

Figure 1

Full unedited blot for Figure 1E

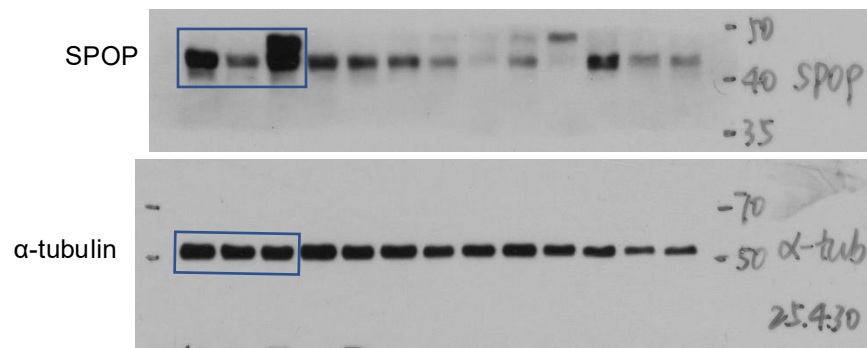
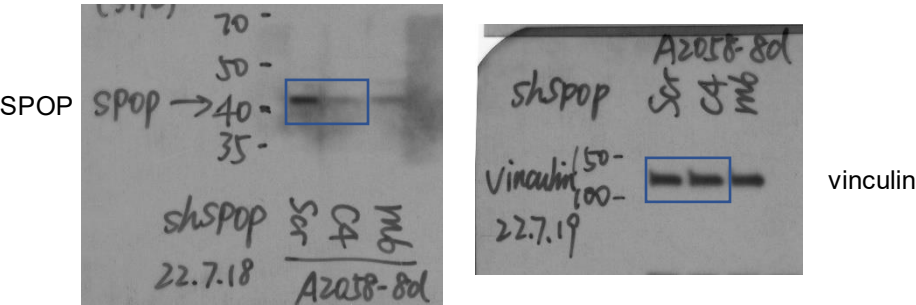


Figure 2

Full unedited blot for Figure 2A



Full unedited blot for Figure 2D

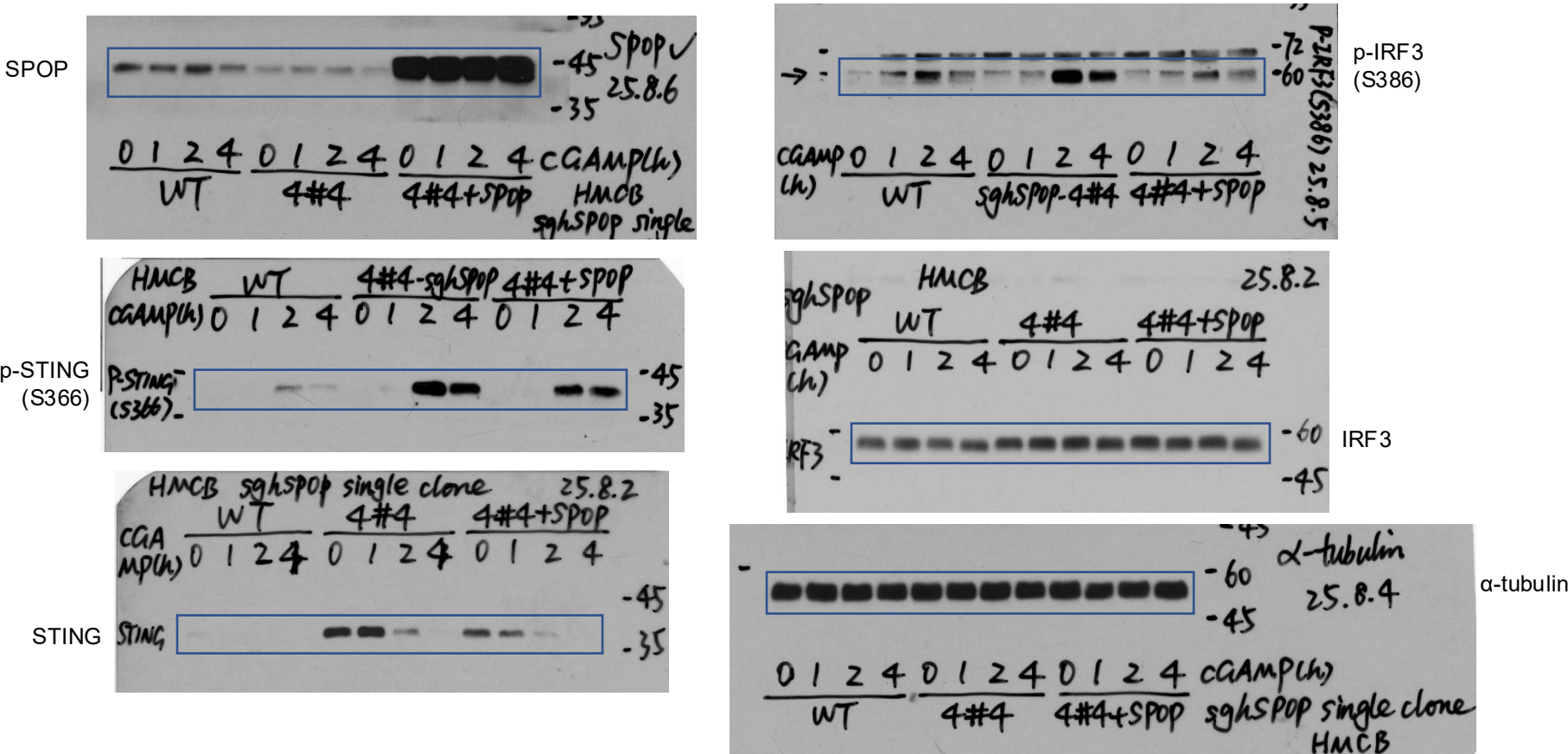
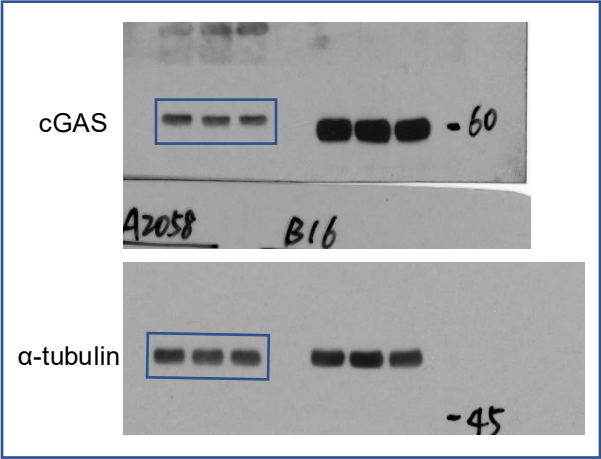
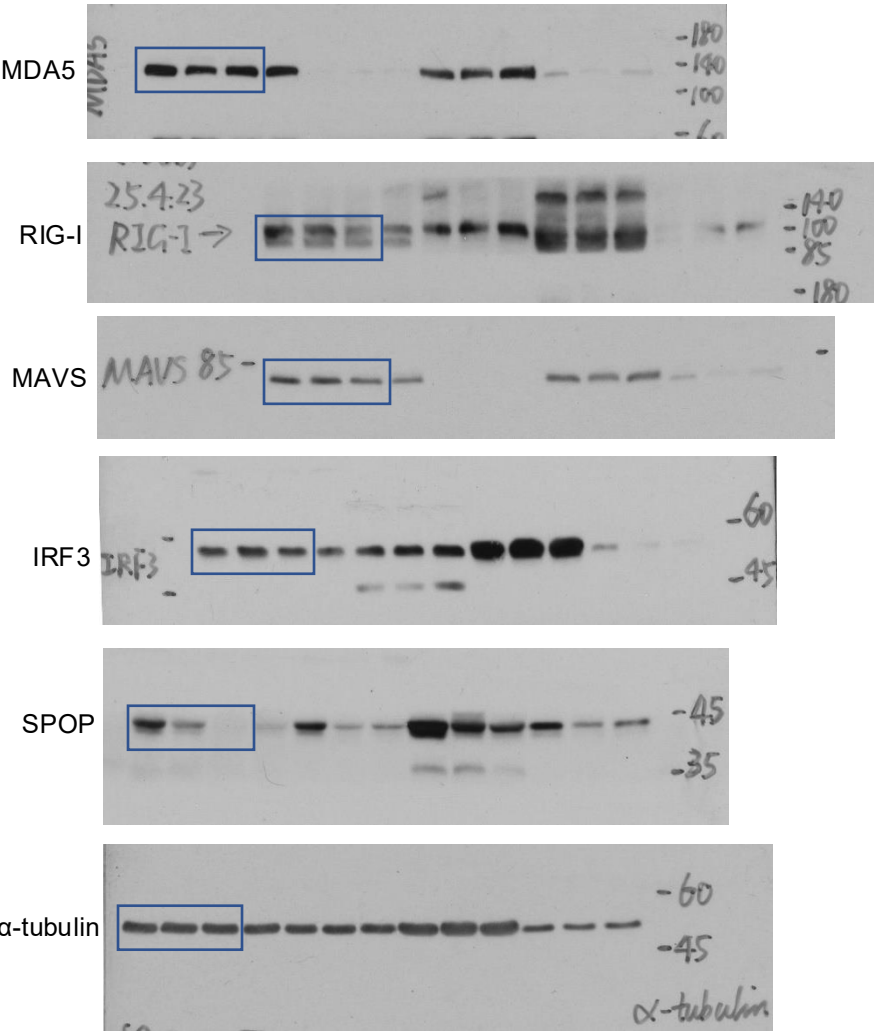
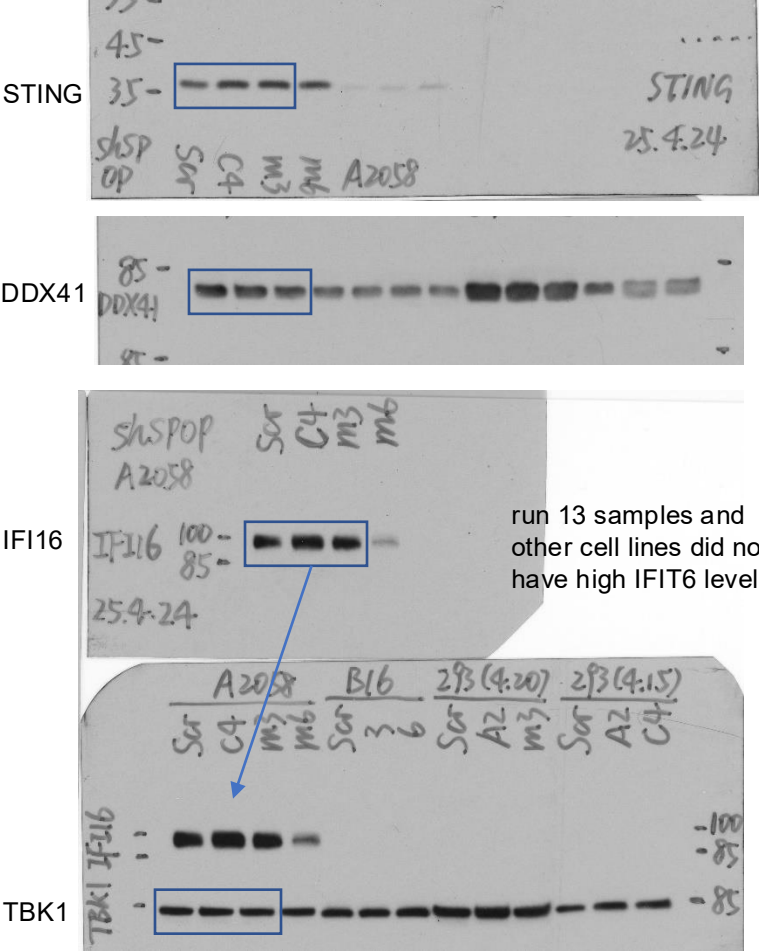


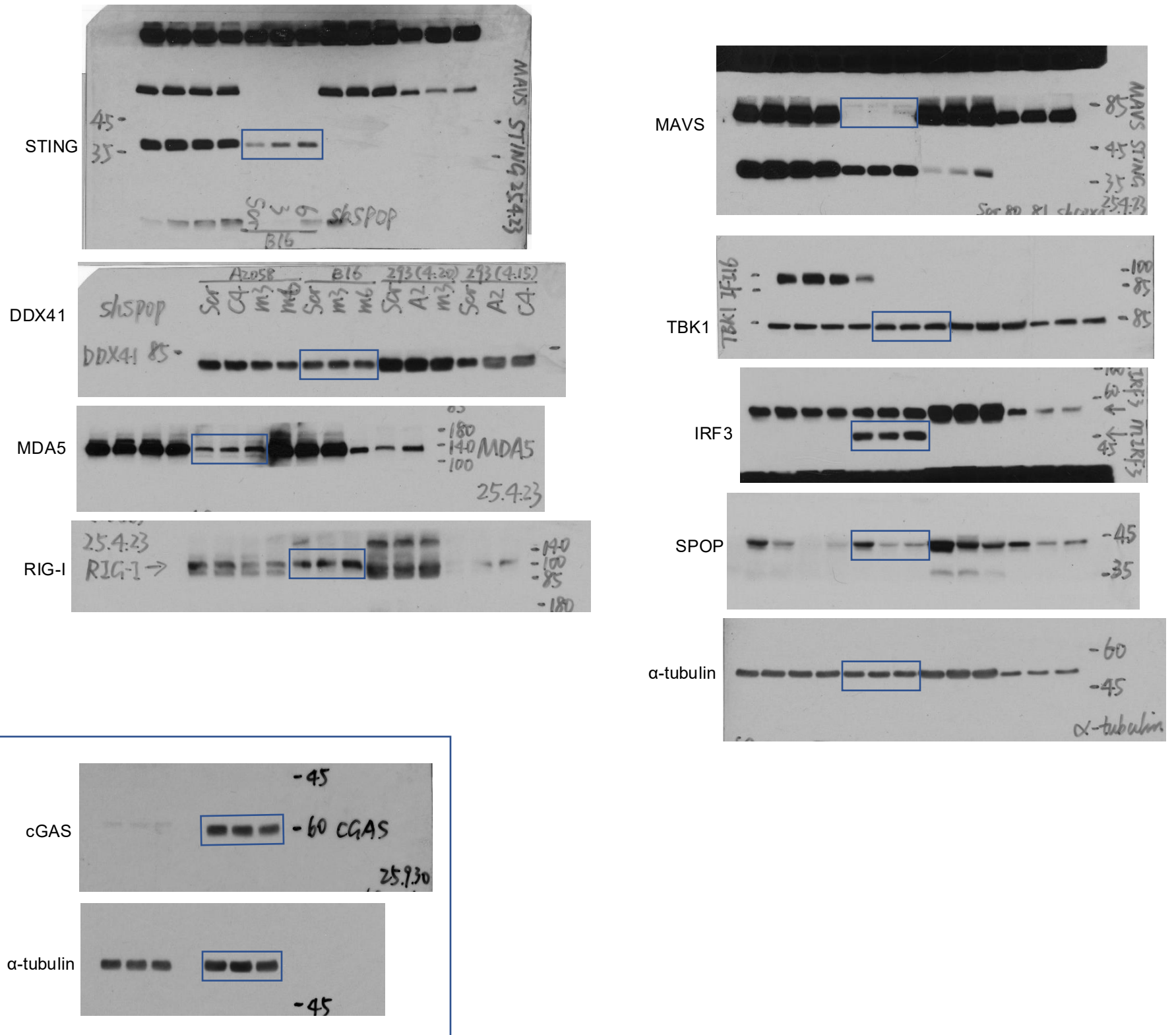
Figure 3

Full unedited blot for Figure 3A

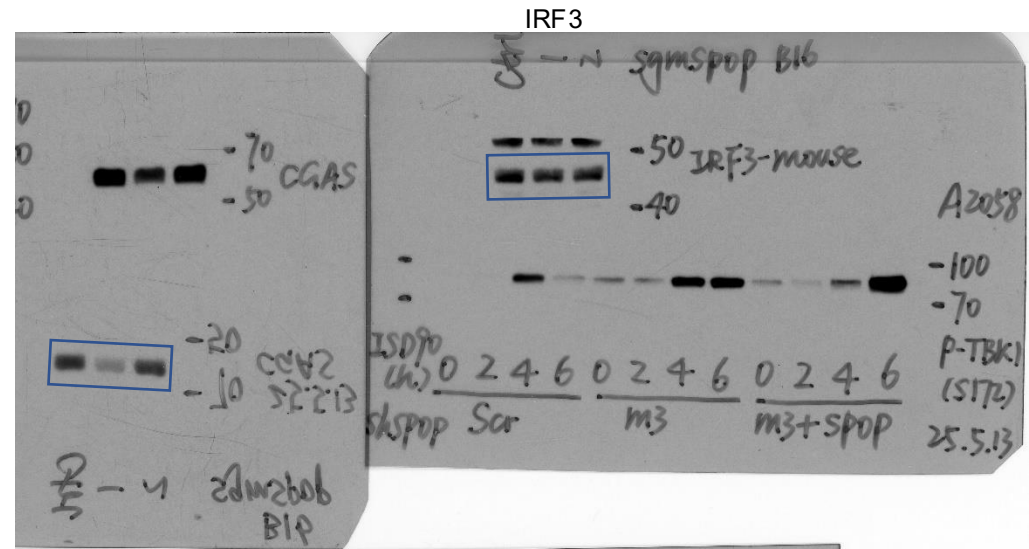
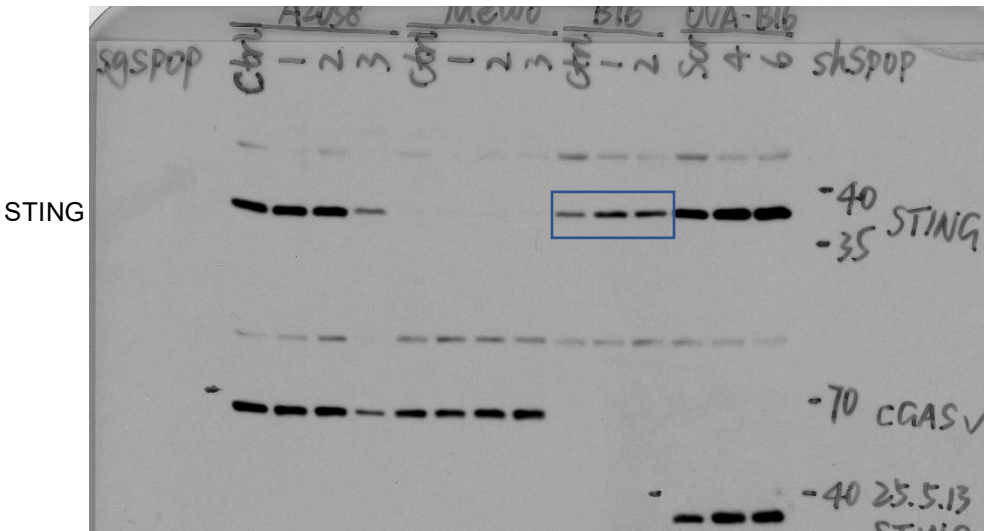
run 13 samples and other cell lines in lane
5-13 did not have high STING level



Full unedited blot for Figure 3B

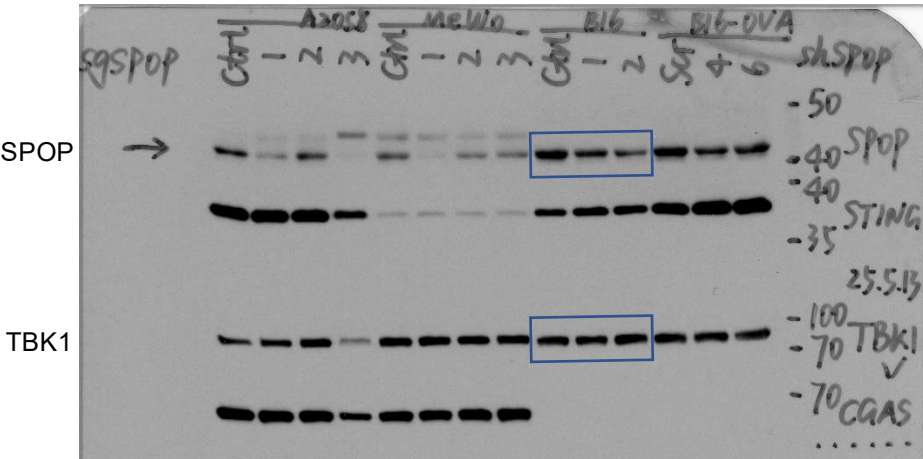


Full unedited blot for Figure 3C

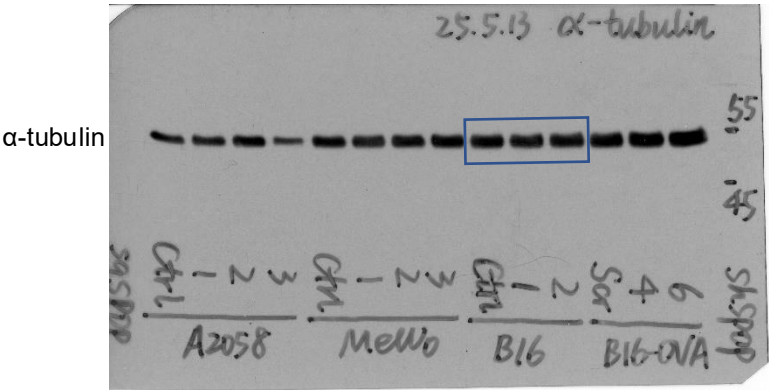


Three B16 samples were run in parallel gel on the same day for cGAS and IRF3 detection.

cGAS

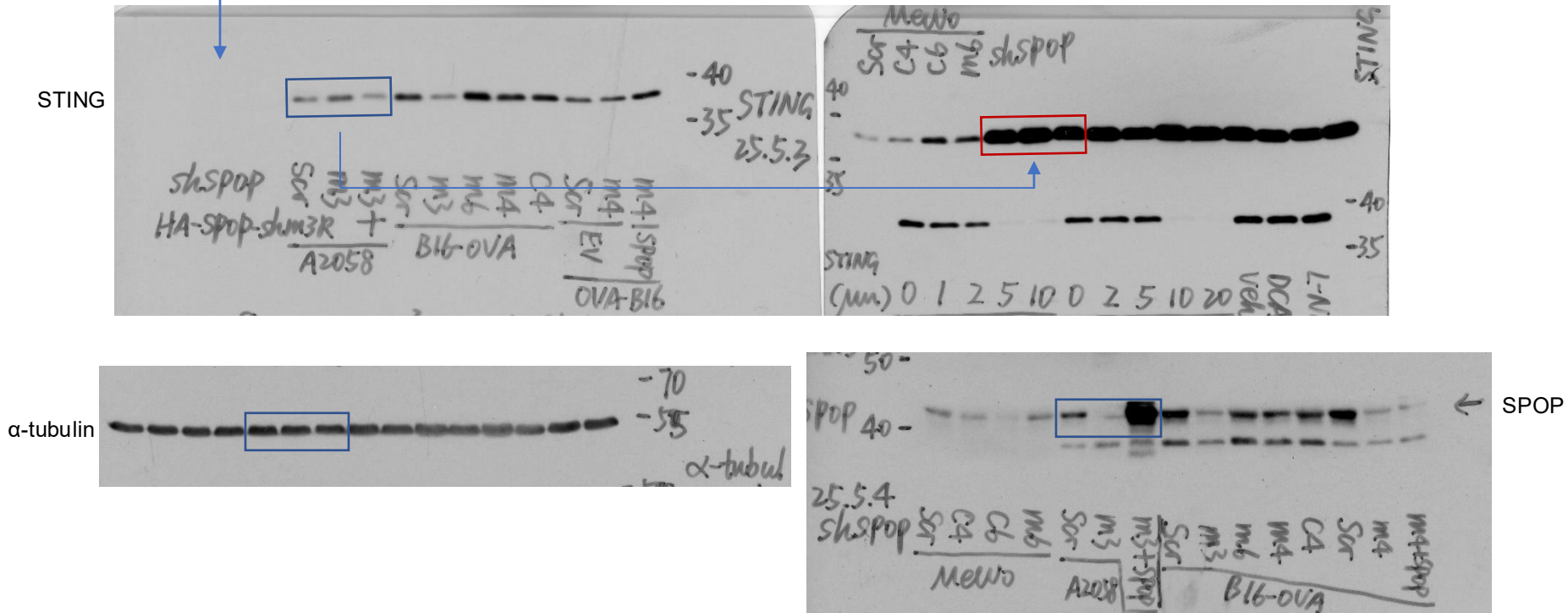


TBK1

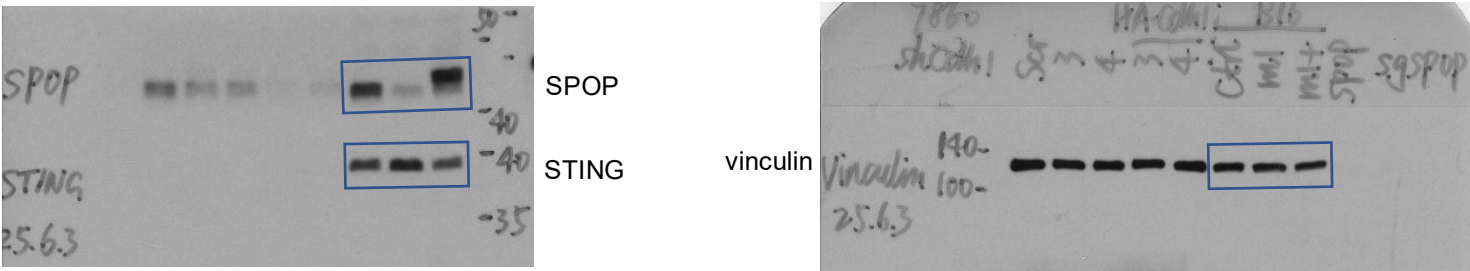


Full unedited blot for Figure 3D

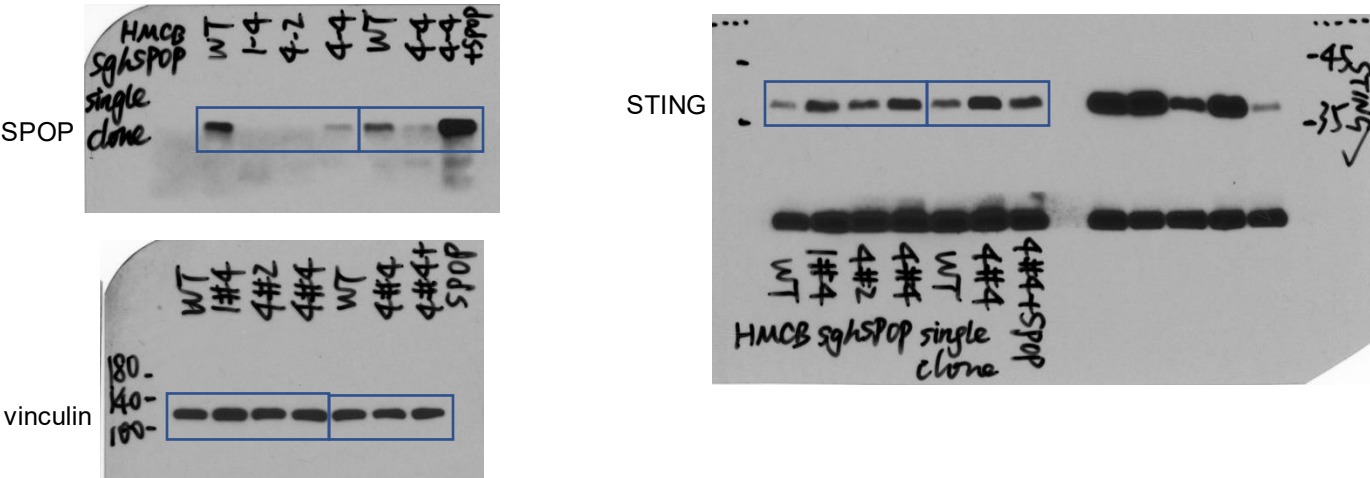
run 15 samples and MeWo did not have high STING level



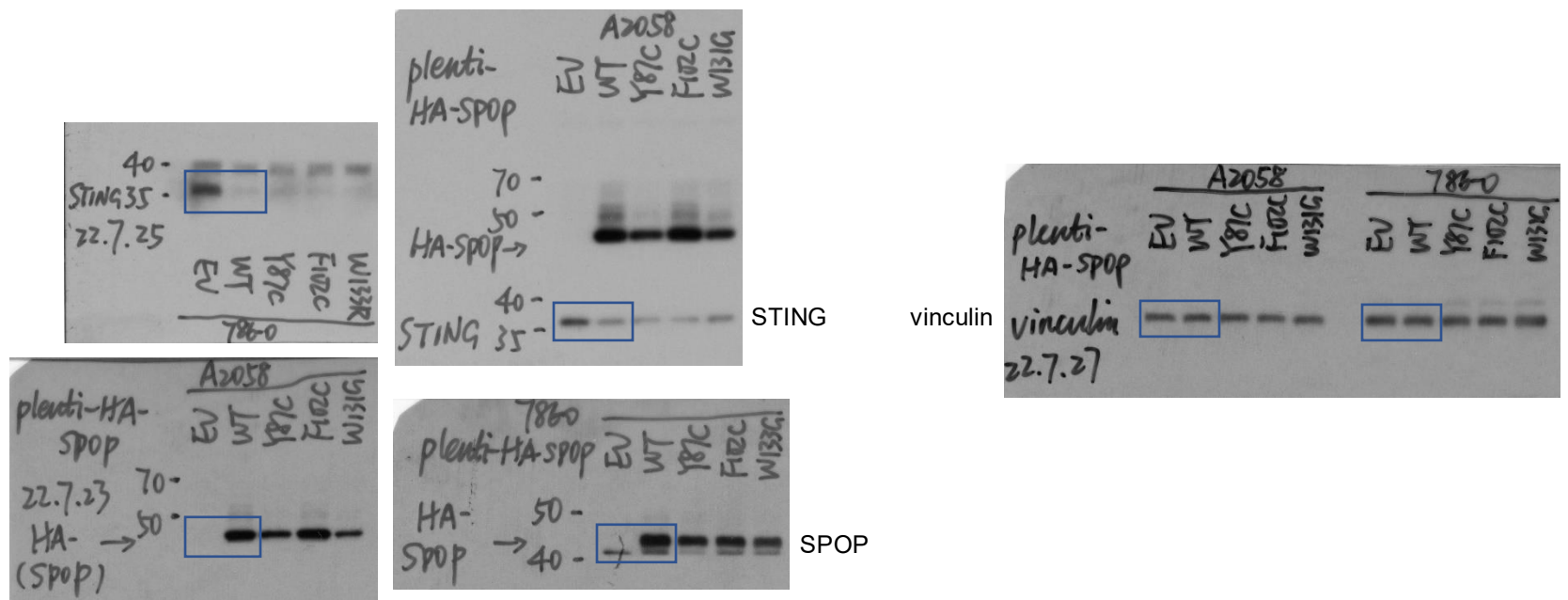
Full unedited blot for Figure 3E



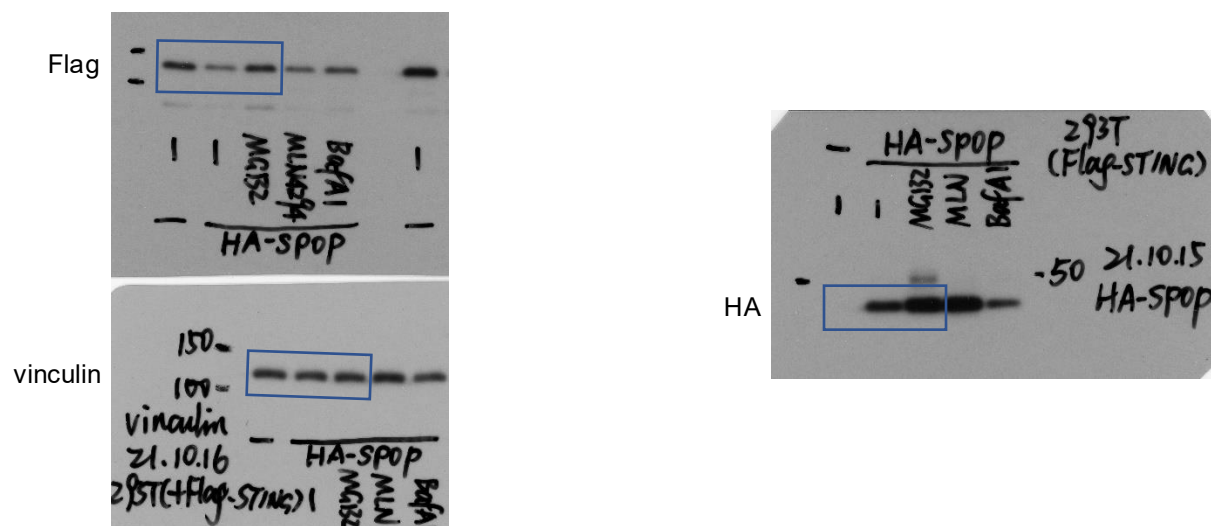
Full unedited blot for Figure 3F and 3G



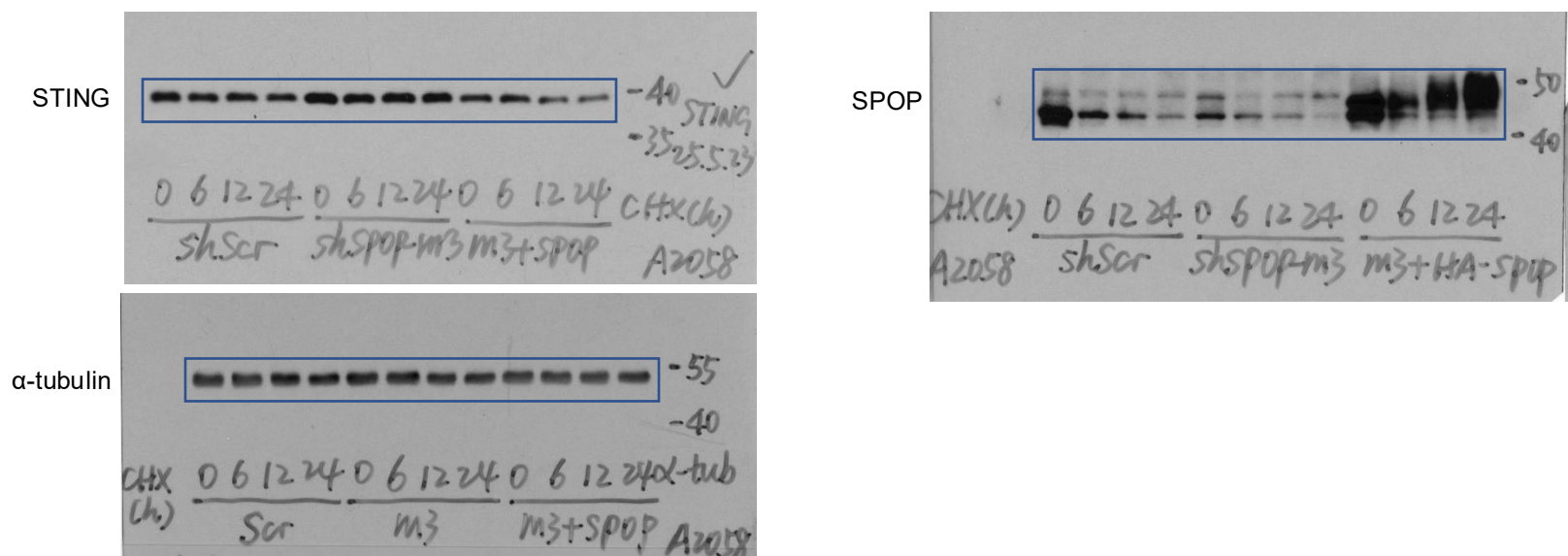
Full unedited blot for Figure 3H



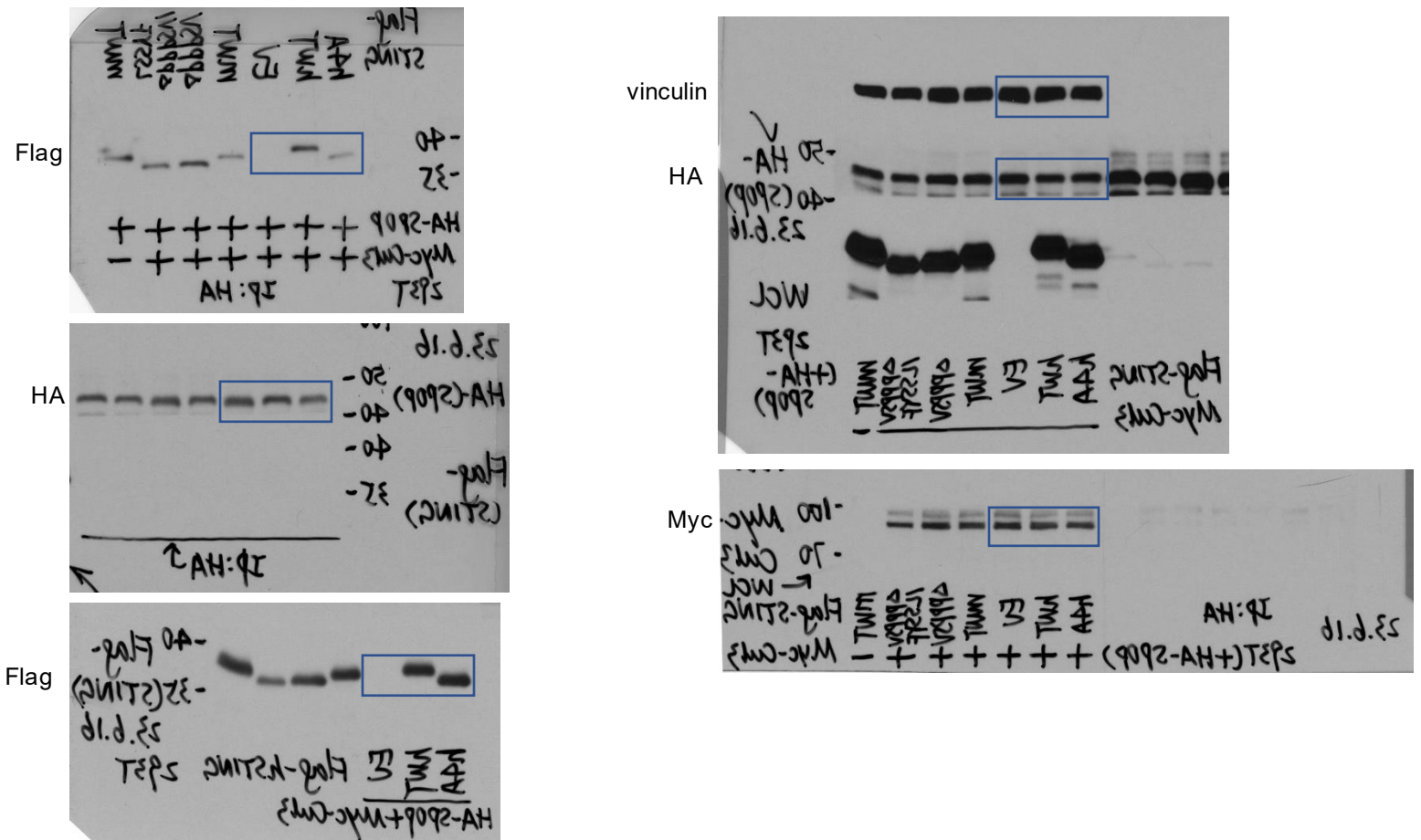
Full unedited blot for Figure 3I



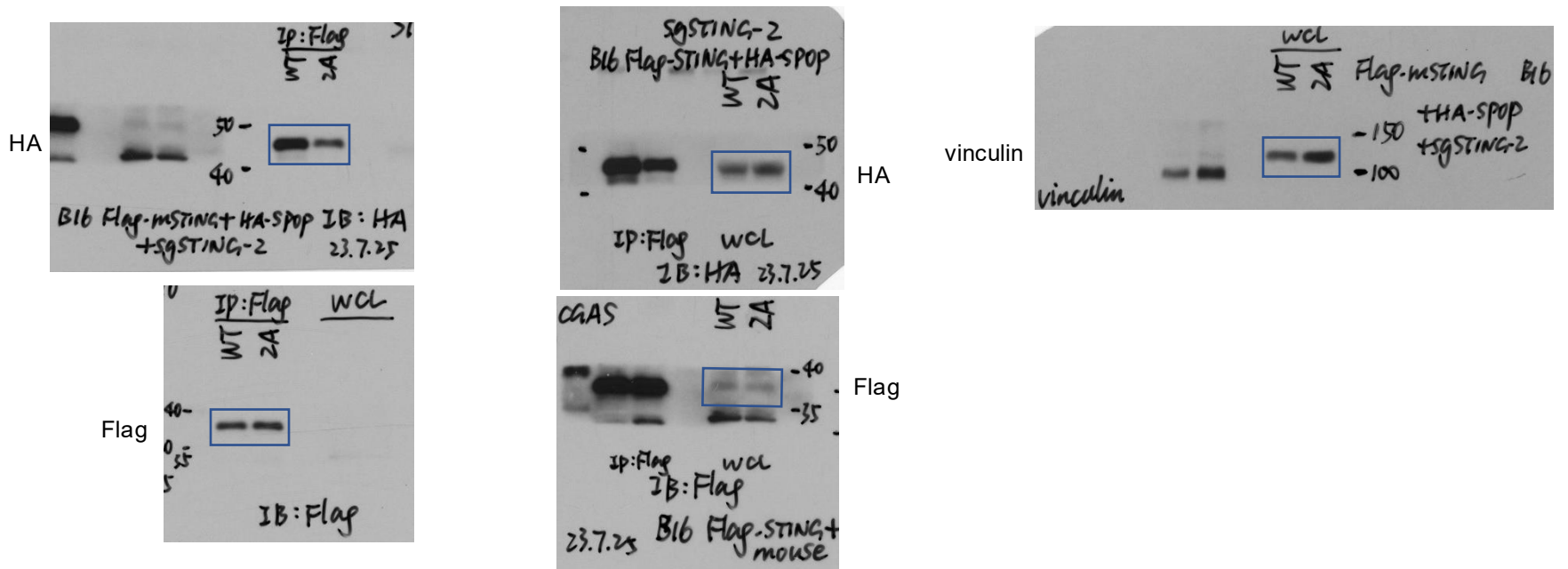
Full unedited blot for Figure 3J



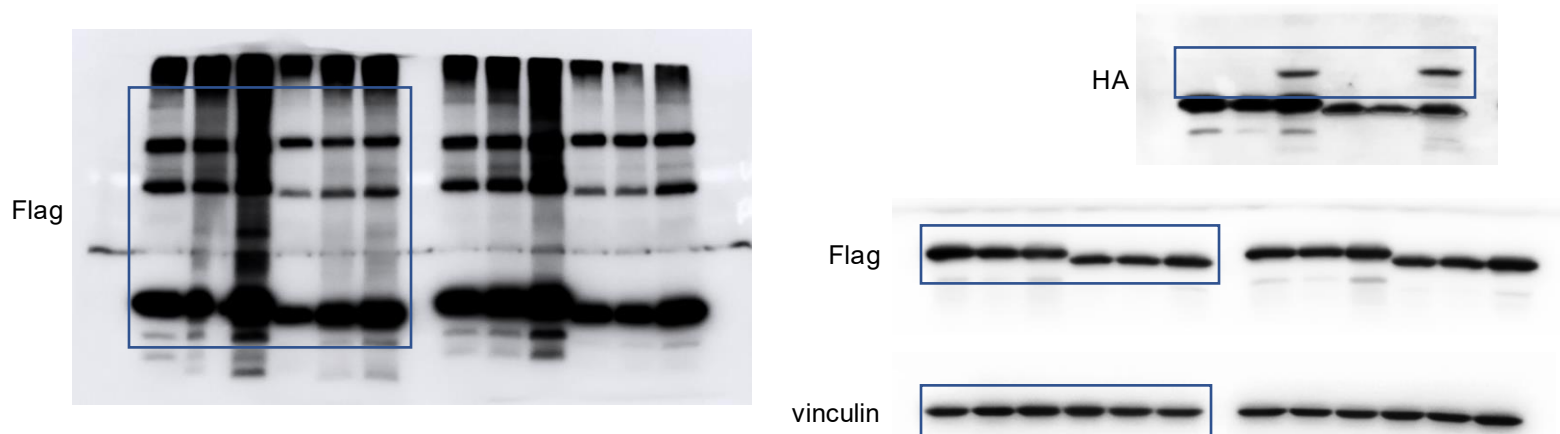
Full unedited blot for Figure 3M



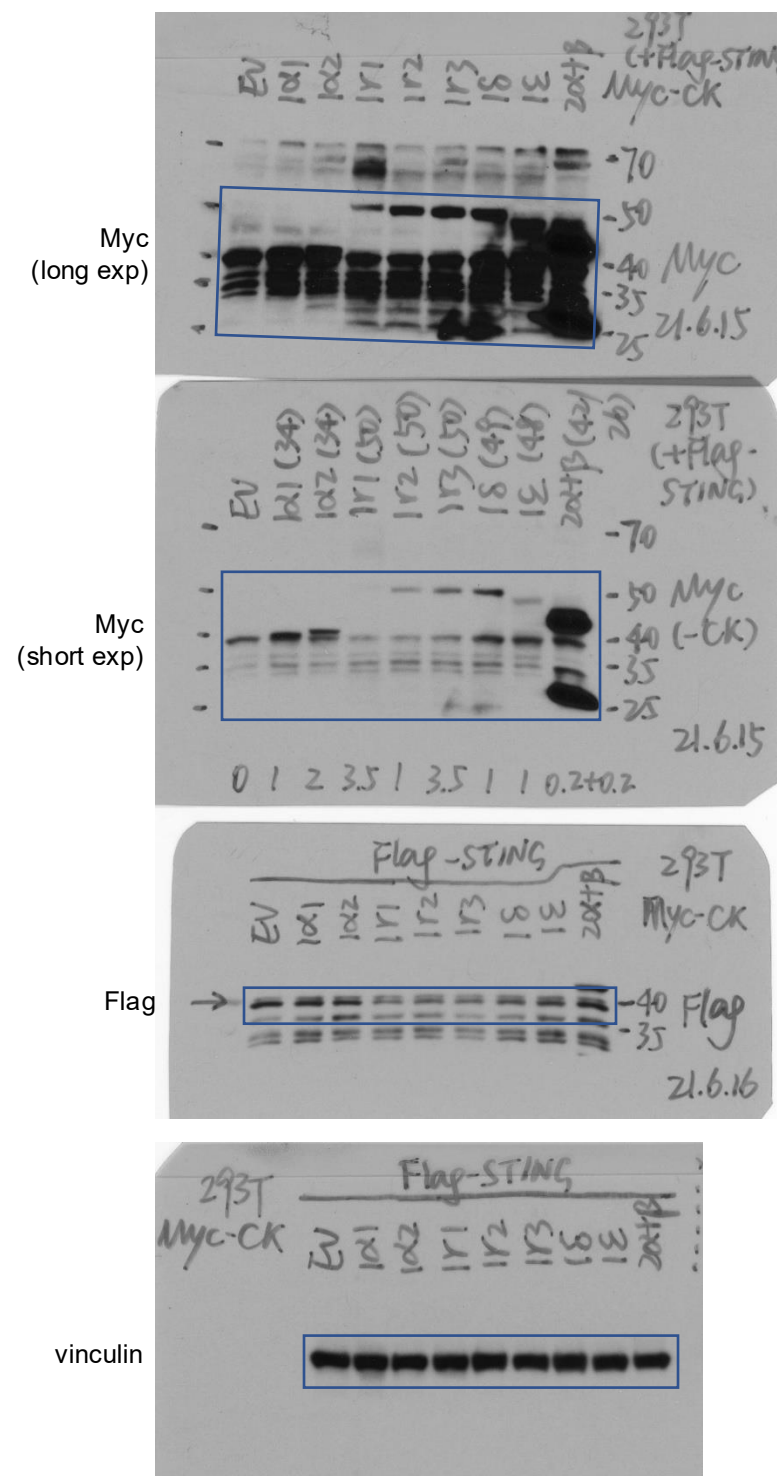
Full unedited blot for Figure 3N



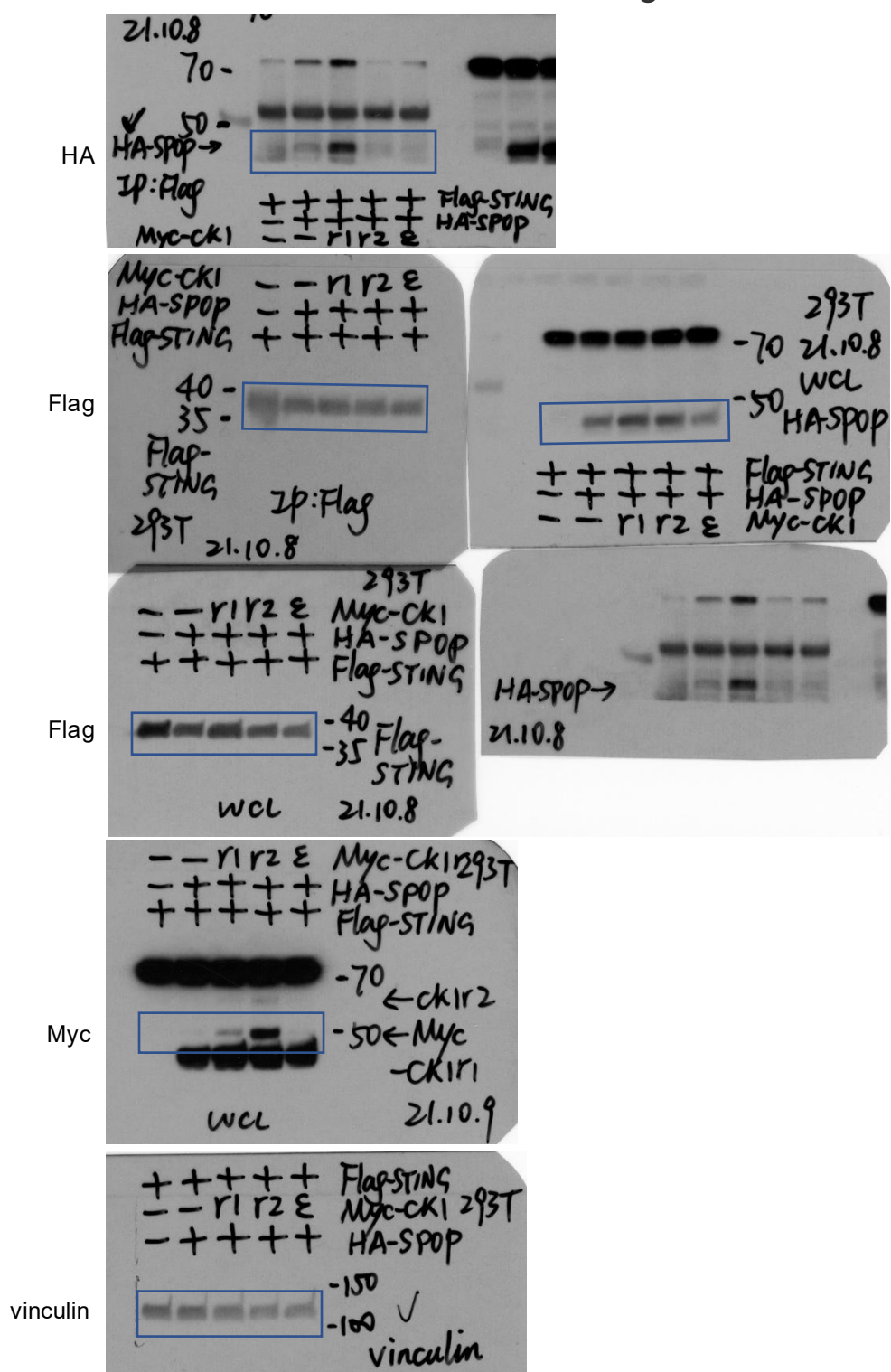
Full unedited blot for Figure 3O



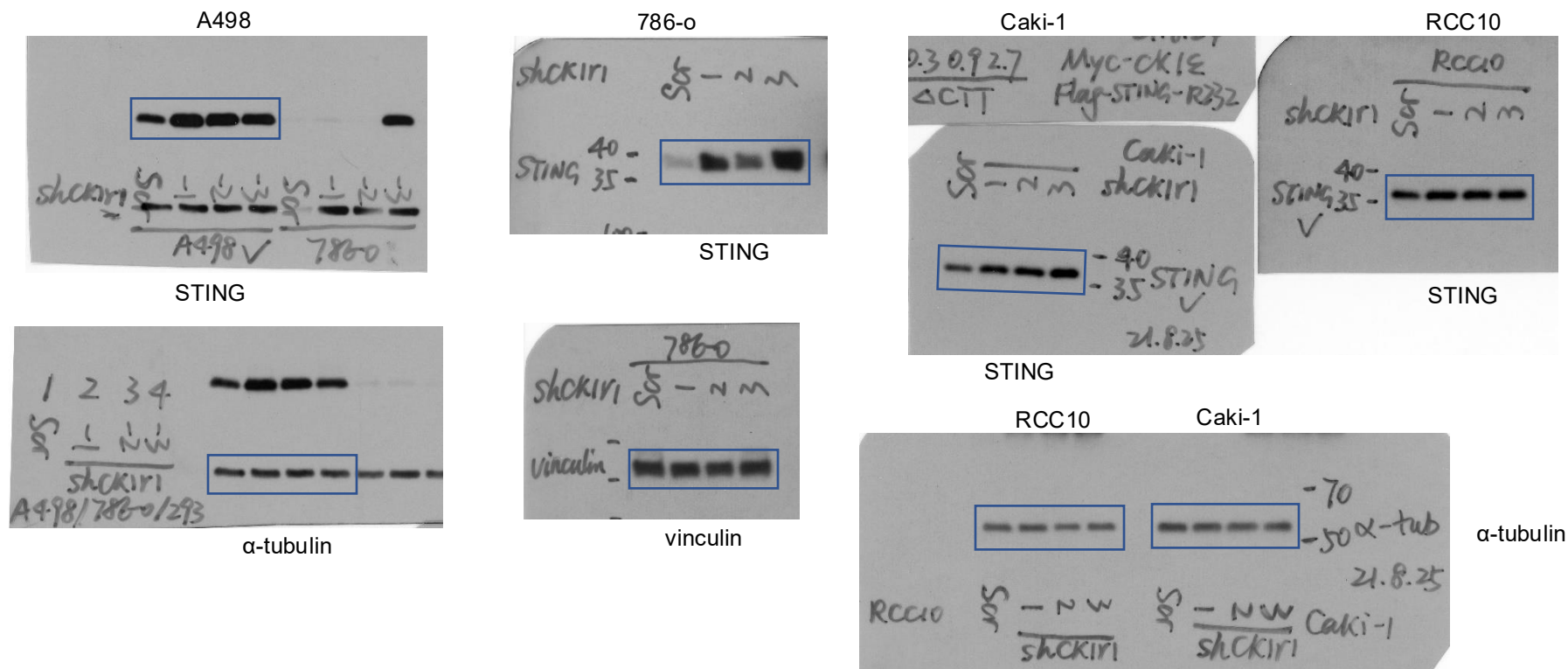
Full unedited blot for Figure 4A



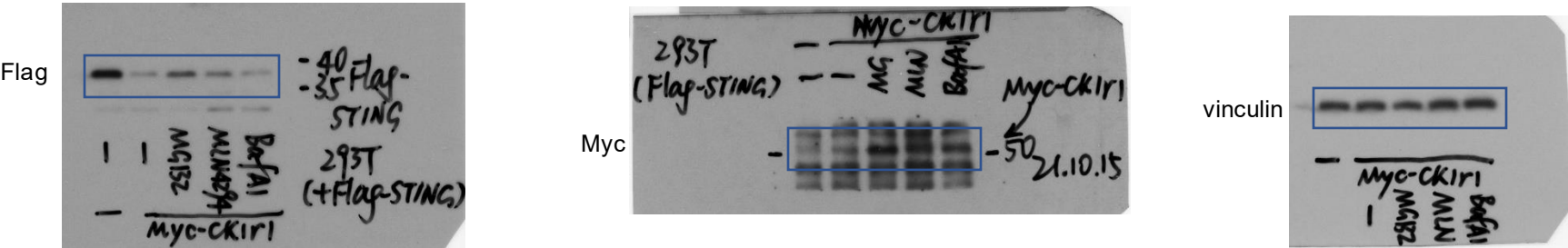
Full unedited blot for Figure 4B



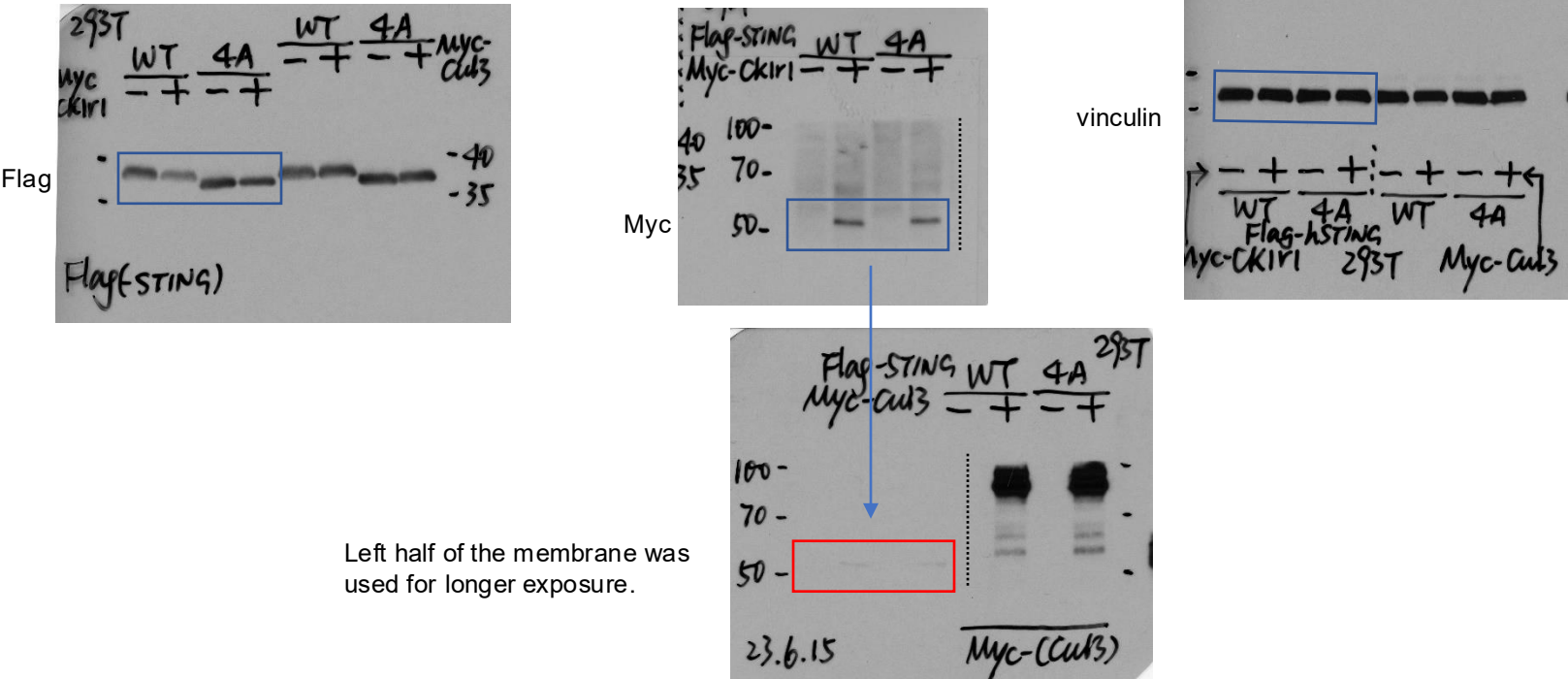
Full unedited blot for Figure 4C



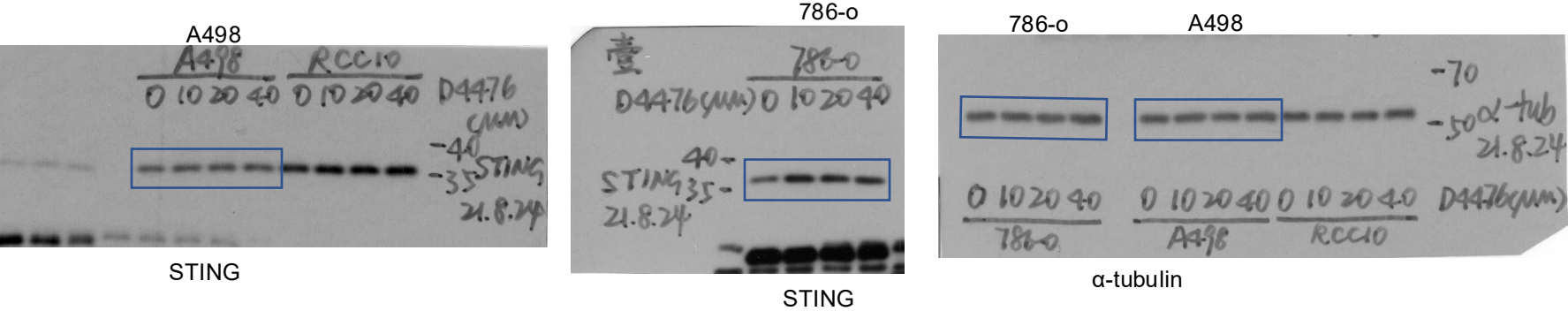
Full unedited blot for Figure 4F



Full unedited blot for Figure 4G



Full unedited blot for Figure 4H



786-o

HEK293

0.3 0.9 2.7 0.3 0.9 2.7 HA-Spop (μM) Flag-STING

WT 4A

40- (STING) 35- 293T -Flag 21.7.10

0.3 1 3 0.3 1 3 HA-SPOP (μM) Flag-STING

WT 4A

40- 35- STING 21.7.10

B16 Renca

shSpop

40SPOP 21.7.10

293T

WT 4A Flag-STING HA-SPOP (μM)

0.3 0.9 2.7 0.3 0.9 2.7

50 HA-SPOP (SPop) 21.7.10

Renca

epiblastin A (μM)

0 10 20 40

40- 35- STING 21.7.10

STING Renca

293

epiblastin A (μM)

0 10 20 40

40- 35- STING 21.7.10

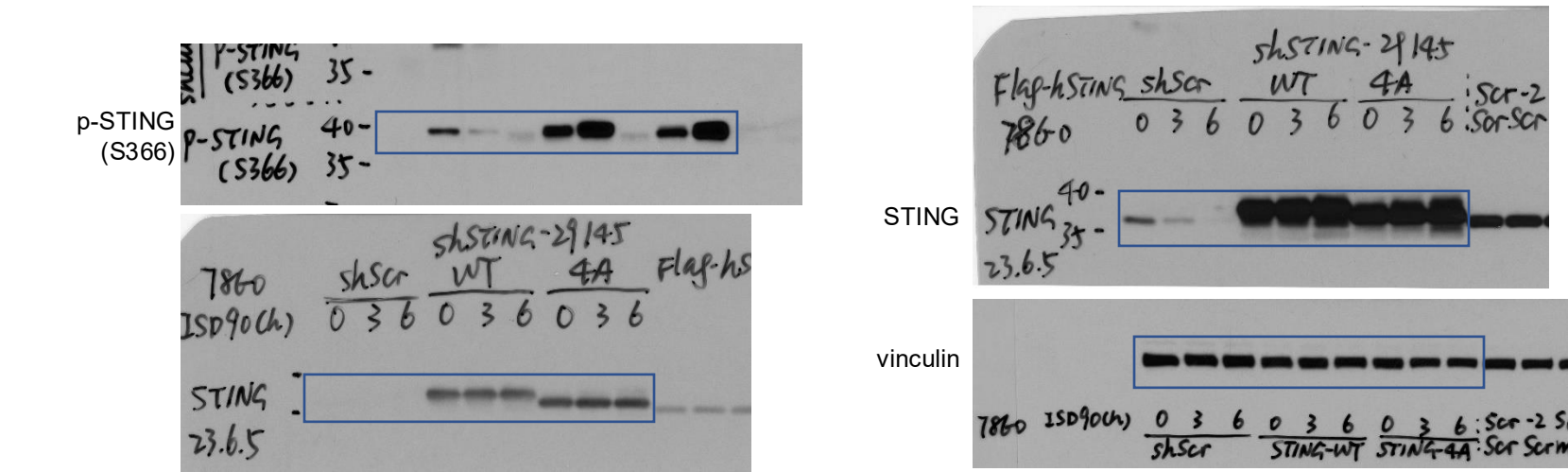
HEK293 part was cut off because of no STING signal in the shorter exposure film.

Western blot analysis of vinculin in HEK293 and Renca cells treated with tin A. The blot shows four lanes for each cell line, corresponding to 0, 10, 20, and 40 minutes of treatment. Molecular weight markers are indicated on the right at 150 and 100 kDa. Vinculin bands are visible in all lanes, with a slight increase in intensity over time in Renca cells.

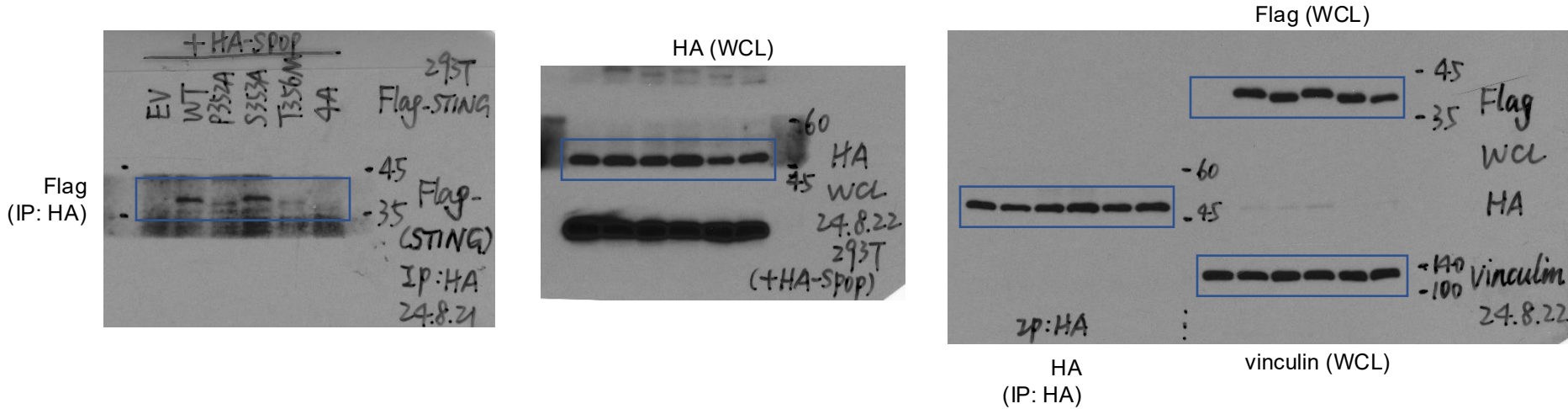
Cell Line	Treatment (min)	Vinculin Band Intensity (approx.)
HEK293	0	1.0
	10	1.0
	20	1.0
	40	1.0
Renca	0	1.0
	10	1.2
	20	1.5
	40	1.8

Figure 5

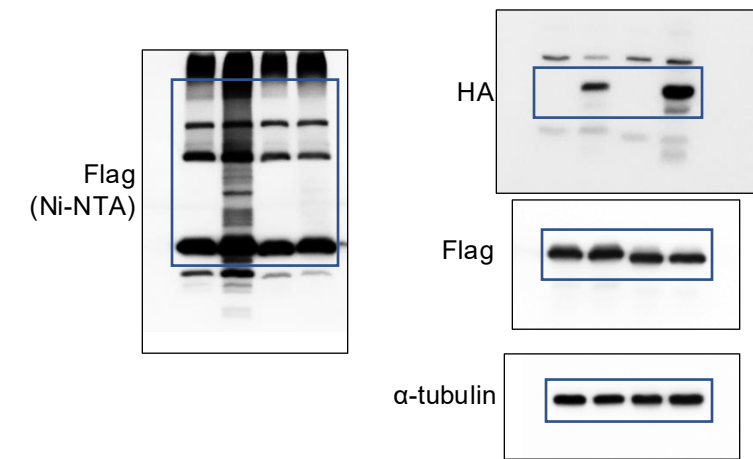
Full unedited blot for Figure 5A



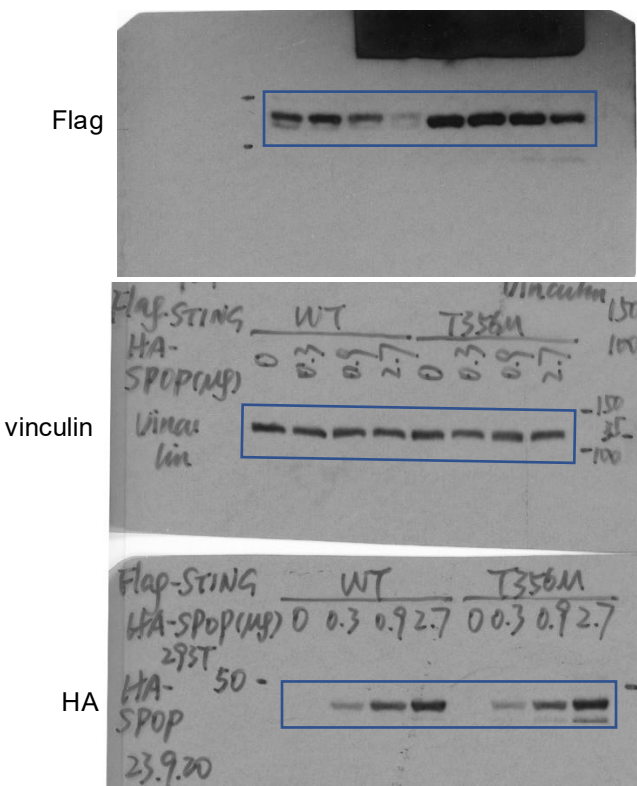
Full unedited blot for Figure 5E



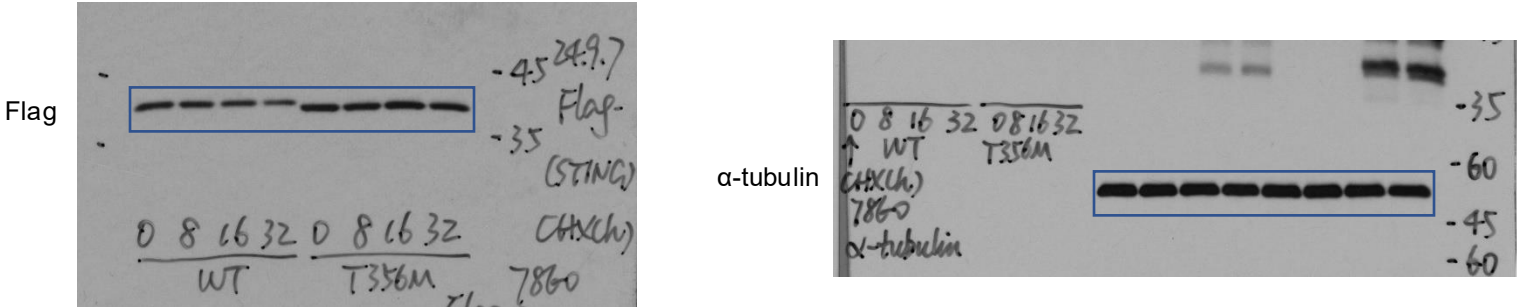
Full unedited blot for Figure 5F



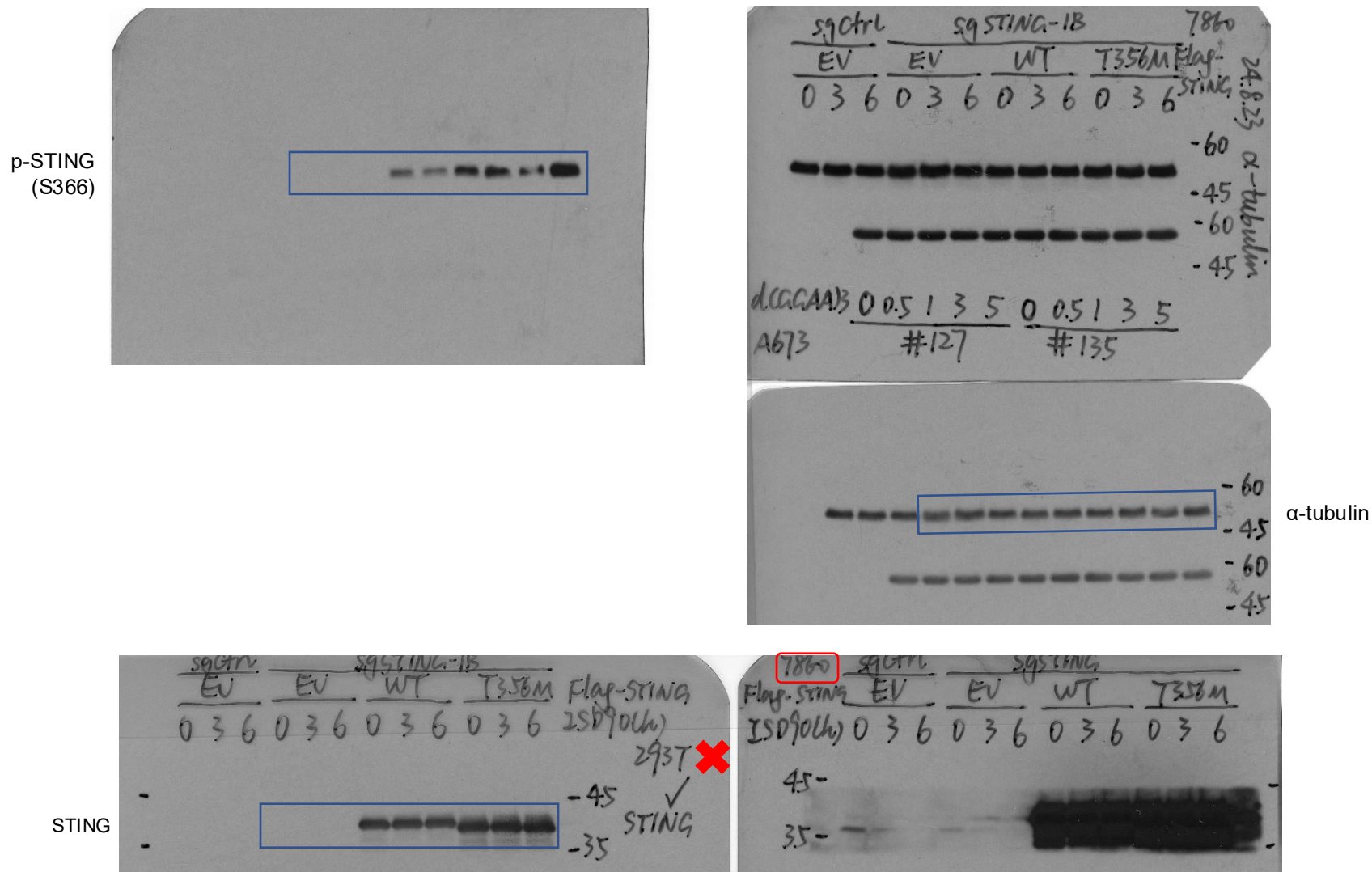
Full unedited blot for Figure 5G



Full unedited blot for Figure 5H

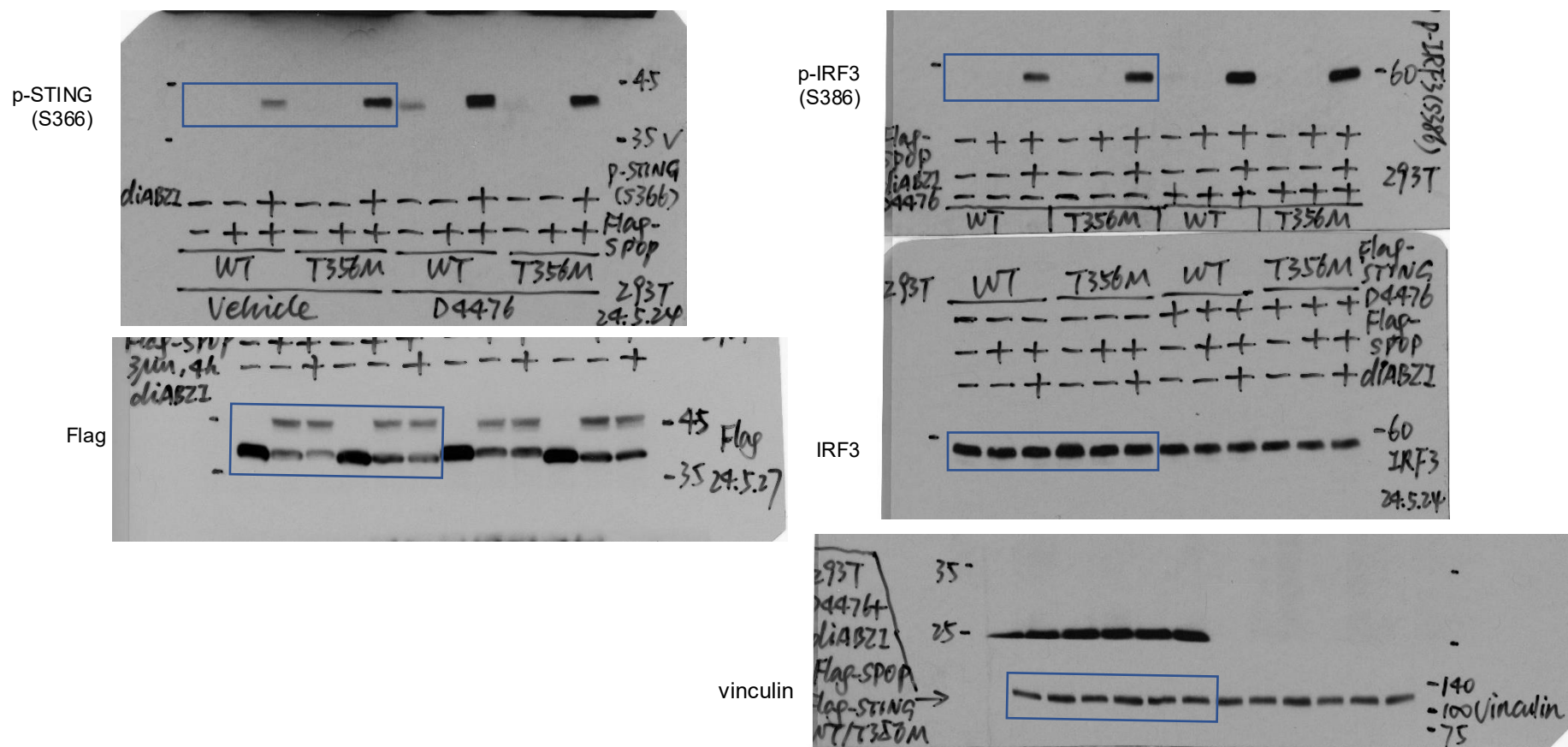


Full unedited blot for Figure 6A

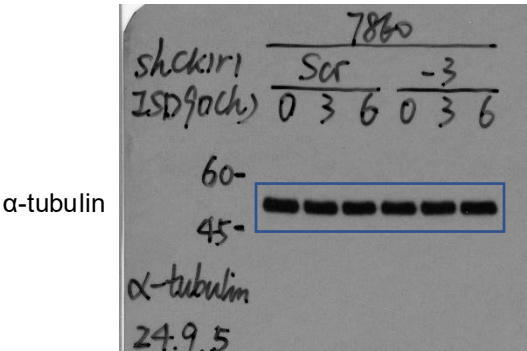
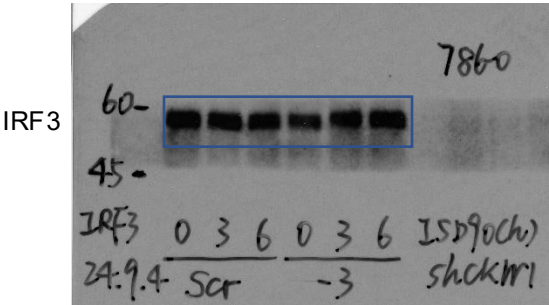
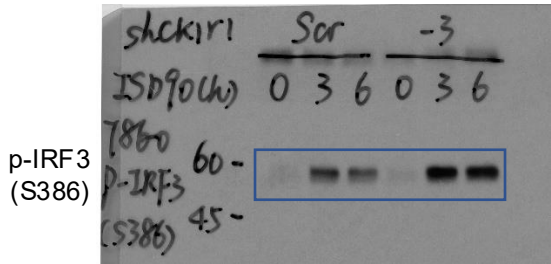
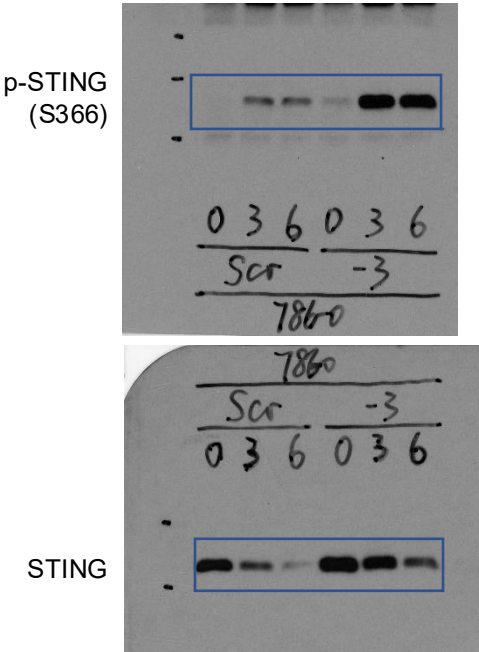


Cell line name “293T” in the short exposure film was typo error of “786-o”.

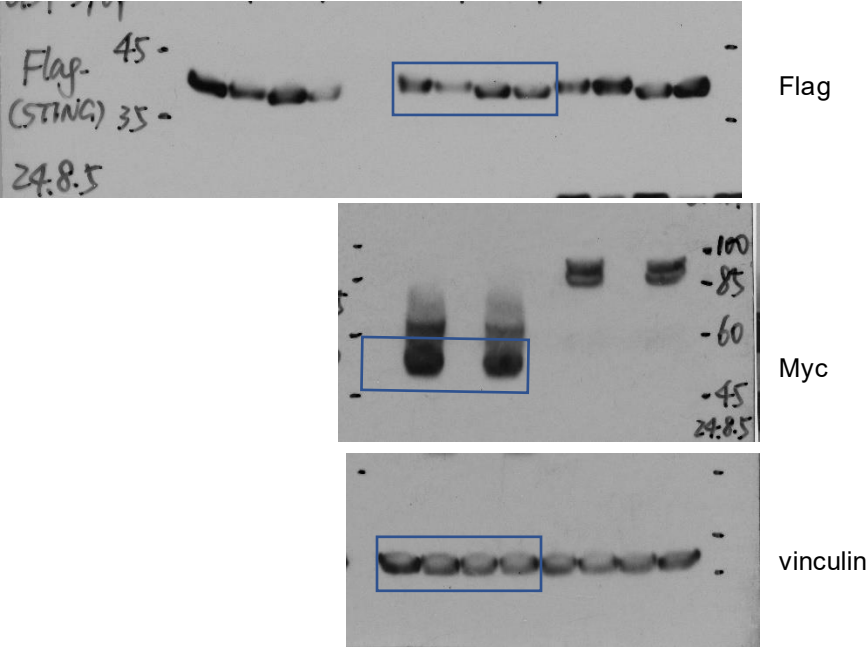
Full unedited blot for Figure 6B



Full unedited blot for Figure 6D



Full unedited blot for Figure 6E



Full unedited blot for Figure 6F

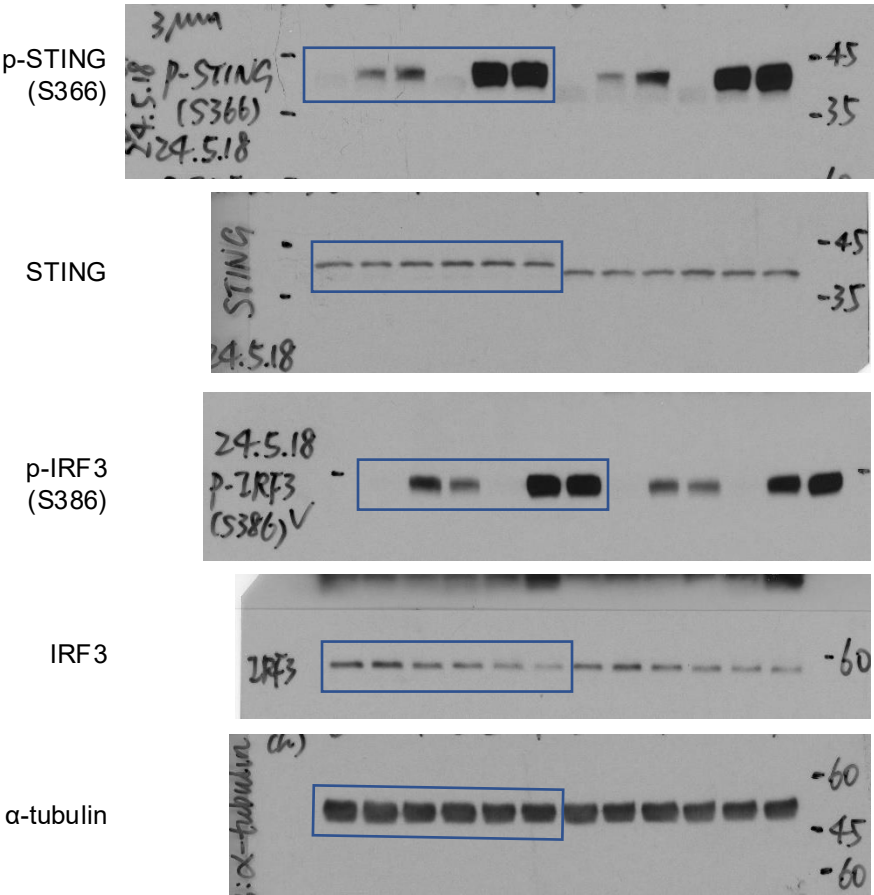
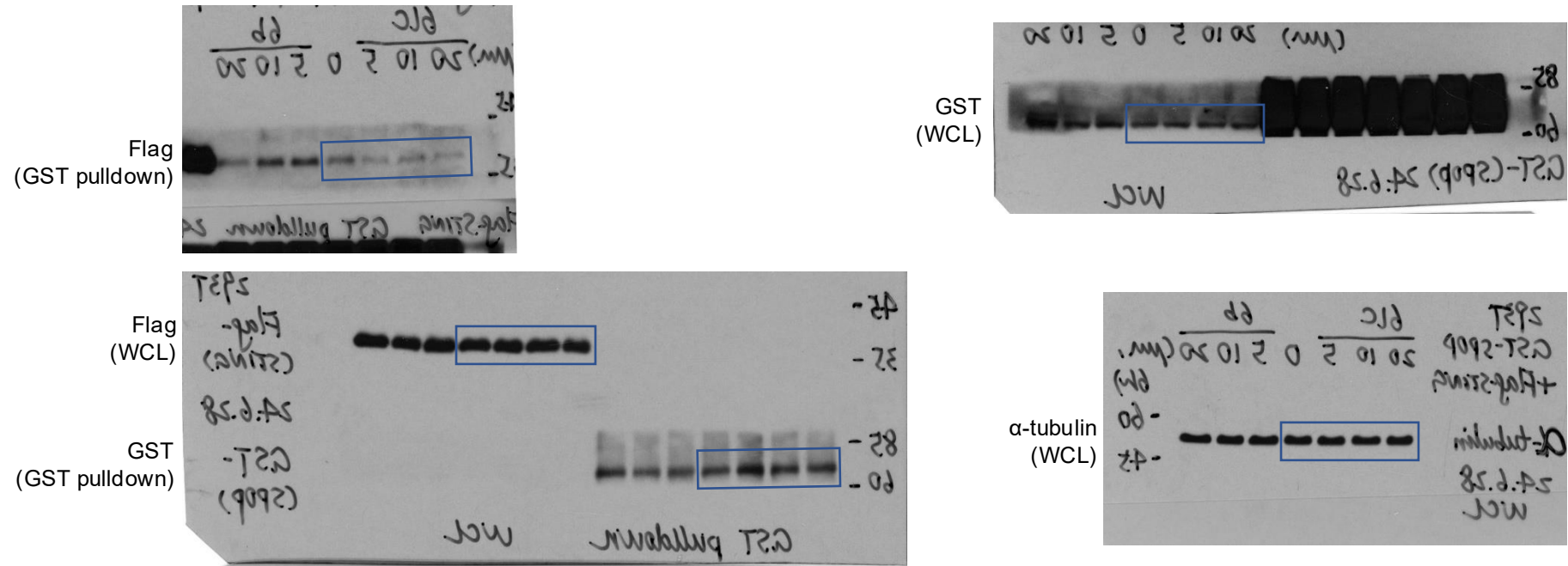
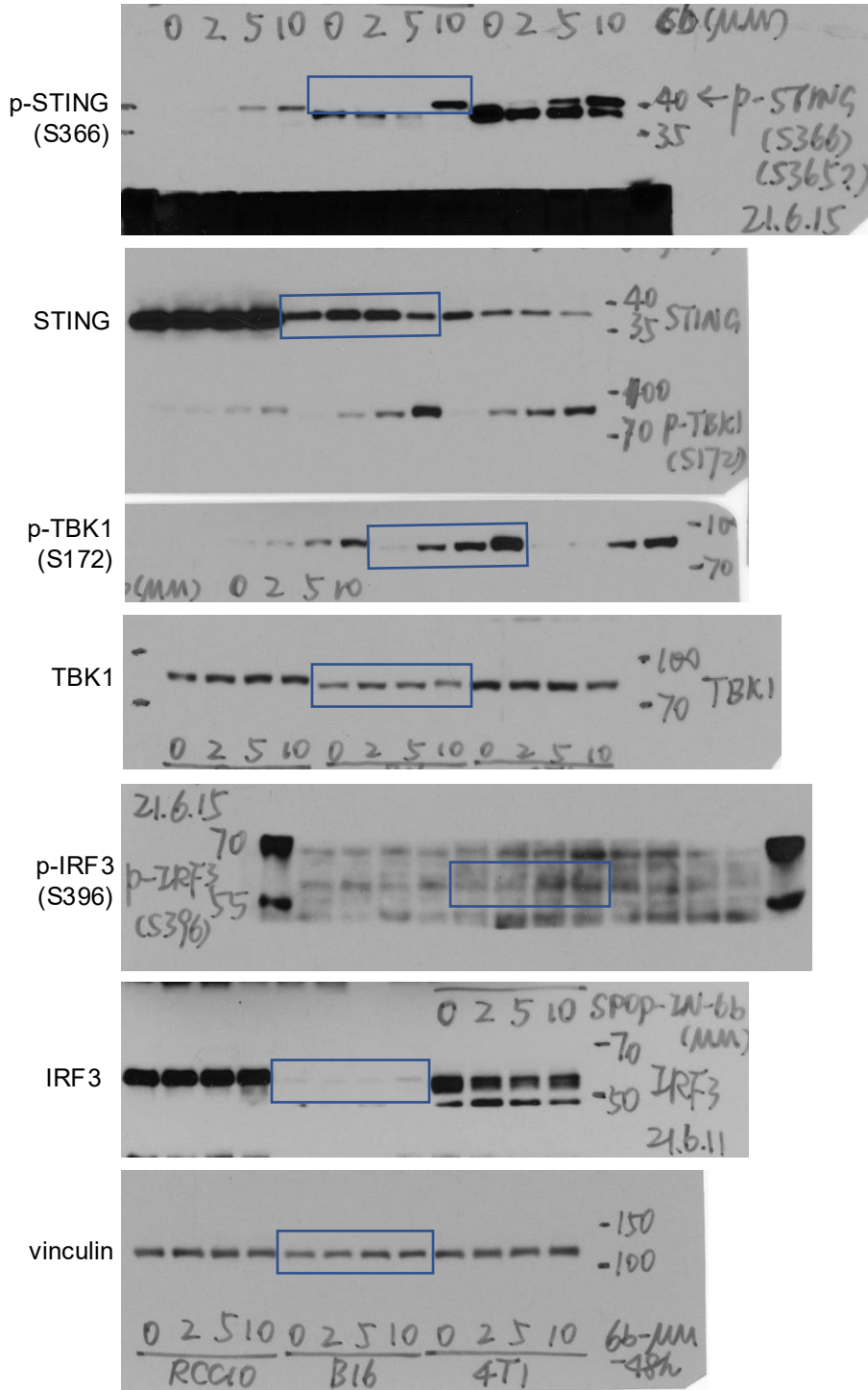


Figure 7

Full unedited blot for Figure 7A



Full unedited blot for Figure 7B



Full unedited blot for Figure 7C

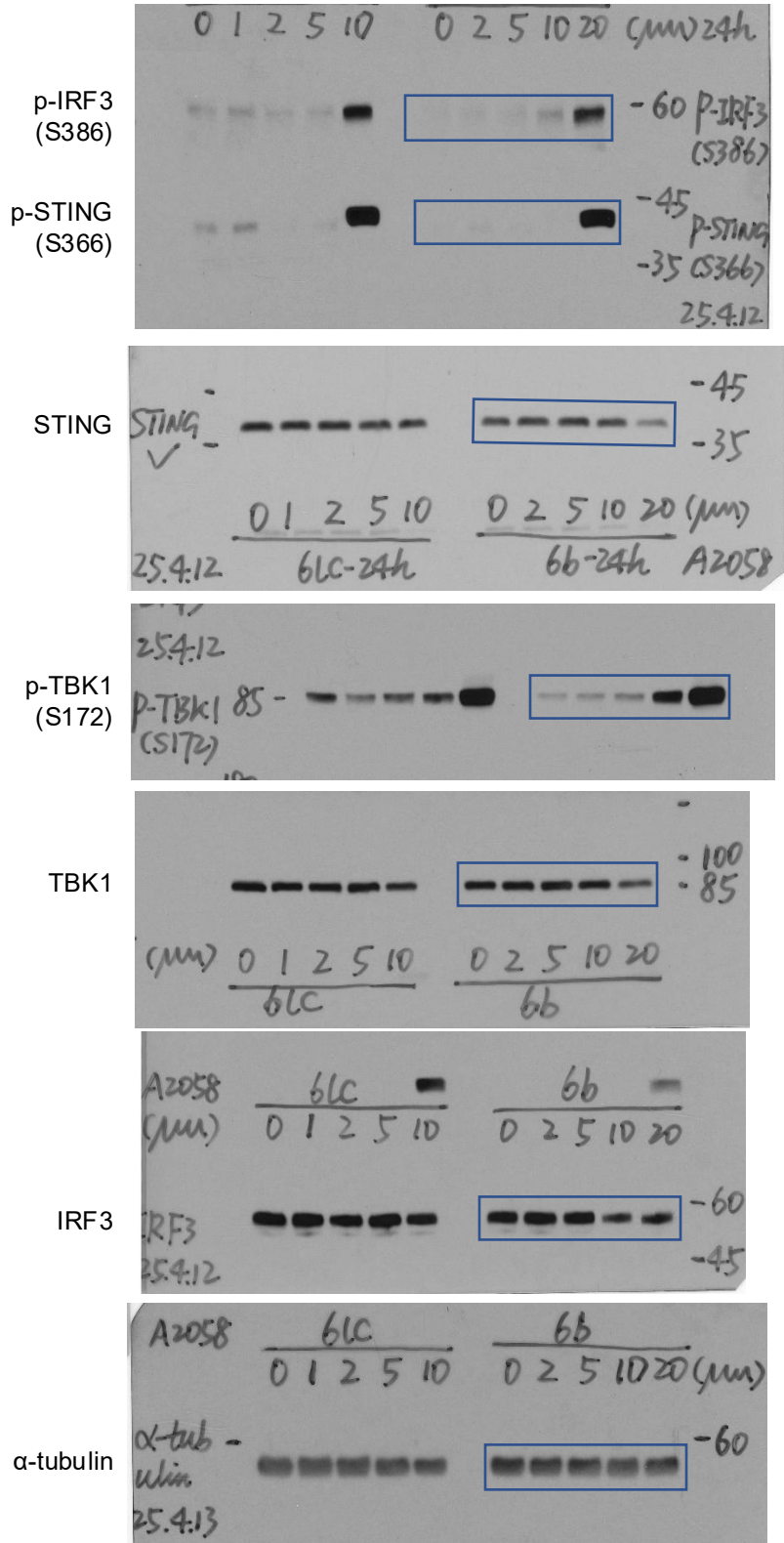


Figure 9

Full unedited blot for Figure 9D

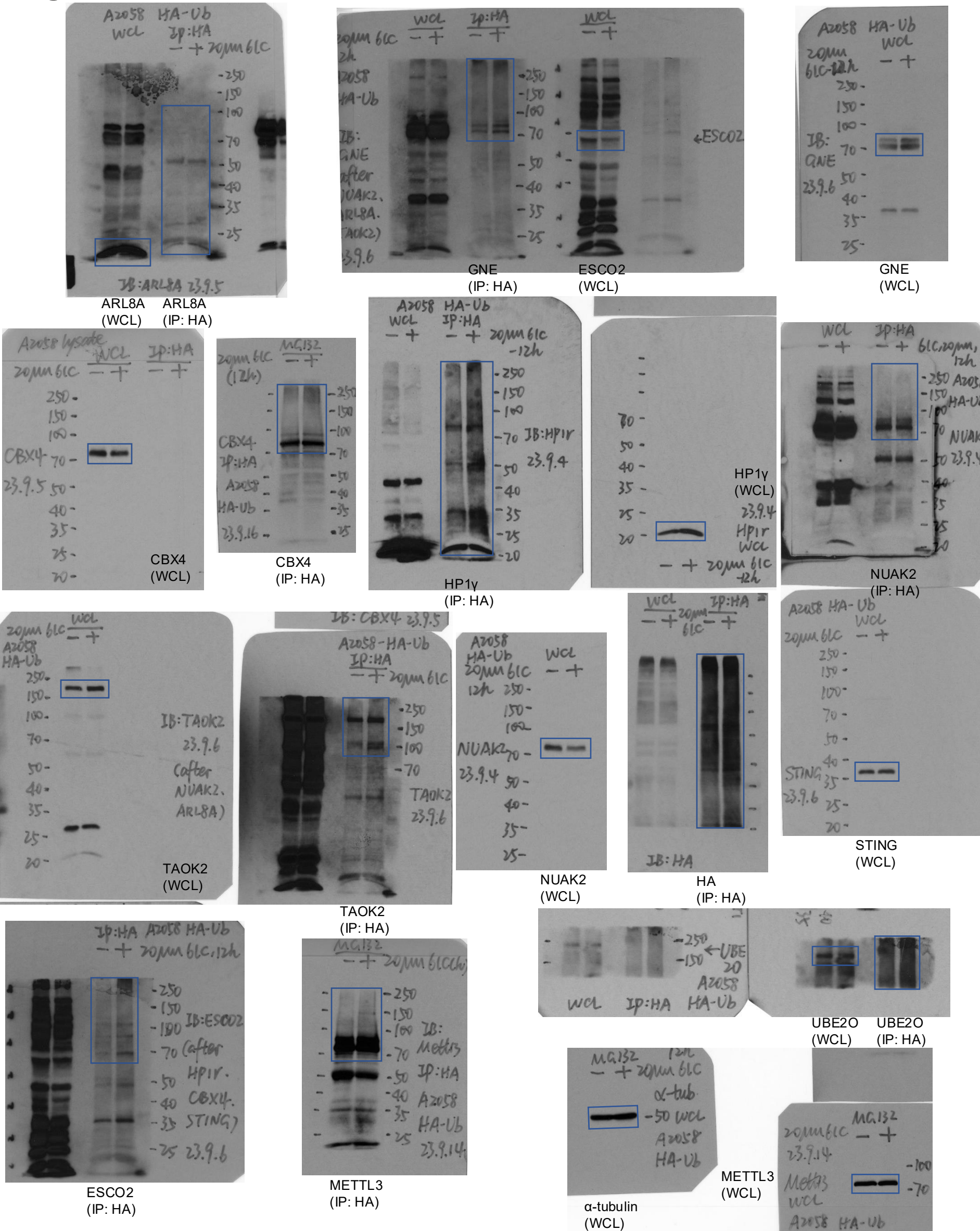
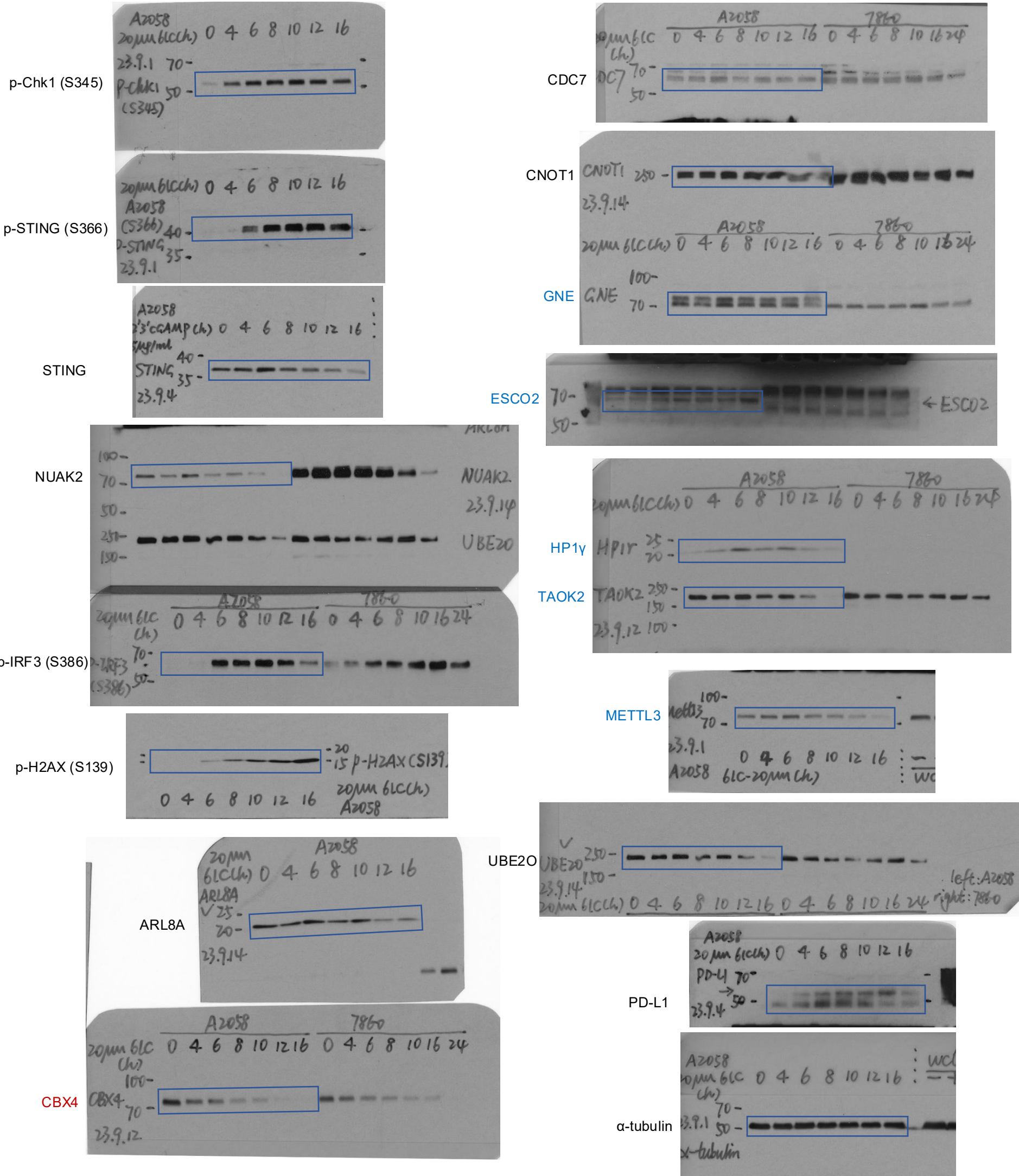
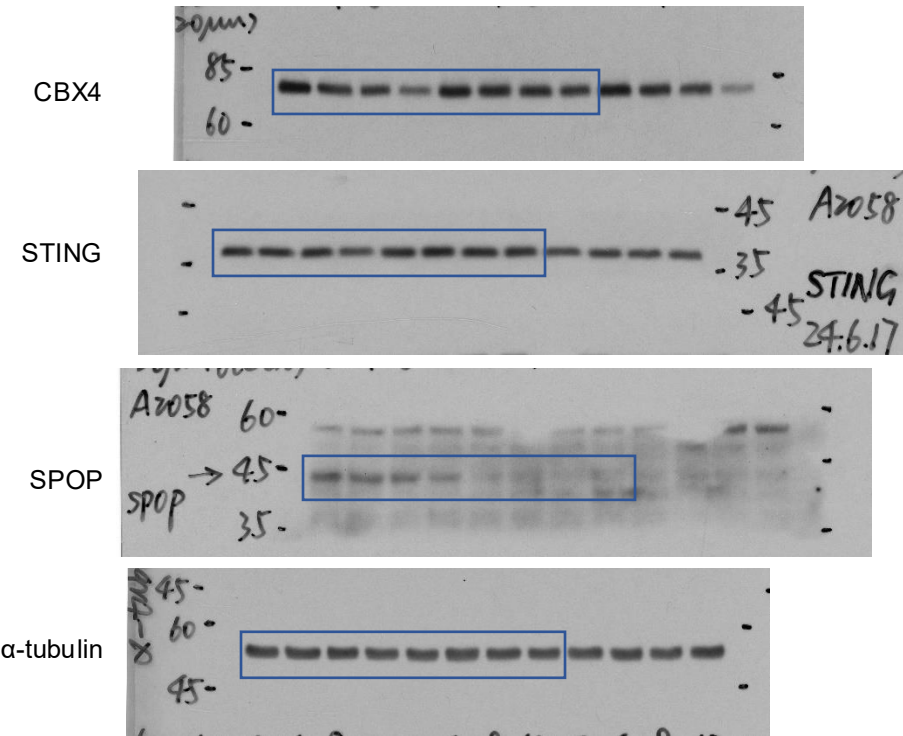


Figure 10

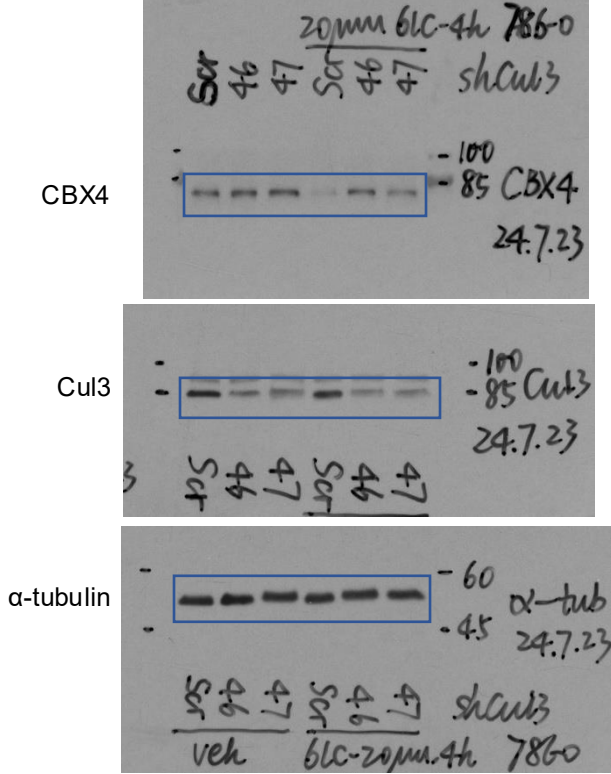
Full unedited blot for Figure 10A



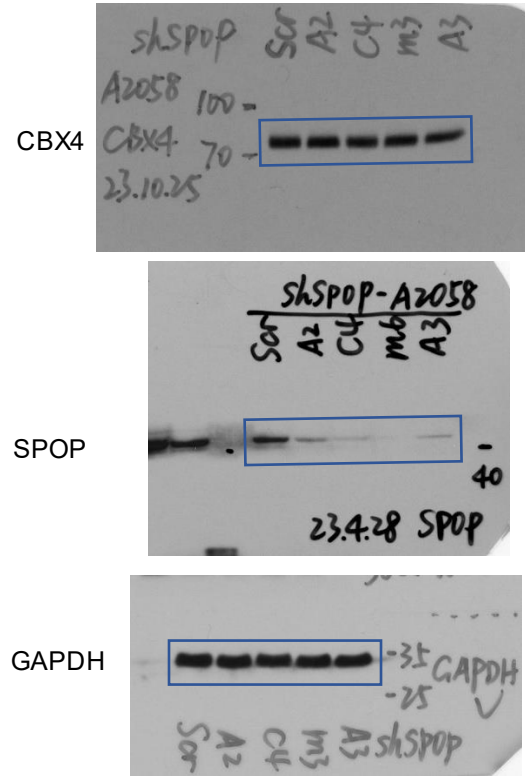
Full unedited blot for Figure 10B



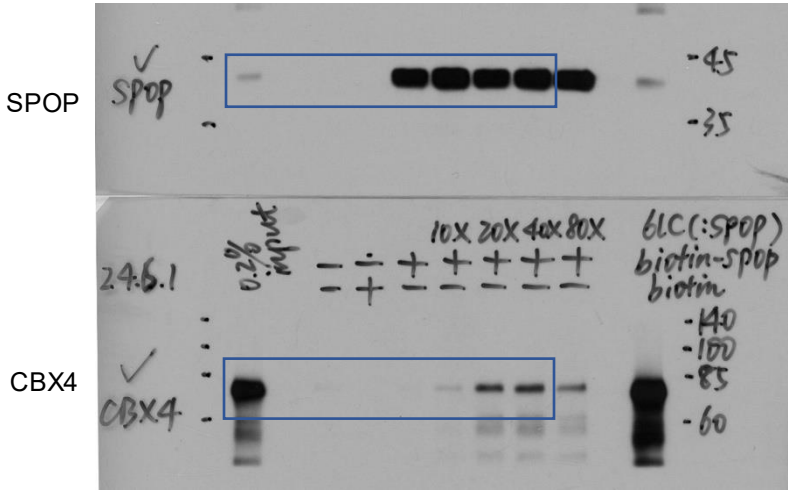
Full unedited blot for Figure 10C



Full unedited blot for Figure 10D



Full unedited blot for Figure 10F



Full unedited blot for Figure 10H

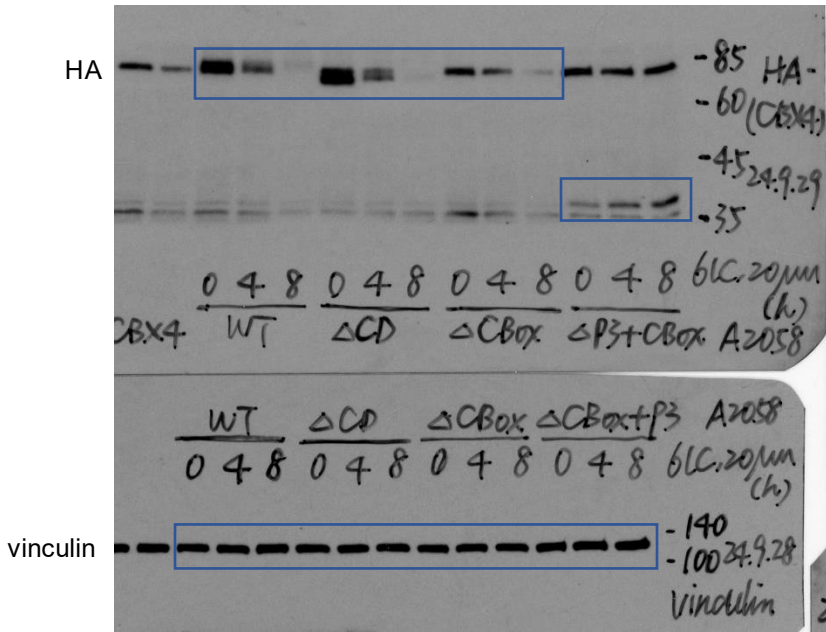
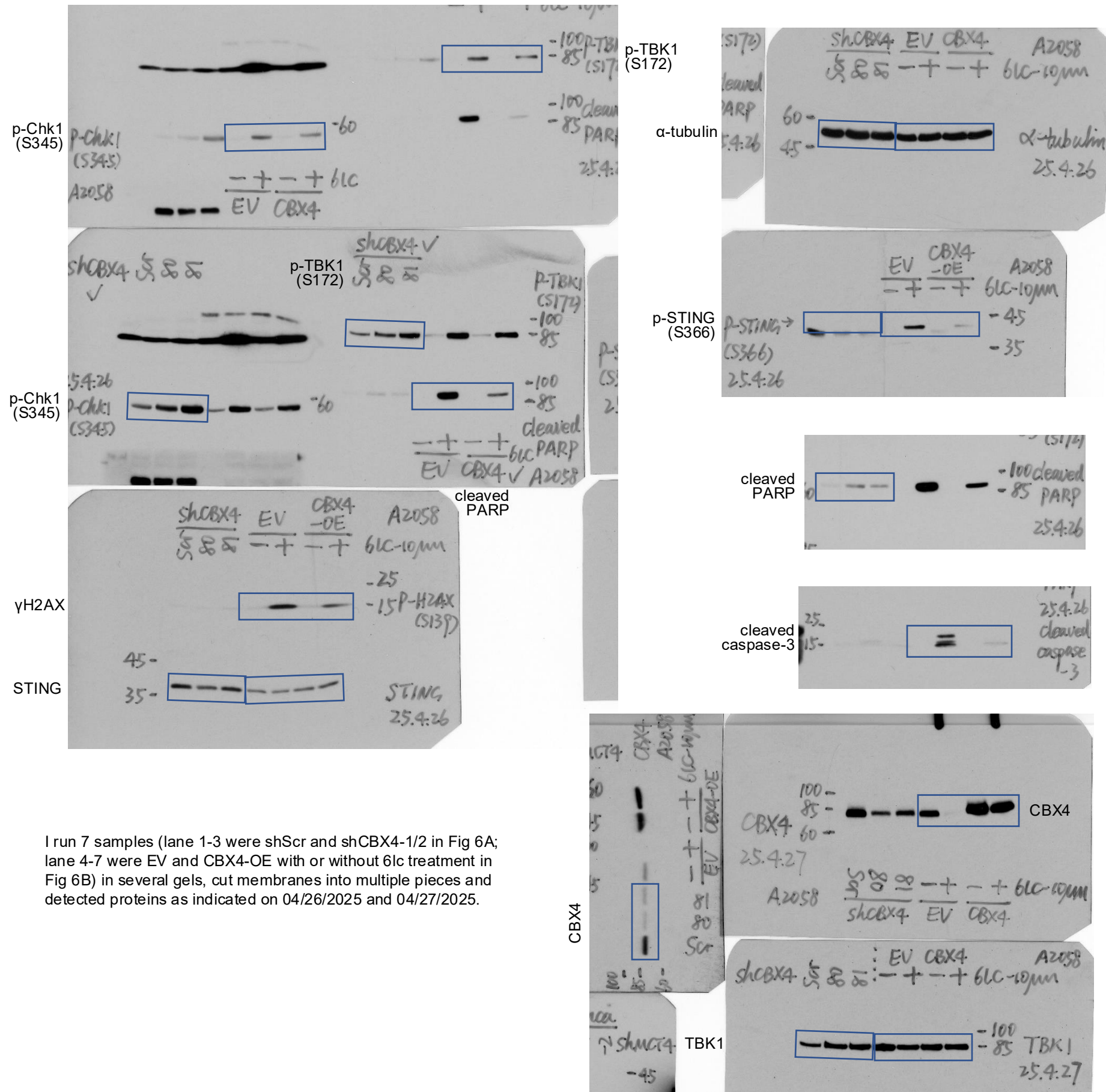


Figure 11

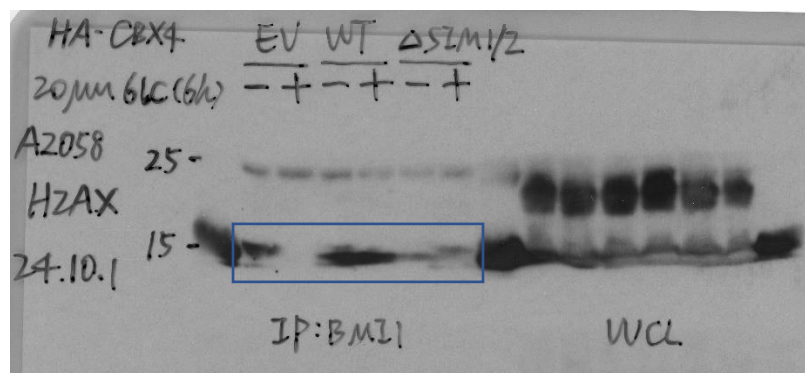
Full unedited blot for Figure 11A and 11B



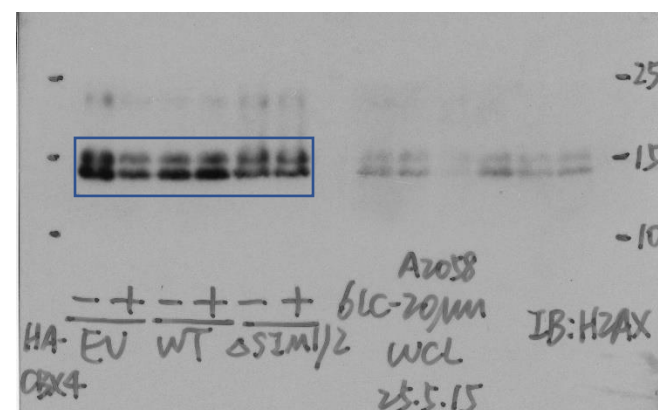
I run 7 samples (lane 1-3 were shScr and shCBX4-1/2 in Fig 6A; lane 4-7 were EV and CBX4-OE with or without 6lc treatment in Fig 6B) in several gels, cut membranes into multiple pieces and detected proteins as indicated on 04/26/2025 and 04/27/2025.

Full unedited blot for Figure 11K

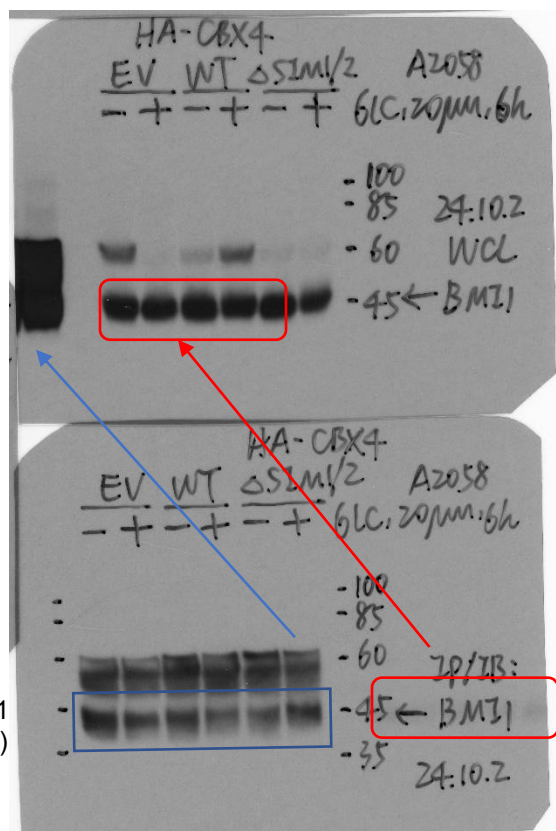
H2AX
(IP: BMI1)



H2AX
(WCL)



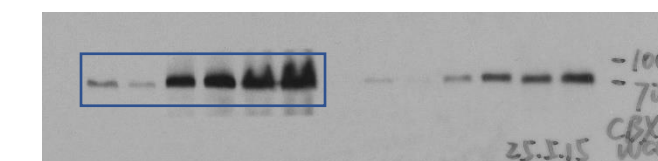
BMI1
(IP: BMI1)



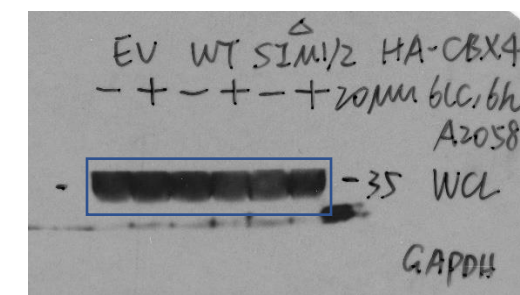
BMI1
(WCL)



CBX4
(WCL)



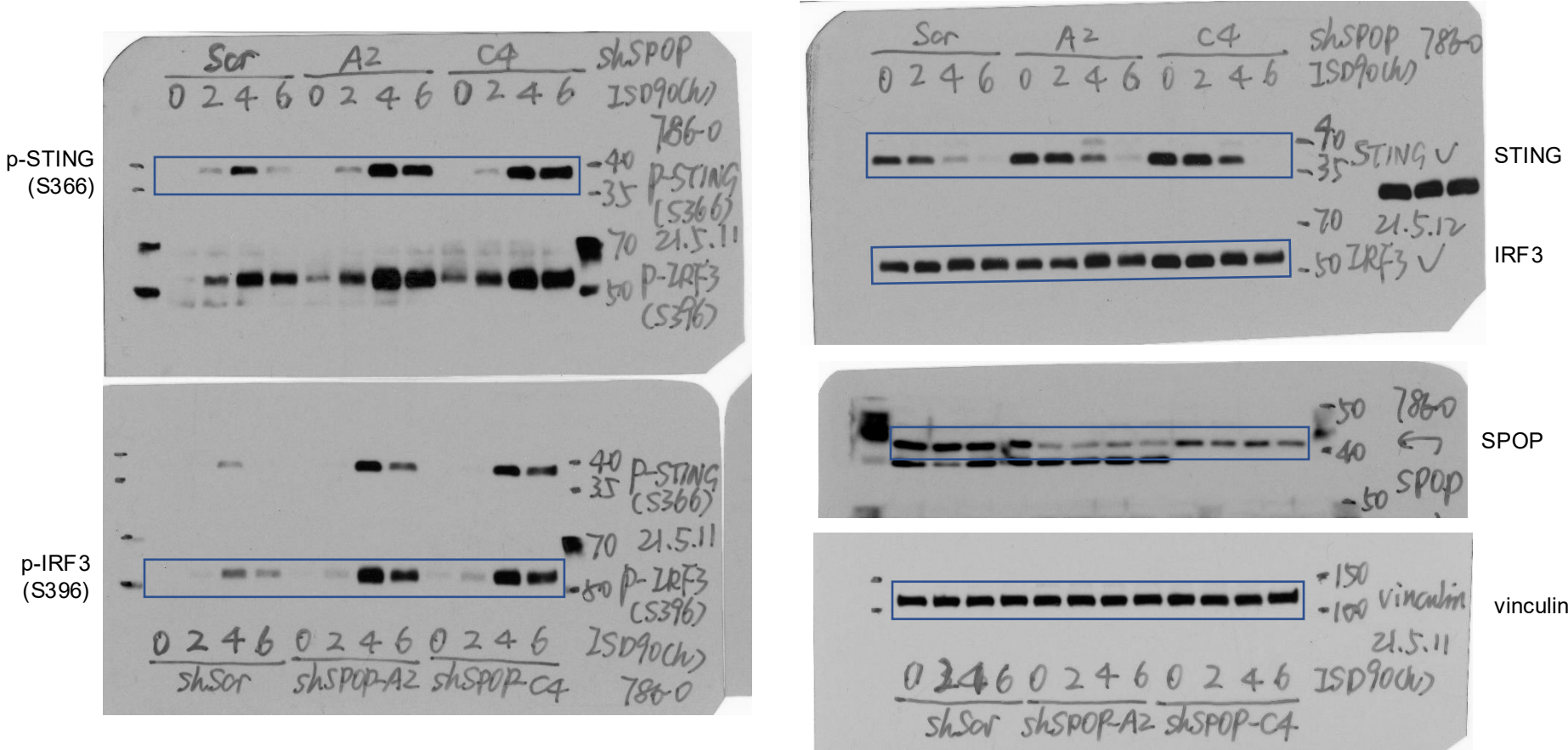
GAPDH
(WCL)



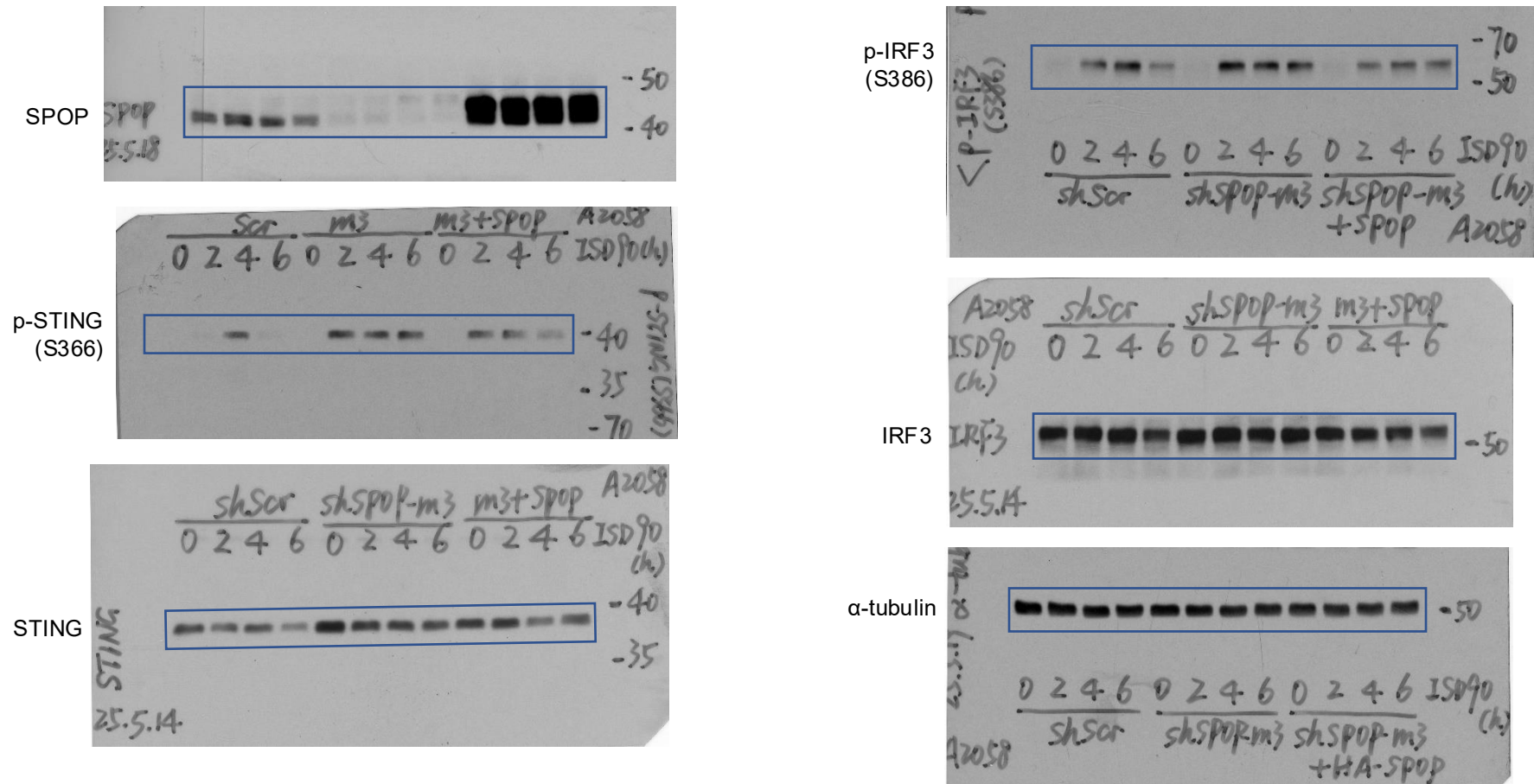
IP and WCL samples were prepared and analyzed in 10/2024. H2AX, BMI1 and CBX4 in WCL were detected again on 05/15/2025 per reviewer's request.

Figure S1

Full unedited blot for Figure S1K



Full unedited blot for Figure S1Z



Full unedited blot for Figure S1Z1

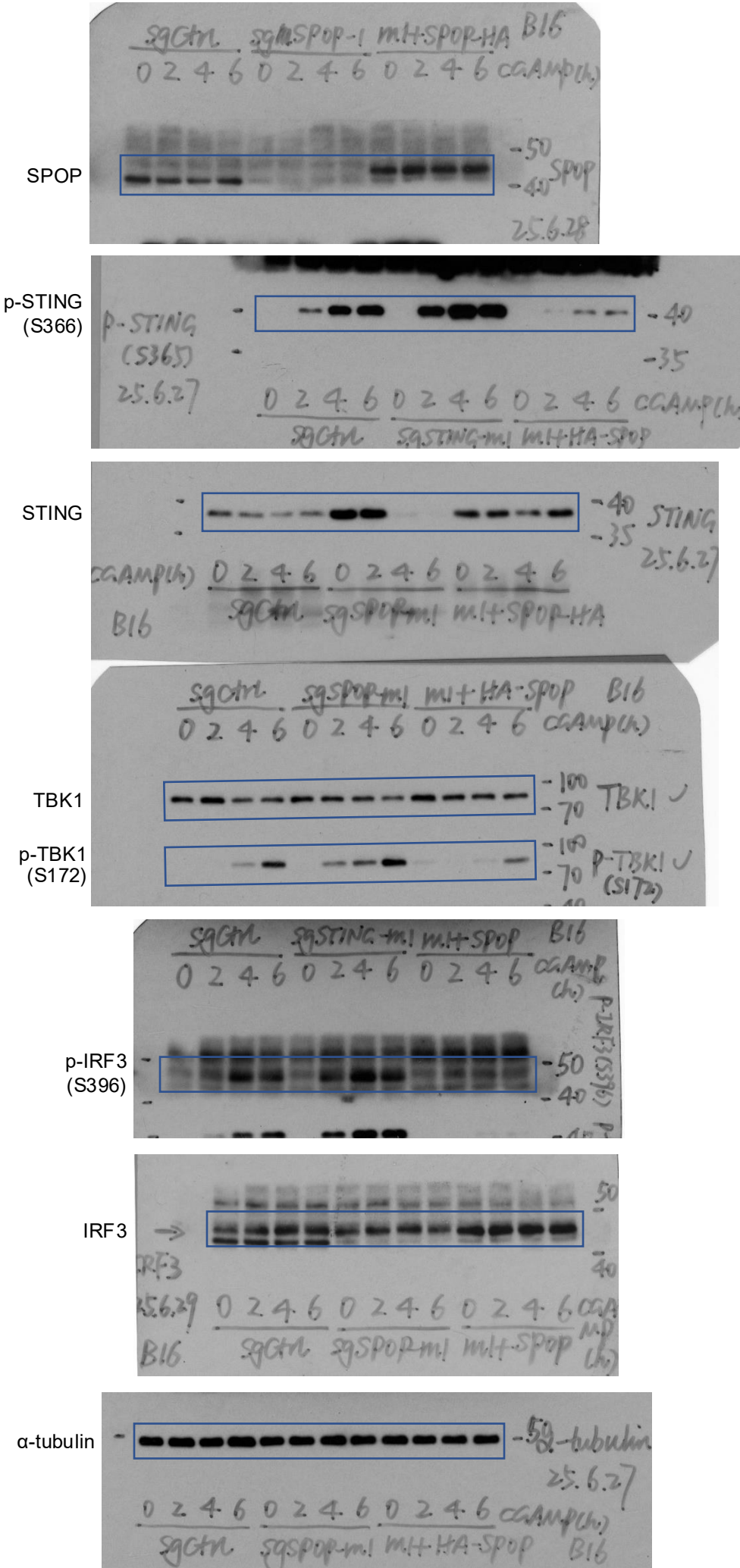
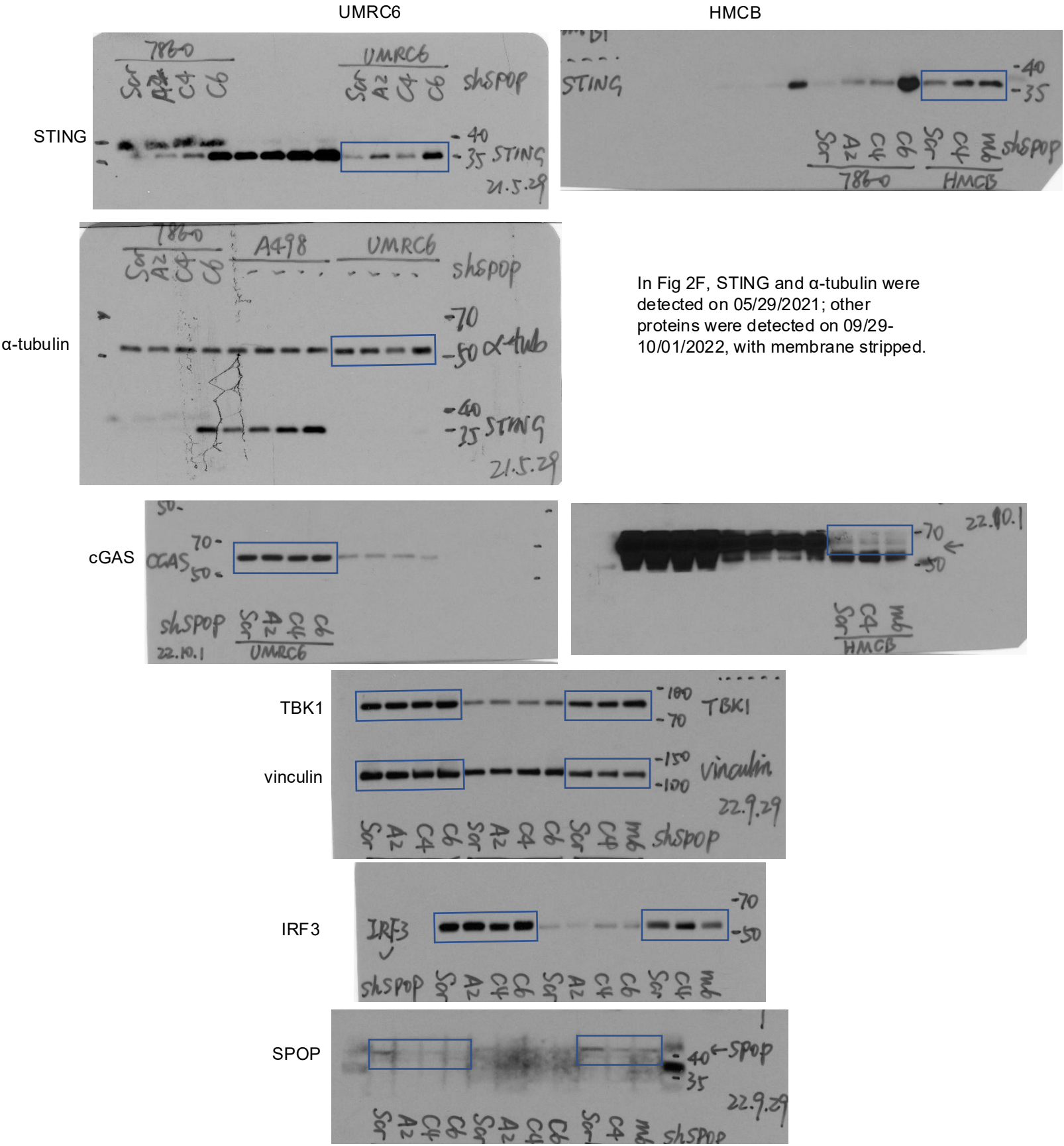
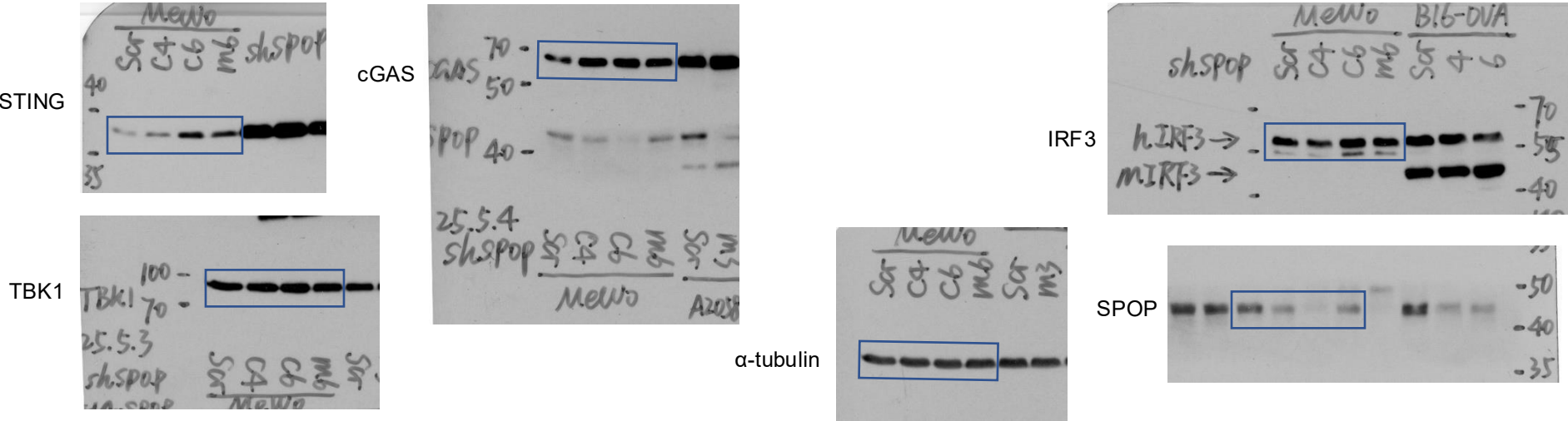


Figure S2

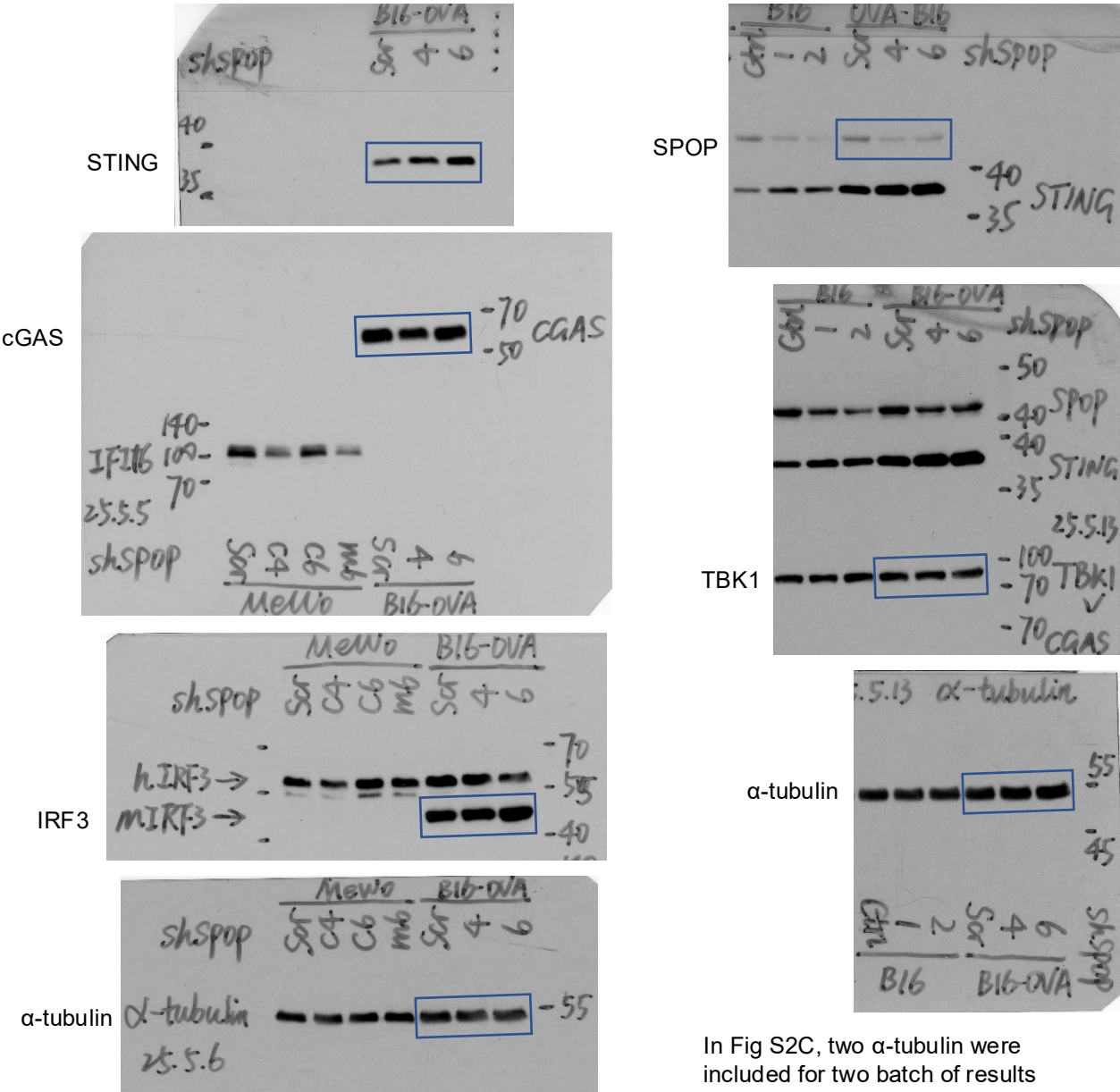
Full unedited blot for Figure S2A and 2F



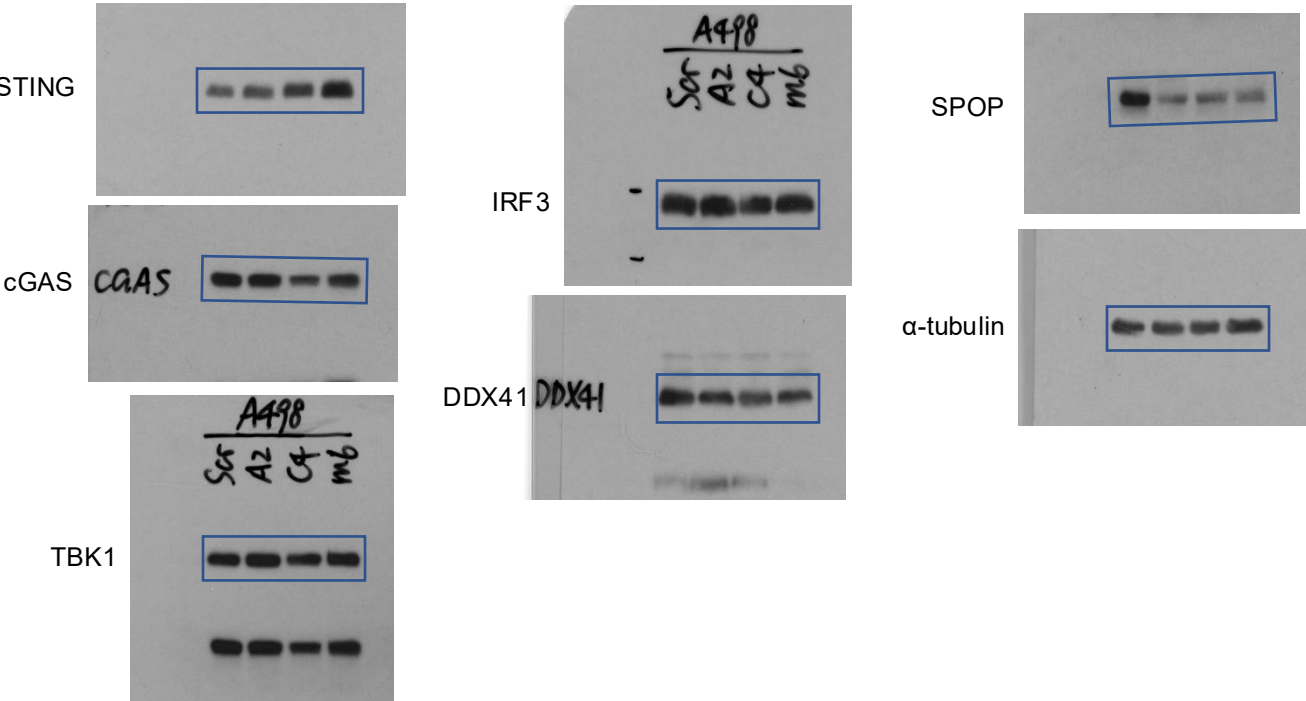
Full unedited blot for Figure S2B



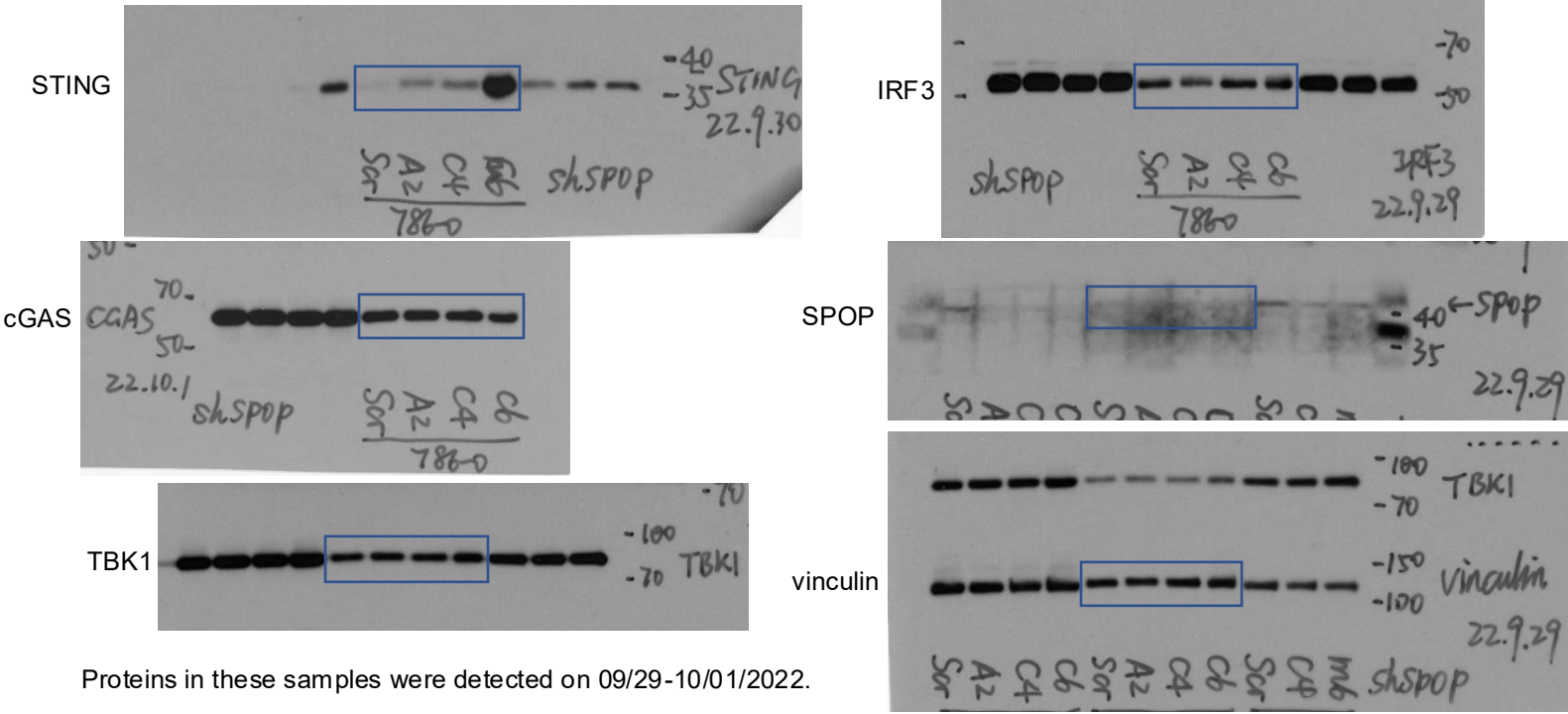
Full unedited blot for Figure S2C



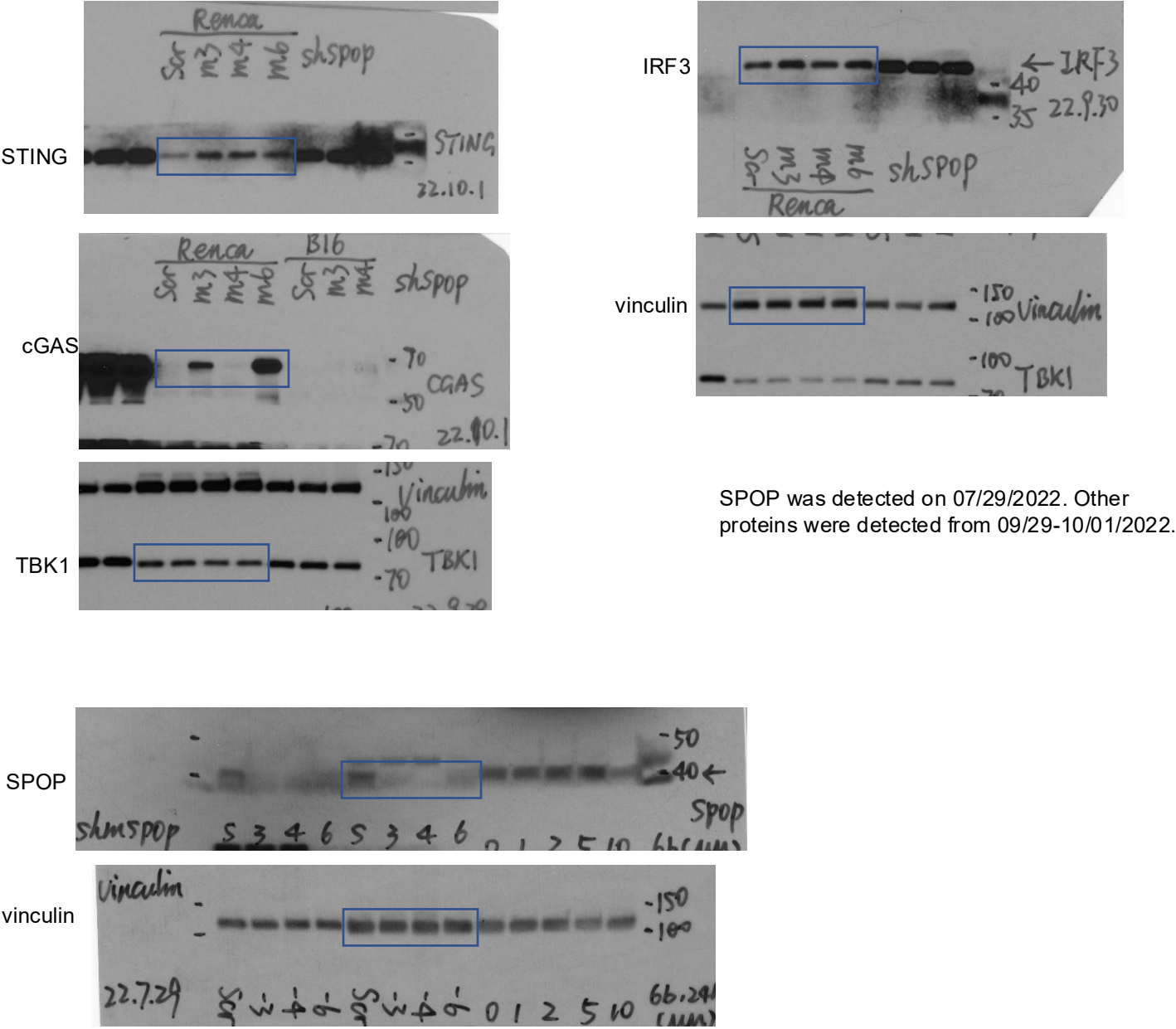
Full unedited blot for Figure S2D



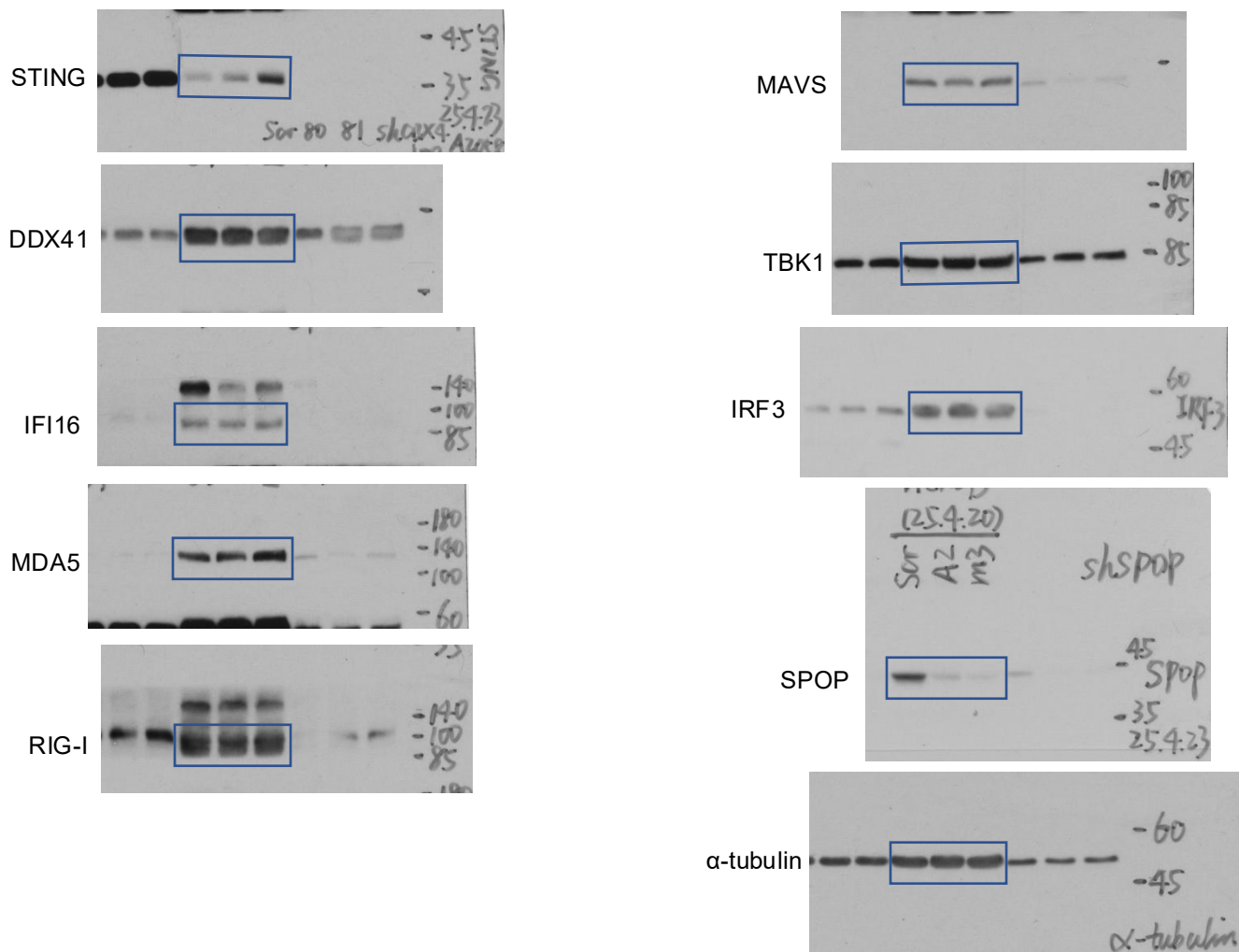
Full unedited blot for Figure S2E



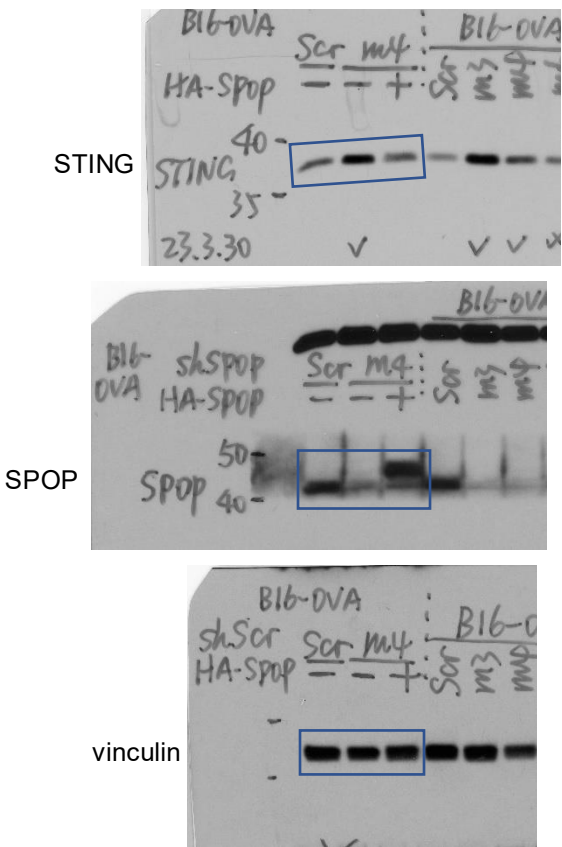
Full unedited blot for Figure S2G



Full unedited blot for Figure S2H



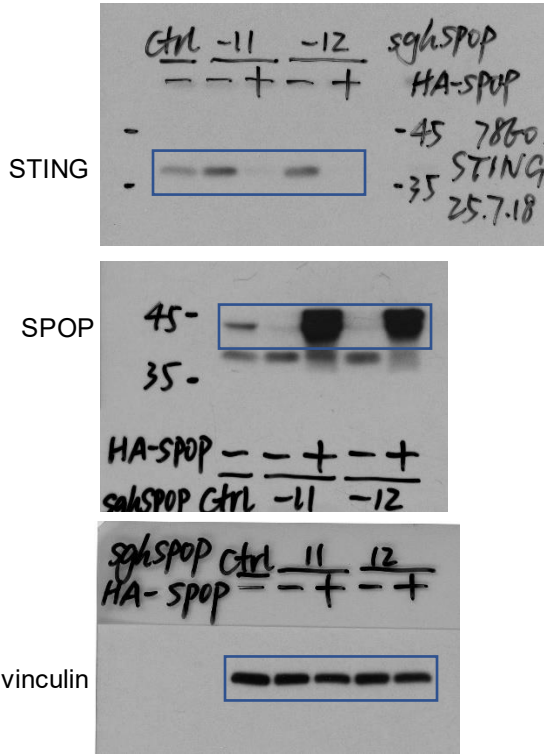
Full unedited blot for Figure S2J



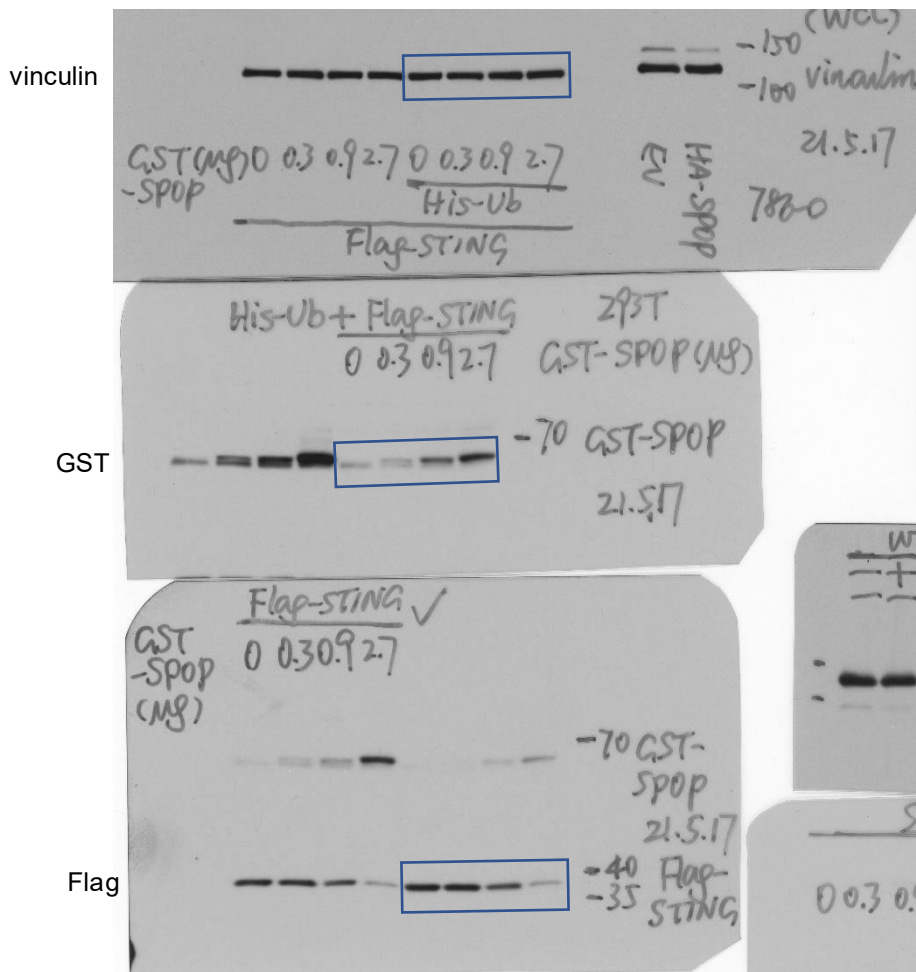
Full unedited blot for Figure S2K



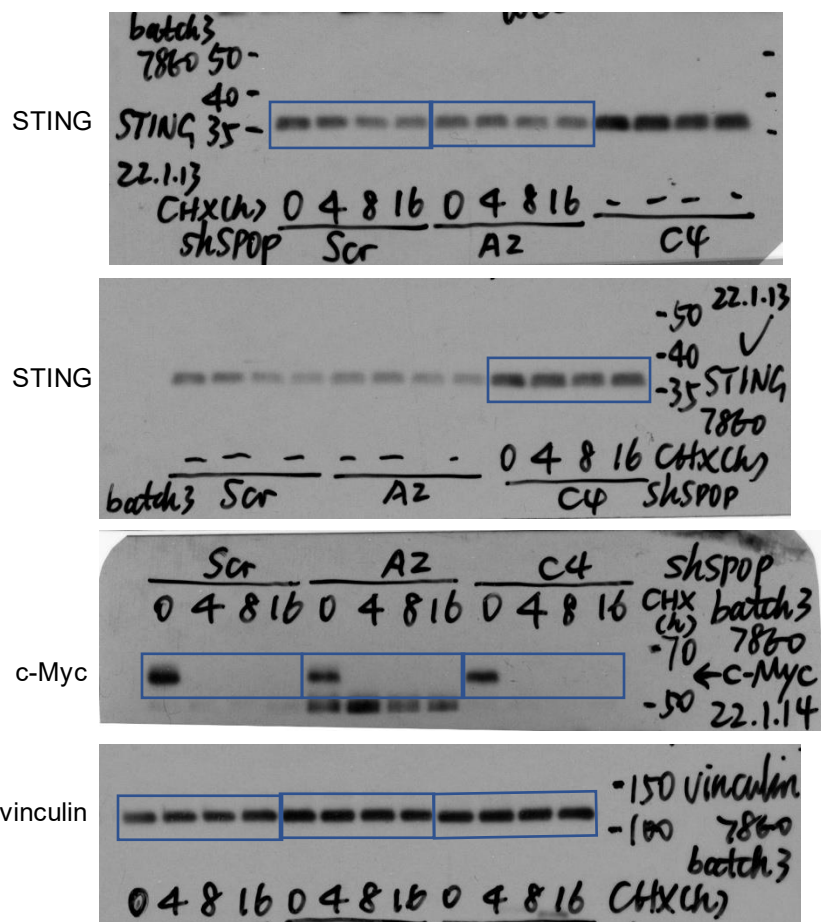
Full unedited blot for Figure S2L



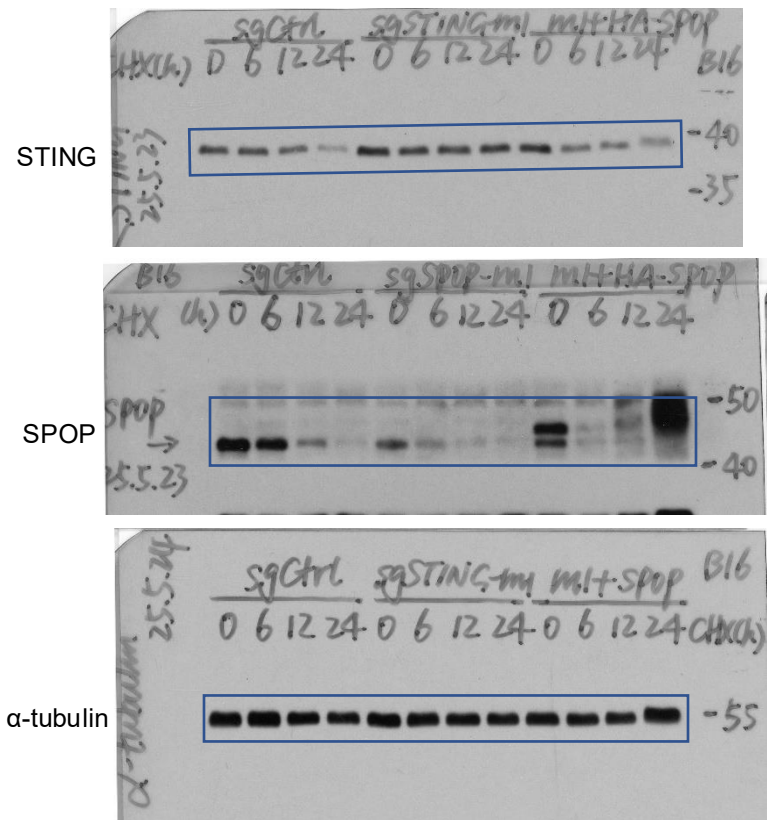
Full unedited blot for Figure S2M



Full unedited blot for Figure S2N



Full unedited blot for Figure S2P



Full unedited blot for Figure S2R

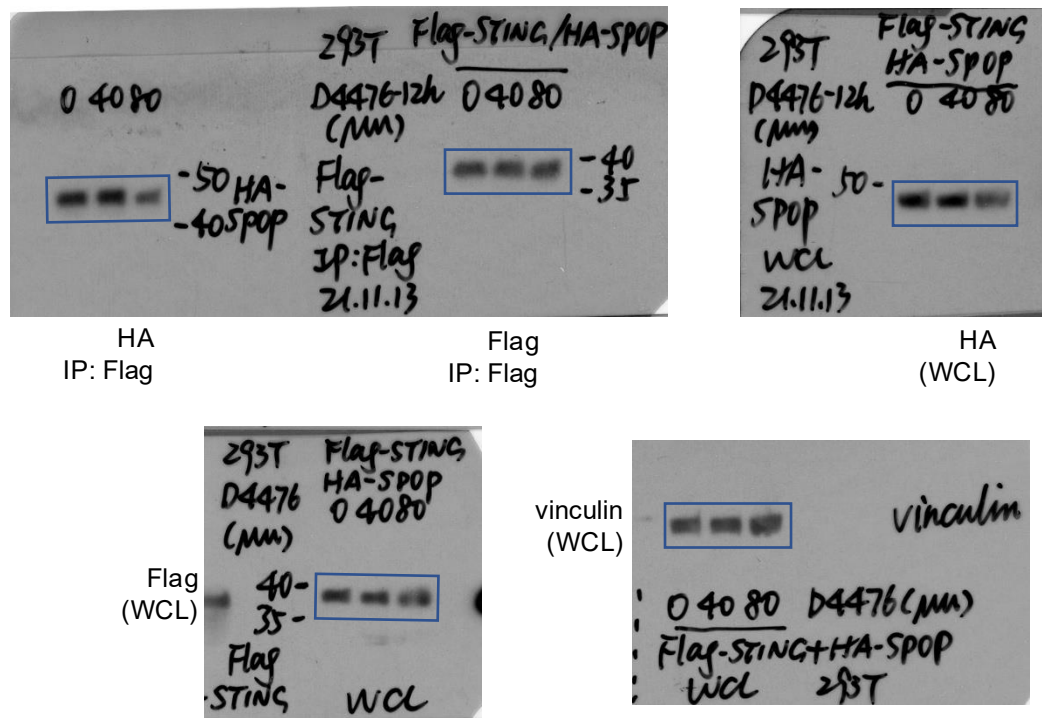
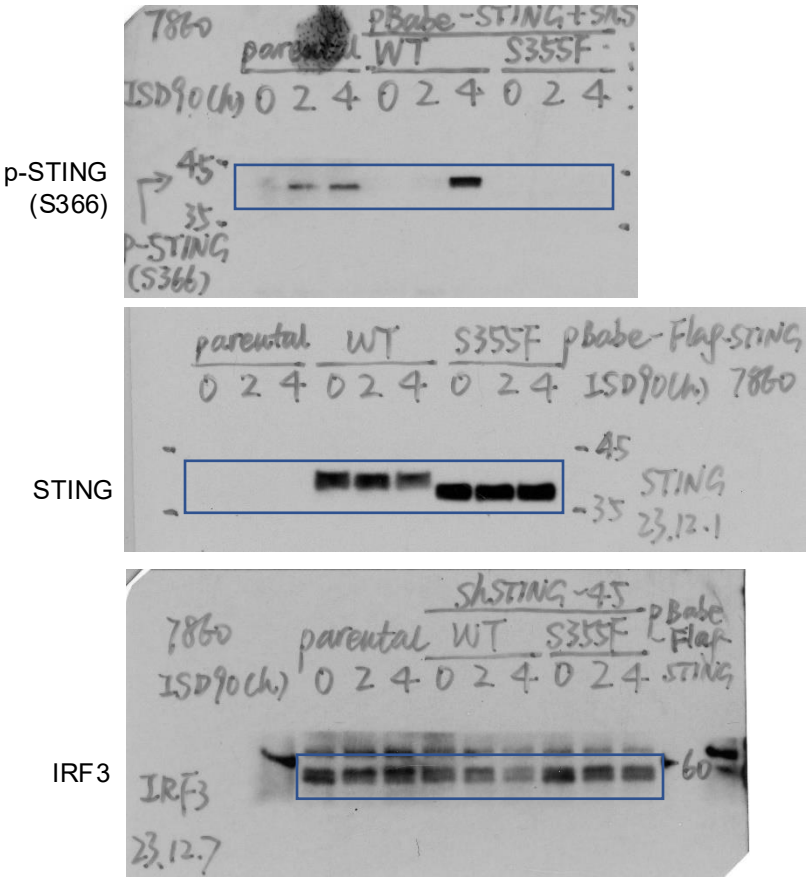
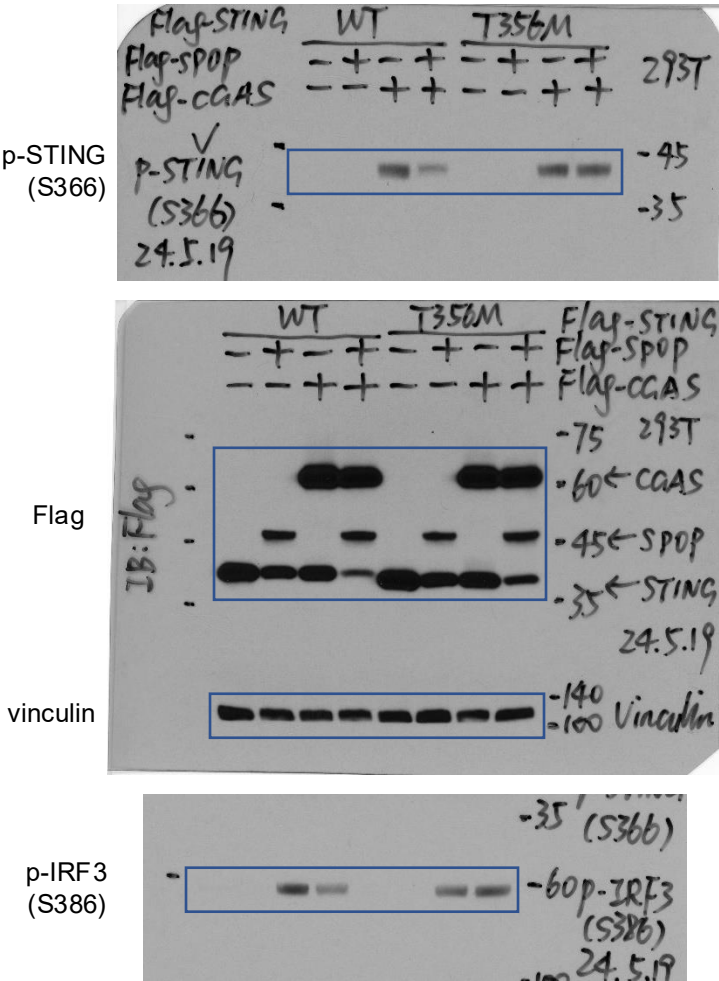


Figure S3

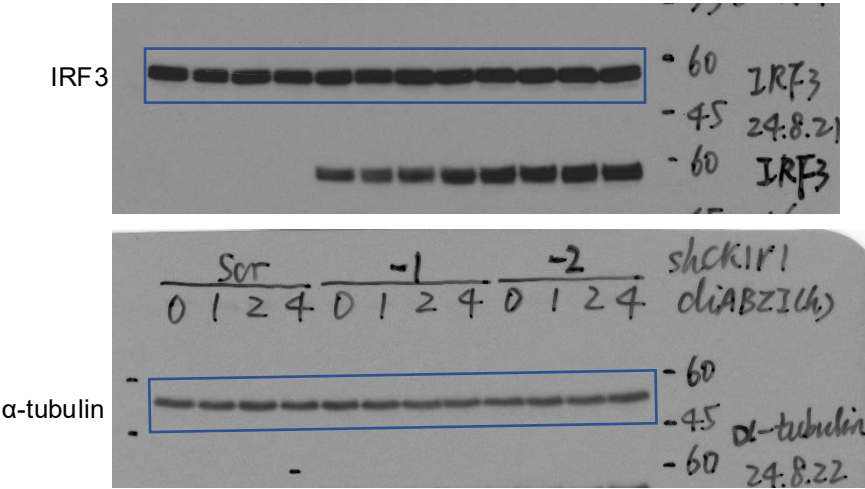
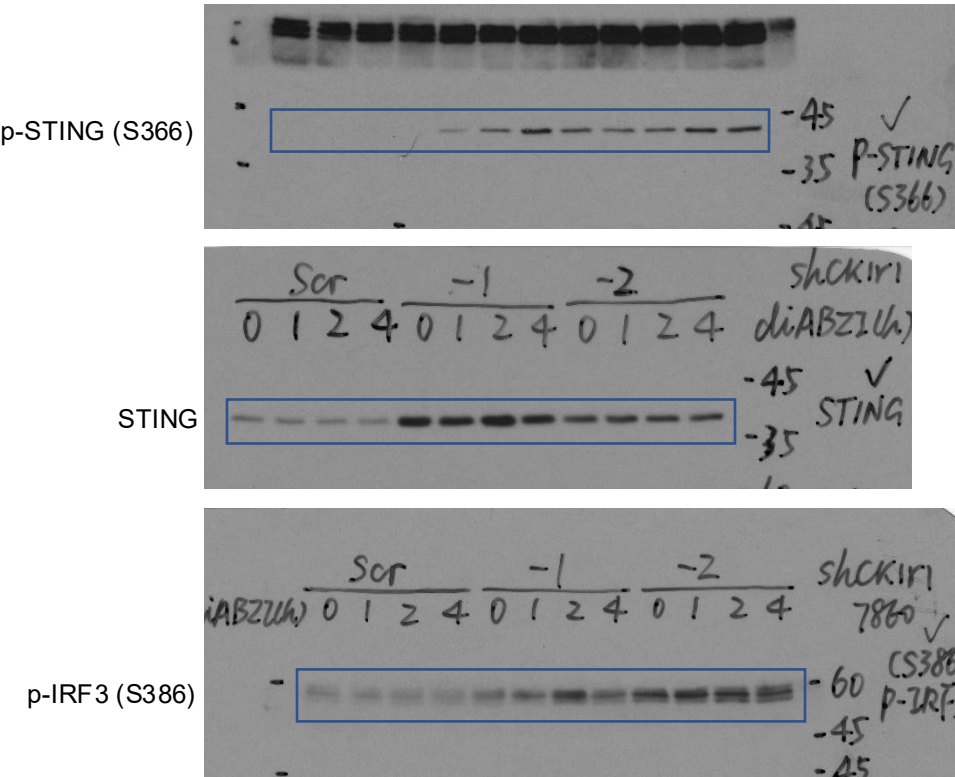
Full unedited blot for Figure S3E



Full unedited blot for Figure S3F



Full unedited blot for Figure S3G



Full unedited blot for Figure S3H

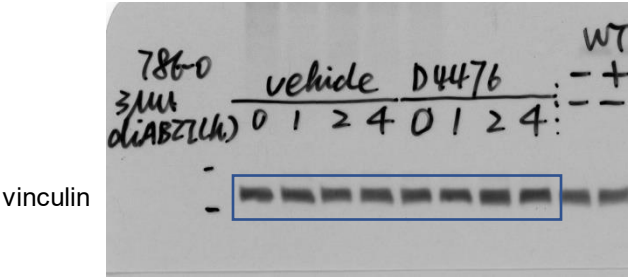
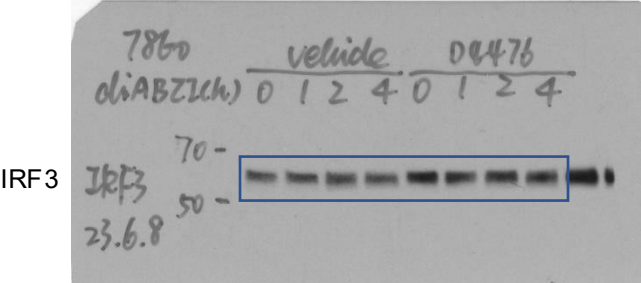
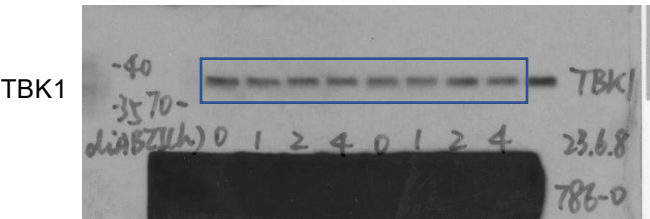
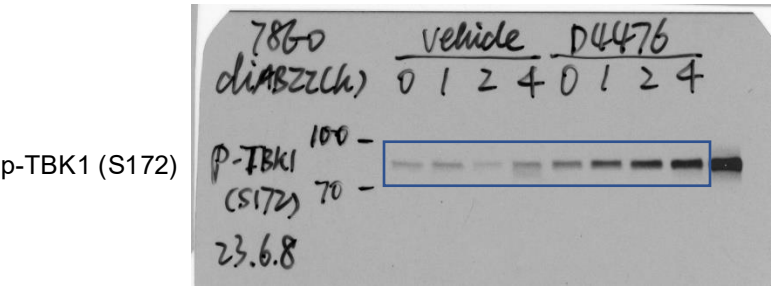
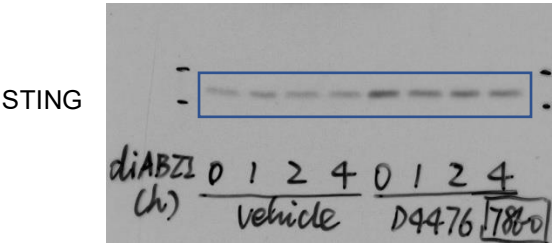
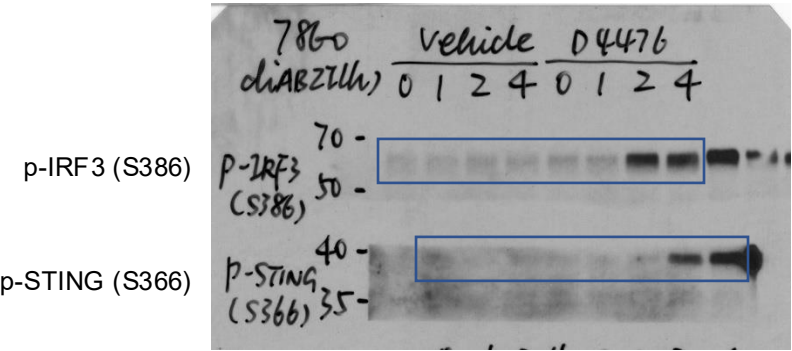
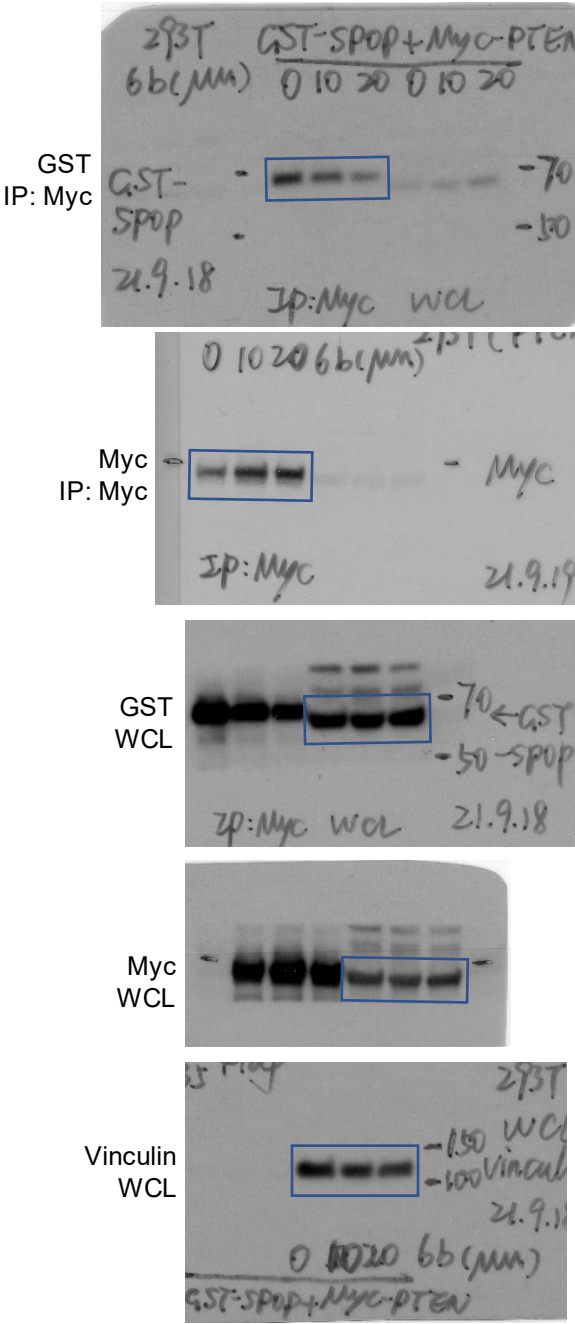
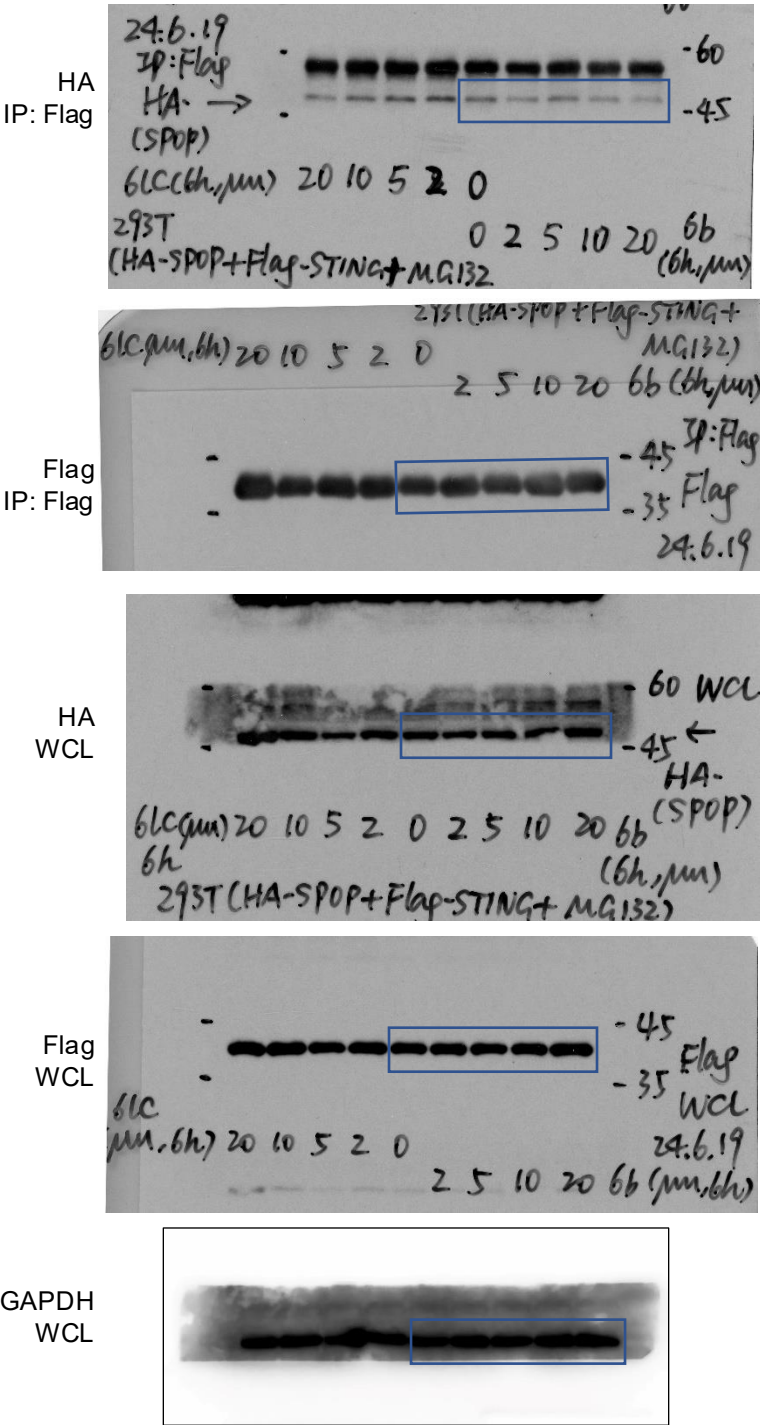


Figure S4

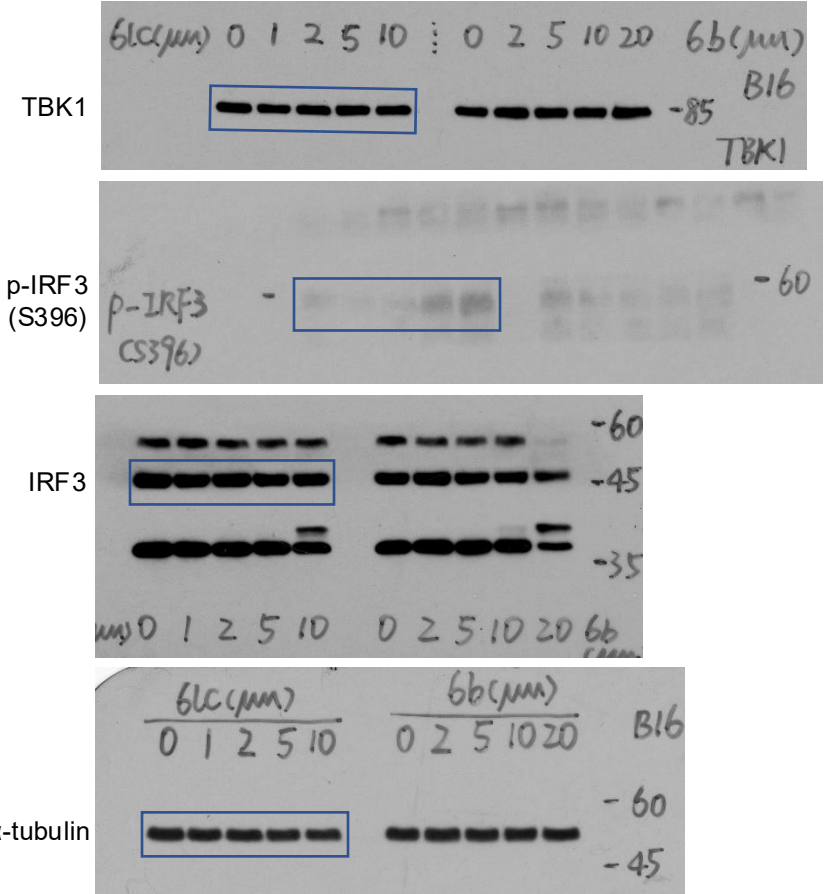
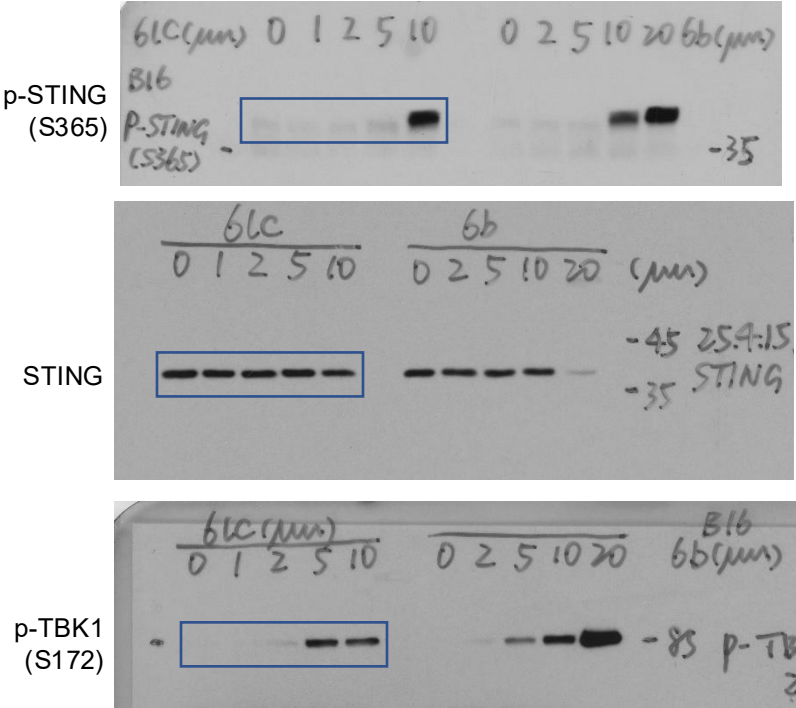
Full unedited blot for Figure S4A



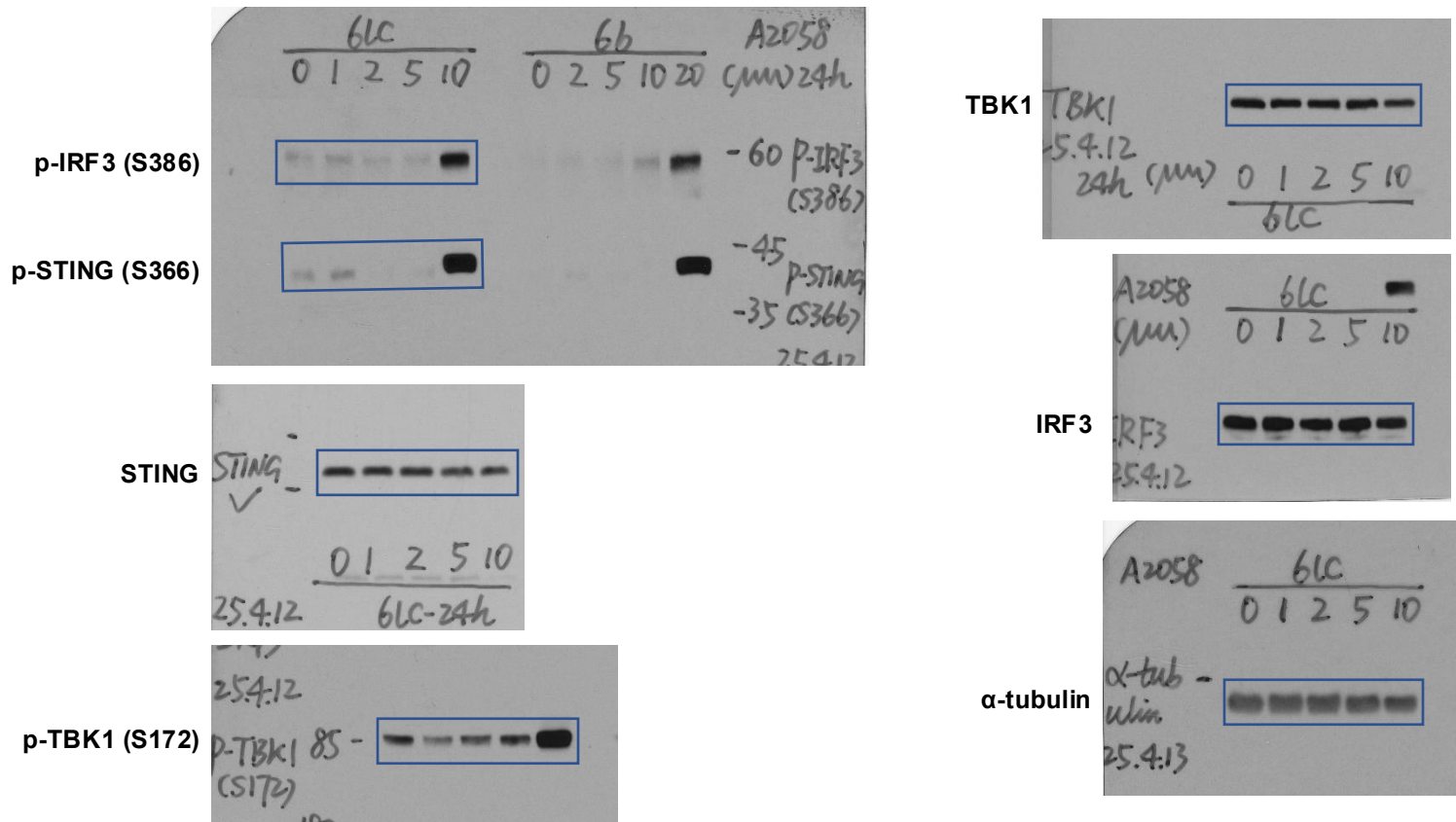
Full unedited blot for Figure S4B



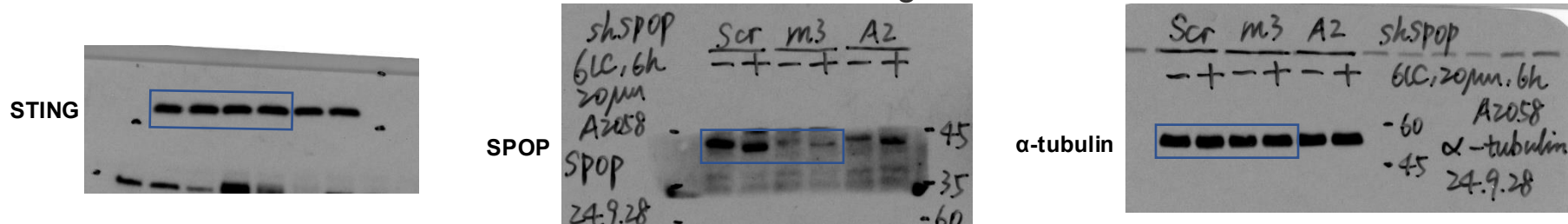
Full unedited blot for Figure S4C



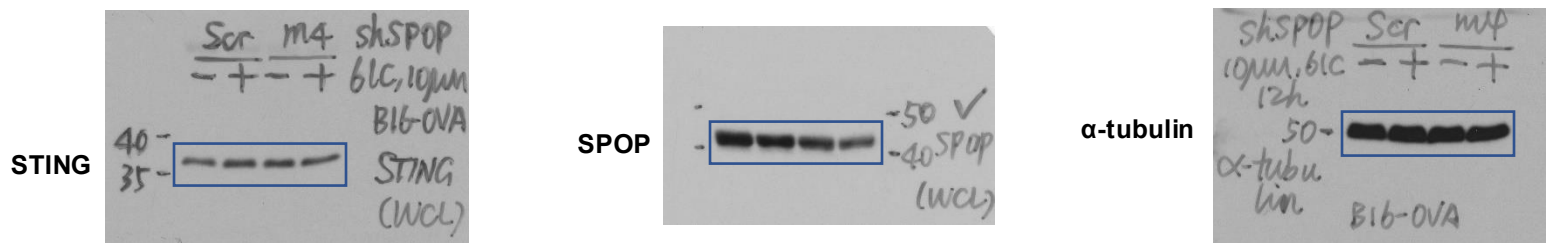
Full unedited blot for Figure S4D



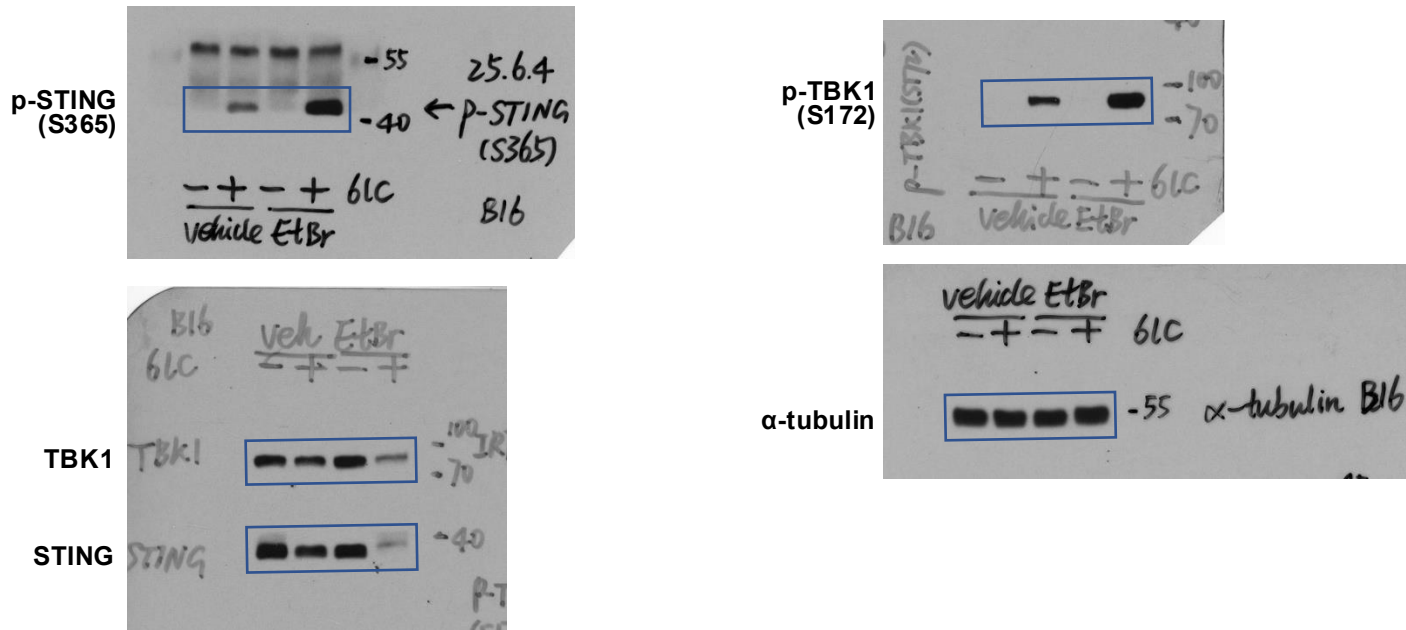
Full unedited blot for Figure S4E



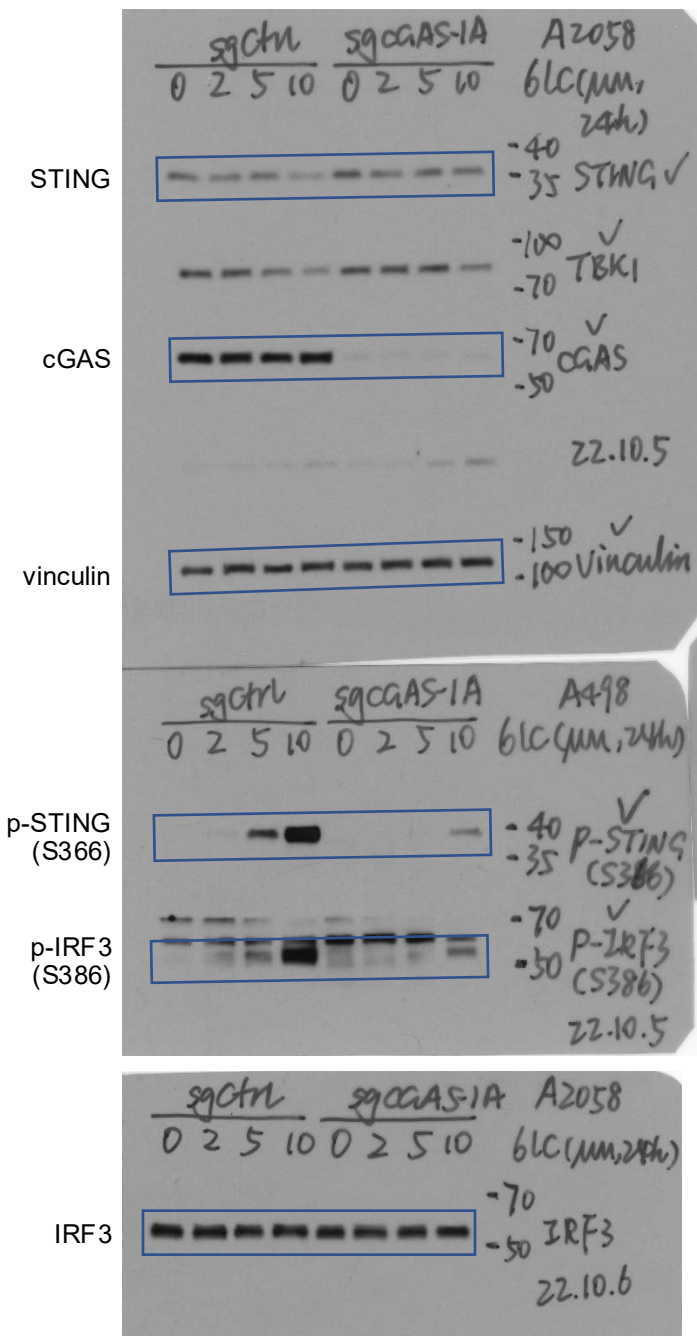
Full unedited blot for Figure S4F



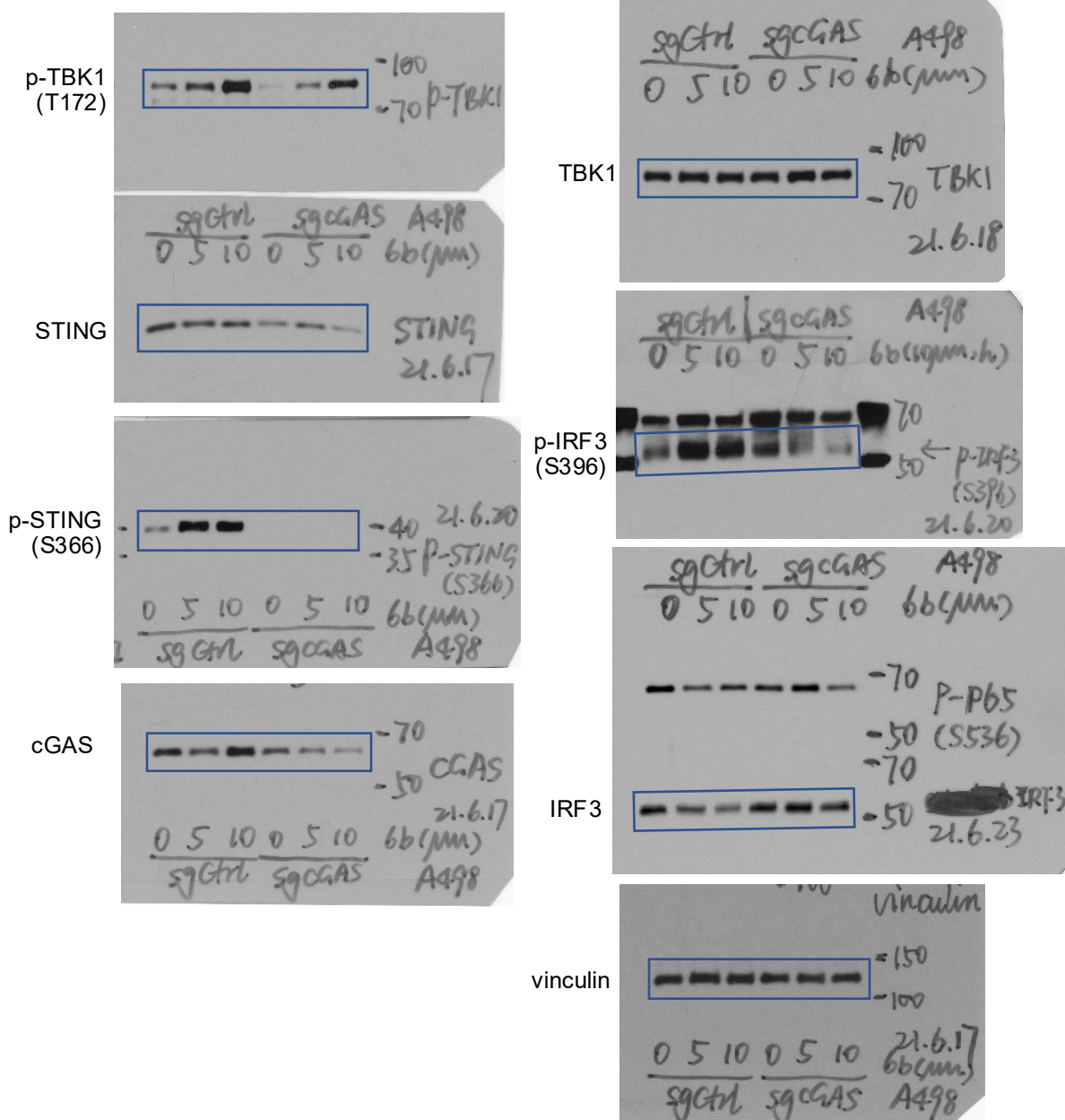
Full unedited blot for Figure S4L



Full unedited blot for Figure S4P



Full unedited blot for Figure S4Q



Full unedited blot for Figure S4R

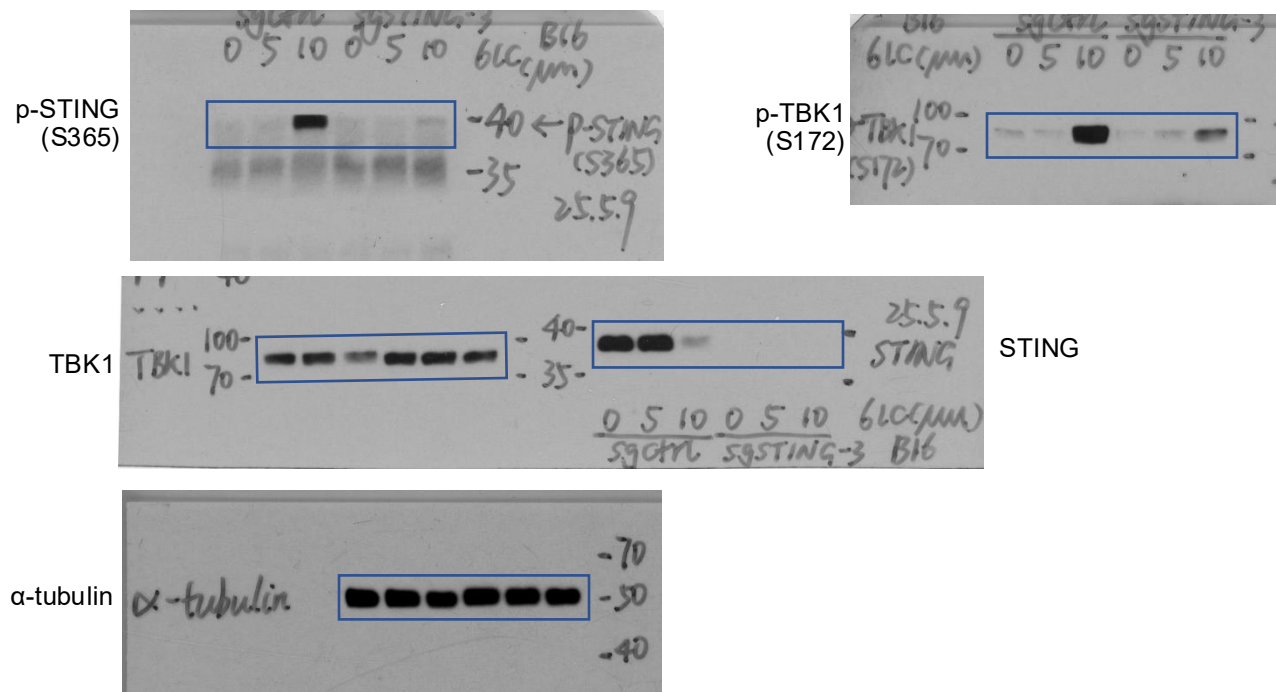
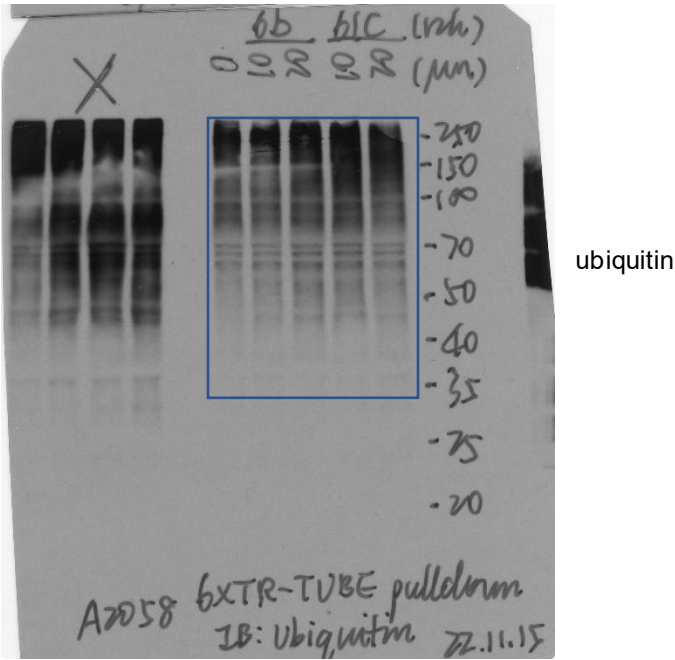
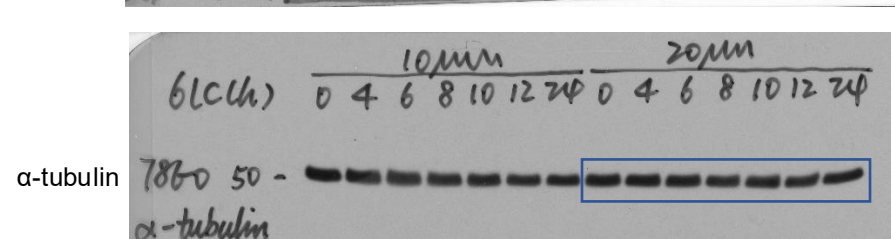
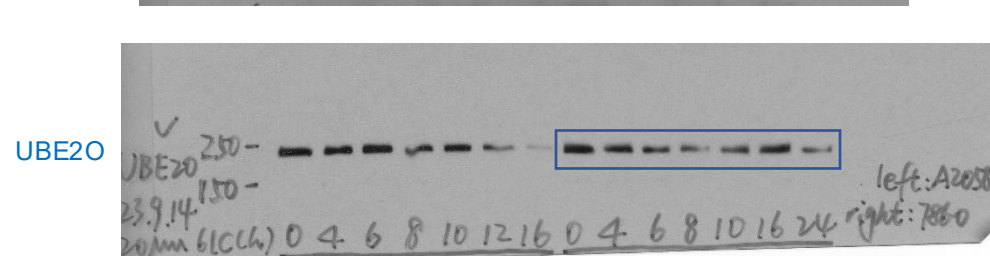
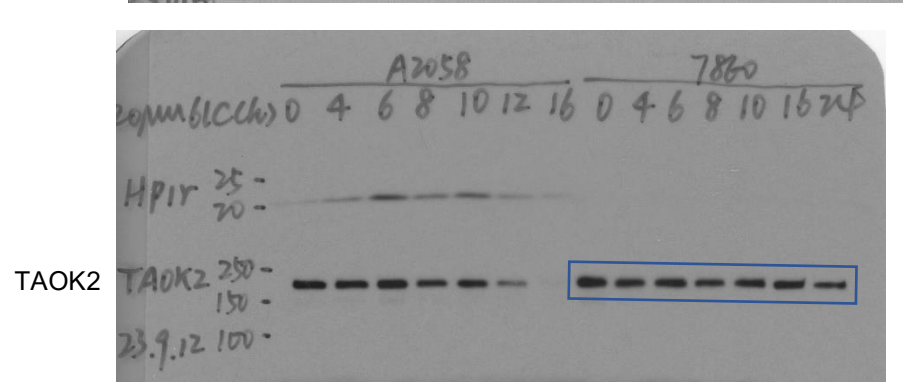
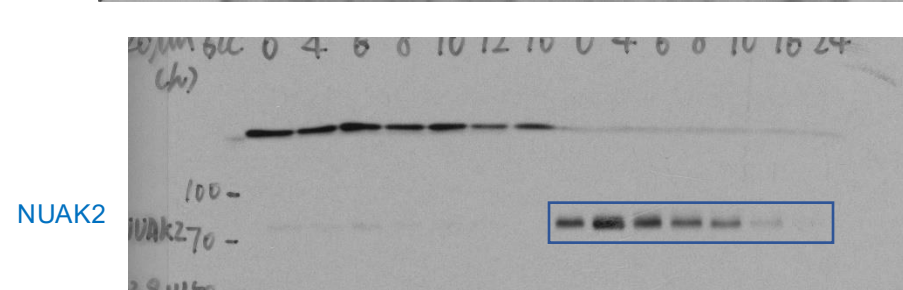
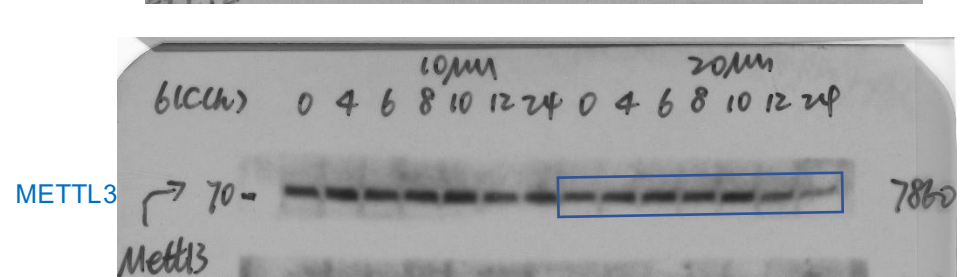
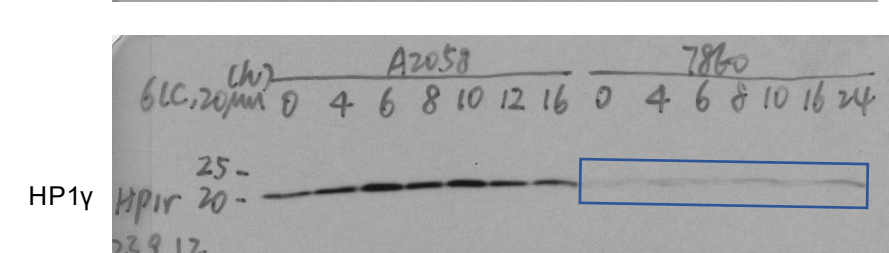
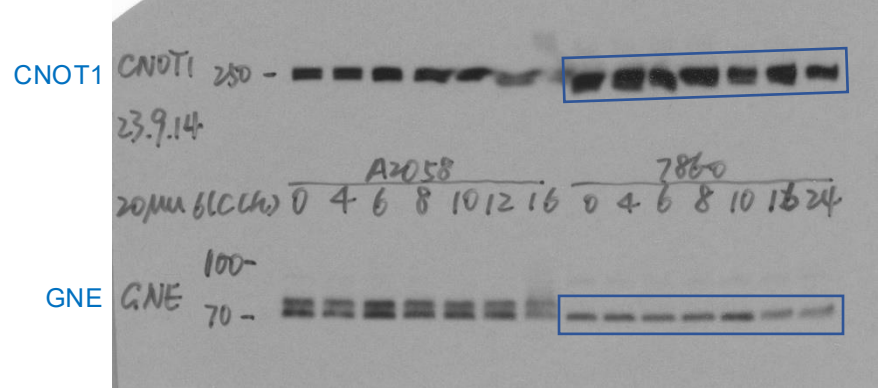
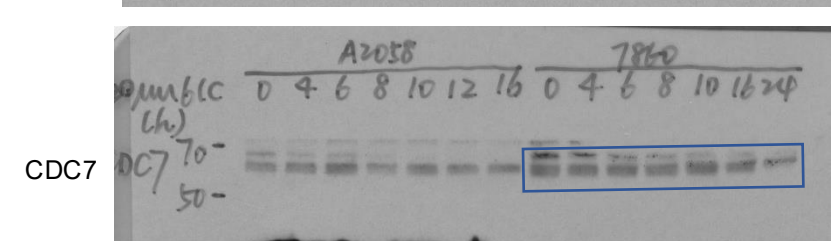
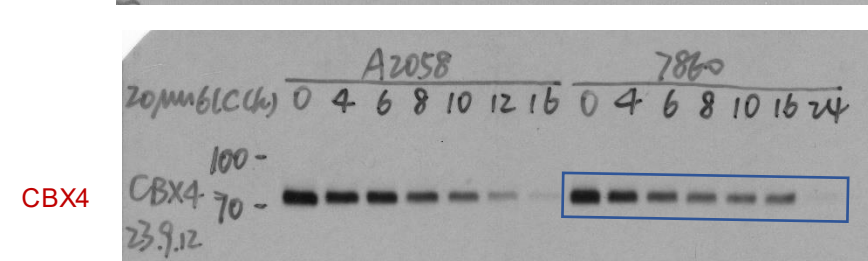
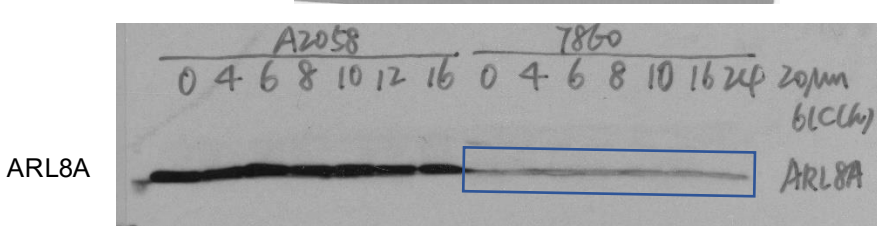
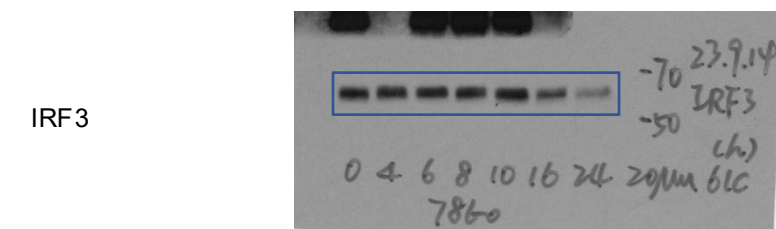
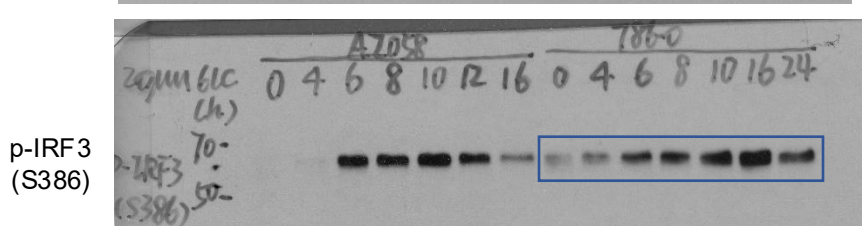
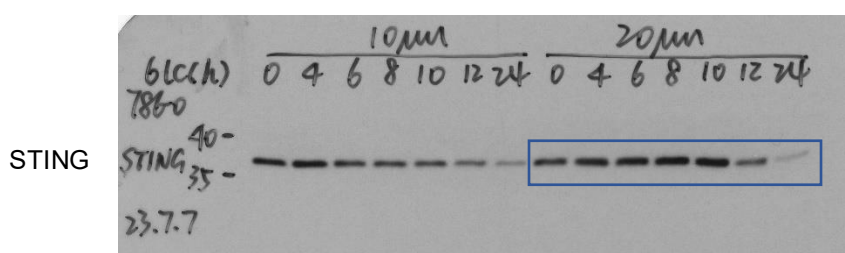
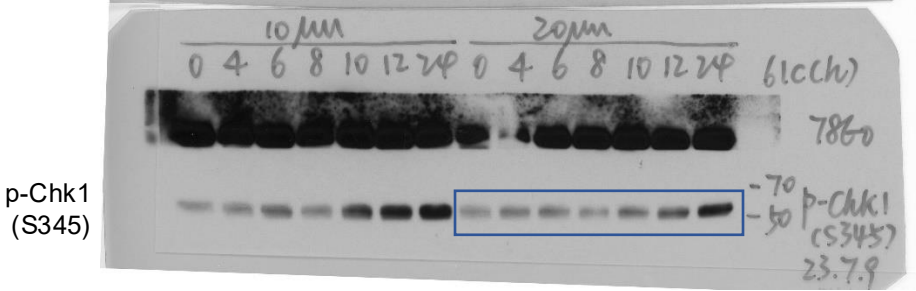
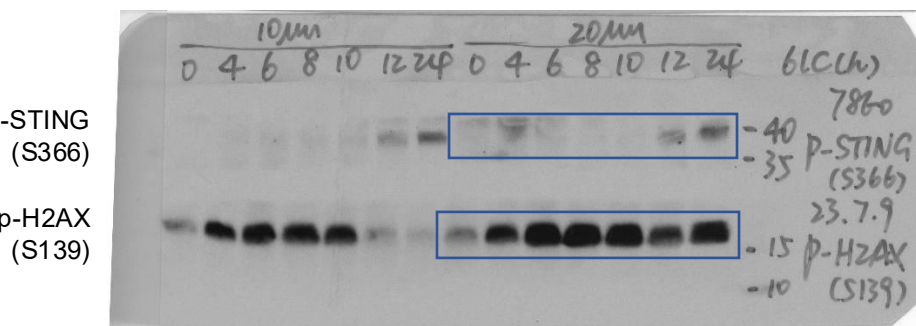


Figure S5

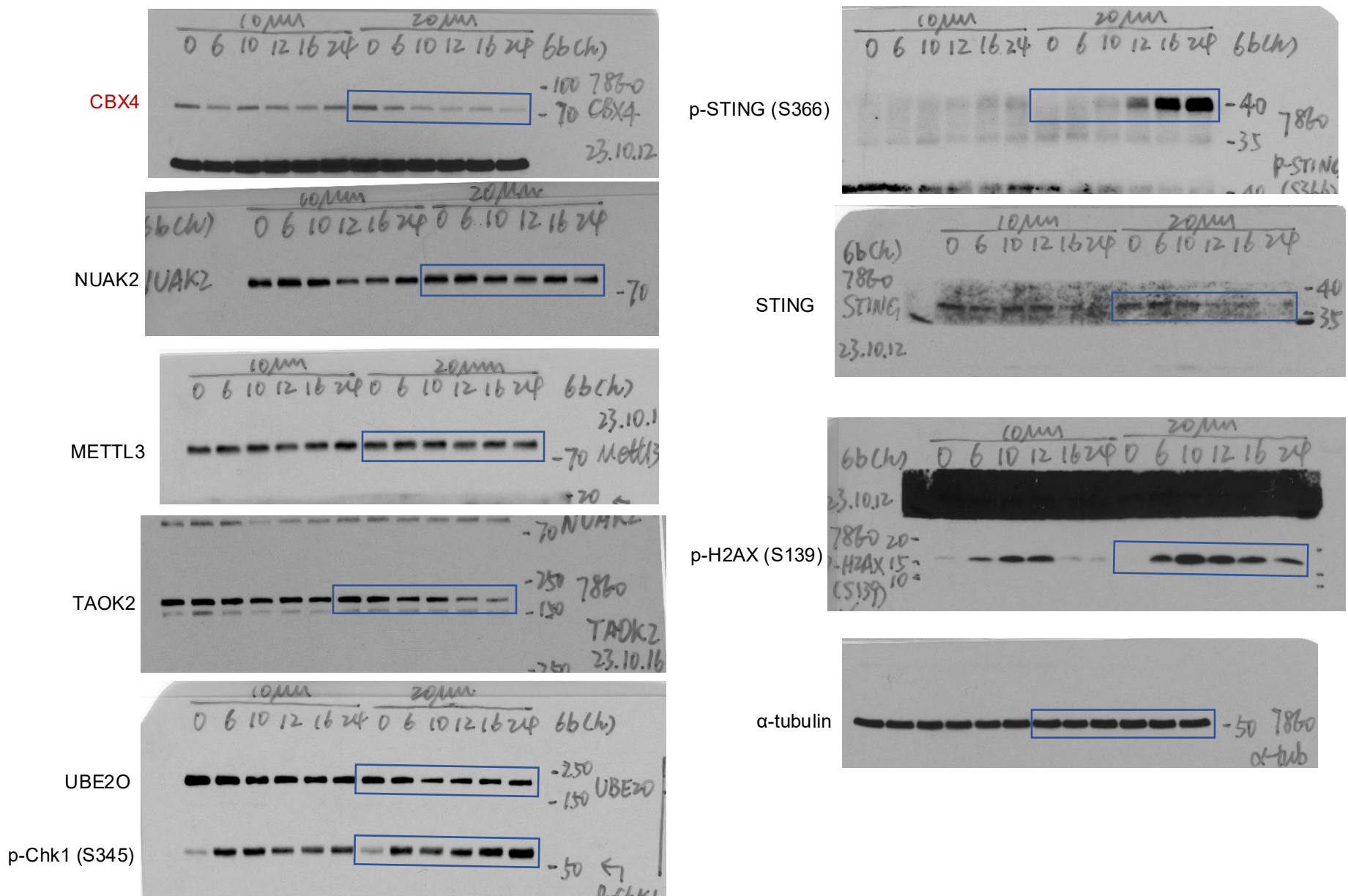
Full unedited blot for Figure S5A



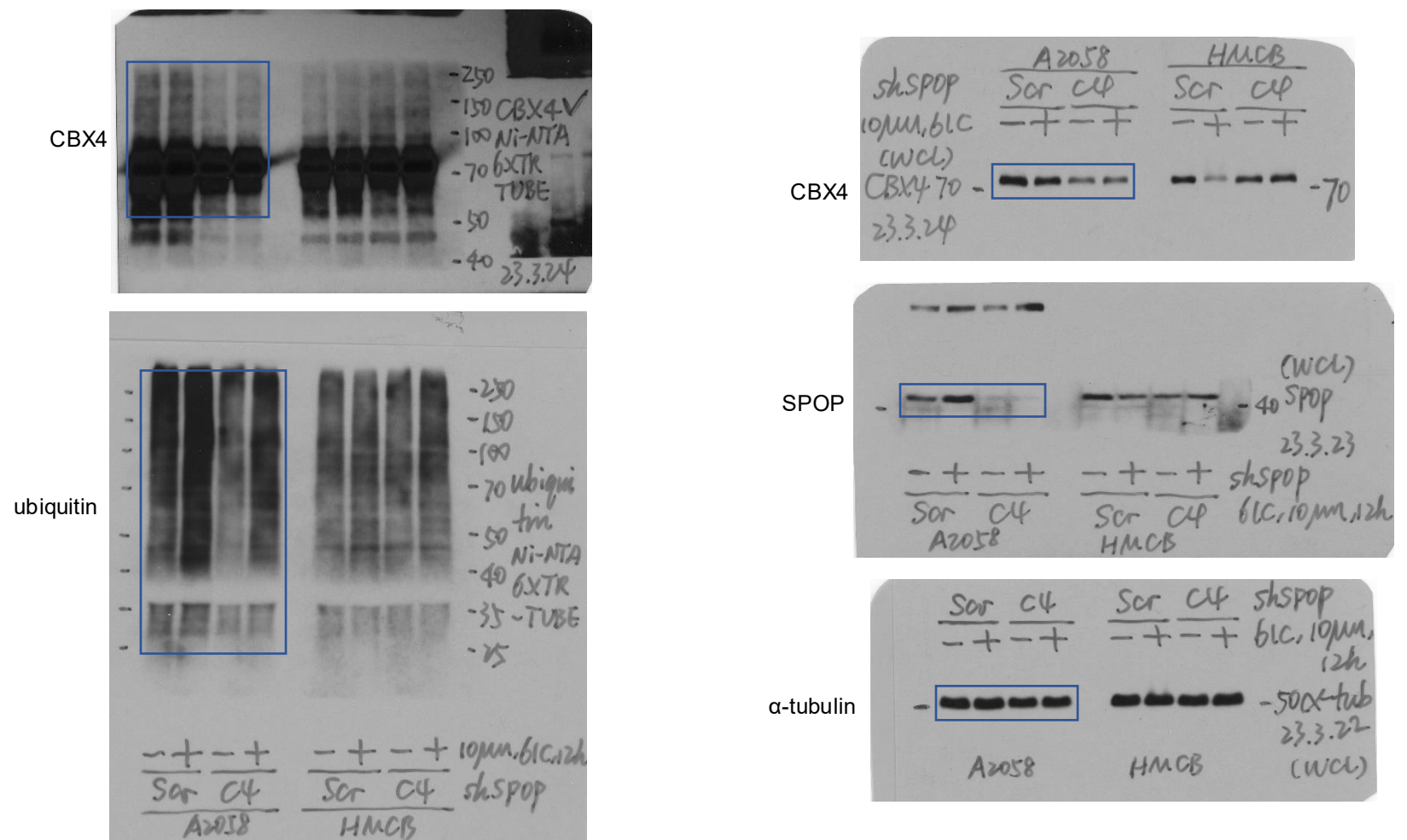
Full unedited blot for Figure S5C



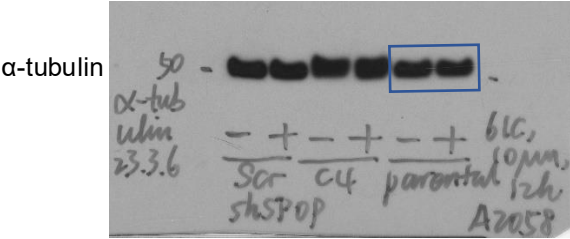
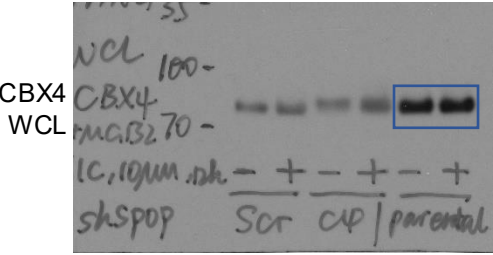
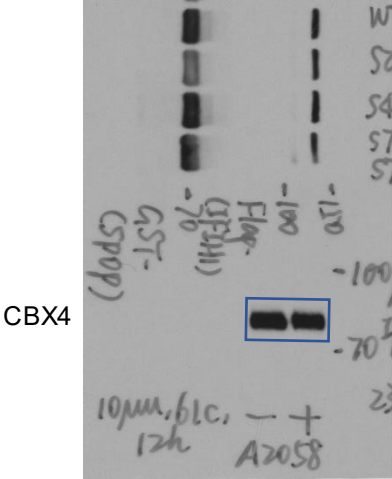
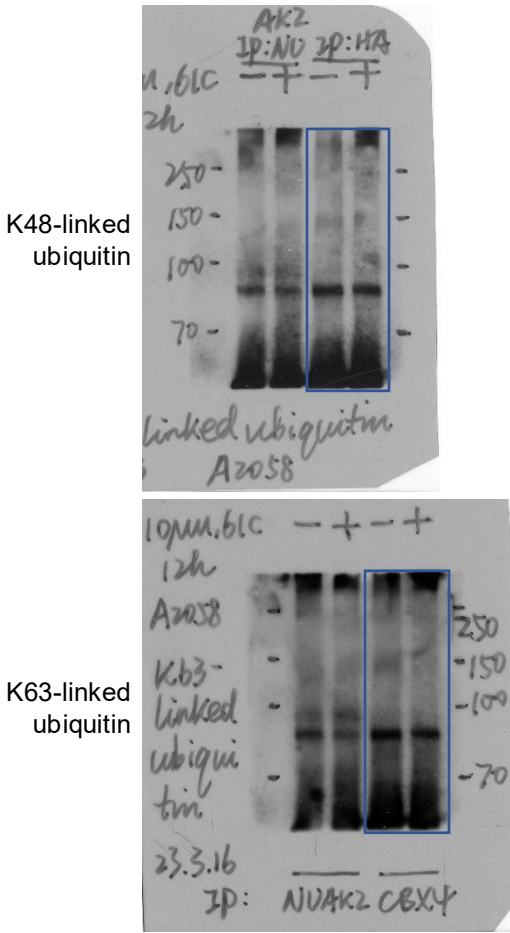
Full unedited blot for Figure S5D



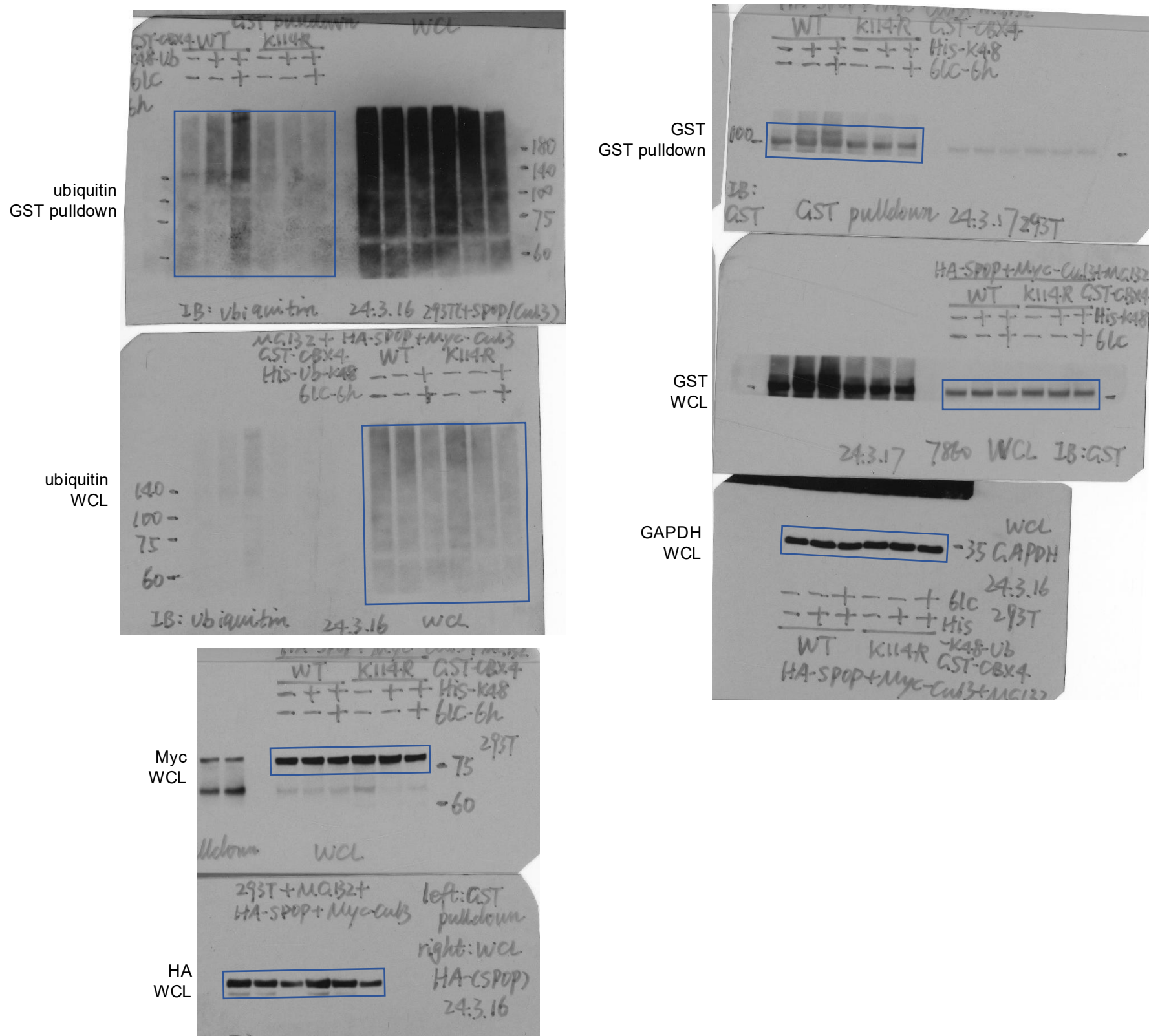
Full unedited blot for Figure S5E



Full unedited blot for Figure S5F



Full unedited blot for Figure S5I



Full unedited blot for Figure S5J

