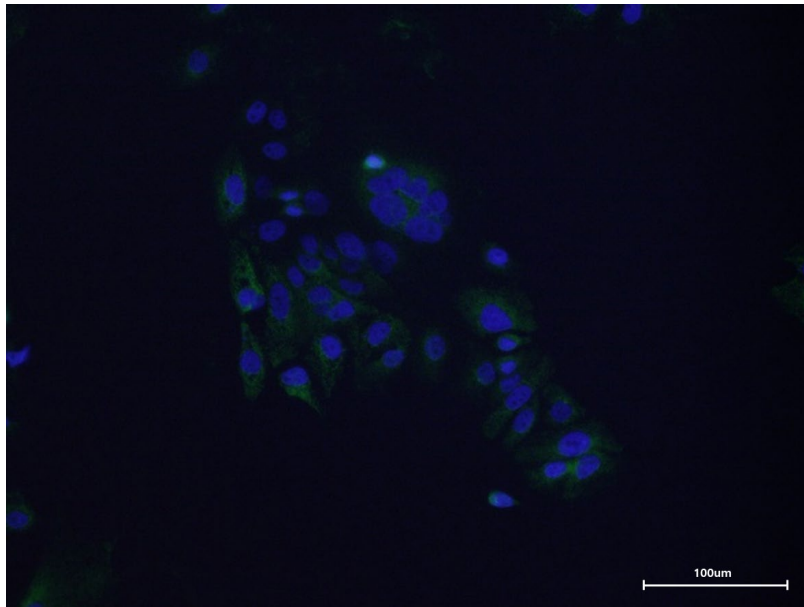
**Insulin**



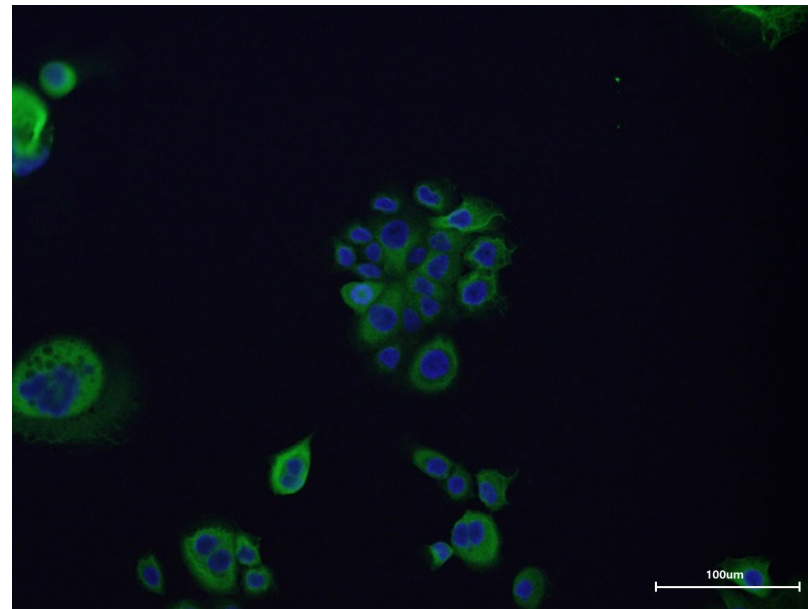
**Vimentin**



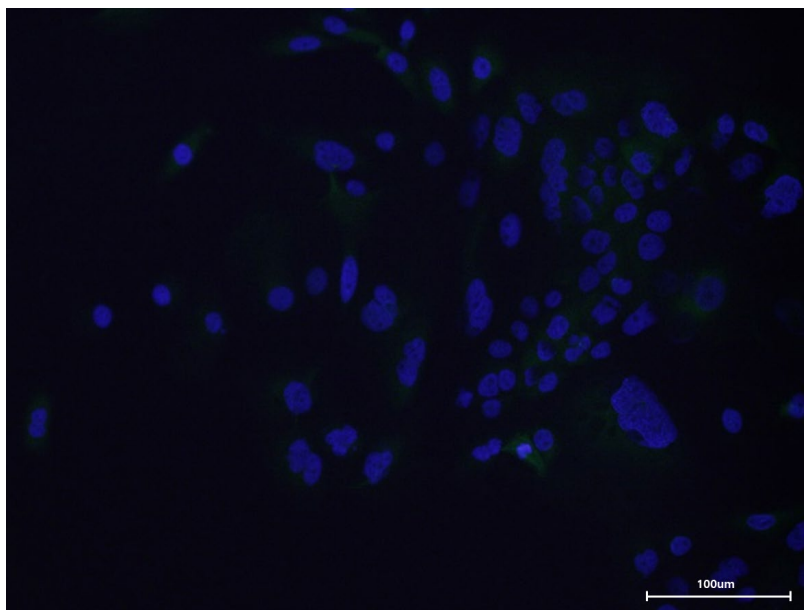
**a-Amylase**



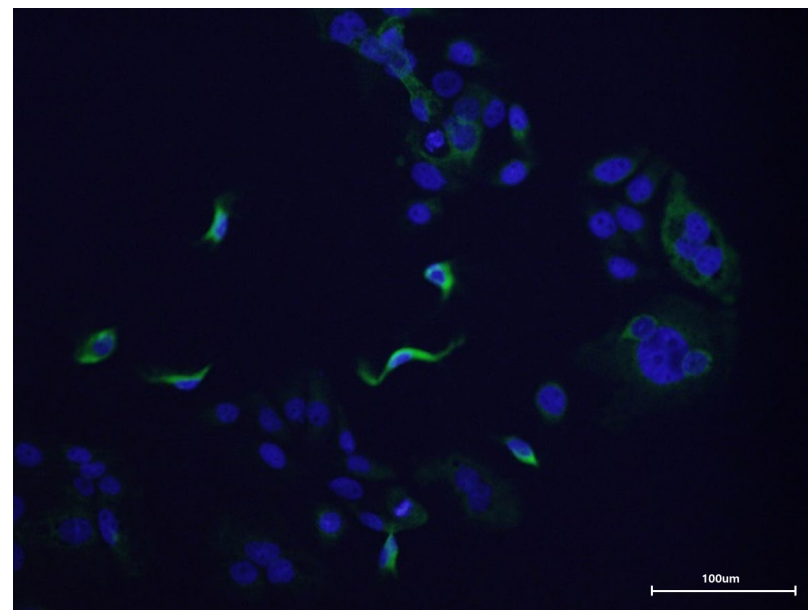
**Cytokeratin 19**



**Insulin**

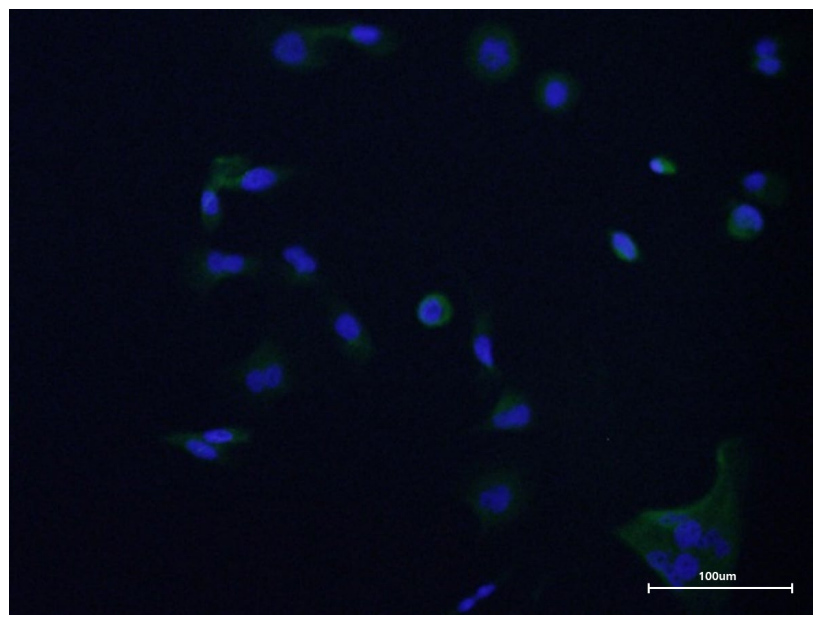


**Vimentin**

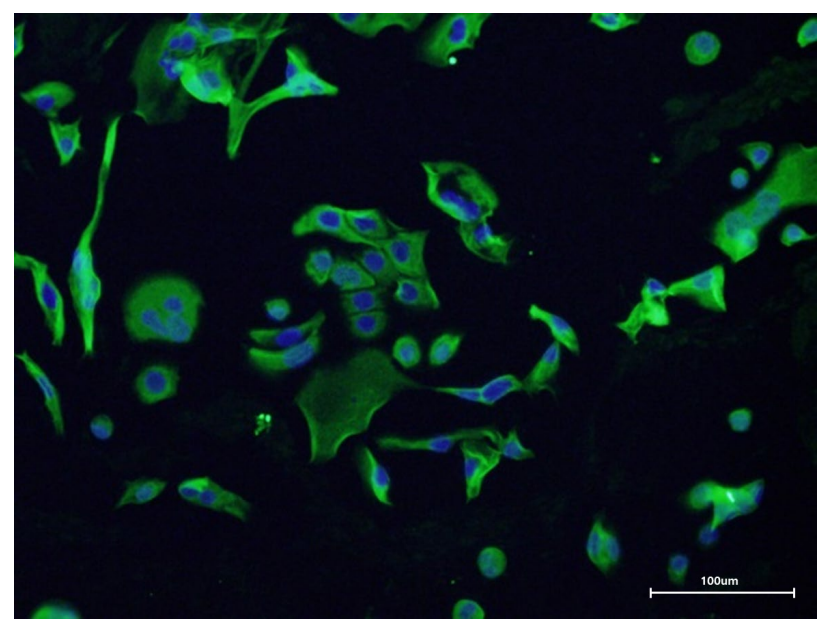


# YPAC-37

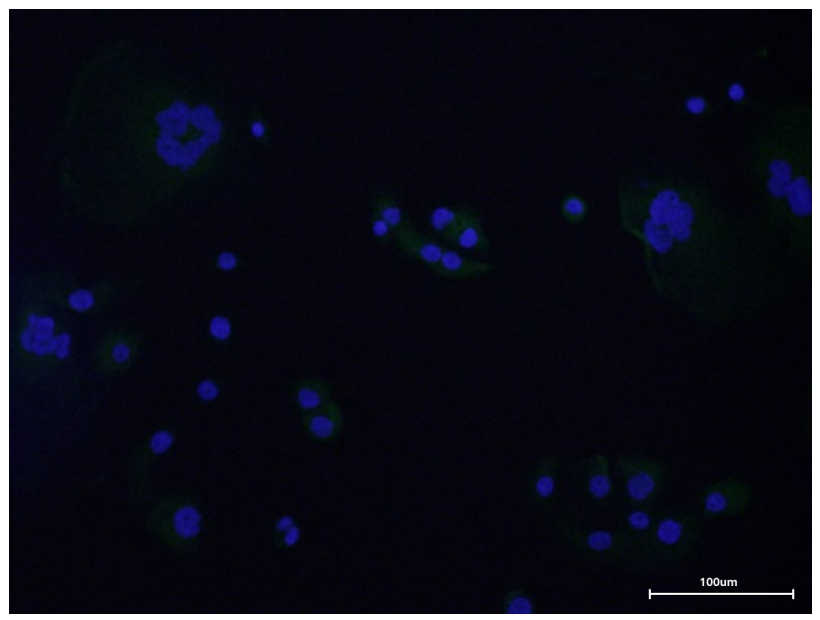
**a-Amylase**



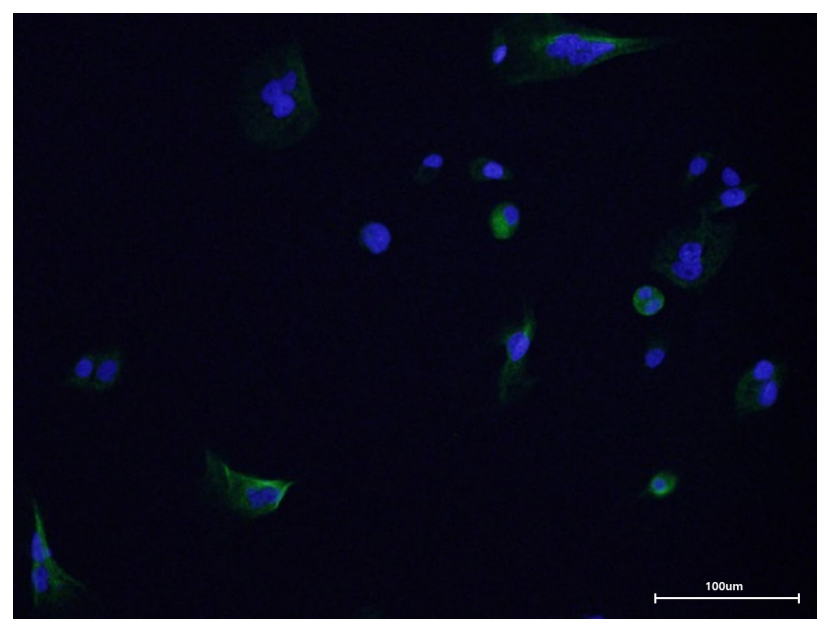
**Cytokeratin 19**



**Insulin**

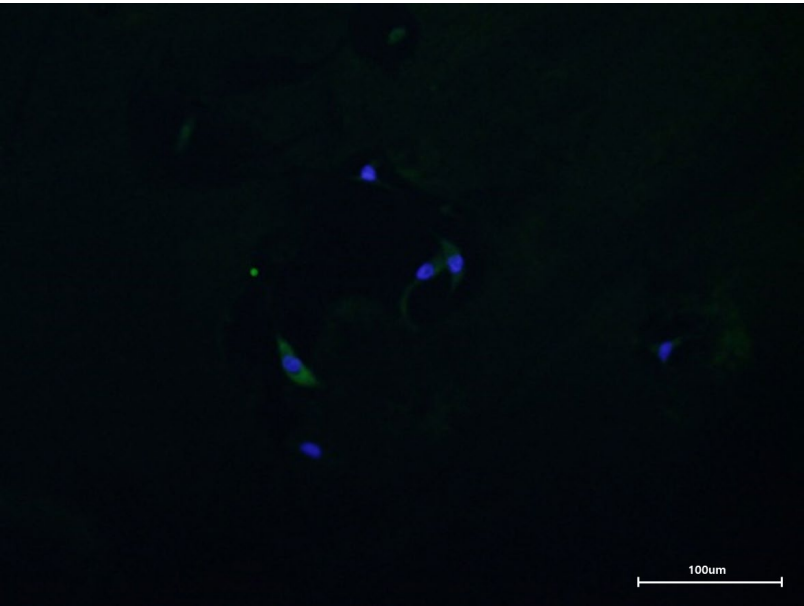


**Vimentin**

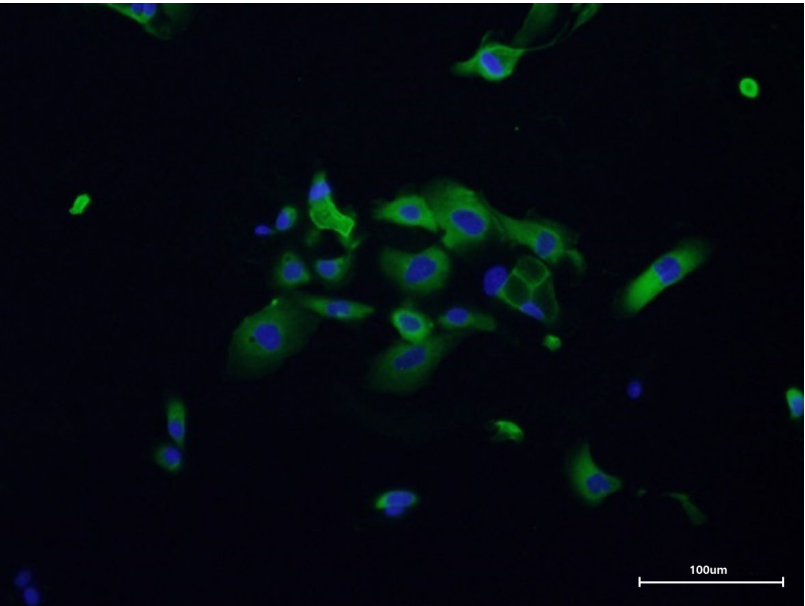


YPAC-39

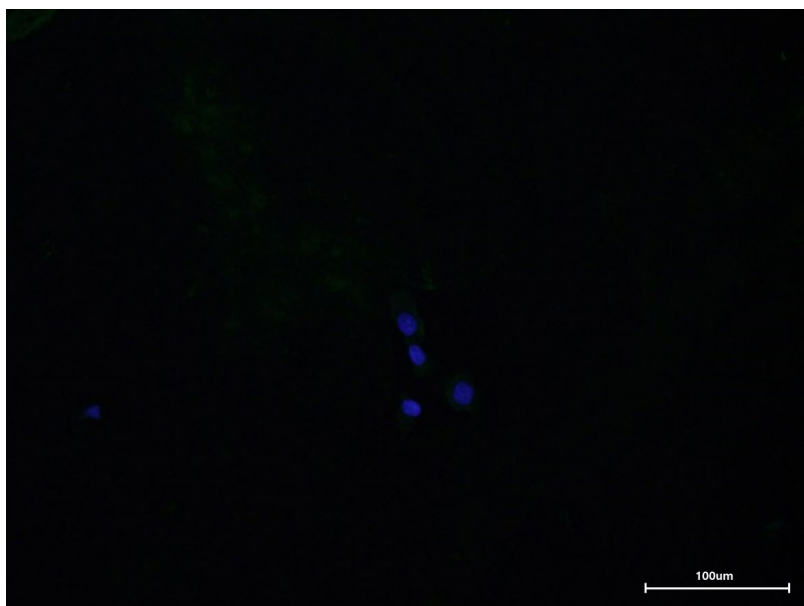
**a-Amylase**



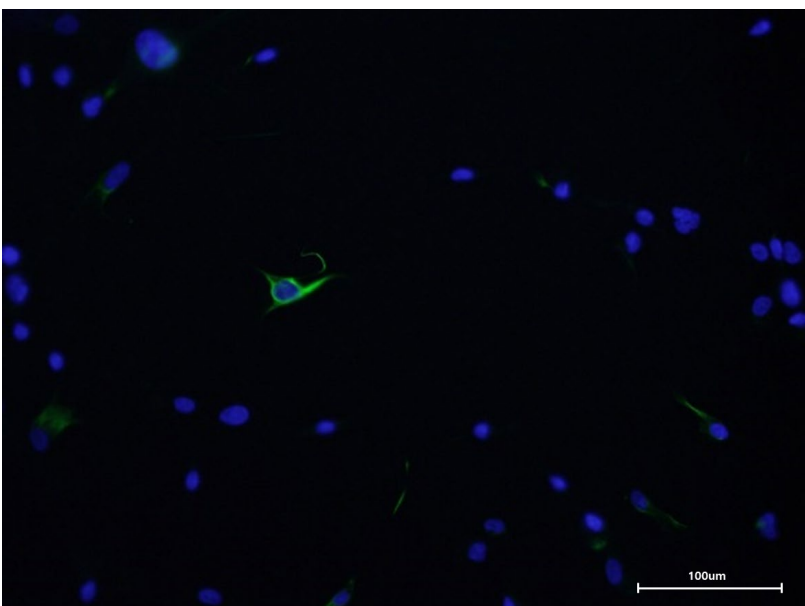
**Cytokeratin 19**



**Insulin**

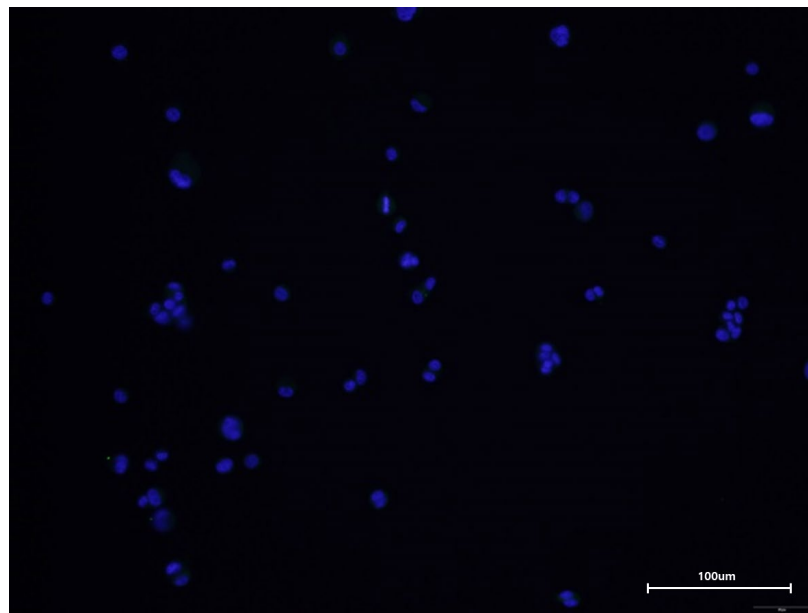


**Vimentin**

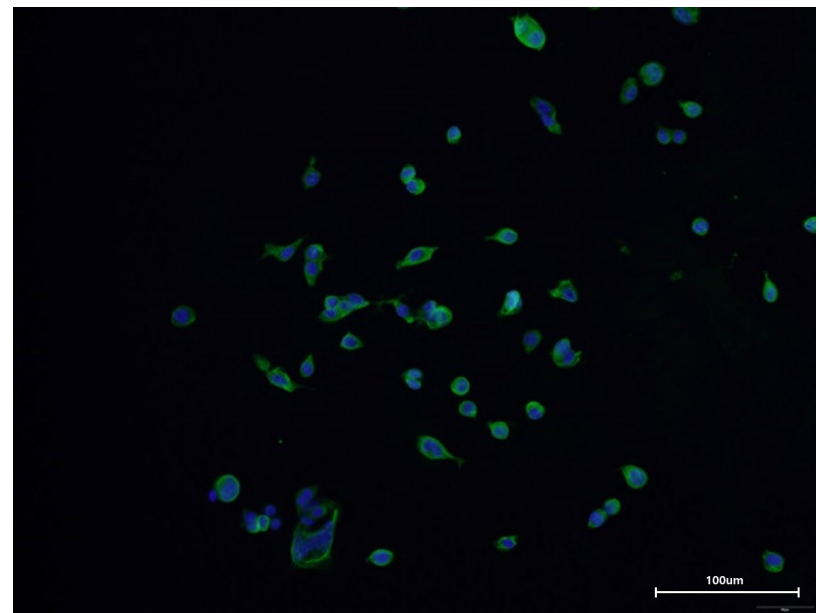


# YPAC-43

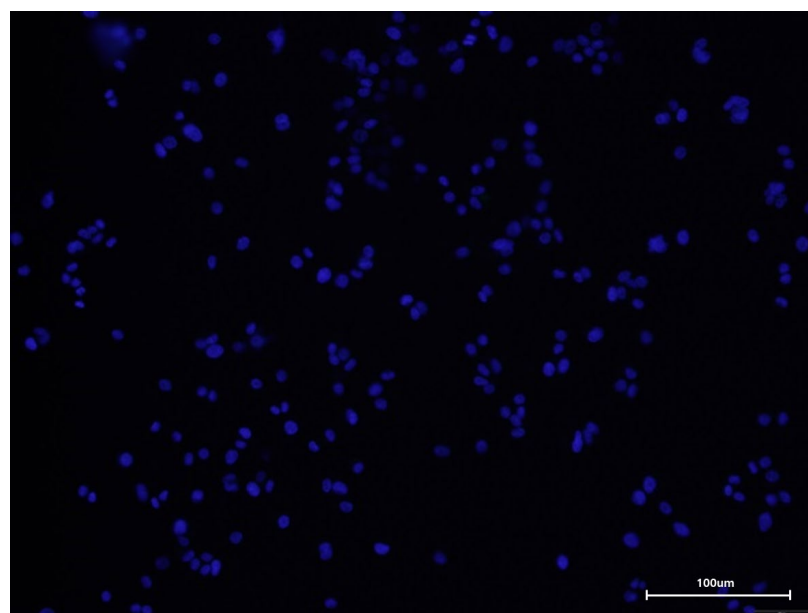
**a-Amylase**



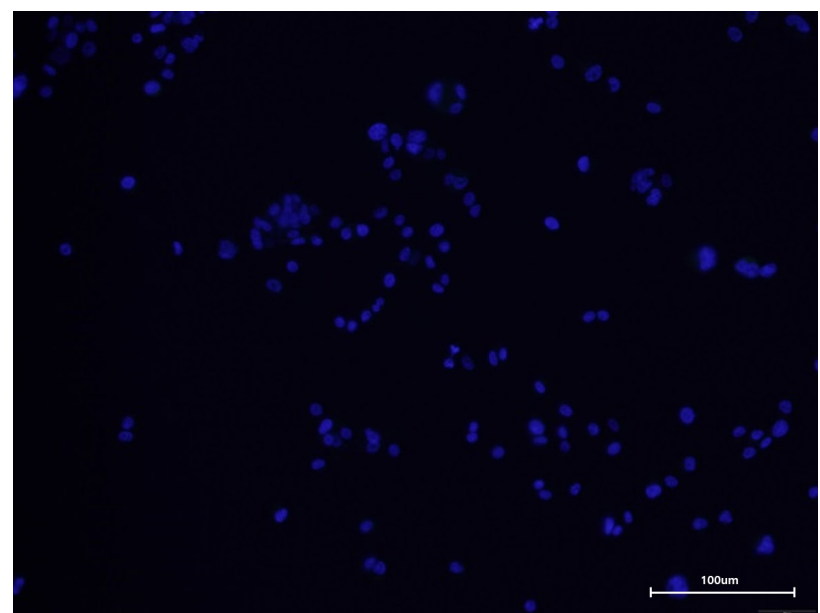
**Cytokeratin 19**



**Insulin**

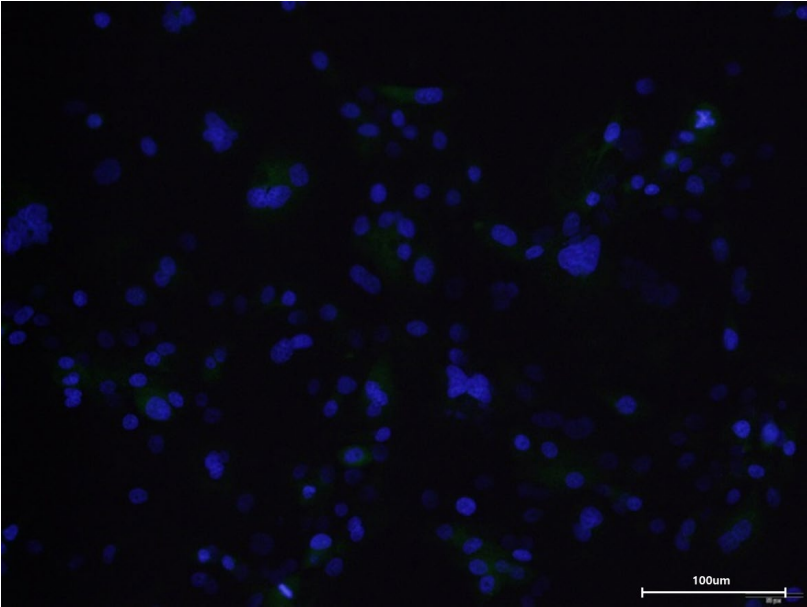


**Vimentin**

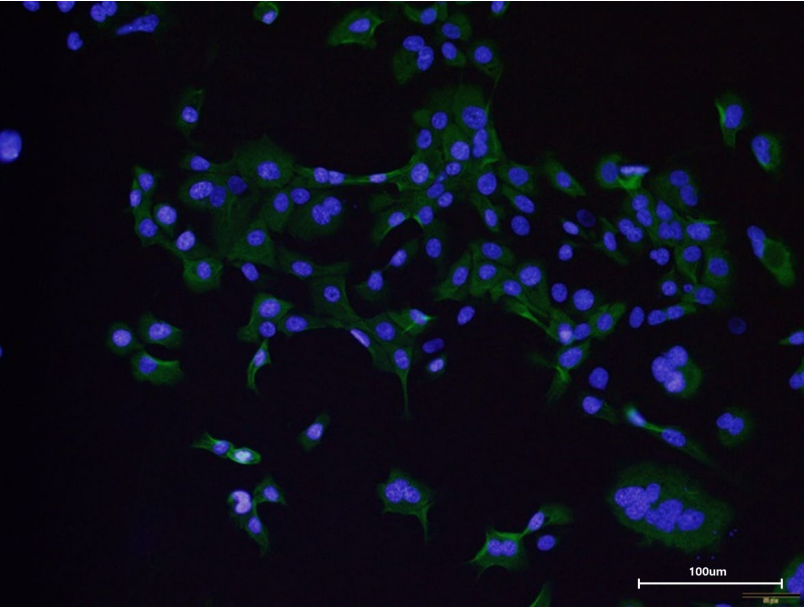


**YPAC-44**

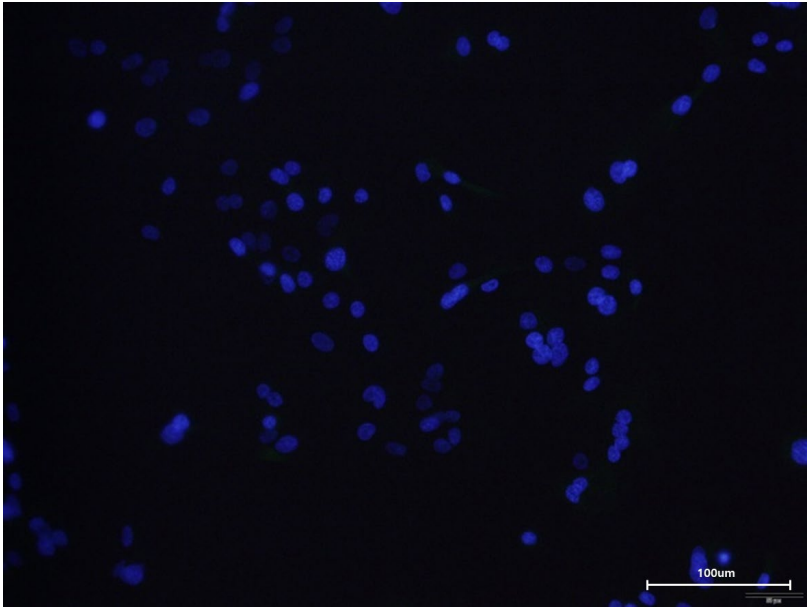
**a-Amylase**



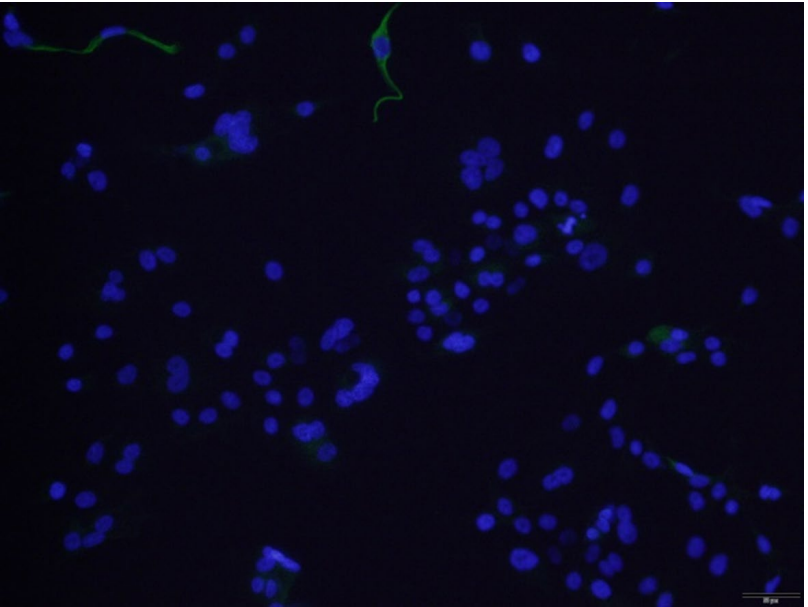
**Cytokeratin 19**



**Insulin**

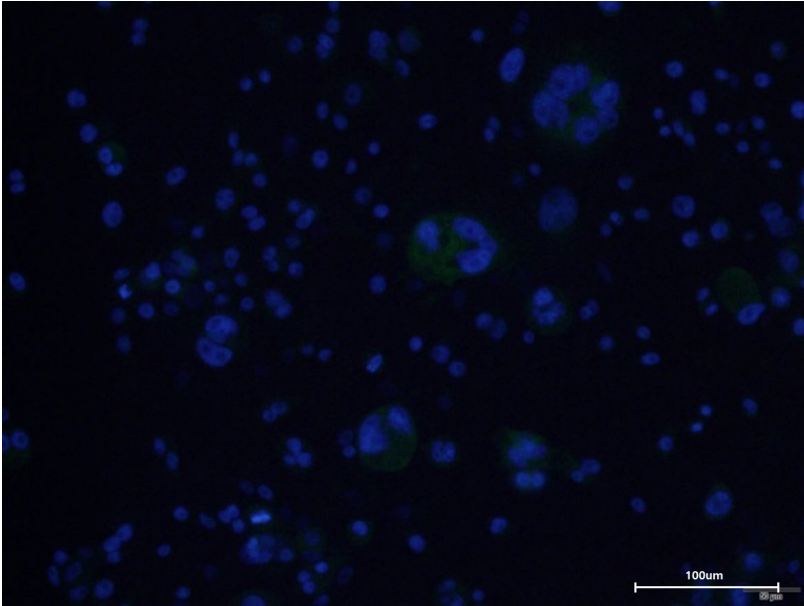


**Vimentin**

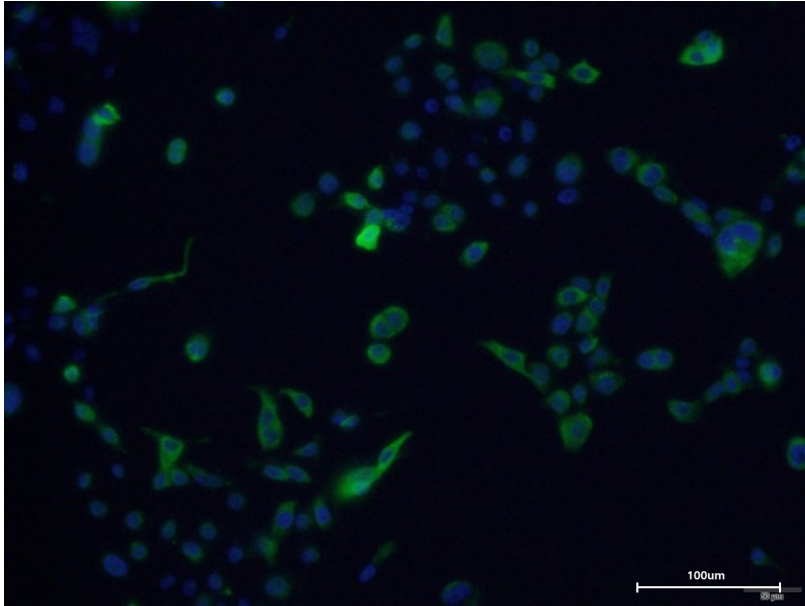


# YPAC-46

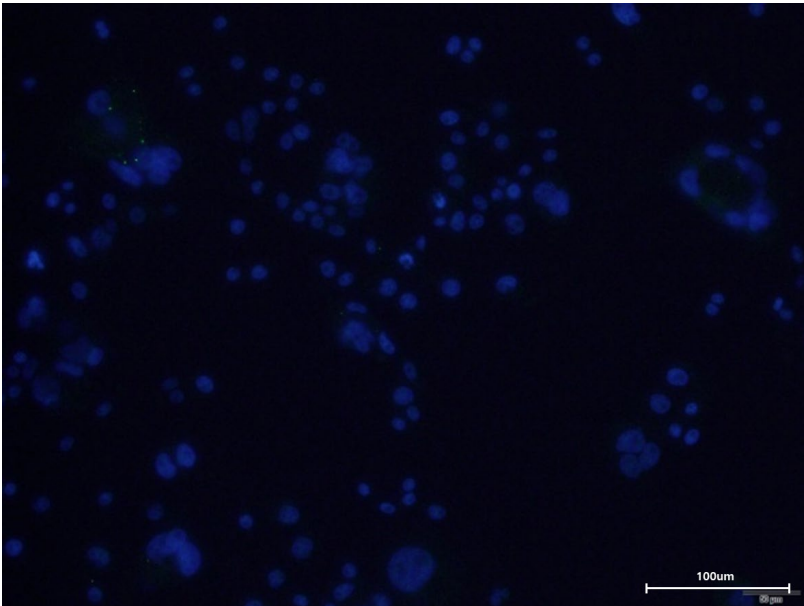
**a-Amylase**



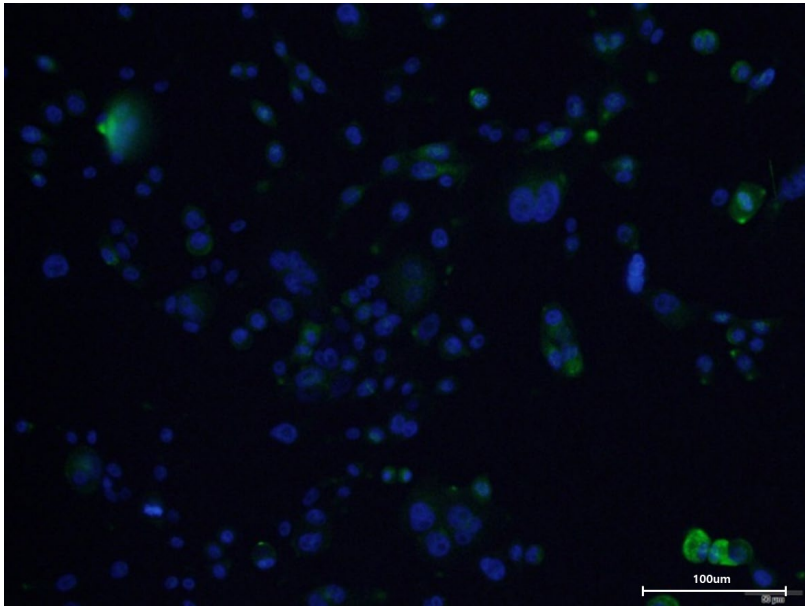
**Cytokeratin 19**



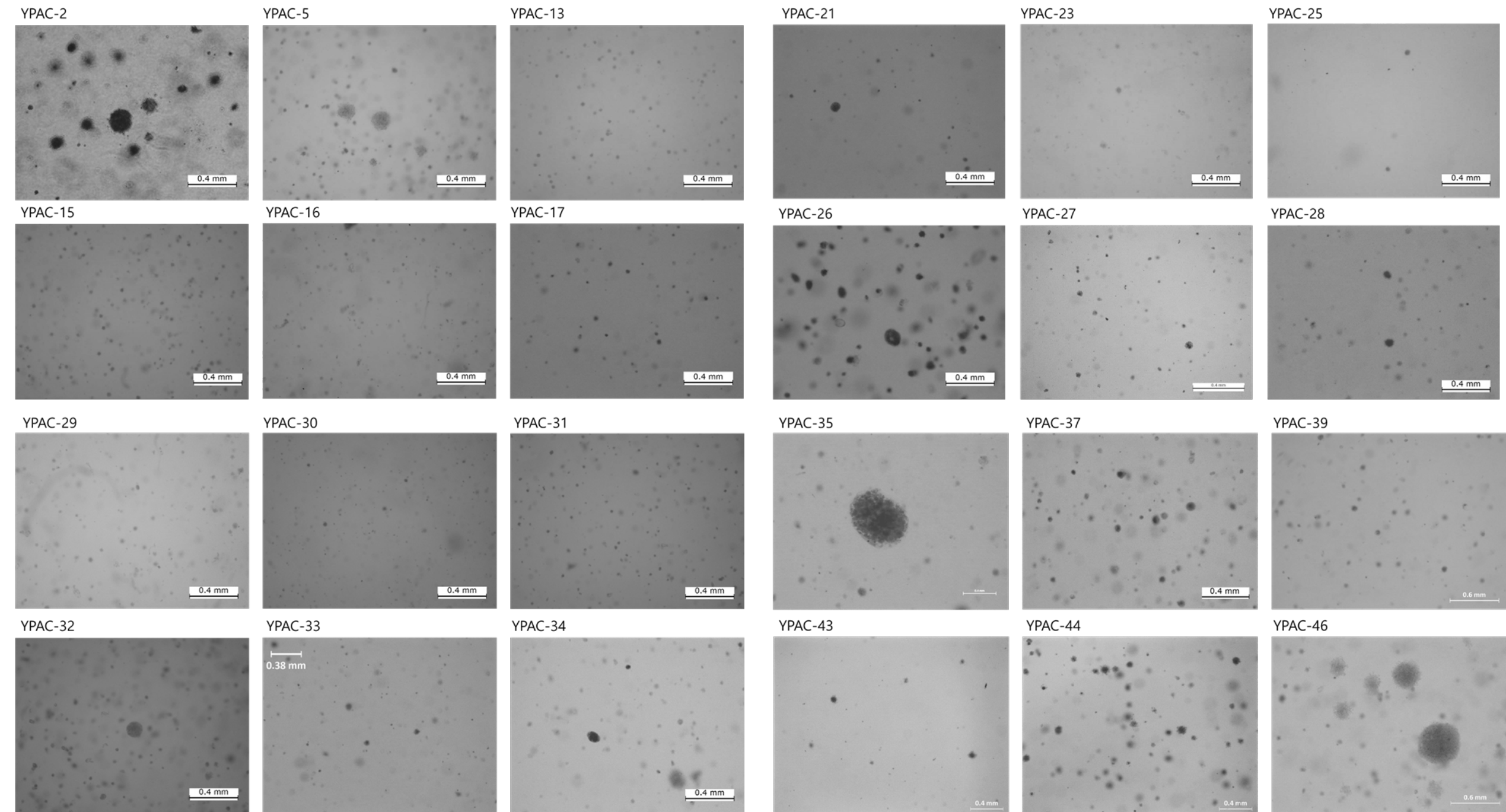
**Insulin**



**Vimentin**



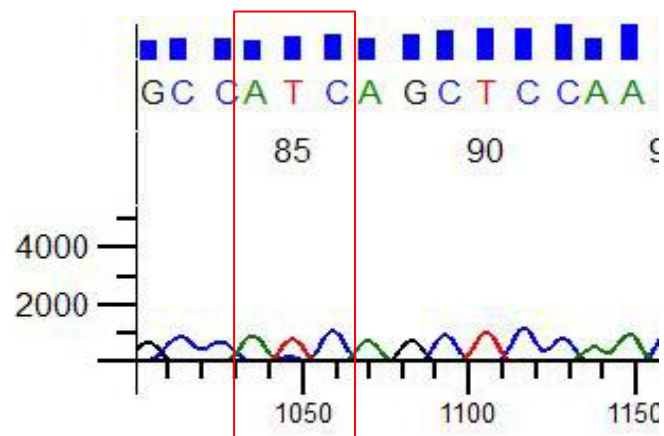
Supplementary Figure 4



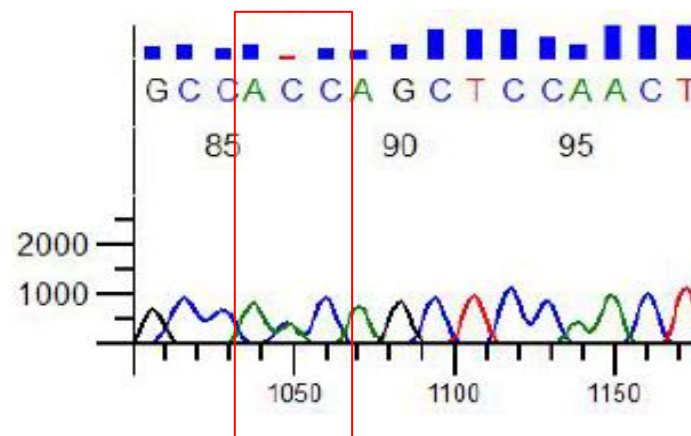


# Supplementary figure 5

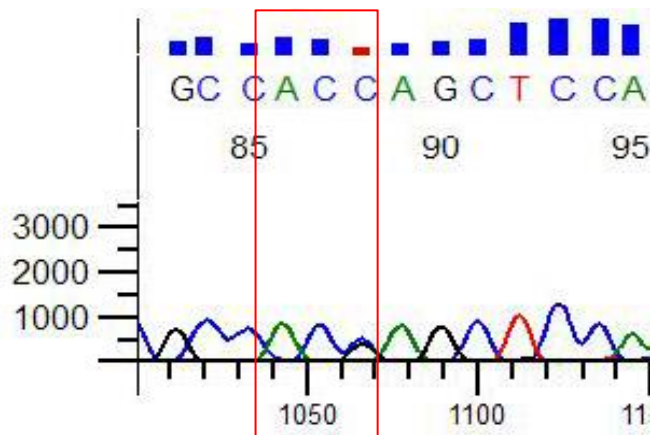
## YPAC-5



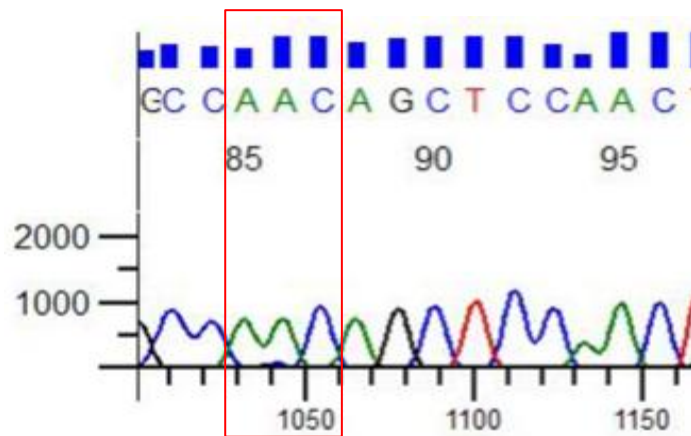
## YPAC-13



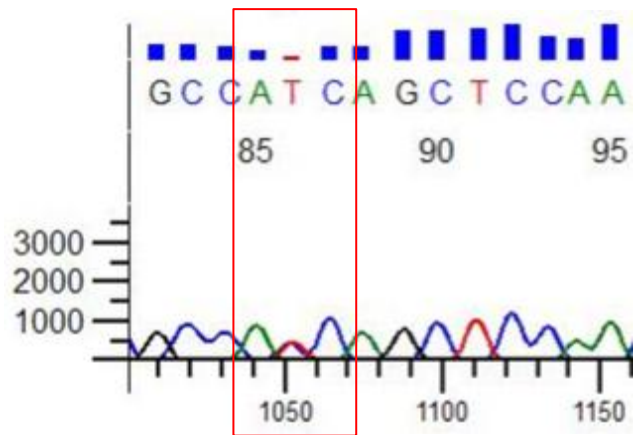
## YPAC-10



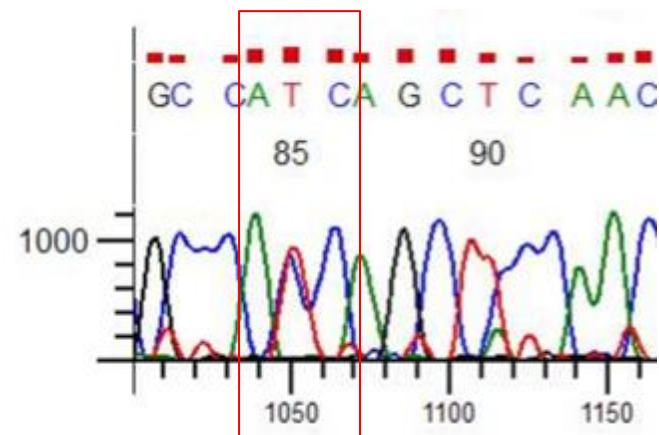
## YPAC-15



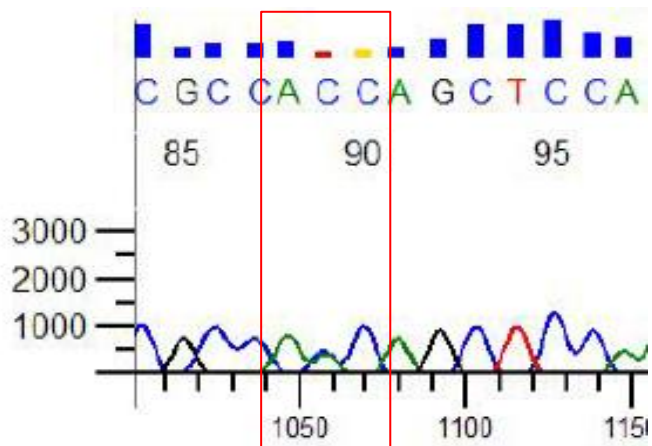
YPAC-16



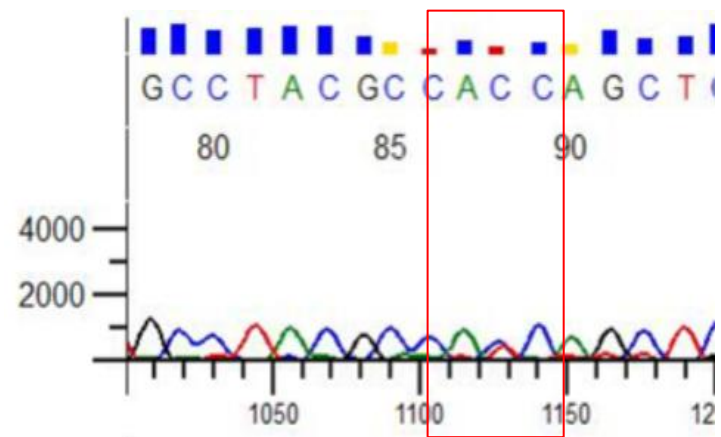
YPAC-20



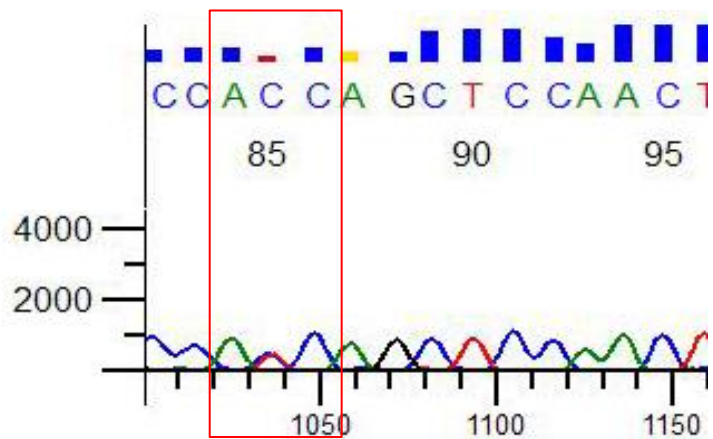
YPAC-17



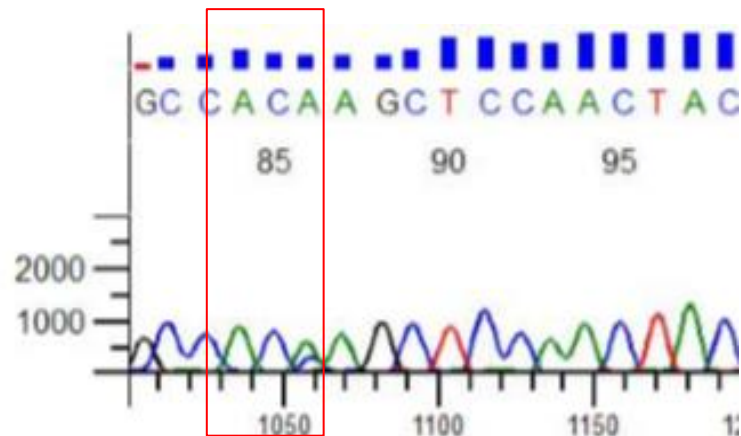
YPAC-21



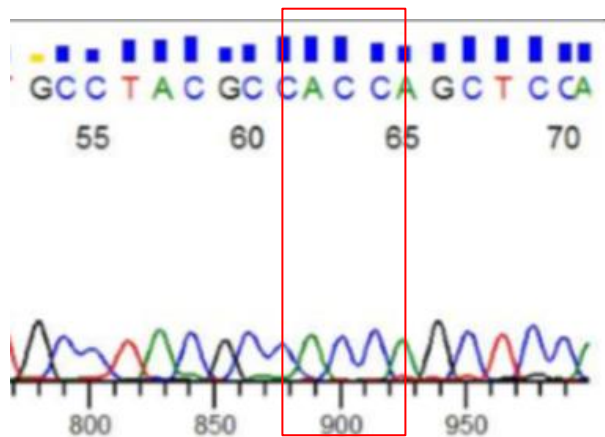
YPAC-23



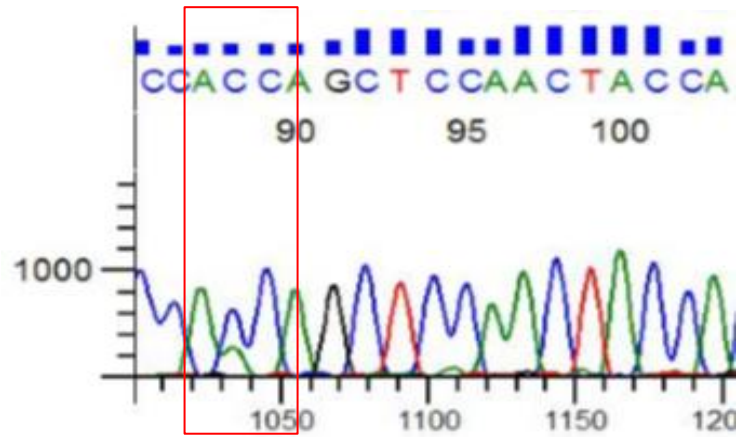
YPAC-26



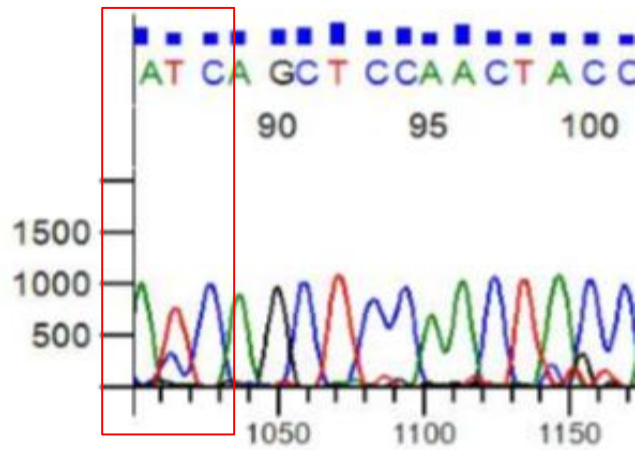
YPAC-25



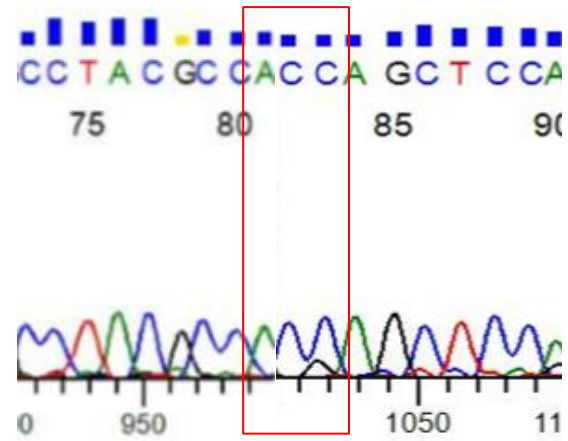
YPAC-27



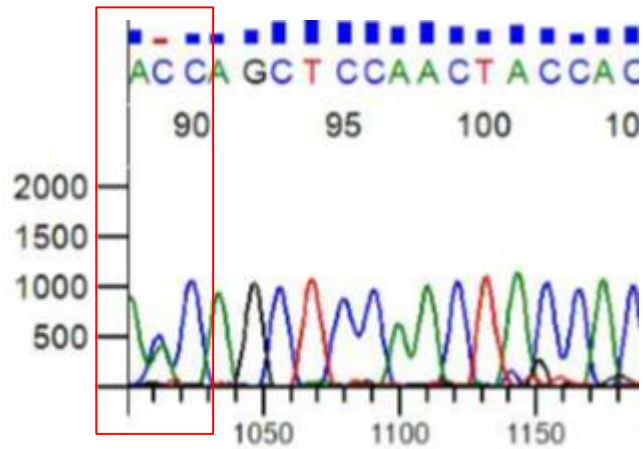
YPAC-27



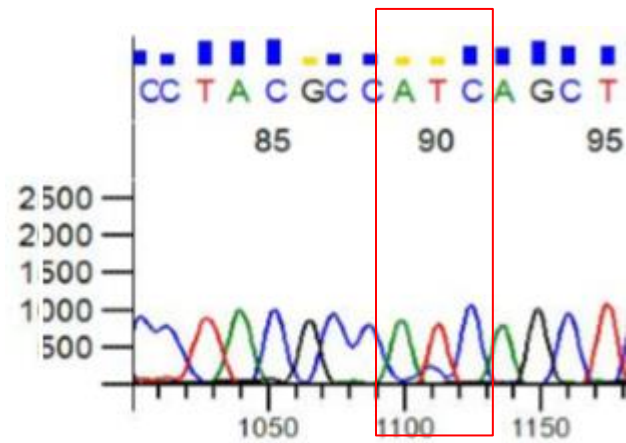
YPAC-30



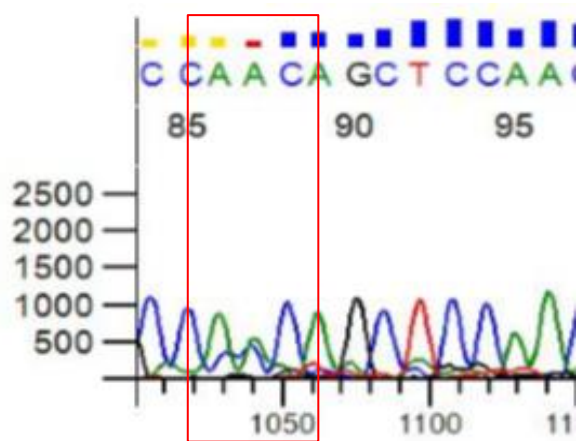
YPAC-28



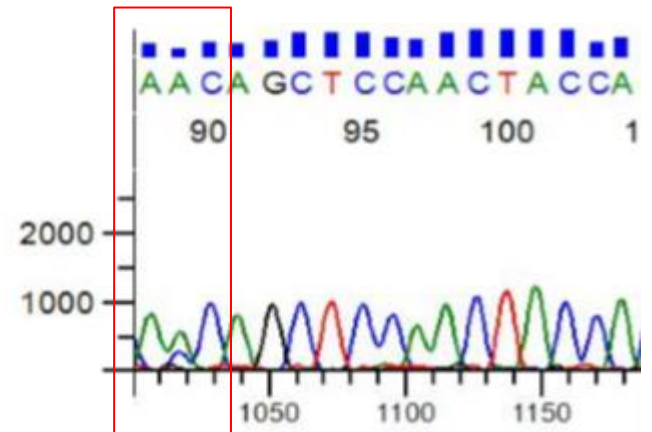
YPAC-32



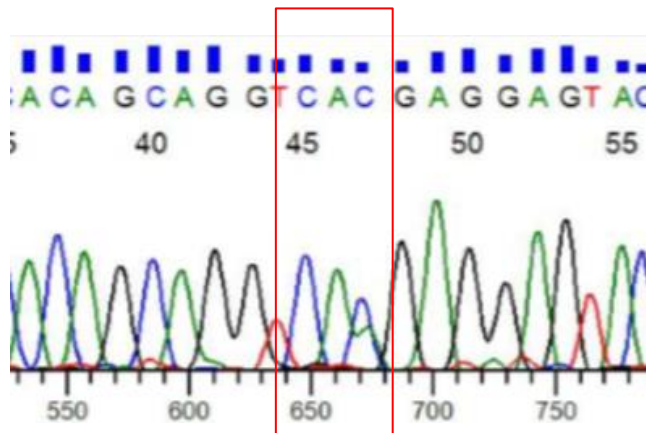
YPAC-33



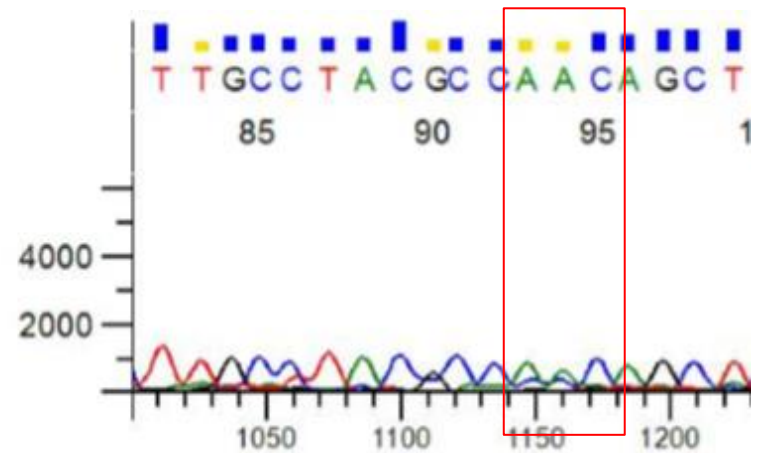
YPAC-35



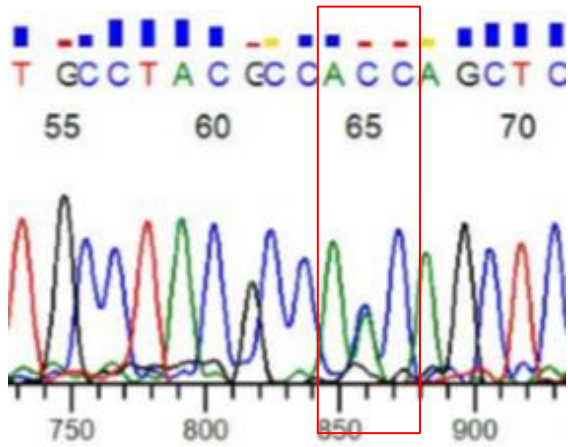
YPAC-34



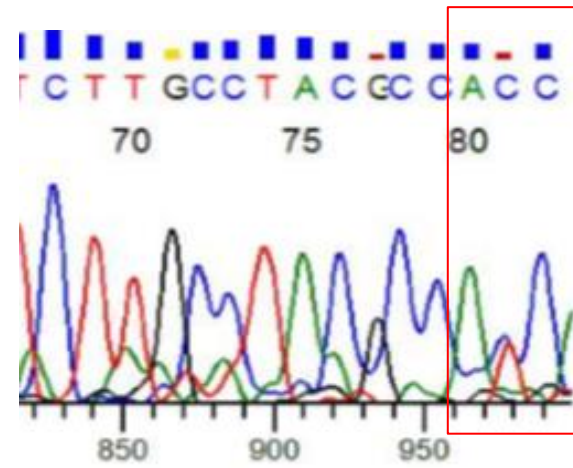
YPAC-37



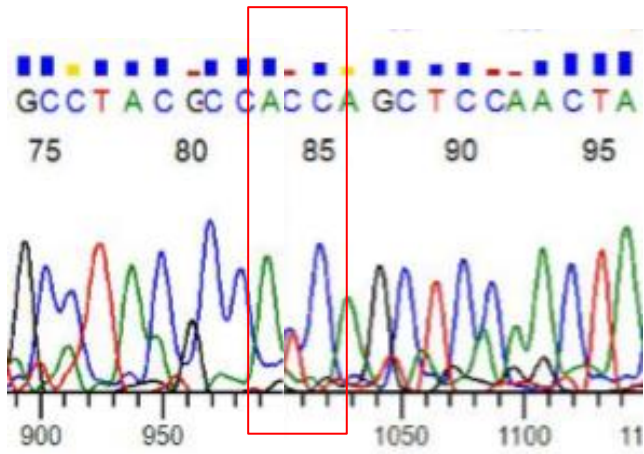
YPAC-39



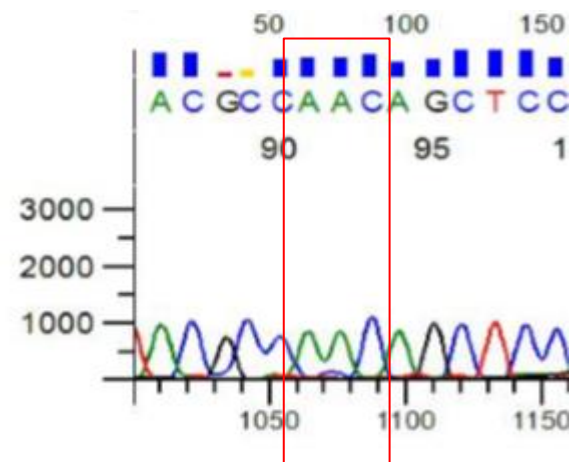
YPAC-44

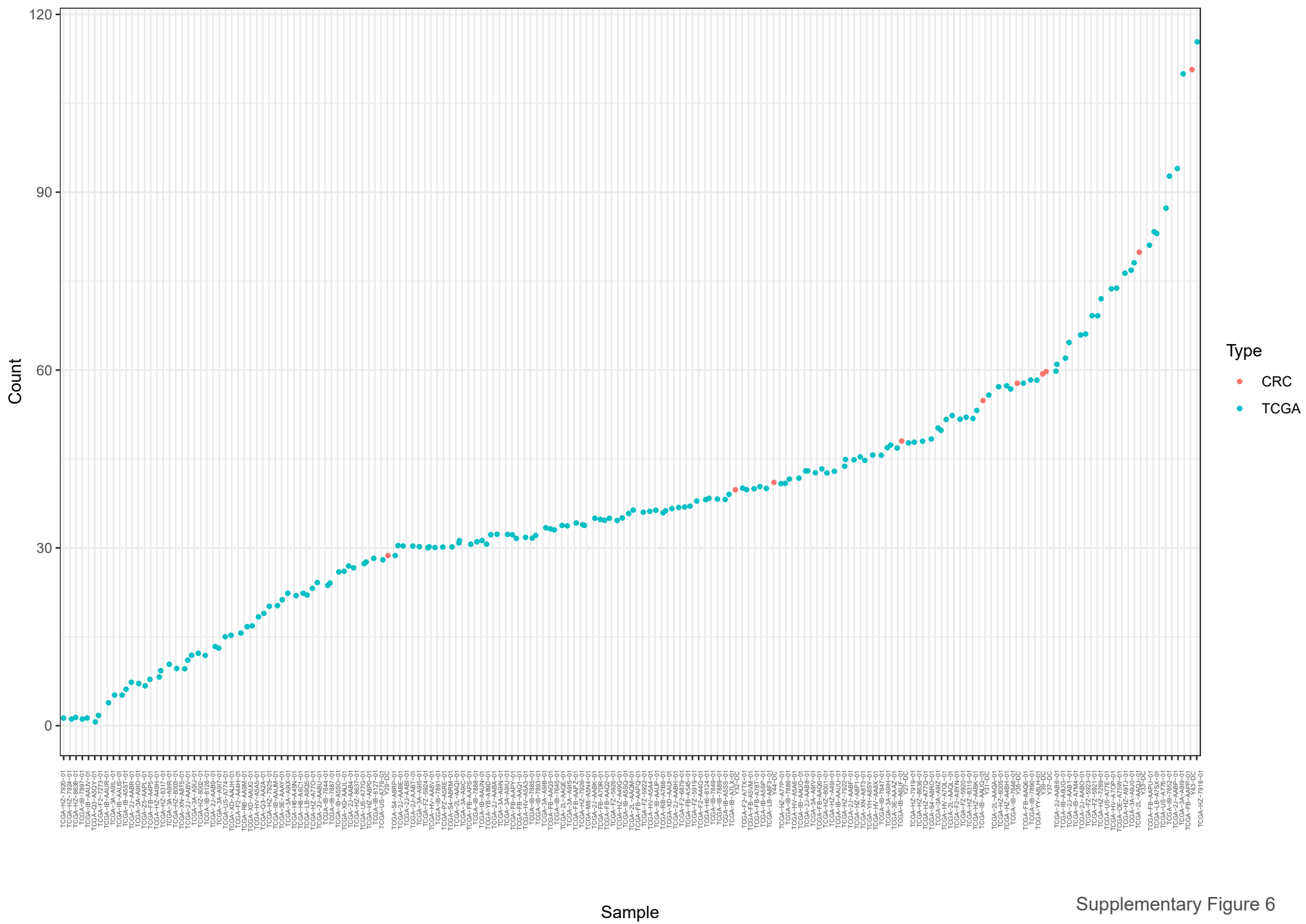


YPAC-43

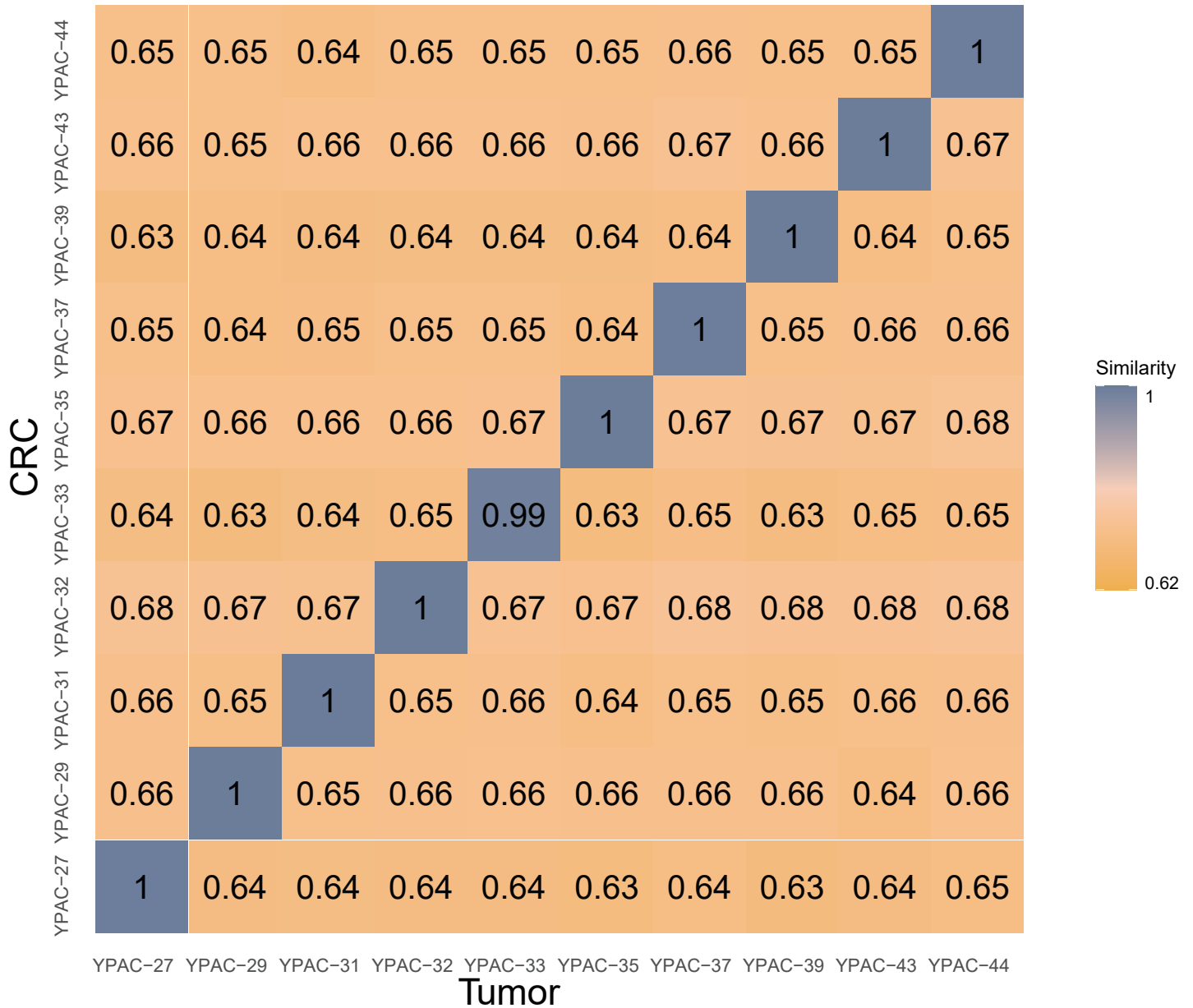


YPAC-46



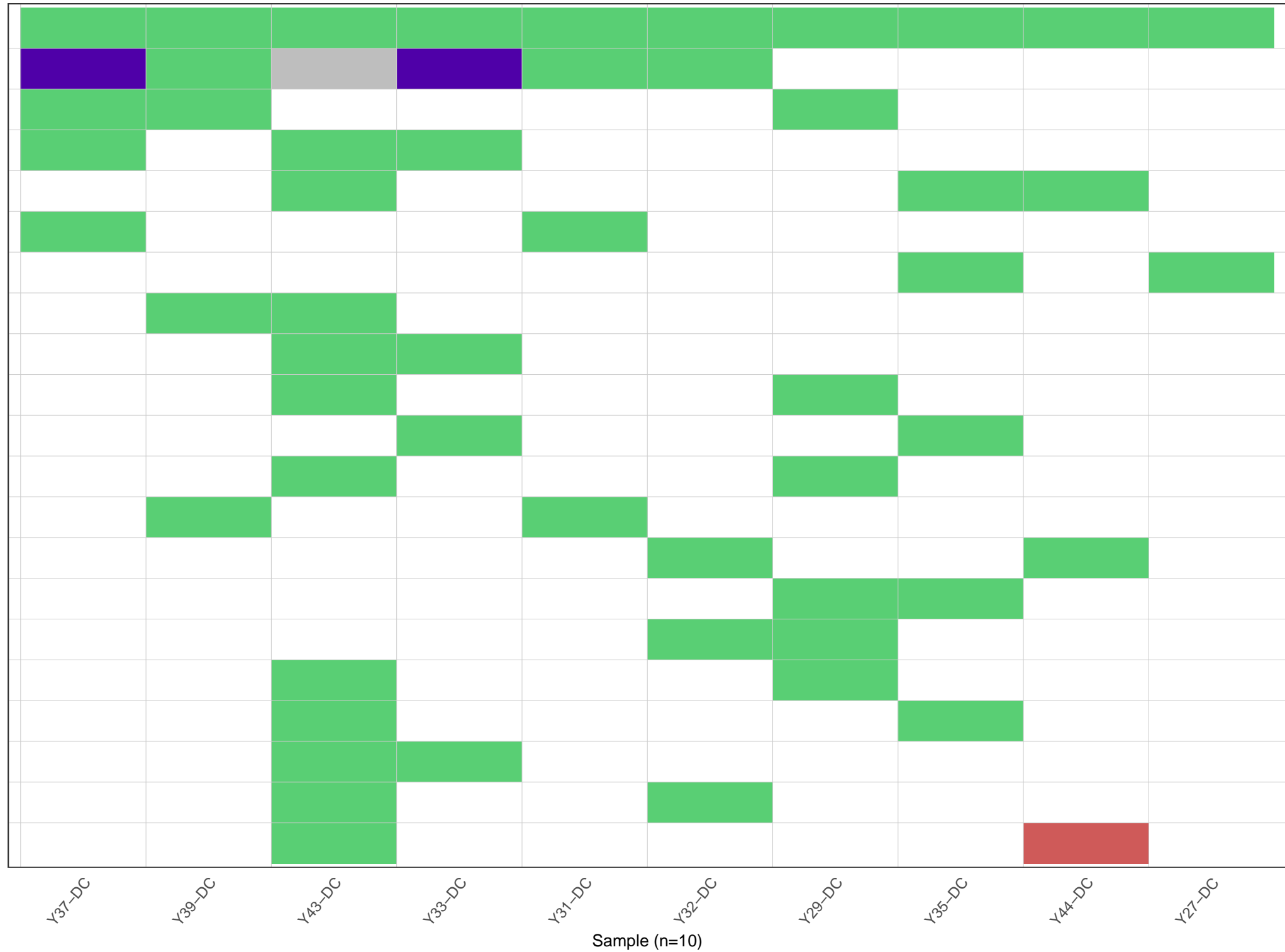
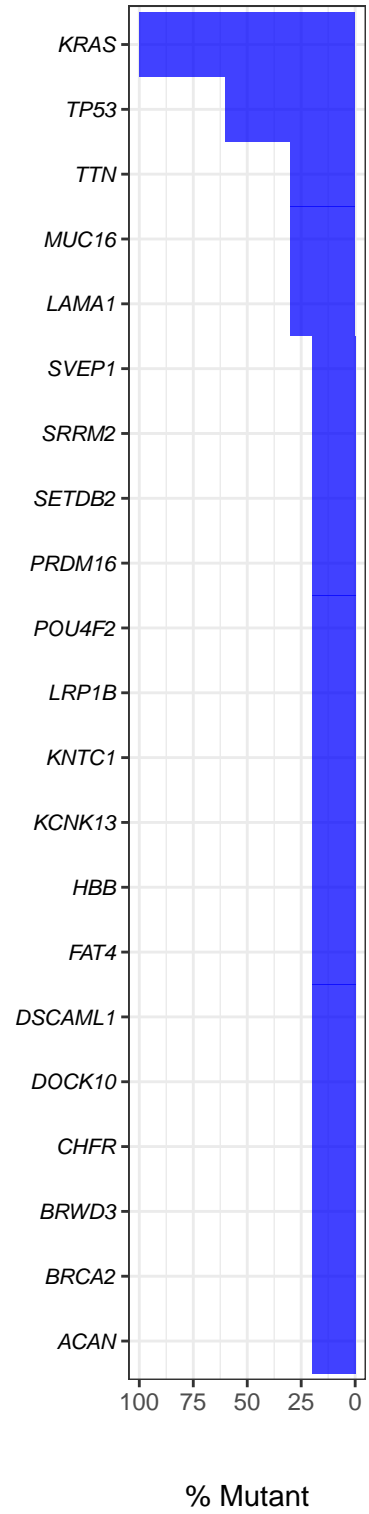
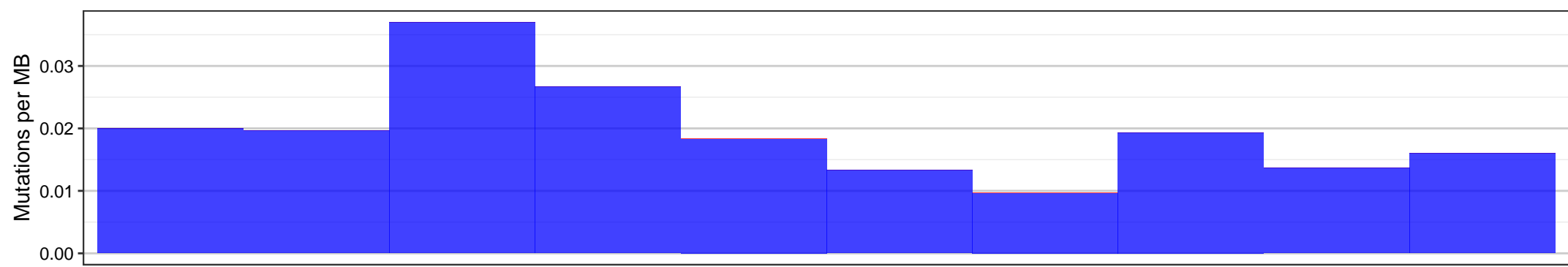


Supplementary figure 7

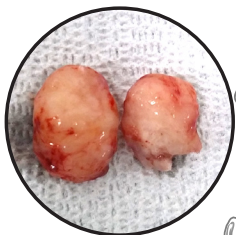




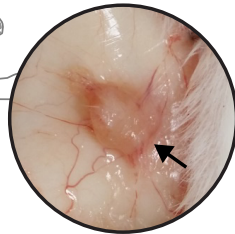
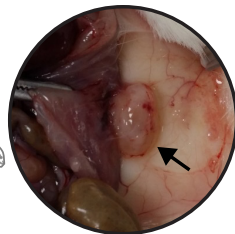
Supplementary figure 8



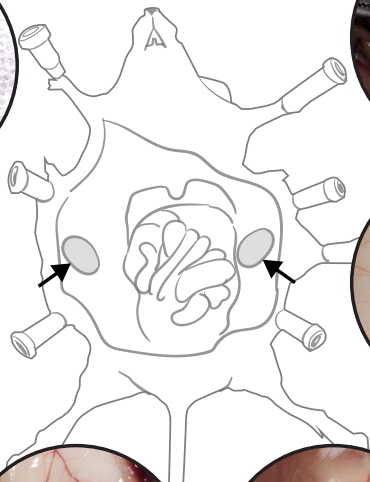
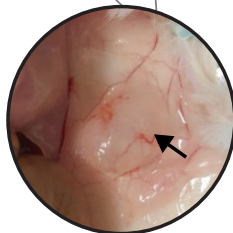
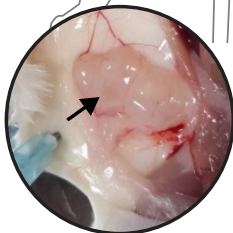
YPAC-2



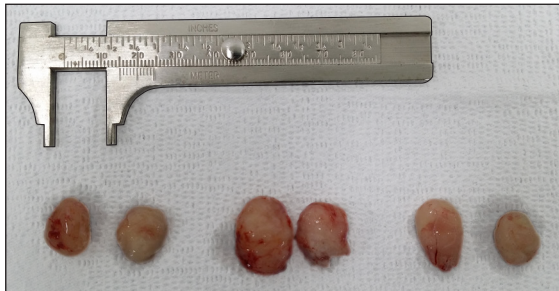
YPAC-5



YPAC-21



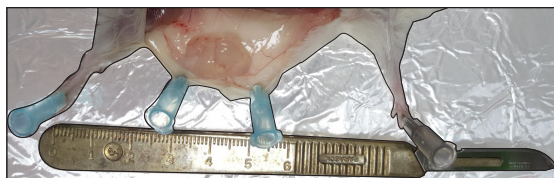
YPAC-2



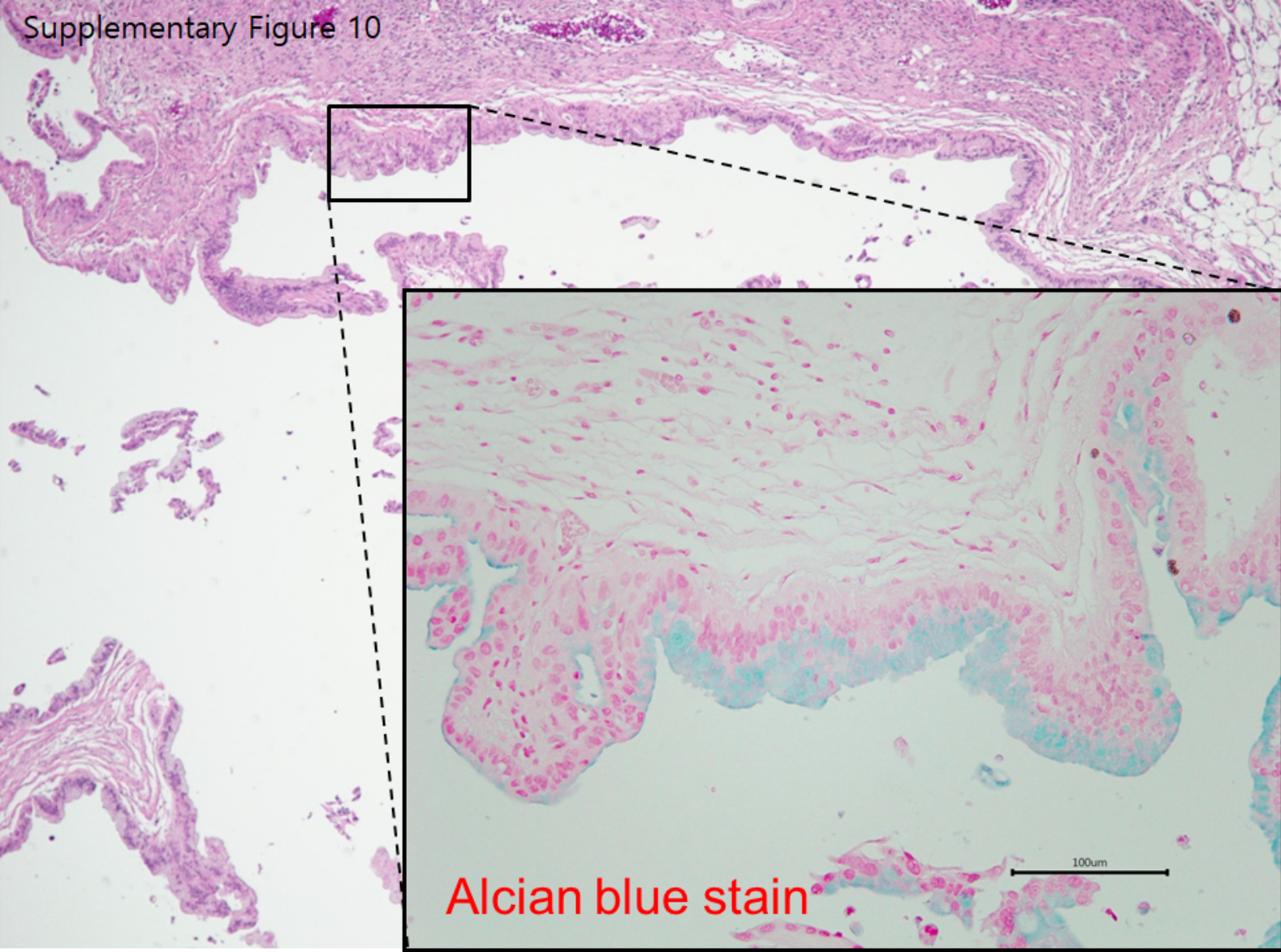
YPAC-5



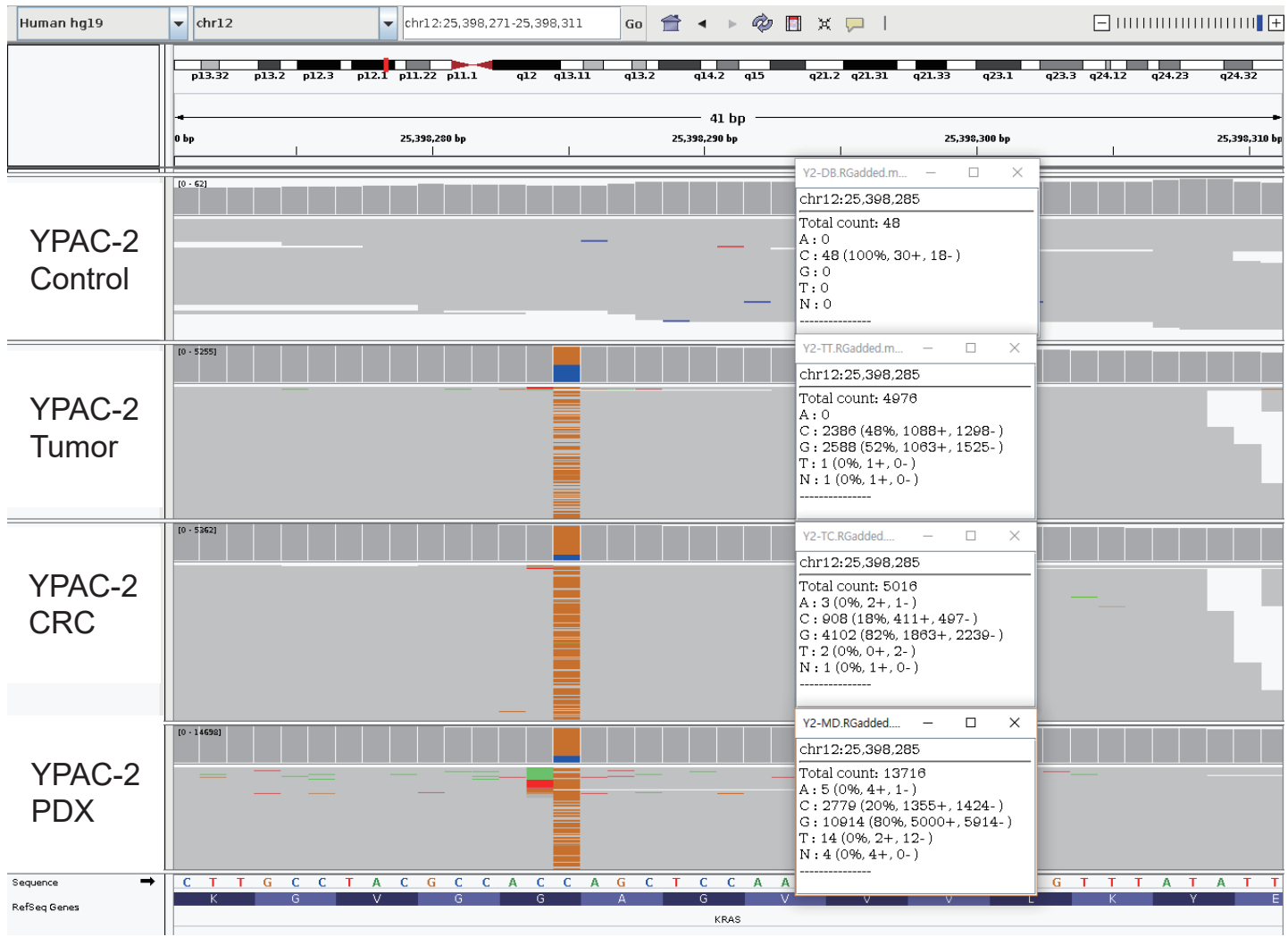
YPAC-21



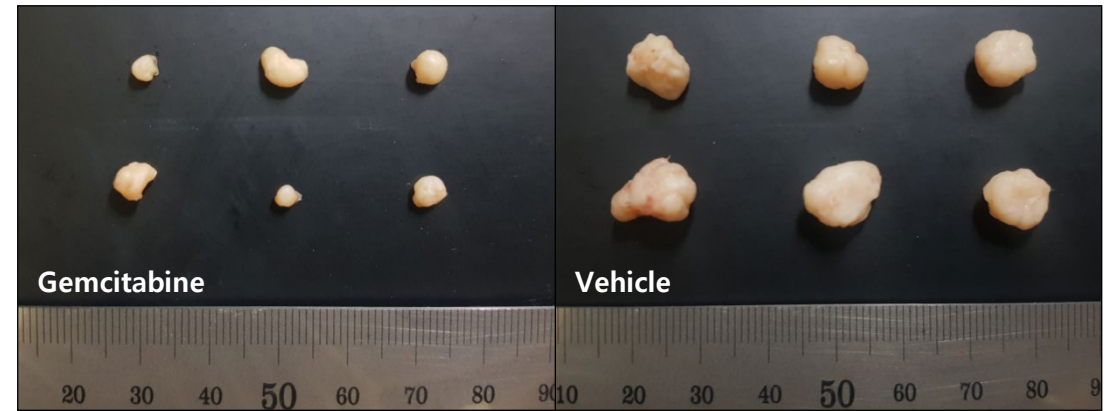
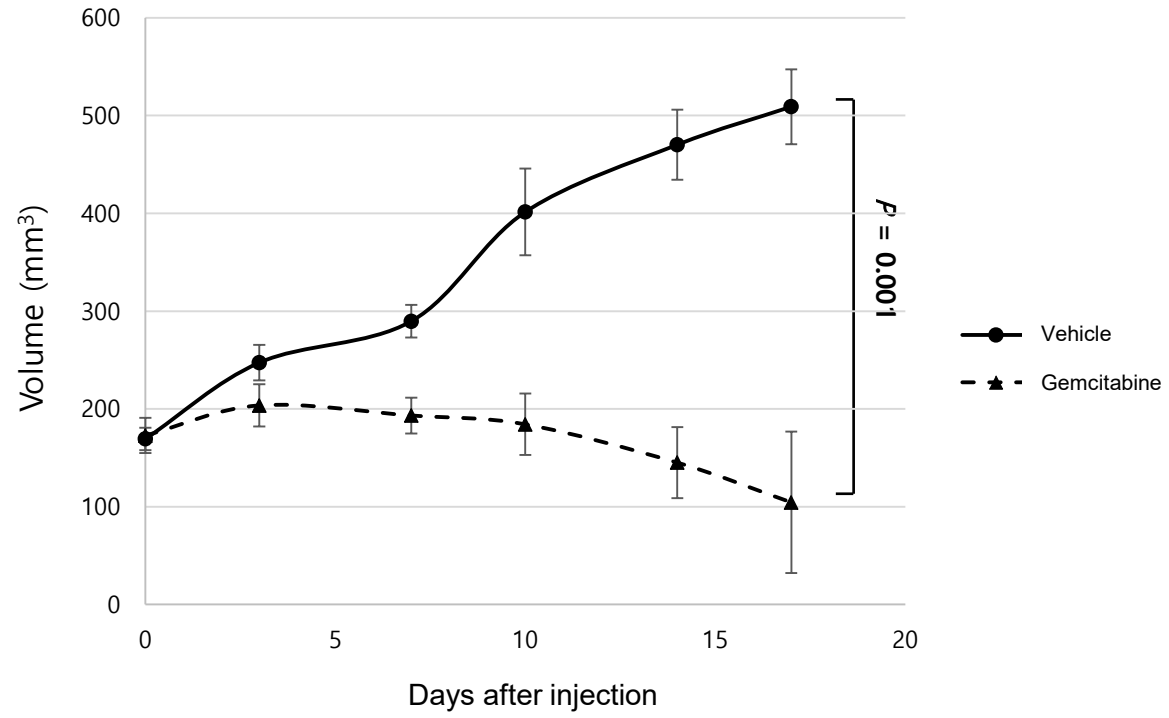
Supplementary Figure 10



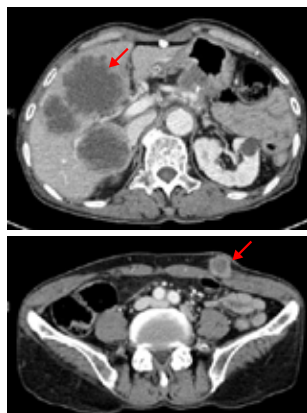
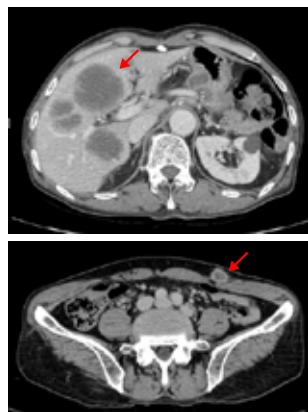
### KRAS missense variants p.G12R



Supplementary figure 12

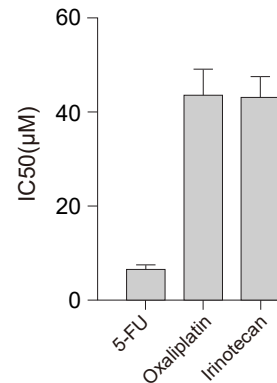


a



**YPAC-02**  
**PFS 65 days.**  
**BR: PD**

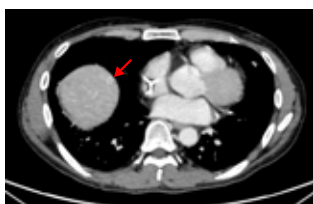
**YPAC-02 (Resistant)**



Liver metastasis  
 1st FOLFIRINOX

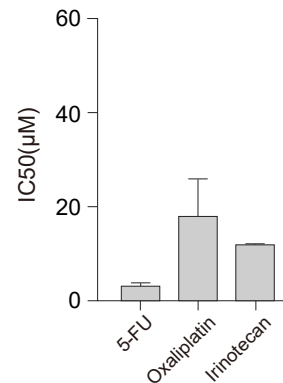
4th FOLFIRINOX

b



**YPAC-25**  
**PFS 360 days.**  
**BR: PR**

**YPAC-25 (Sensitive)**



Disease recurrence  
 1st FOLFIRINOX

20th FOLFIRINOX