

**A**

Nuclei

Kv2.1

Merge



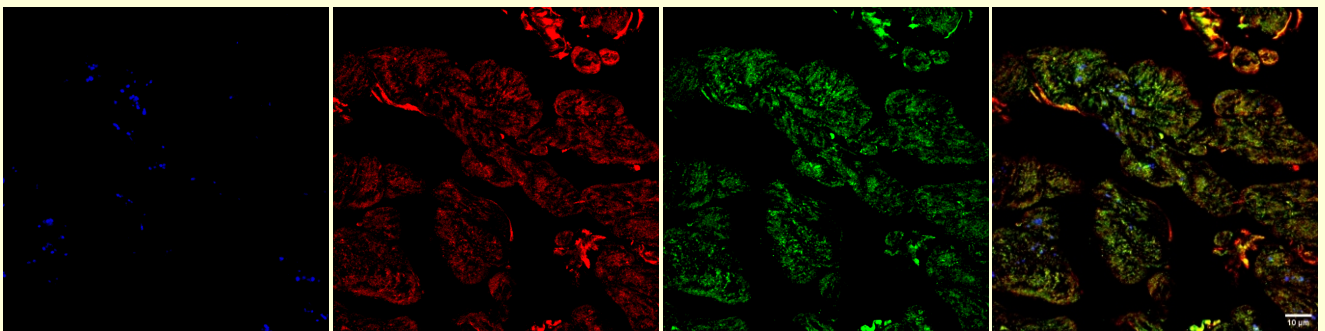
**B**

Nuclei

Kv7.1

JPH4

Merge



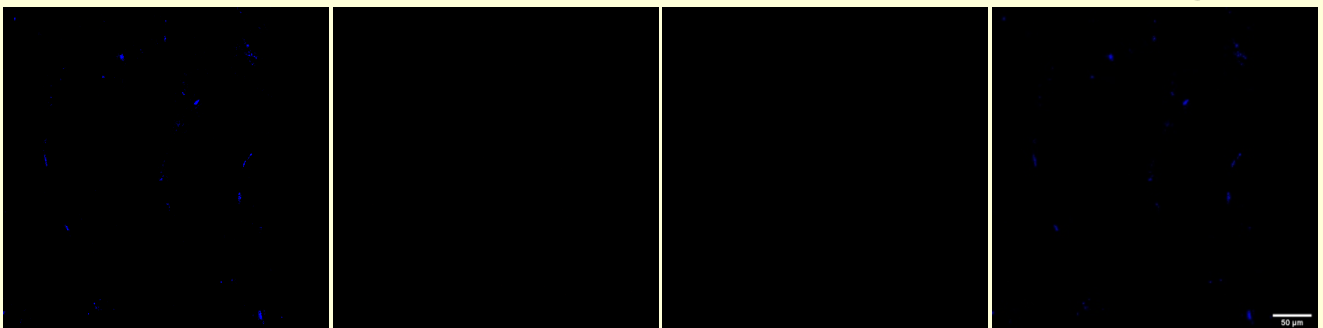
**C**

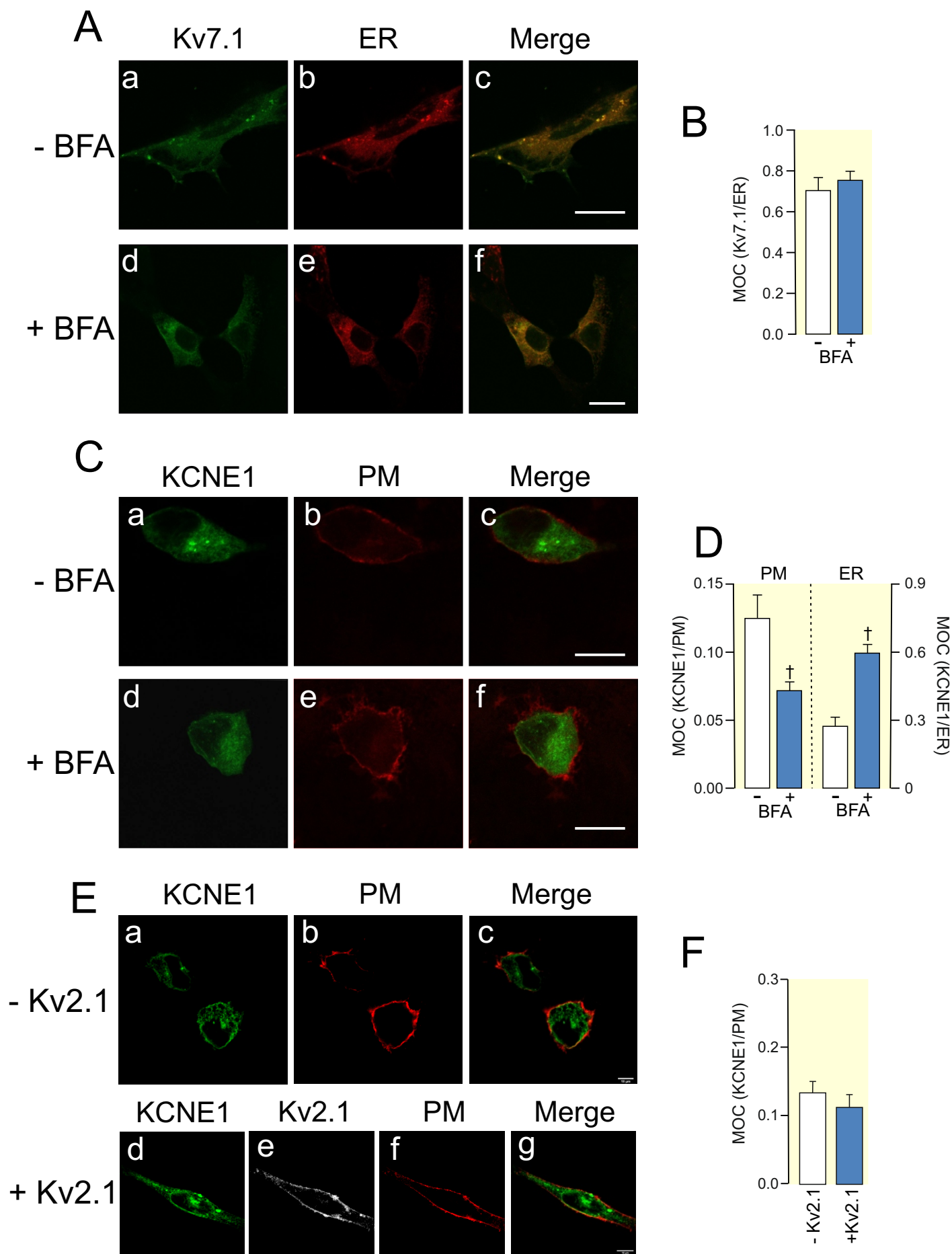
Nuclei

Kv7.1

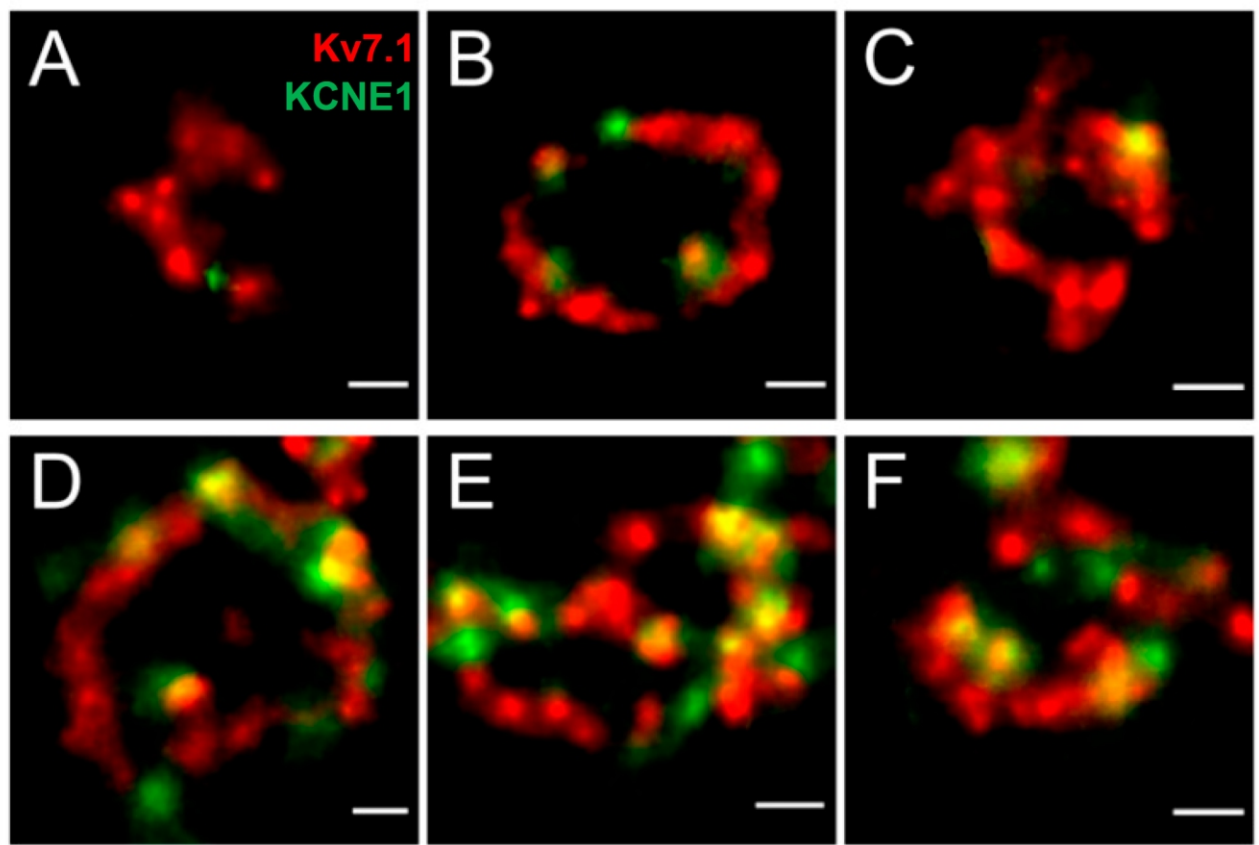
JPH4

Merge

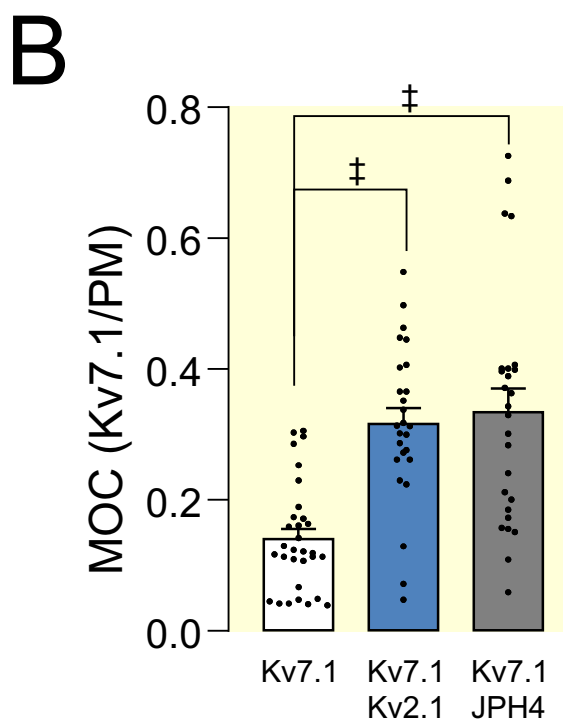
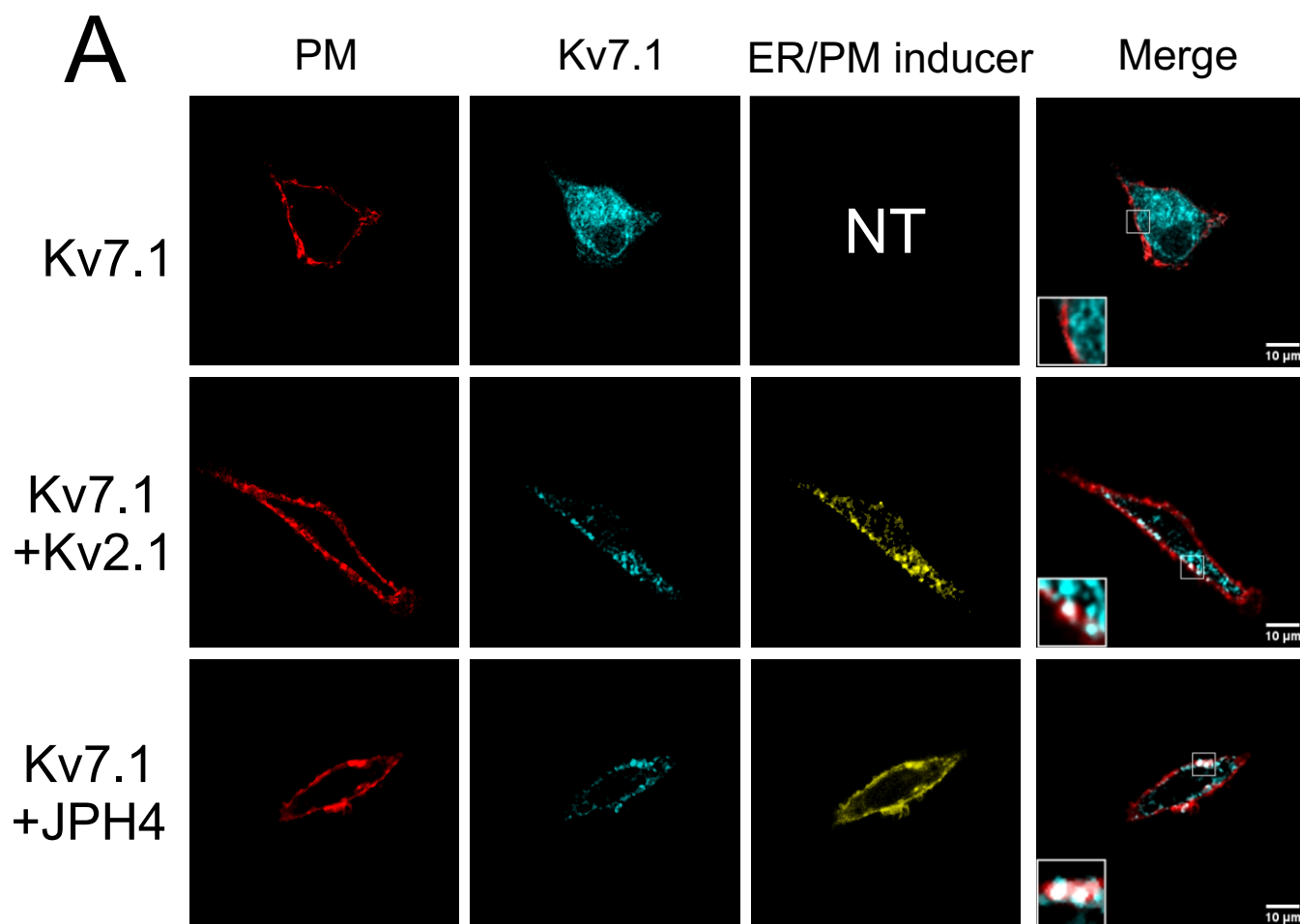




Supplemental Figure 2

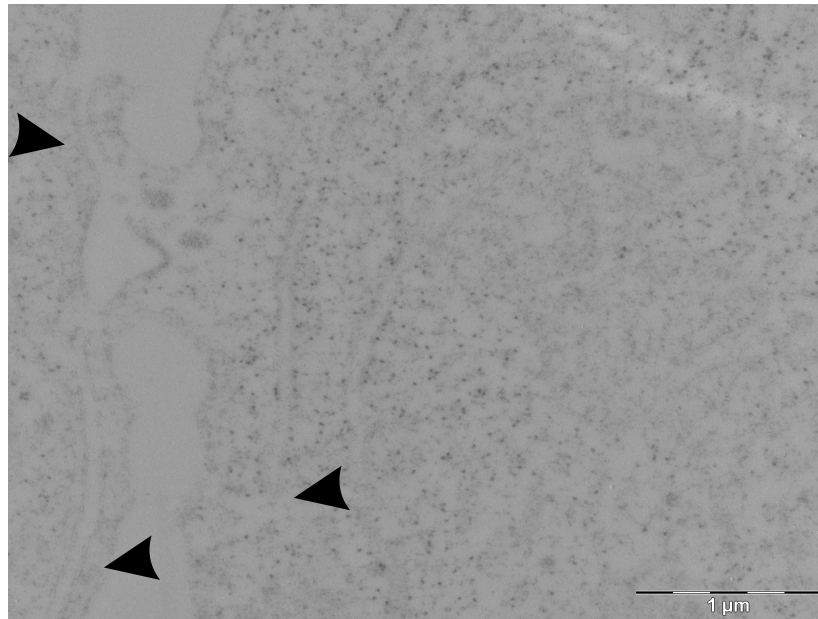
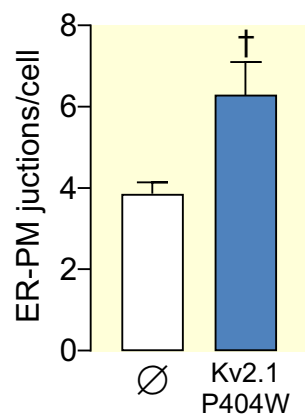
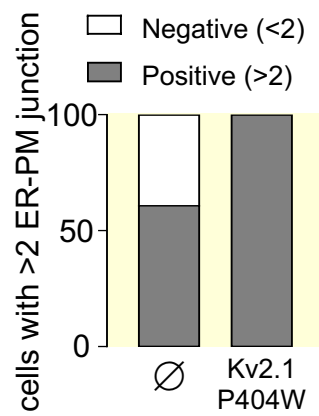
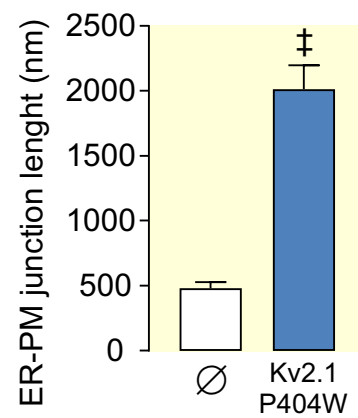


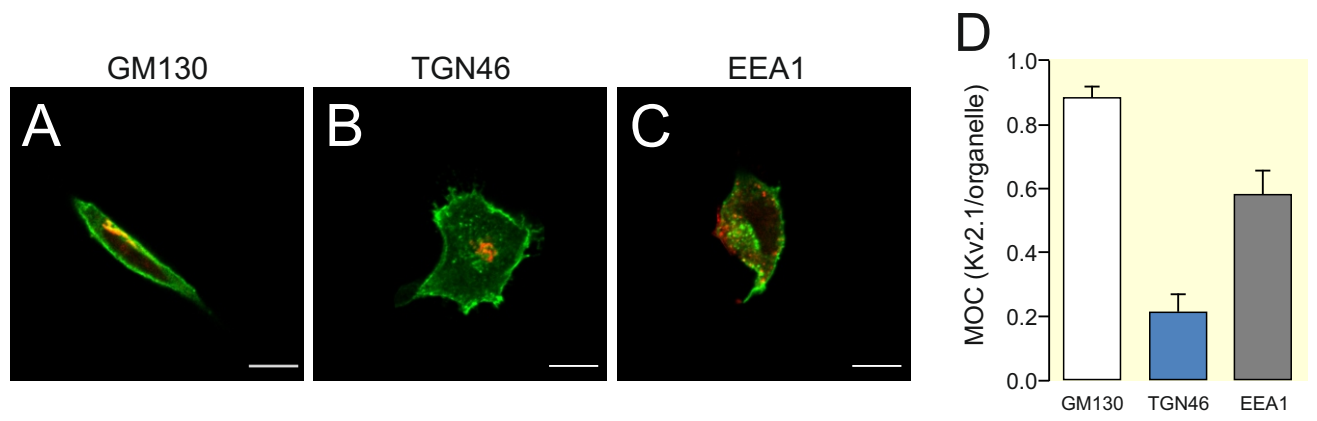
Supplemental Figure 3



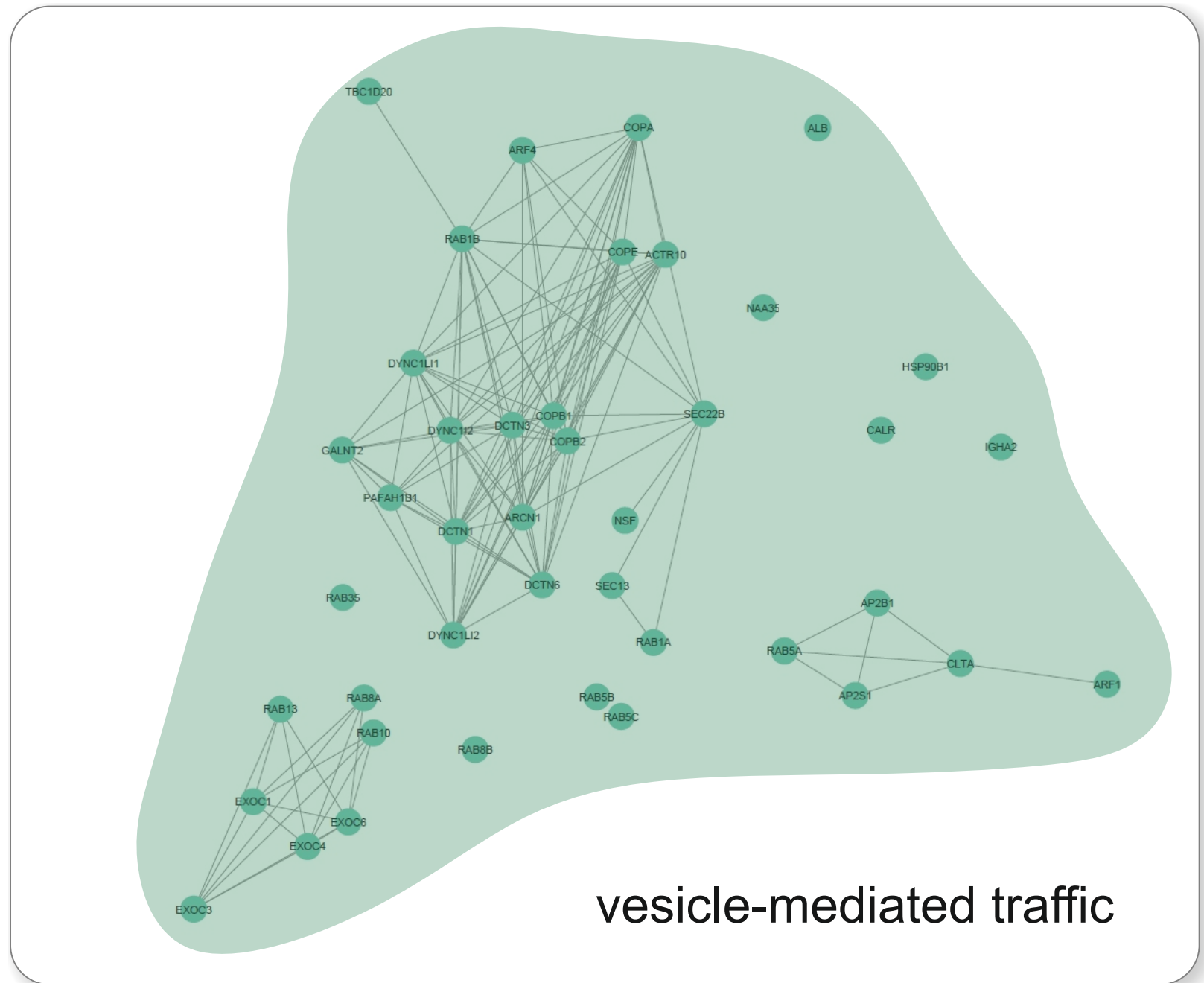
Supplemental Figure 4



**A****Kv2.1 P404W****B****C****D**

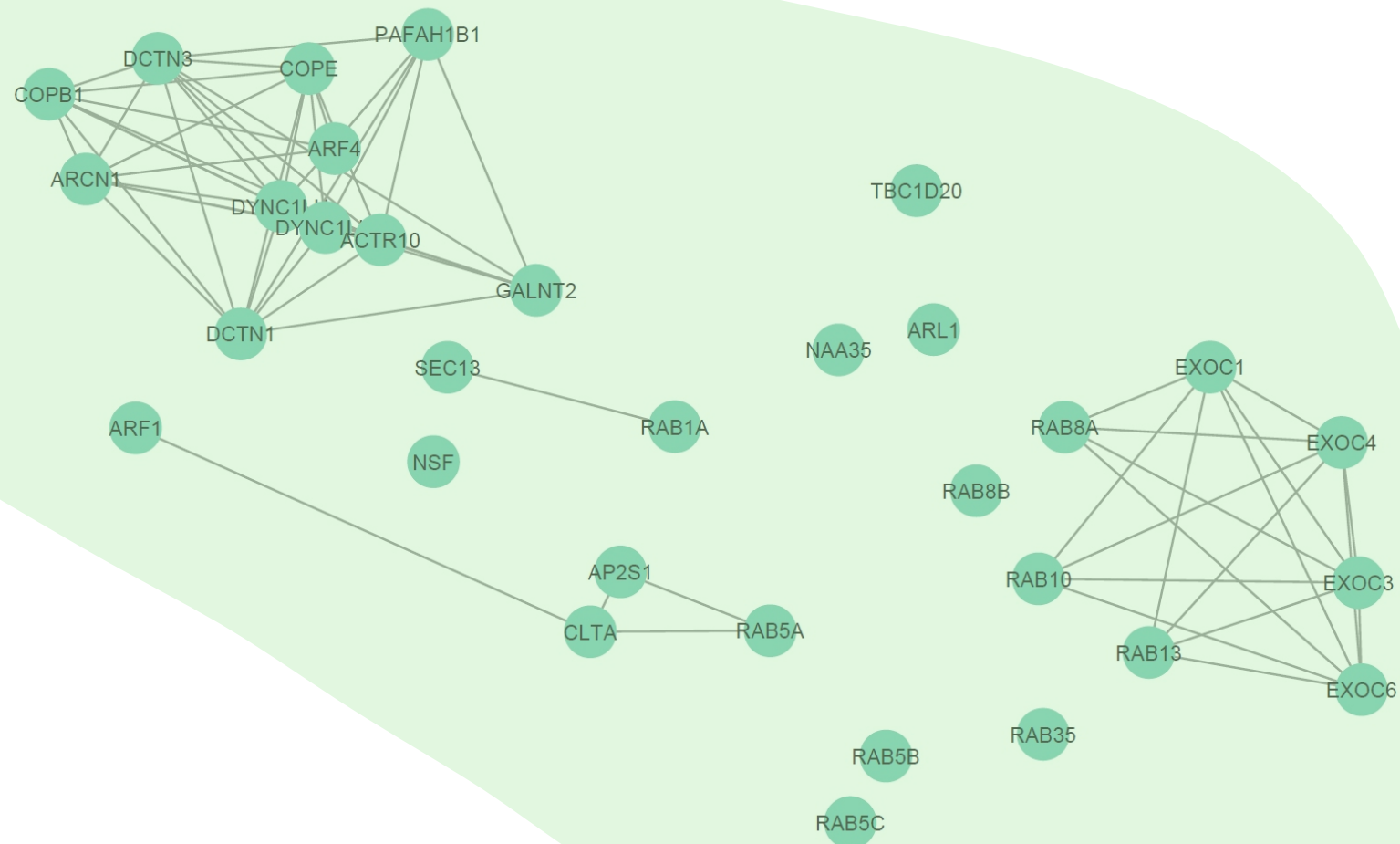


Supplemental Figure 6



Supplemental Figure 7

## membrane traffic



Supplemental Figure 8