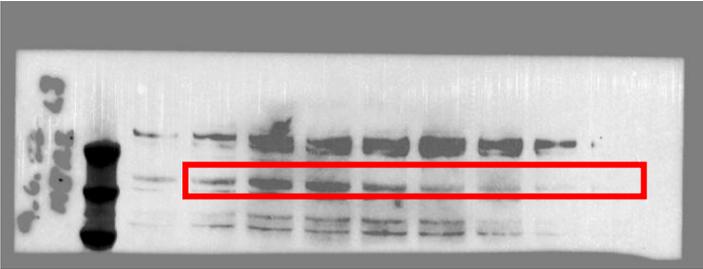


<b>Table</b>	<b>Title</b>
1H - LNCaP	LNCaP + ASPN, HER2/HER3 western blots
1H - VCaP	VCaP + ASPN, HER2/HER3 western blots
1H - MyC-CaP	MyC-CaP + ASPN, HER2/HER3 western blots
1H - LNCaP EnzaR	LNCaP EnzaR + ASPN, HER2/HER3 western blots
1H - VCaP EnzaR	VCaP EnzaR + ASPN, HER2/HER3 western blots
1H - PC3	PC3 + ASPN, HER2/HER3 western blots
2A	LNCaP+ASPN western blots
2C	MyC-CaP+ASPN western blots
3A	LNCaP+NRG1 western blots
3C	MyC-CaP+NRG1 western blots
4C	Recombinant HER3 Co-IP
4F	HEK293 HER3-FLAG Co-IP
4G	LNCaP Parental HER3-FLAG Co-IP
4H	LNCaP HER2 KO HER3-FLAG Co-IP
4I	HEK293 HER3 $\Delta$ I-3xFLAG Co-IP
4J	HEK293 HER3 $\Delta$ III-3xFLAG Co-IP
4K	HEK293 HER3 $\Delta$ I/III-3xFLAG Co-IP
5A	LNCaP HER3 TKD ASPN western blots
5C	LNCaP HER2 KO ASPN western blots
6A	LNCaP Tucatinib ASPN western blots
6C	PC3 Tucatinib ASPN western blots
9B	ErbB protein expression LNCaP Parental/EnzaR, VCaP Parental/EnzaR
S2A	VCaP+ASPN western blots
S2B	DU145+ASPN western blots
S2C	PC3+ASPN western blots
S2E	LNCaP+ASPN with EGF control western blots
S2F	VCaP+ASPN with EGF control western blots
S2G	LNCaP EnzaR+ASPN with EGF control western blots
S2H	VCaP EnzaR+ASPN with EGF control western blots
S2I	DU145+ASPN with EGF control western blots
S2J	MyC-CaP+ASPN with EGF control western blots
S2K	ERBB protein expression all cell lines
S2L	ASPN expression in PCAF
S2M	PC3 cells treated with PCAF conditioned media western blots
S4B	Recombinant HER2 Co-IP
S4C	Recombinant PDGFRB Co-IP
S4D	PC3 endogenous HER3 co-IP treated with recombinant ASPN western blots
S4E	PC3 endogenous HER3 co-IP treated with PCAF CM western blots
S4G	LNCaP HER2 KO validation western blots
S4I	LNCaP HER3 TKD validation western blots
S5A	LNCaP HER3 TKD + rASPN western blots - additional clones
S5B	LNCaP TKD transfected with WT HER3 or HER3 $\Delta$ I/III + rASPN western blots
S5C	LNCaP HER2 KO + rASPN western blots - additional clones
S9A	PC3 + recombinant mouse ASPN western blots
S9B	PC3 + tucatinib + recombinant mouse ASPN western blots

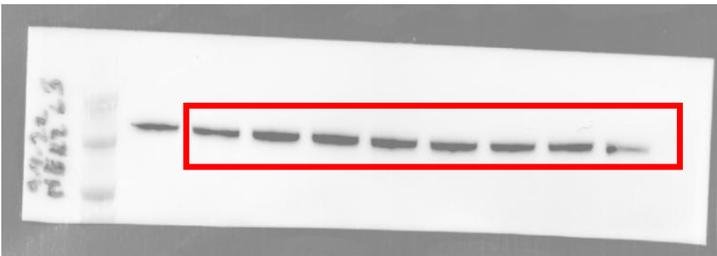
# Full Unedited Blots for Figure 1H LNCaP

Lanes: Hi Calcium, 0, 2, 5, 10, 15, 30, 60, 120

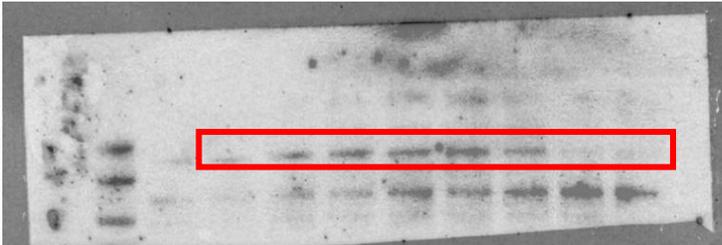
P-HER2



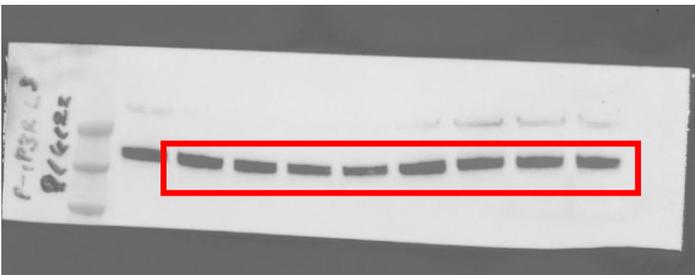
HER2



P-HER3

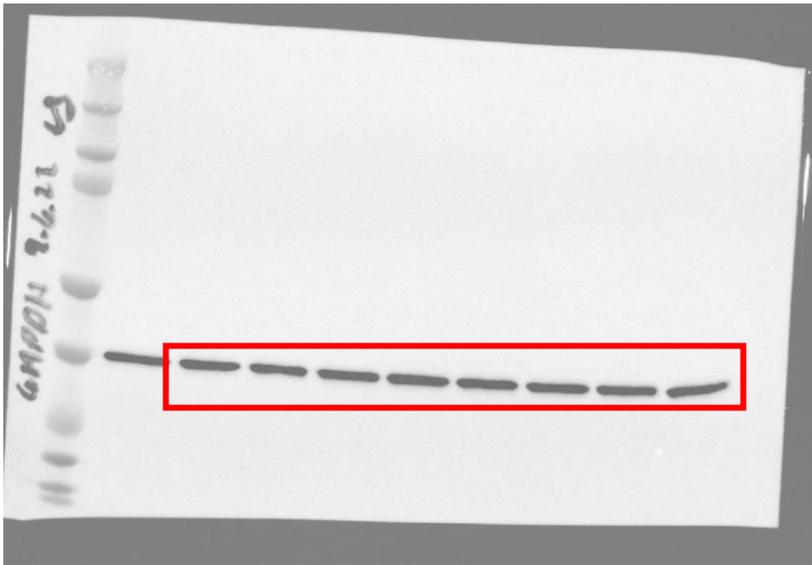


HER3



Full Unedited Blots for Figure 1H LNCaP Continued

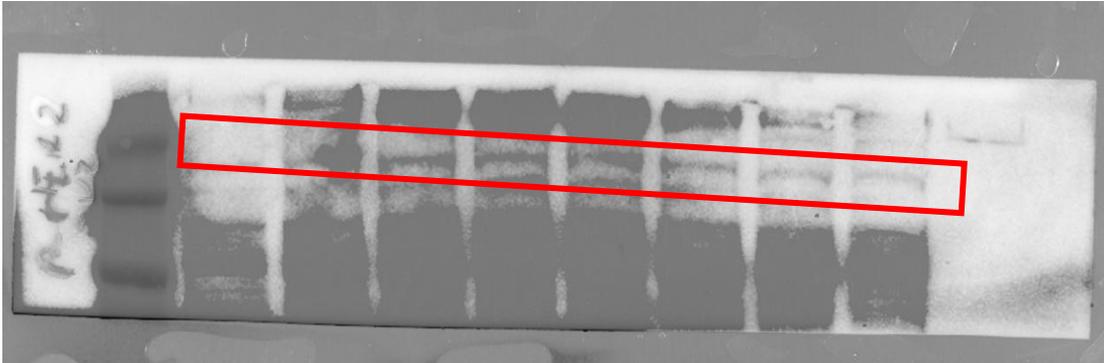
GAPDH



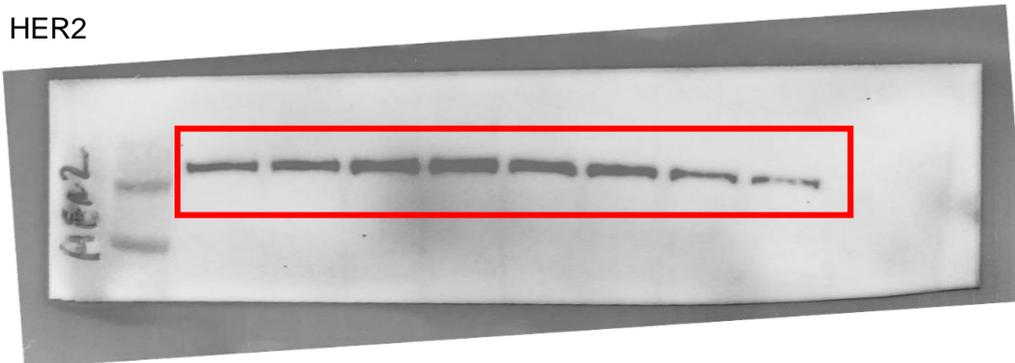
Full Unedited Blots for Figure 1H VCaP

Lanes: 0, 2, 5, 10, 15, 30, 60, 120

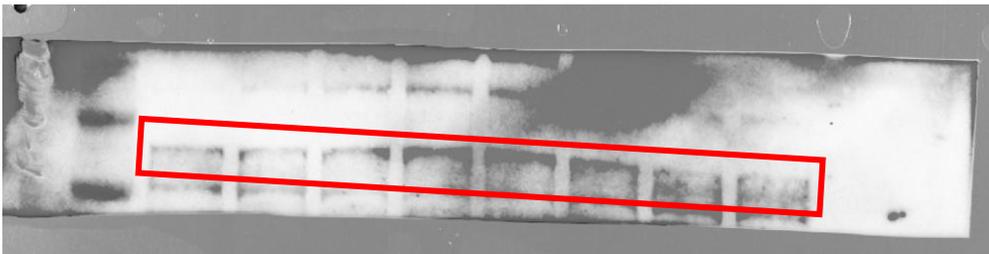
P-HER2



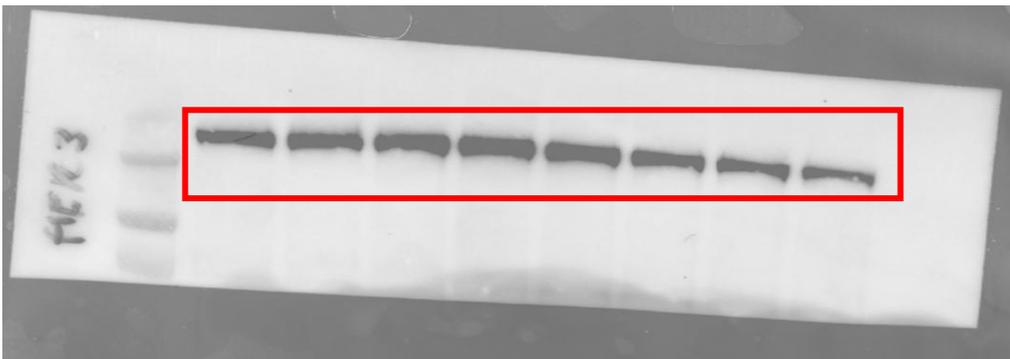
HER2



P-HER3



HER3



Full Unedited Blots for Figure 1H VCaP Continued

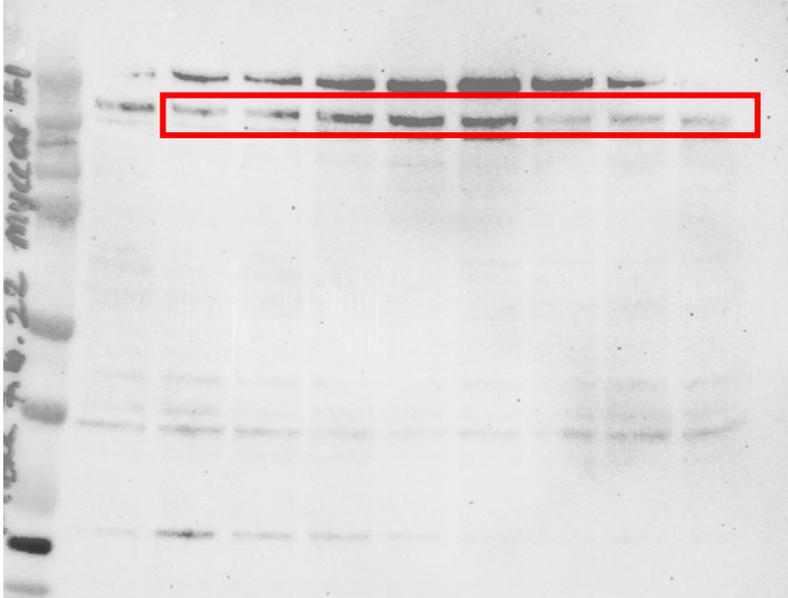
GAPDH



# Full Unedited Blots for Figure 1H MyC-CaP

Lanes: Hi Calcium, 0, 2, 5, 10, 15, 30, 60, 120

P-HER2

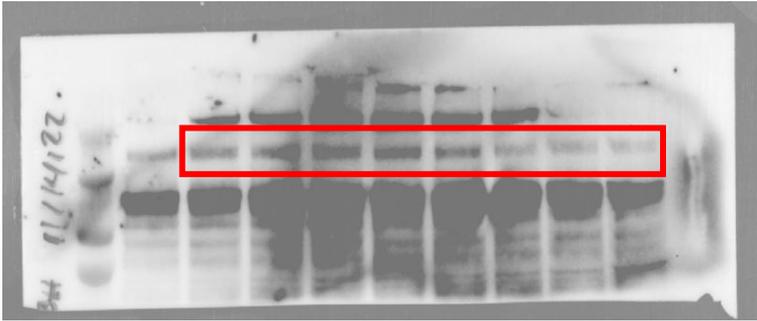


HER2

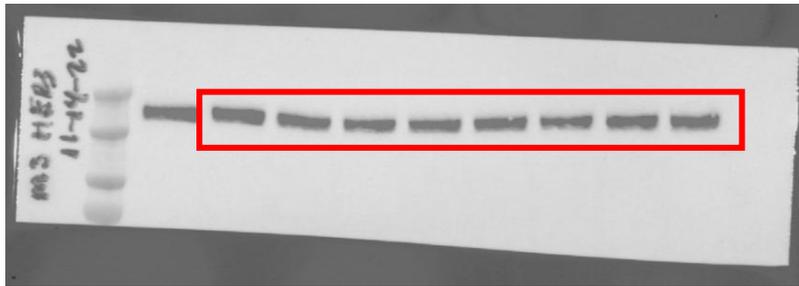


Full Unedited Blots for Figure 1H MyC-CaP Continued

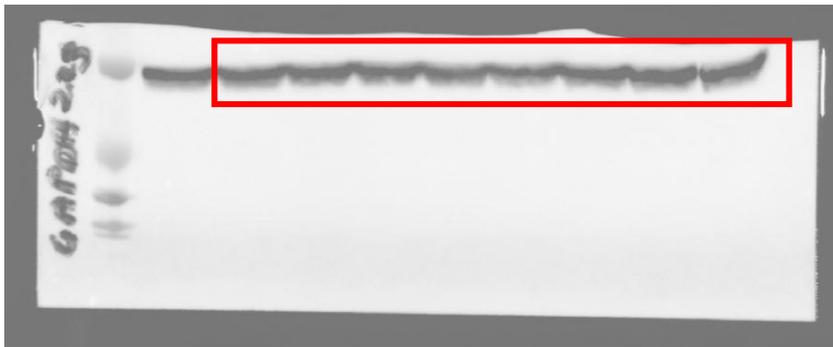
P-HER3



HER3



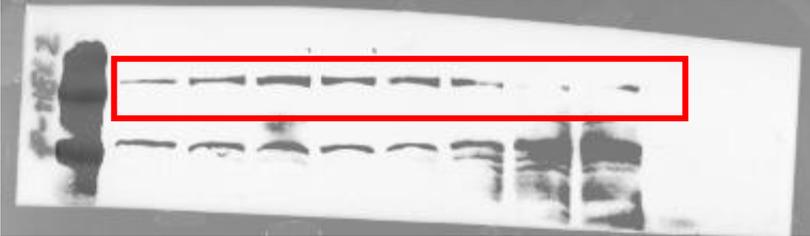
GAPDH



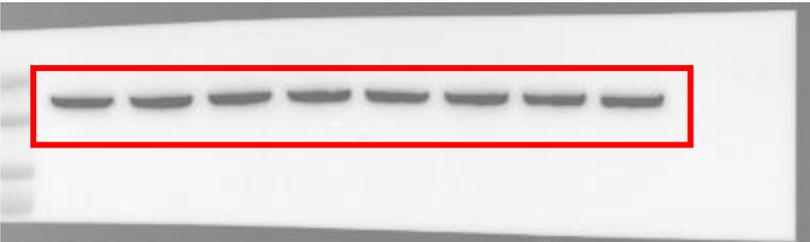
# Full Unedited Blots for Figure 1H LNCaP EnzaR

Lanes: 0, 2, 5, 10, 15, 30, 60, 120

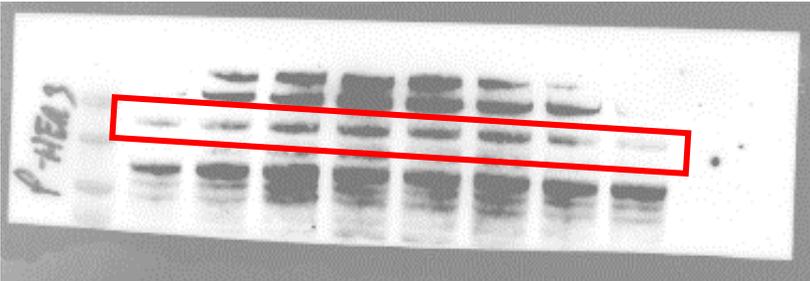
P-HER2



HER2



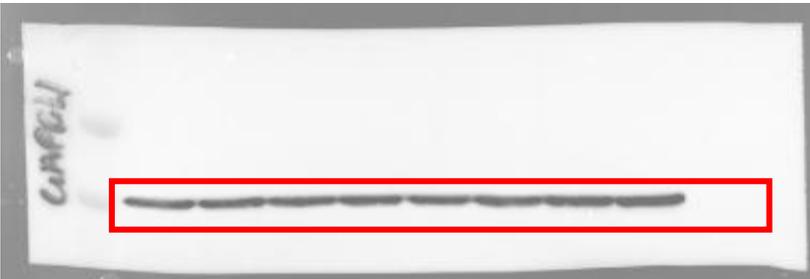
P-HER3



HER3



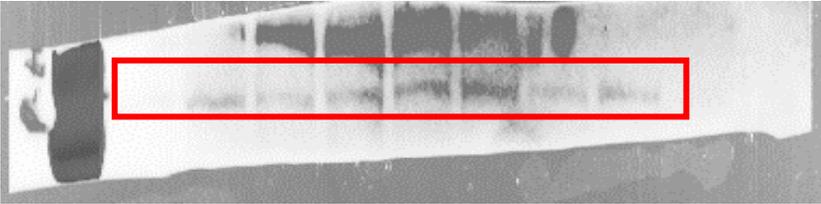
GAPDH



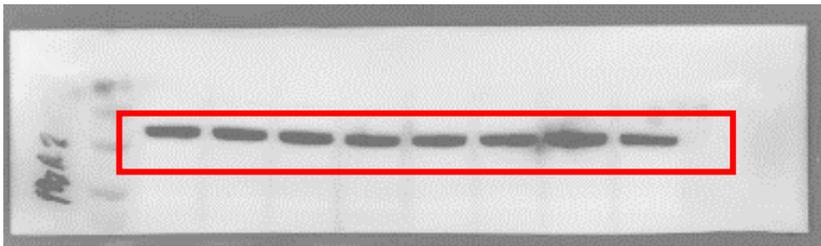
# Full Unedited Blots for Figure 1H VCaP EnzaR

Lanes: 0, 2, 5, 10, 15, 30, 60, 120

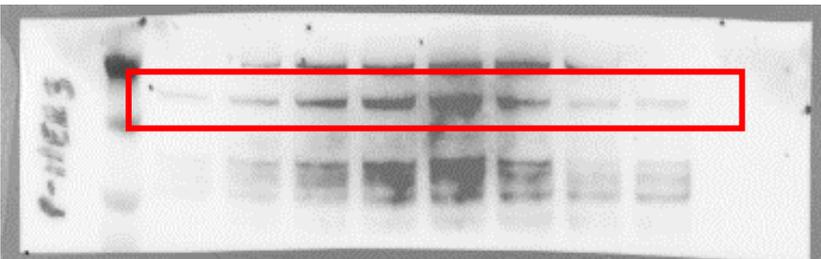
P-HER2



HER2



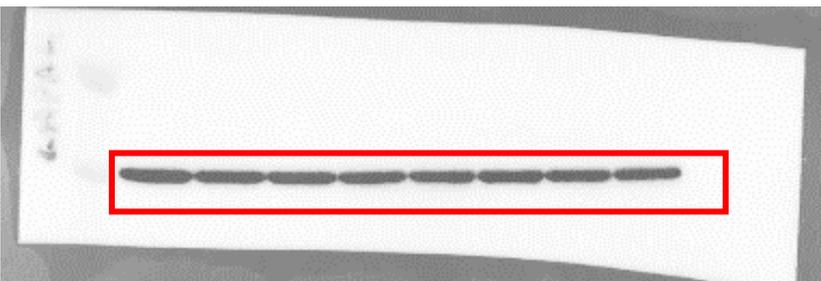
P-HER3



HER3



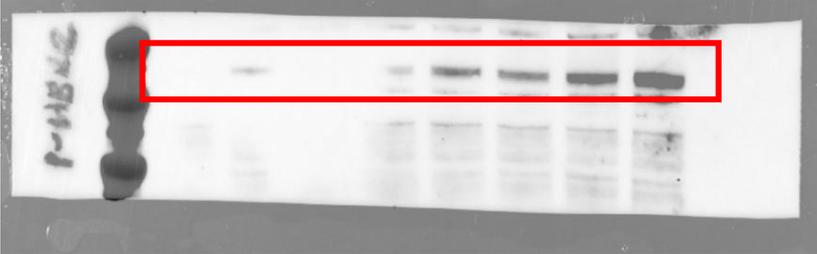
GAPDH



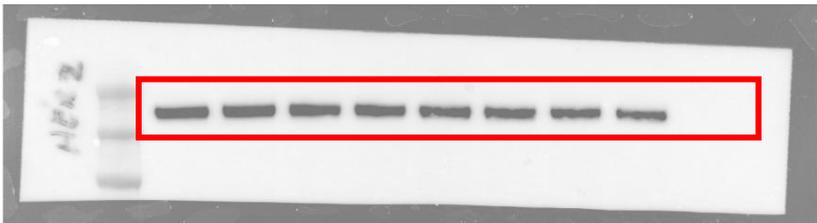
**Full Unedited Blots for Figure 1H PC3**

Lanes: 0, 2, 5, 10, 15, 30, 60, 120

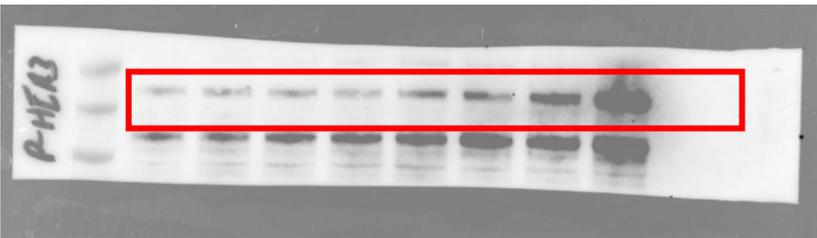
P-HER2



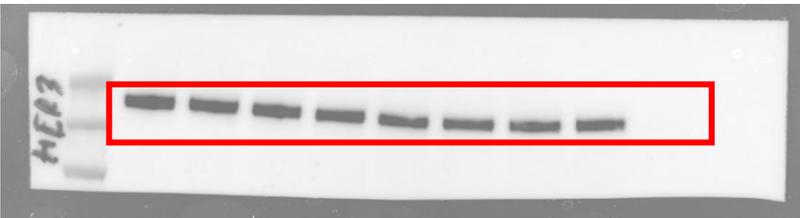
HER2



P-HER3



HER3

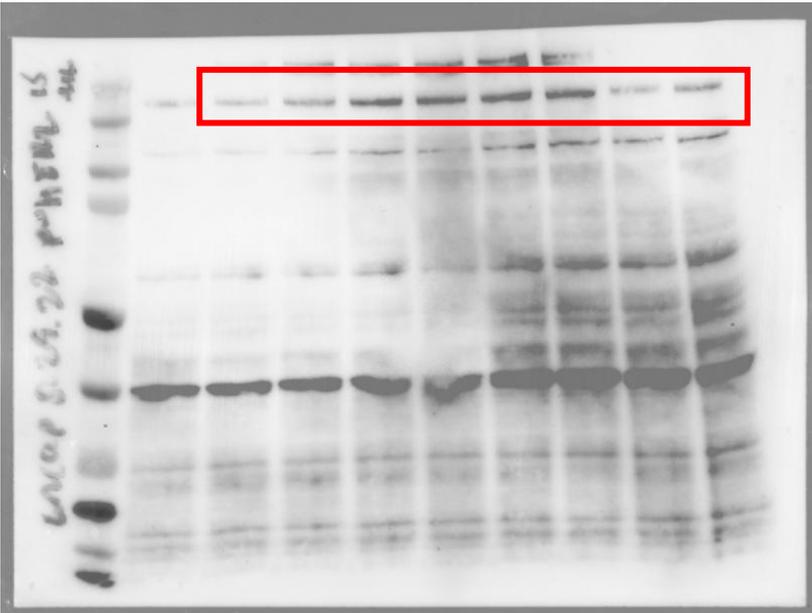


GAPDH

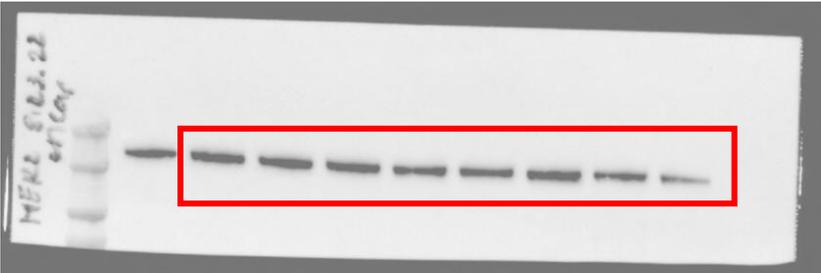


### Full Unedited Blots for Figure 2A

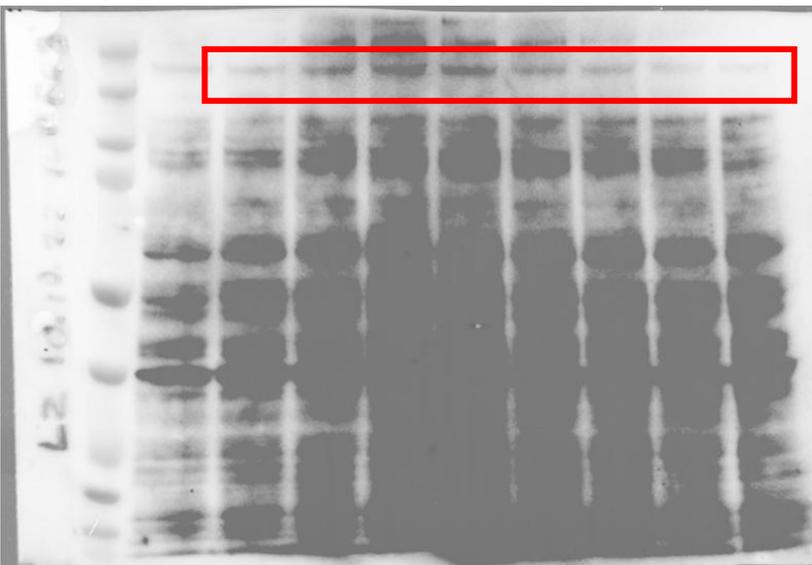
Lanes: Hi Calcium, 0, 2, 5, 10, 15, 30, 60, 120 unless noted  
P-HER2



HER2

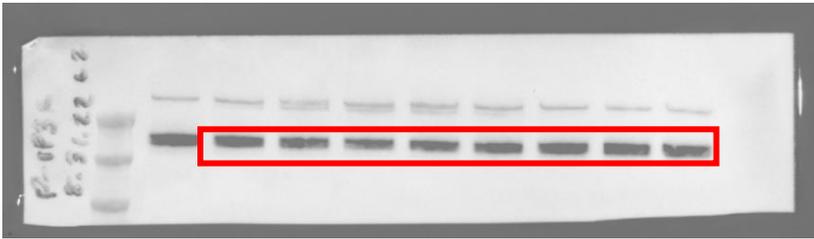


P-HER3



Full Unedited Blots for Figure 2A Continued

HER3



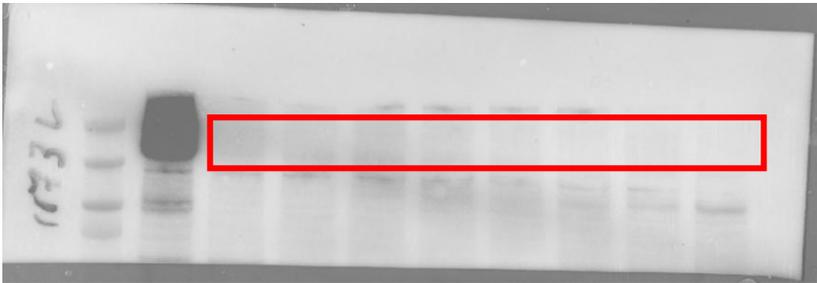
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y845



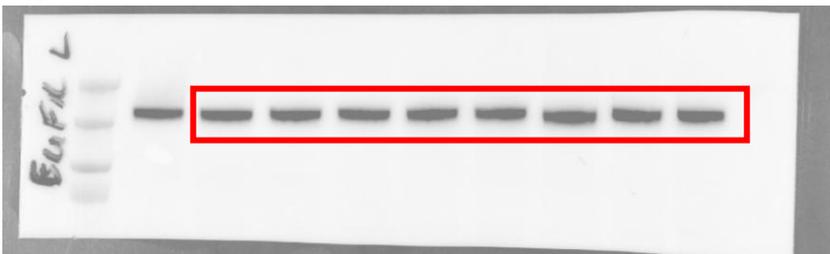
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y1173



Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

EGFR

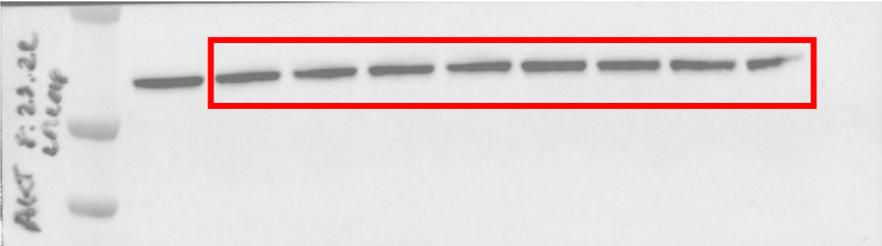


Full Unedited Blots for Figure 2A Continued

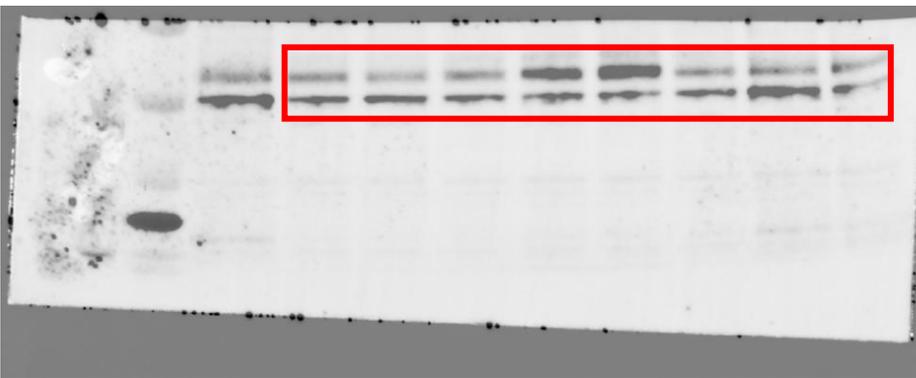
P-AKT



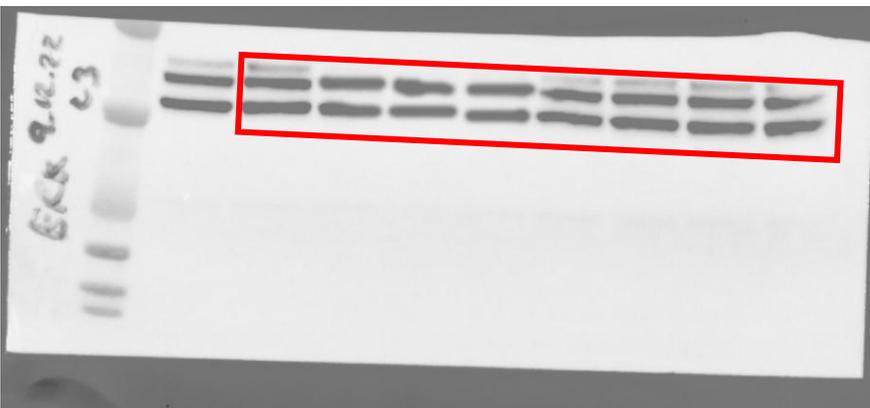
AKT



P-ERK



ERK

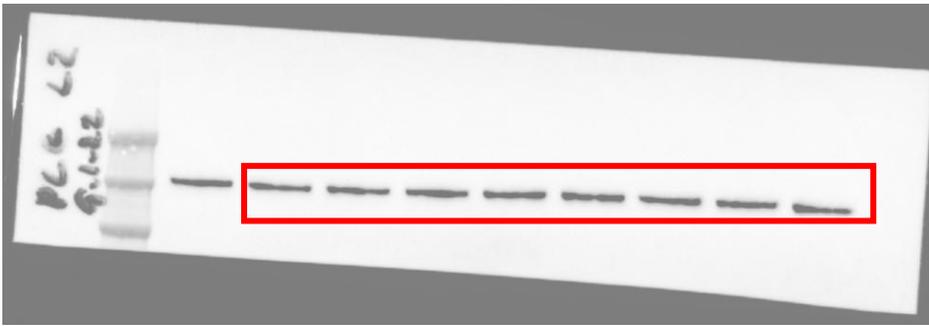


P-PLC

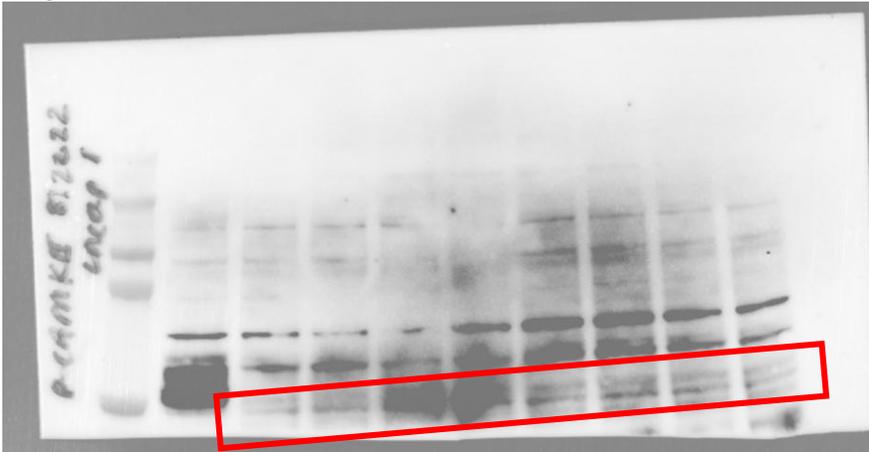


Full Unedited Blots for Figure 2A Continued

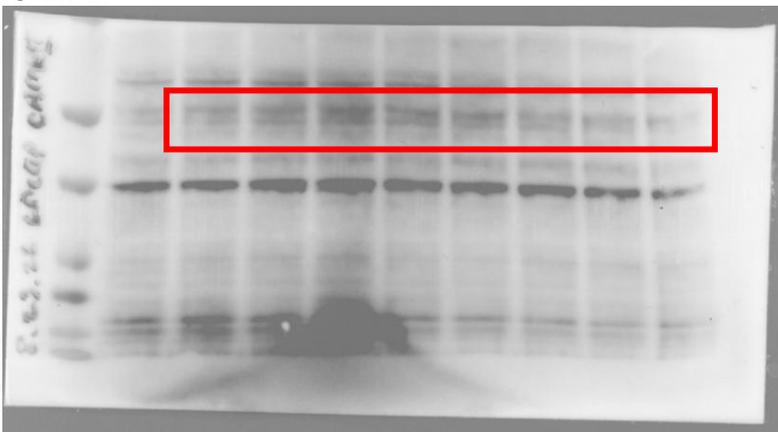
PLC



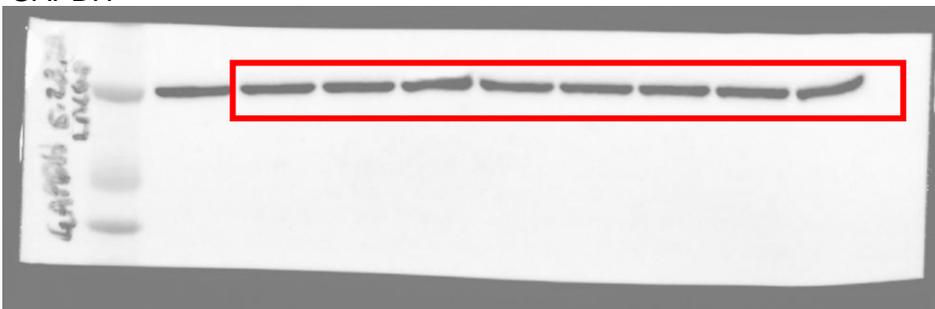
P-CAMKII



CAMKII



GAPDH

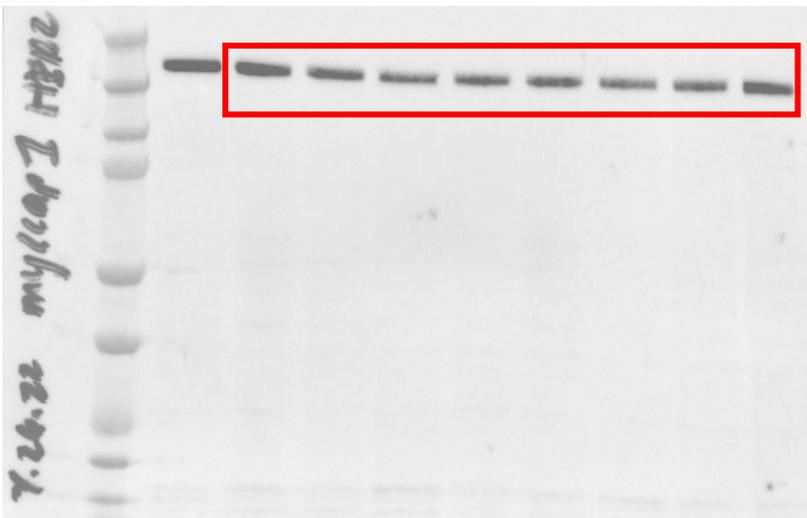


### Full Unedited Blots for Figure 2C

Lanes: Hi Calcium, 0, 2, 5, 10, 15, 30, 60, 120 unless noted  
P-HER2



HER2



P-HER3



# Full Unedited Blots for Figure 2C Continued

HER3



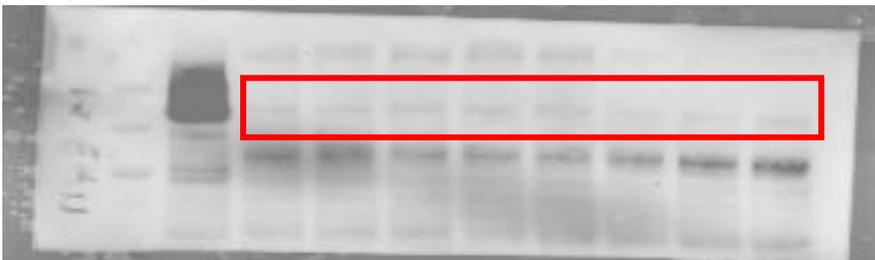
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y845



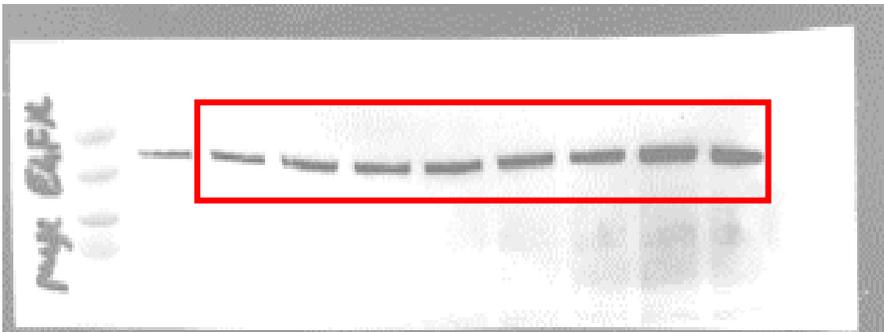
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y1173



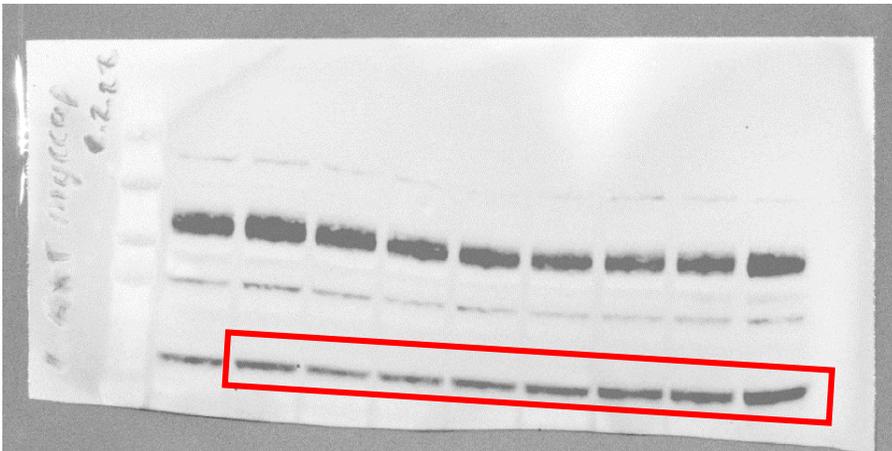
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

EGFR

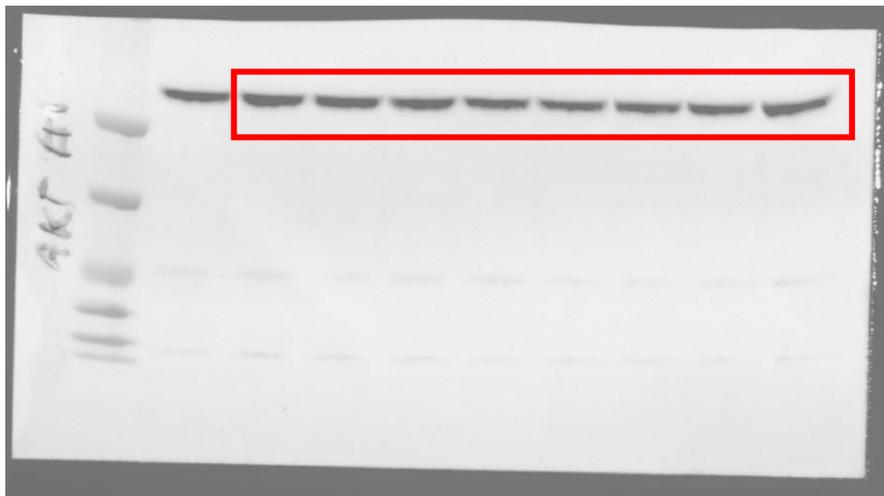


Full Unedited Blots for Figure 2C Continued

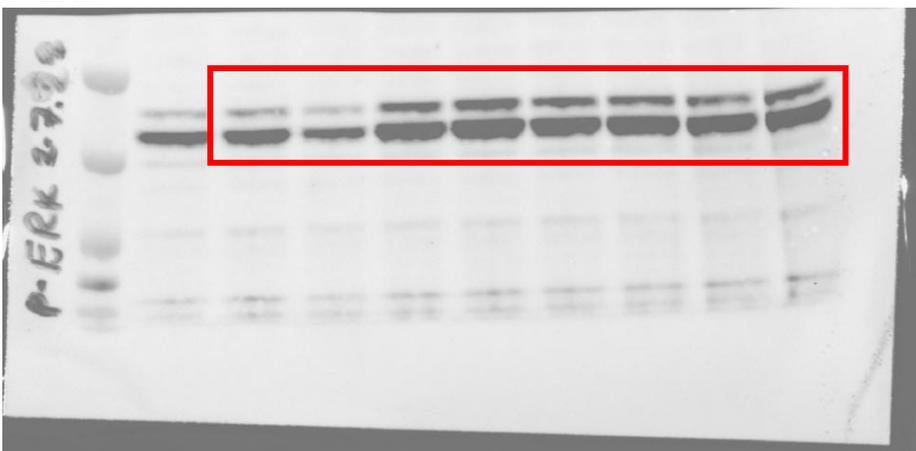
P-AKT



AKT

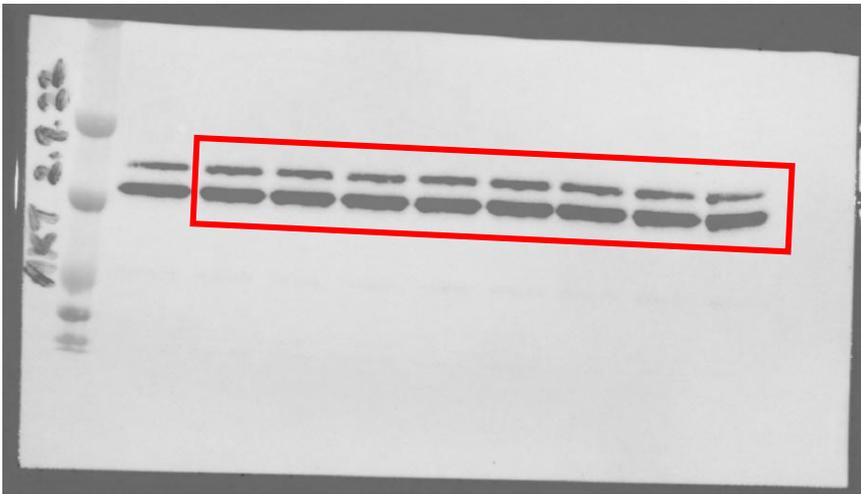


P-ERK



Full Unedited Blots for Figure 2C Continued

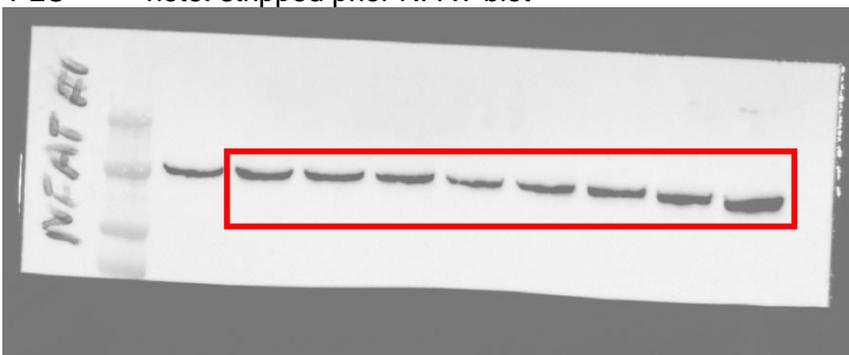
ERK note: stripped prior AKT blot



P-PLC

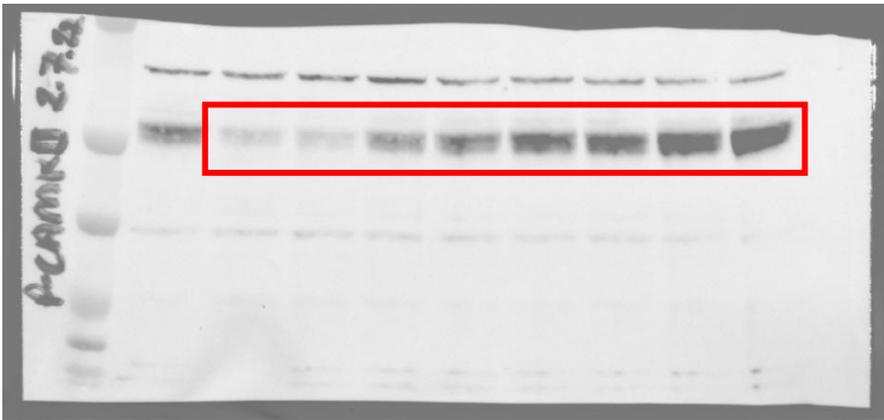


PLC note: stripped prior NFAT blot



Full Unedited Blots for Figure 2C Continued

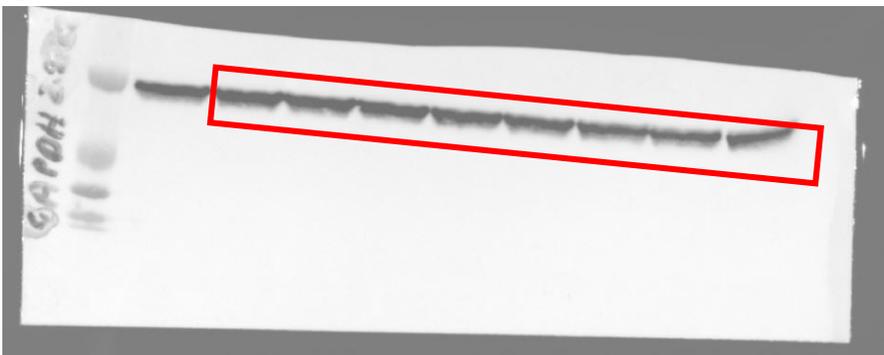
P-CAMKII



CAMKII

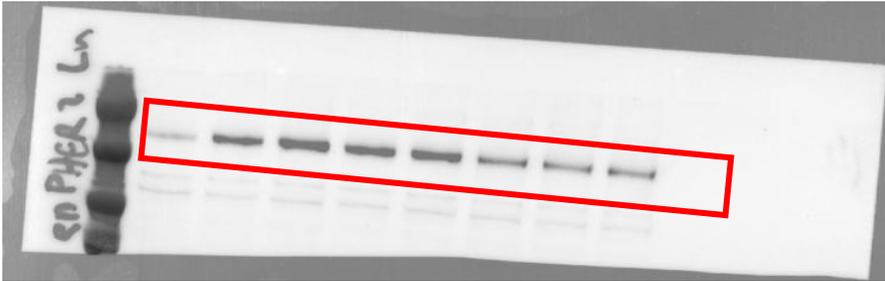


GAPDH

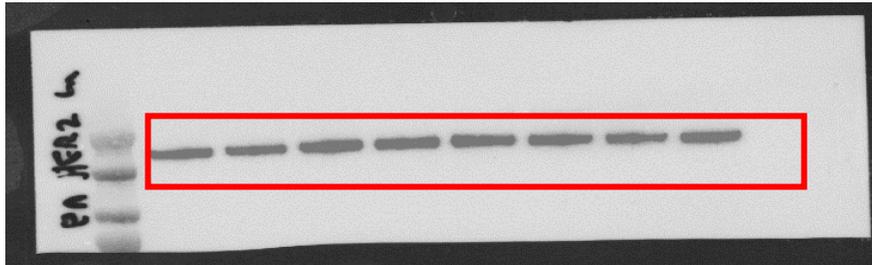


### Full Unedited Blots for Figure 3A

Lanes: 0, 2, 5, 10, 15, 30, 60, 120 unless noted  
P-HER2



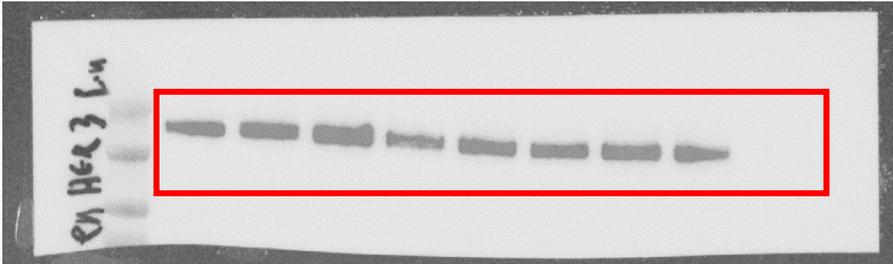
HER2



P-HER3

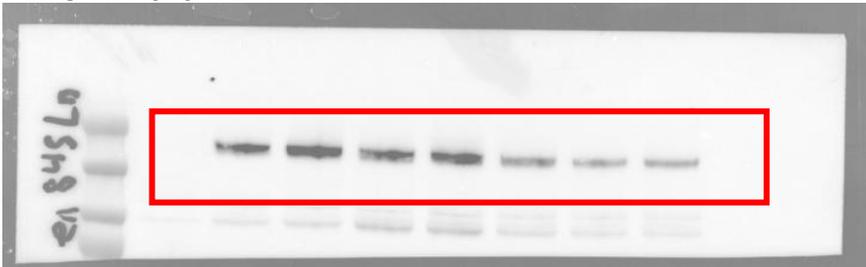


HER3

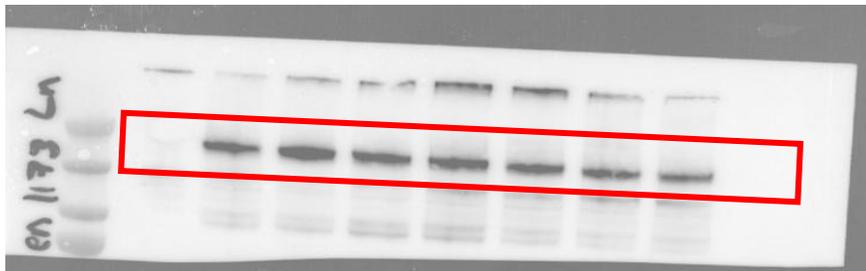


Full Unedited Blots for Figure 3A Continued

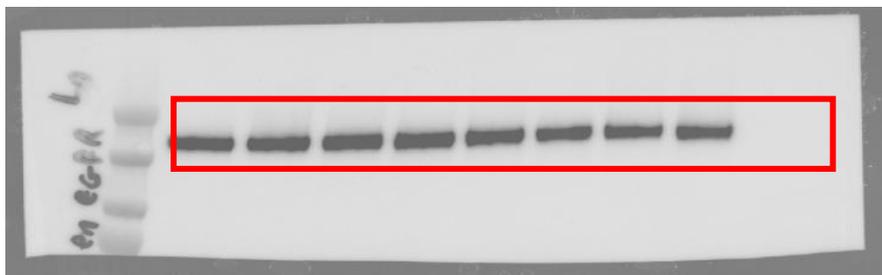
P-EGFR Y845



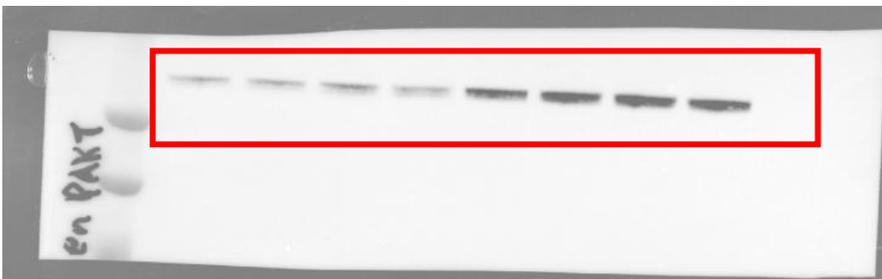
P-EGFR Y1173



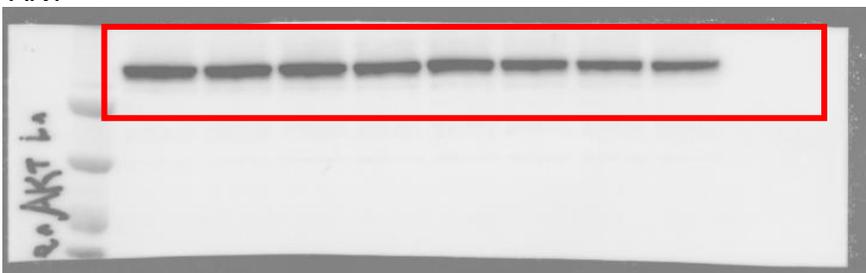
EGFR



P-AKT

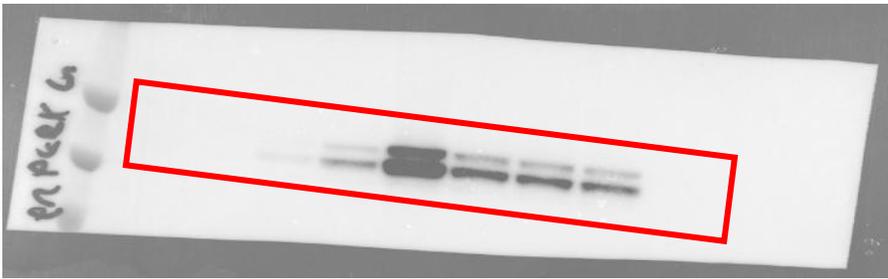


AKT

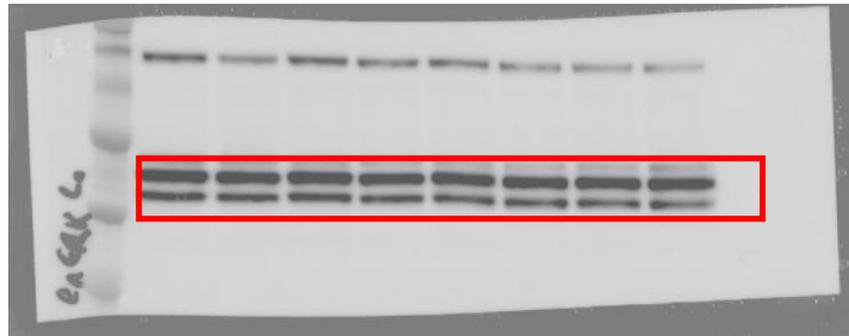


Full Unedited Blots for Figure 3A Continued

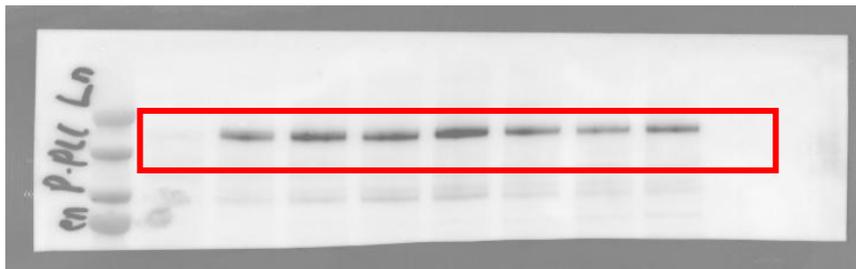
P-ERK



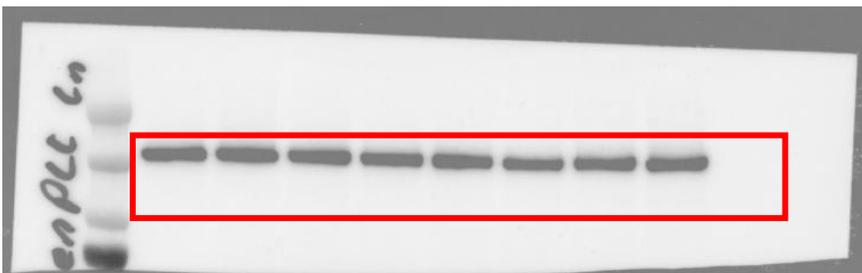
ERK



P-PLC

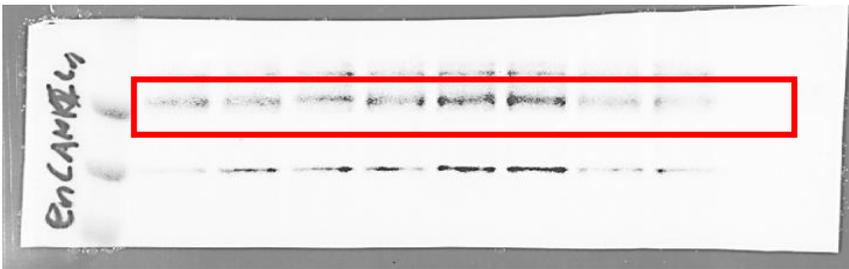


PLC

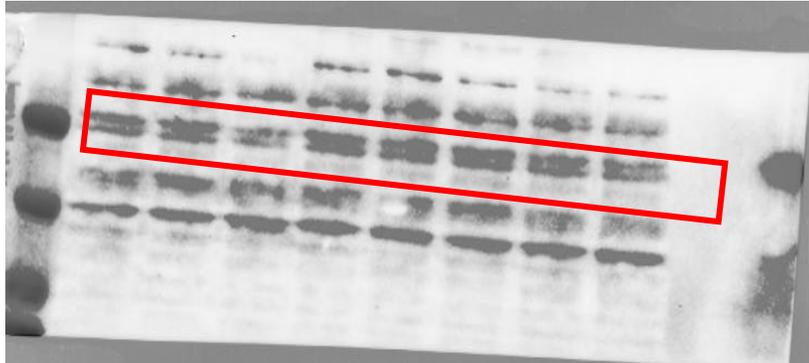


Full Unedited Blots for Figure 3A Continued

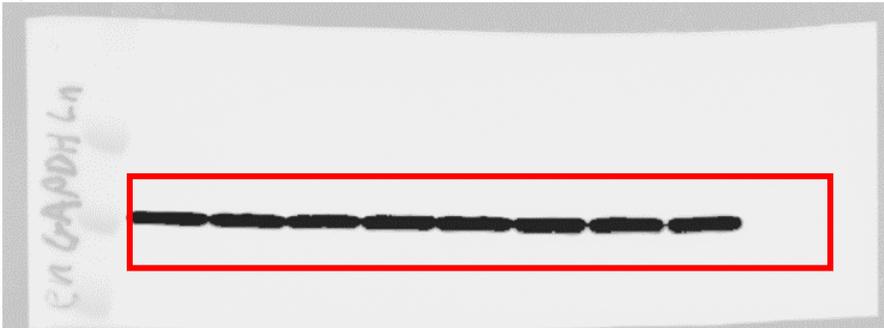
P-CAMKII



CAMKII

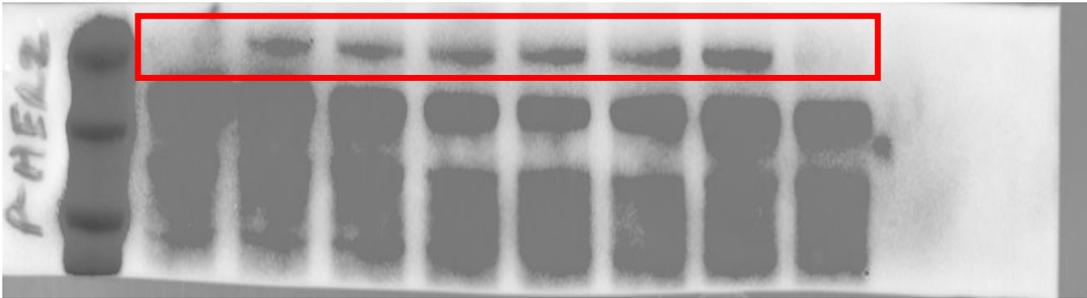


GAPDH

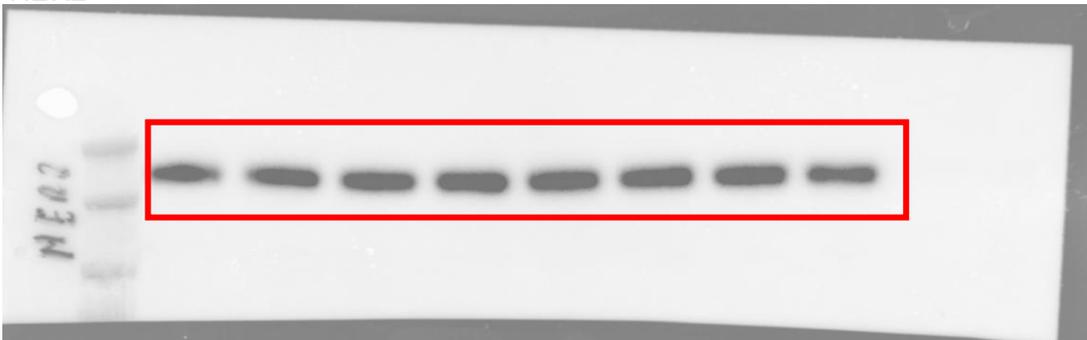


### Full Unedited Blots for Figure 3C

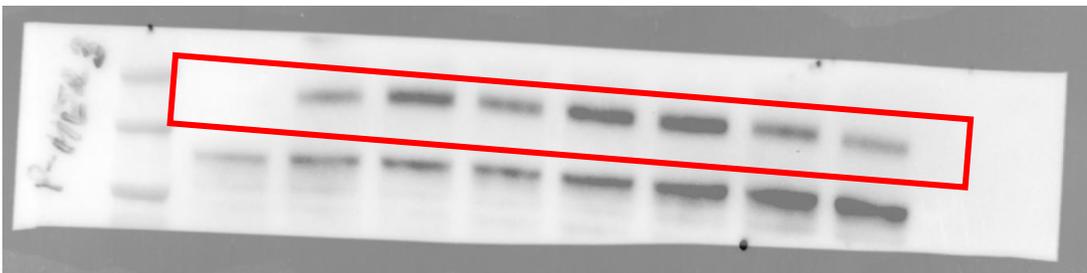
Lanes: 0, 2, 5, 10, 15, 30, 60, 120 unless noted  
P-HER2



HER2



P-HER3



HER3

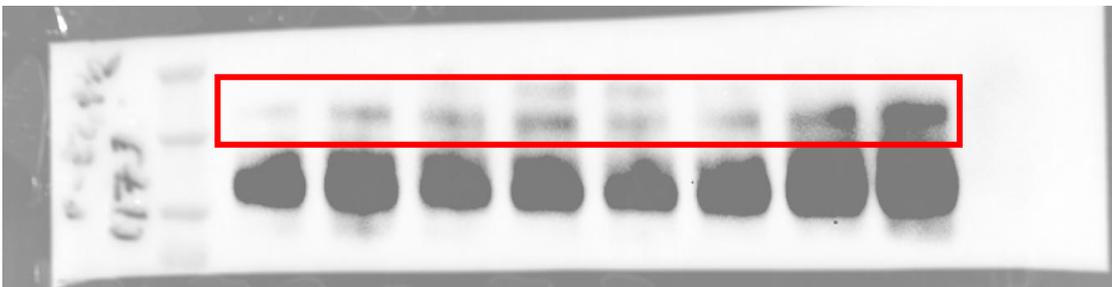


Full Unedited Blots for Figure 3C Continued

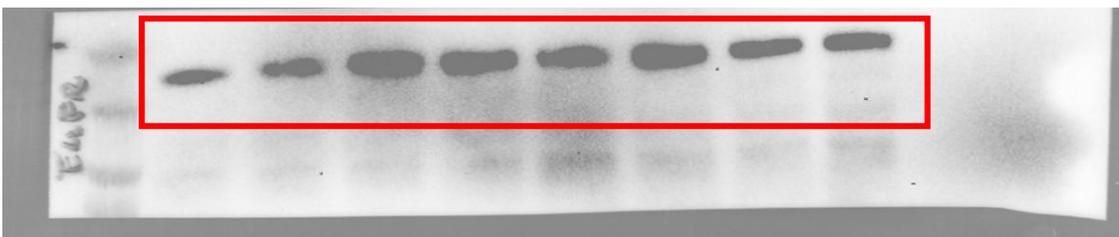
P-EGFR Y845



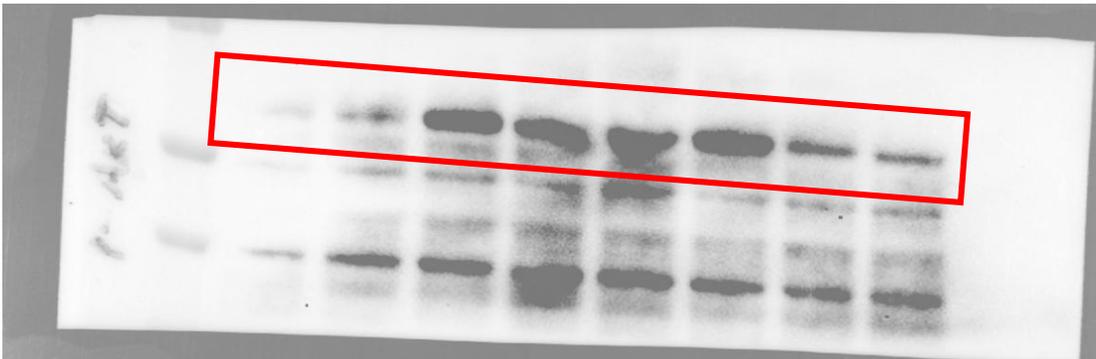
P-EGFR Y1173



EGFR

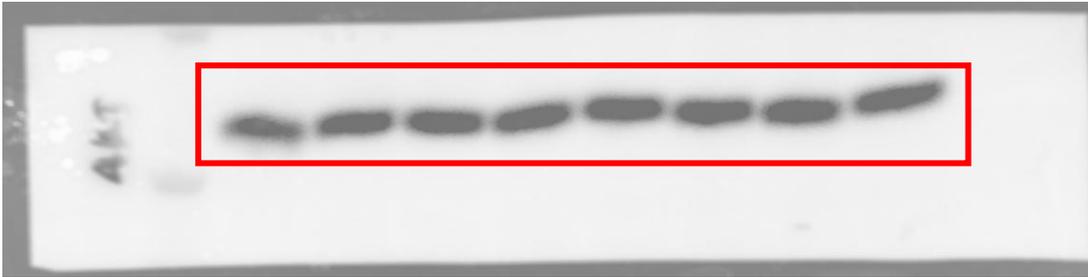


P-AKT

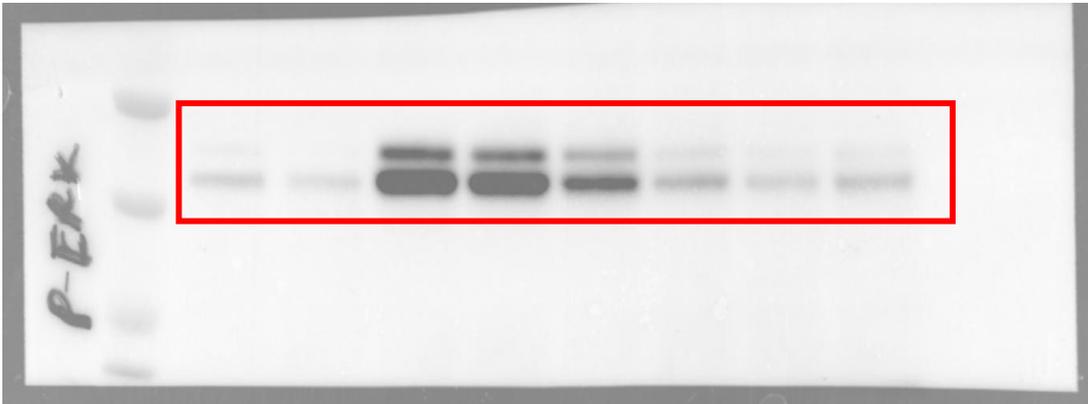


Full Unedited Blots for Figure 3C Continued

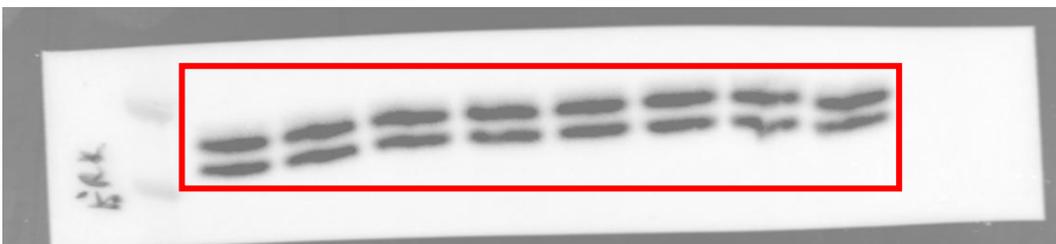
AKT



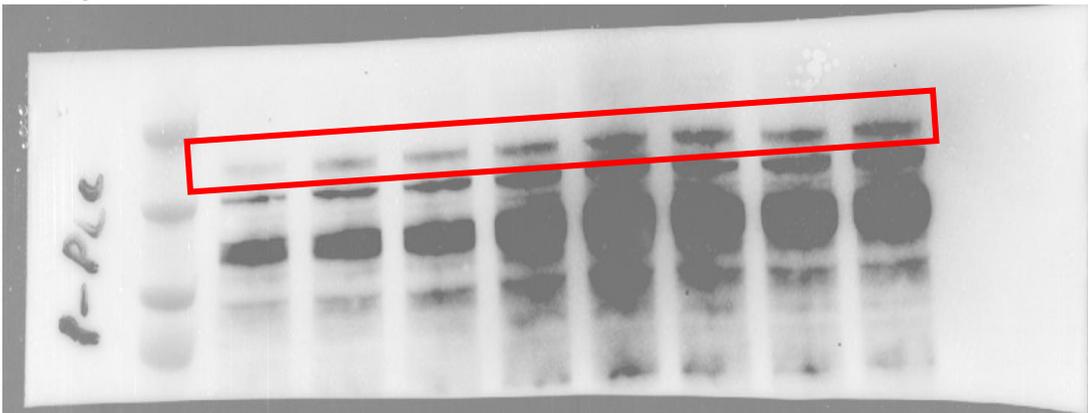
P-ERK



ERK

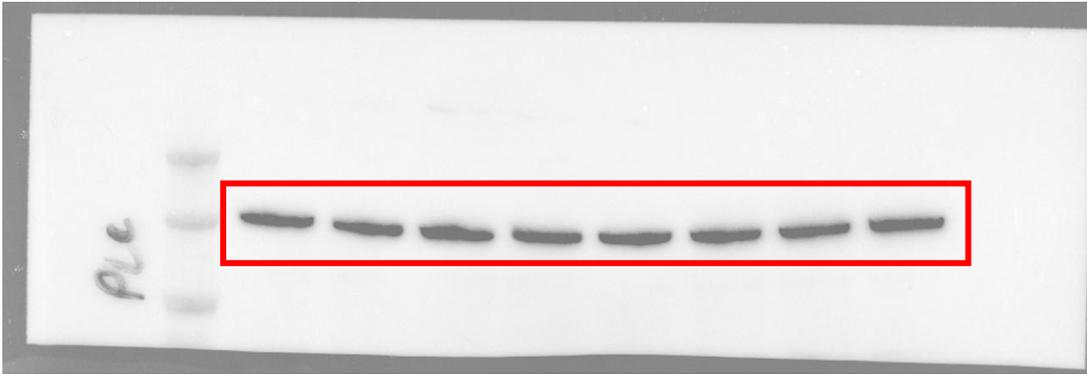


P-PLC



Full Unedited Blots for Figure 3C Continued

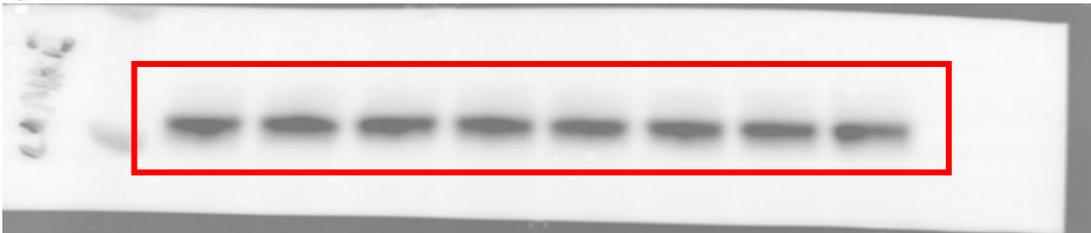
PLC



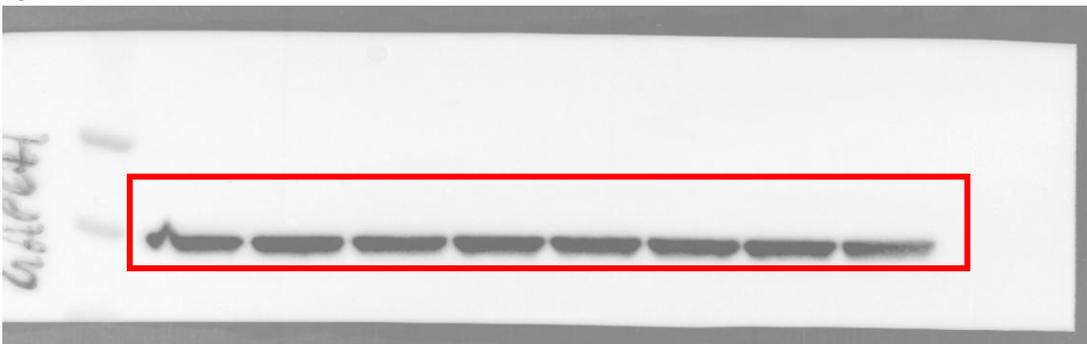
P-CAMKII



CAMKII



GAPDH



**Full Unedited Blots for Figure 4C**  
Recombinant Protein - HER3-FLAG

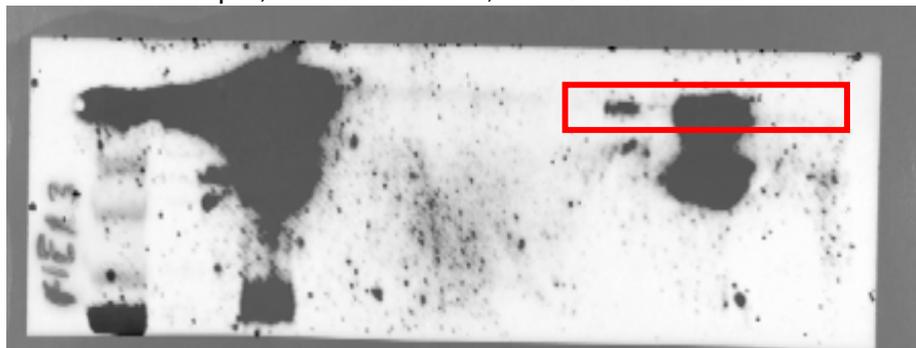
HER3

Lanes: HER3 input, HER3 IP, HER3 Post-IP  
ASPEN input, ASPEN IP, ASPEN Post-IP  
HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP



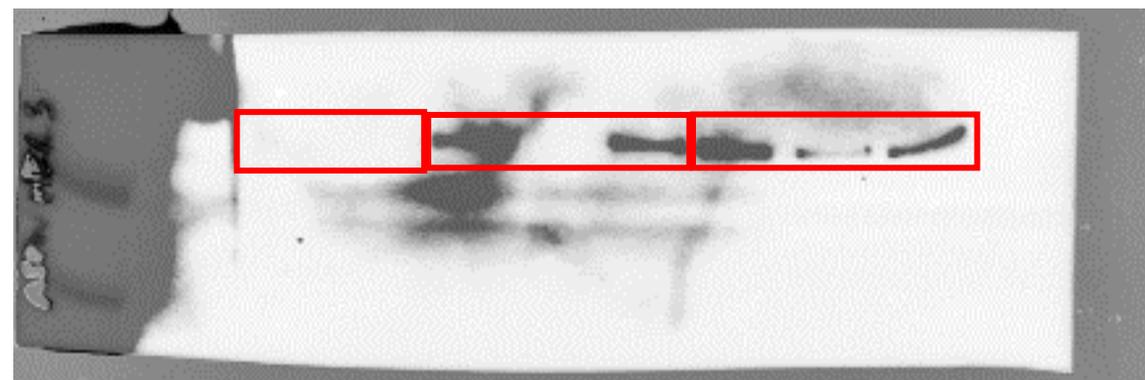
HER3 (exposed longer to draw out band)

Lanes: HER3 input, HER3 IP, HER3 Post-IP  
ASPEN input, ASPEN IP, ASPEN Post-IP  
HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP



ASPEN

Lanes: HER3 input, HER3 IP, HER3 Post-IP  
ASPEN input, ASPEN IP, ASPEN Post-IP  
HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP

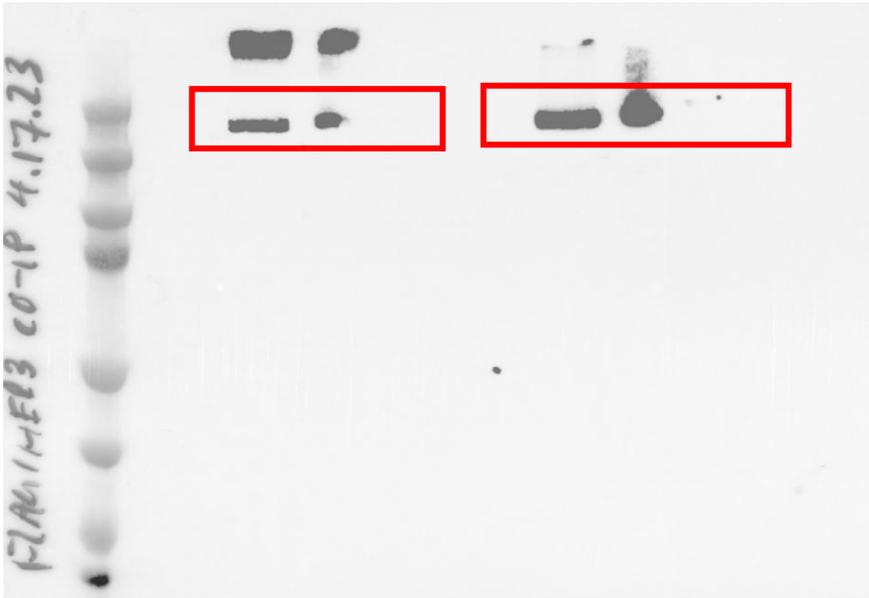


## Full Unedited Blots for Figure 4F

HEK293 HER3-FLAG

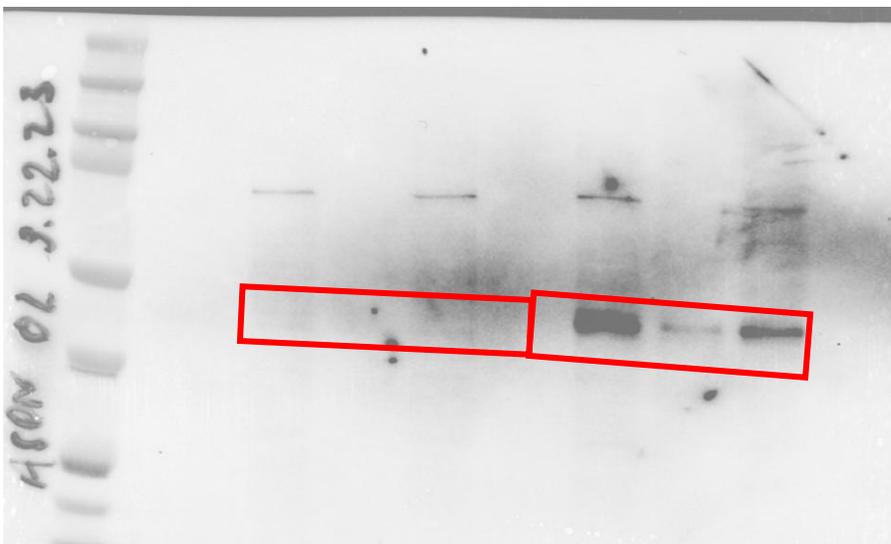
HER3

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP  
HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP



ASPEN

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP  
HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP

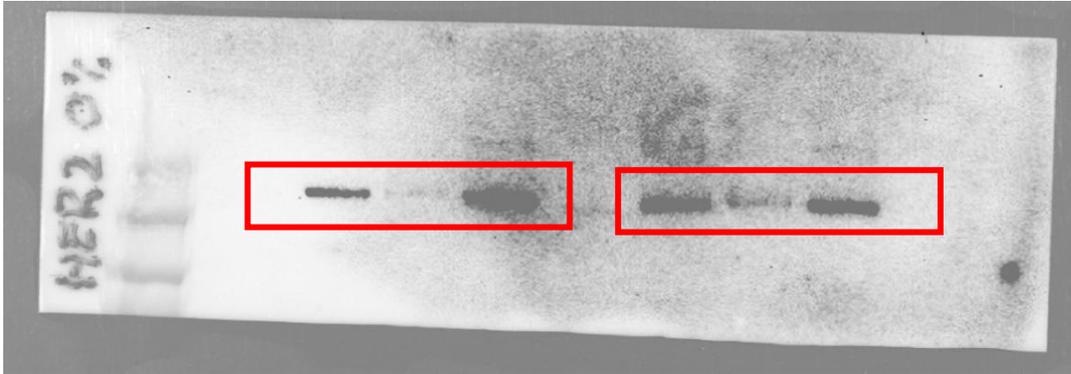


**Full Unedited Blots for Figure 4F Continued**

HER2

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP

HER3+ASPEN Input, HER3+ASPEN IP, HER3+ASPEN Post-IP

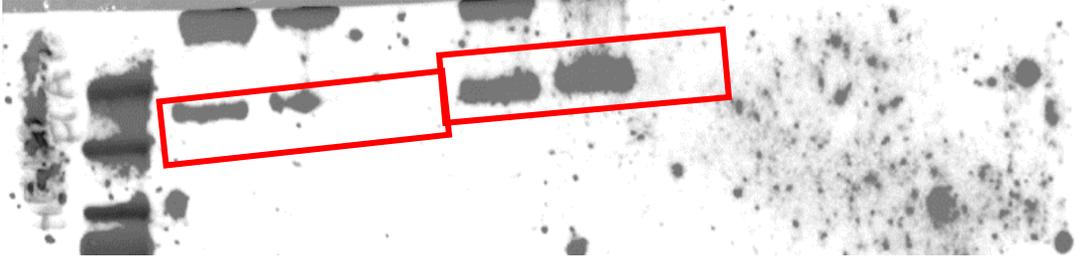


**Full Unedited Blots for Figure 4G**

LNCaP HER3-FLAG

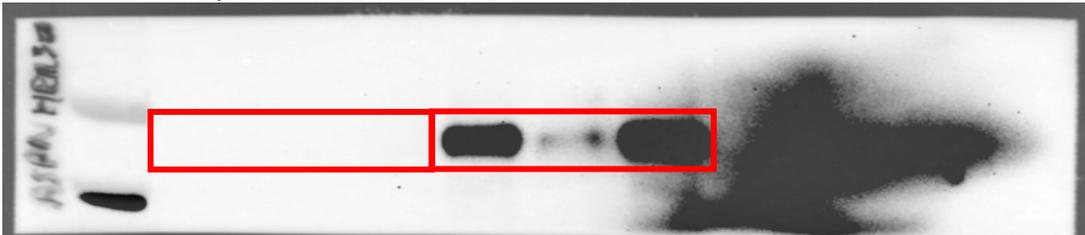
HER3

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP  
HER3+ASP input, HER3+ASP IP, HER3+ASP Post-IP



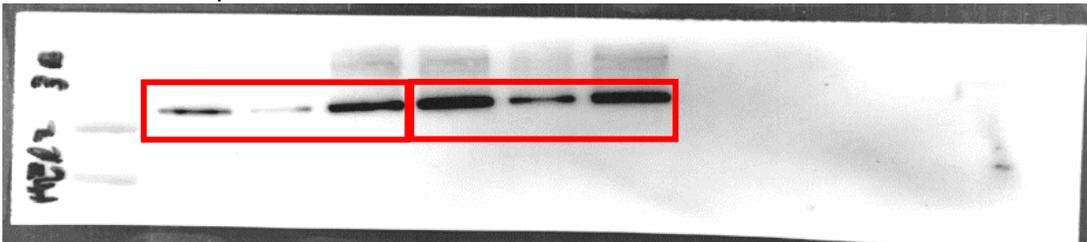
ASP

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP  
HER3+ASP Input, HER3+ASP IP, HER3+ASP Post-IP



HER2

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP  
HER3+ASP Input, HER3+ASP IP, HER3+ASP Post-IP



## Full Unedited Blots for Figure 4H

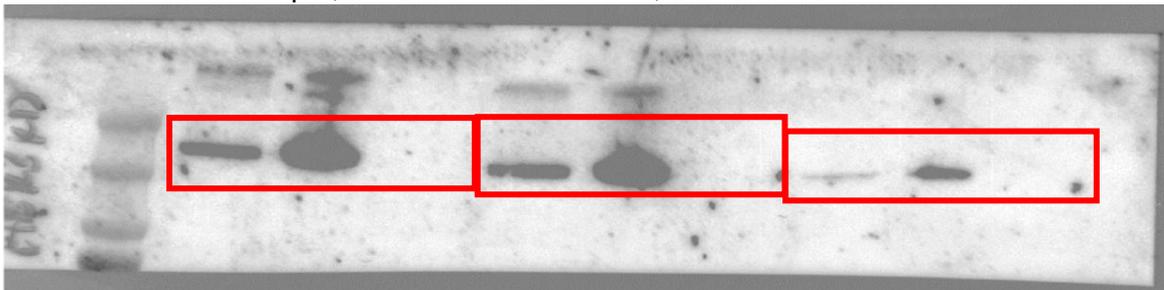
LNCaP HER2 KO HER3-FLAG

HER3

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP

HER3+ASP Input, HER3+ASP IP, HER3+ASP Post-IP

HER3+ASP+HER2 Input, HER3+ASP+HER3 IP, HER3+ASP+HER2 Post-IP

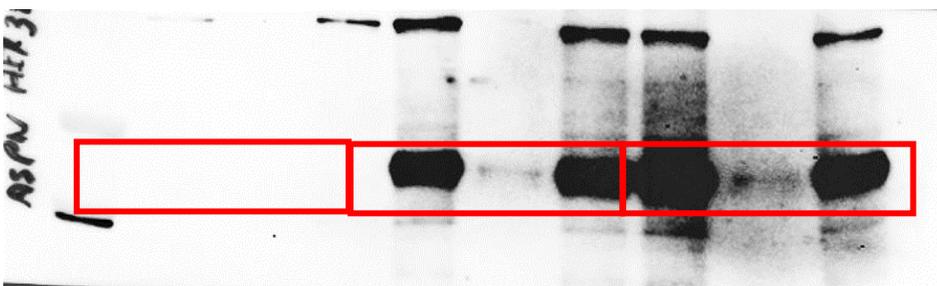


ASP

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP

HER3+ASP Input, HER3+ASP IP, HER3+ASP Post-IP

HER3+ASP+HER2 Input, HER3+ASP+HER3 IP, HER3+ASP+HER2 Post-IP

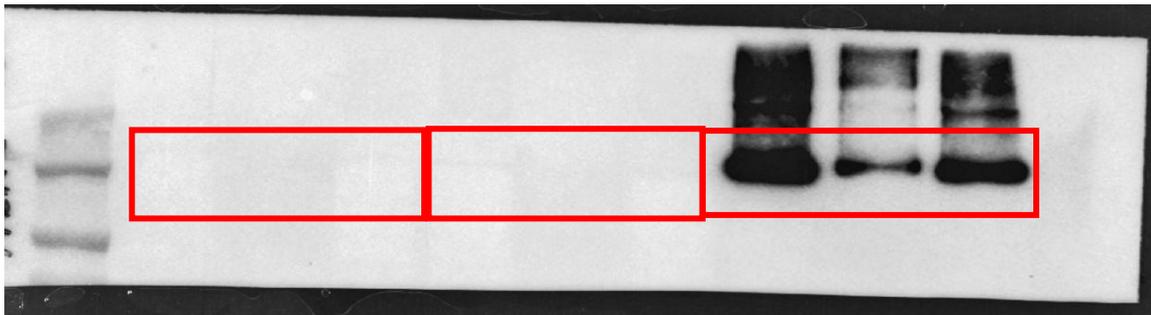


HER2

Lanes: HER3+EV Input, HER3+EV IP, HER3+EV Post-IP

HER3+ASP Input, HER3+ASP IP, HER3+ASP Post-IP

HER3+ASP+HER2 Input, HER3+ASP+HER3 IP, HER3+ASP+HER2 Post-IP

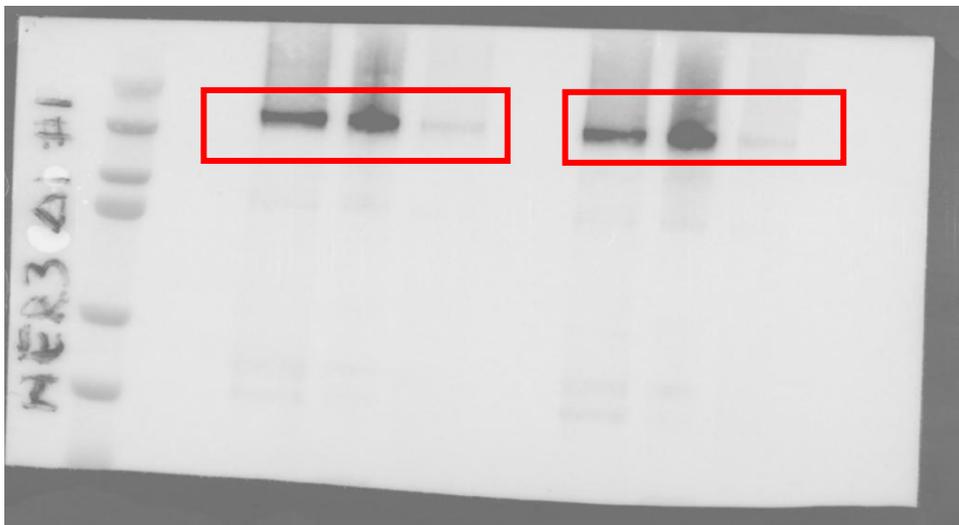


**Full Unedited Blots for Figure 4I**

HEK293 HER3ΔI-3xFLAG

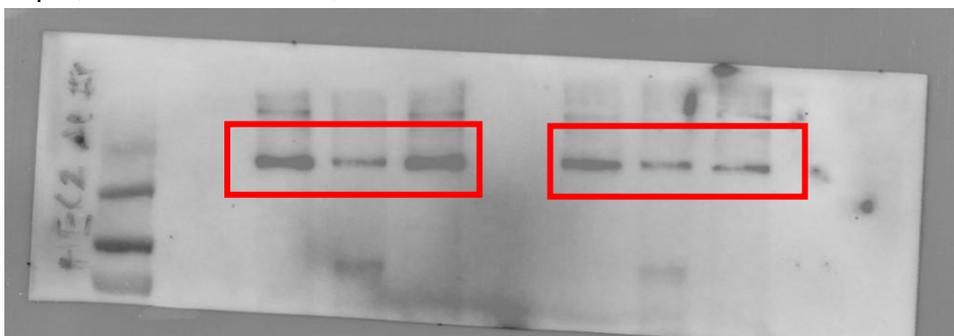
HER3

Lanes: HER3ΔI+EV Input, HER3ΔI+EV IP, HER3ΔI+EV Post-IP, HER3ΔI+ASPEN Input, HER3ΔI+ASPEN IP, HER3ΔI+ASPEN Post-IP



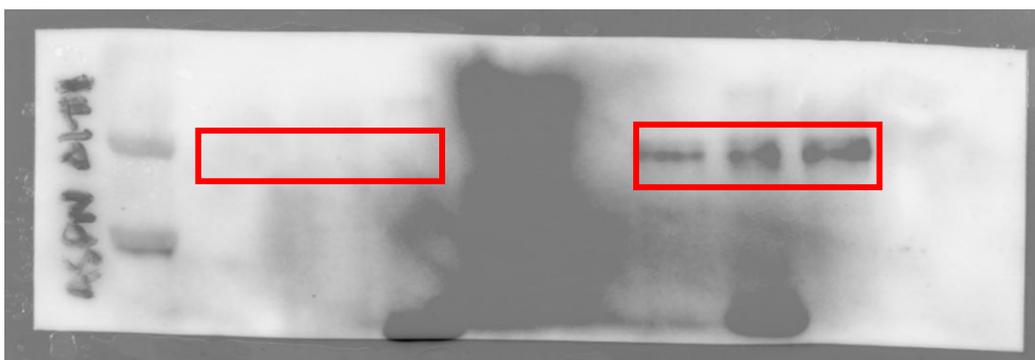
HER2

Lanes: HER3ΔI+EV Input, HER3ΔI+EV IP, HER3ΔI+EV Post-IP, HER3ΔI+ASPEN Input, HER3ΔI+ASPEN IP, HER3ΔI+ASPEN Post-IP



ASPEN

Lanes: HER3ΔI+EV Input, HER3ΔI+EV IP, HER3ΔI+EV Post-IP, HER3ΔI+ASPEN Input, HER3ΔI+ASPEN IP, HER3ΔI+ASPEN Post-IP

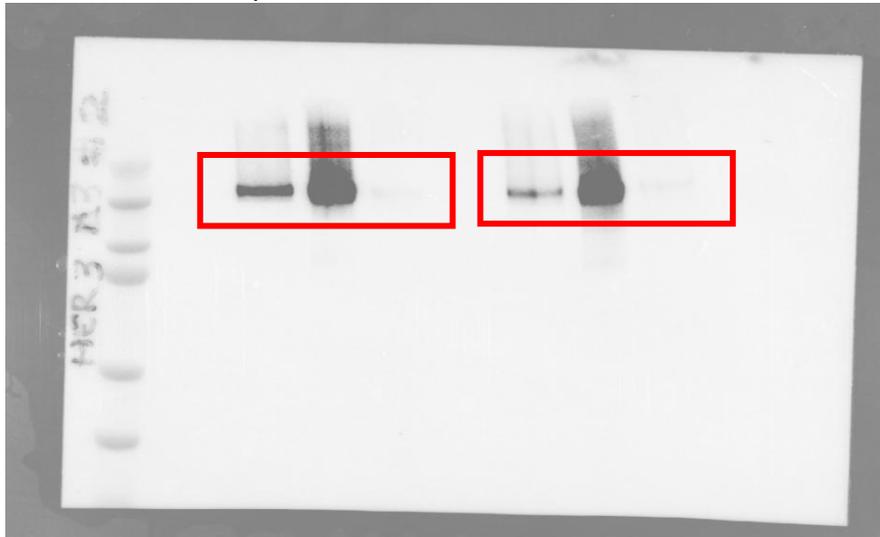


### Full and Unedited Blots for Figure 4J

HEK293 HER3 $\Delta$ III-3xFLAG

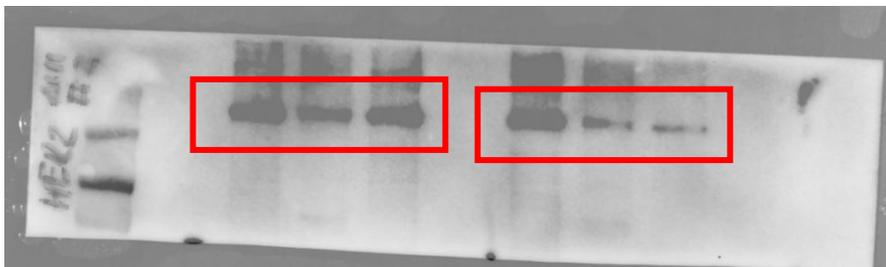
HER3

Lanes: HER3 $\Delta$ III+EV Input, HER3 $\Delta$ III+EV IP, HER3 $\Delta$ III+EV Post-IP, HER3 $\Delta$ III+ASP<sub>N</sub> Input, HER3 $\Delta$ III+ASP<sub>N</sub> IP, HER3 $\Delta$ III+ASP<sub>N</sub> Post-IP



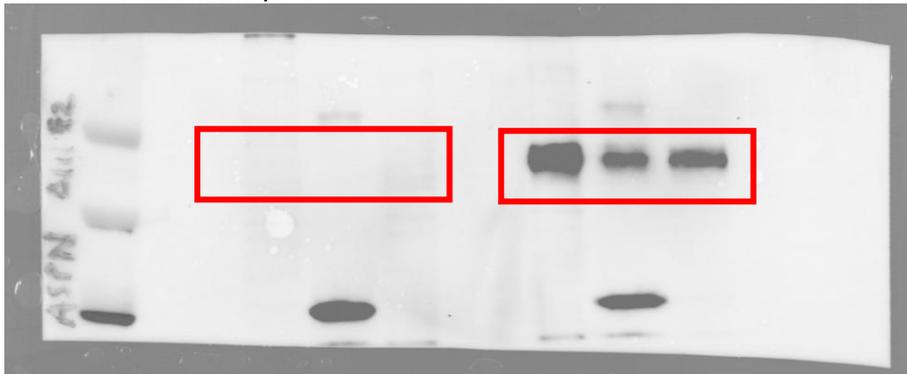
HER2

Lanes: HER3 $\Delta$ III+EV Input, HER3 $\Delta$ III+EV IP, HER3 $\Delta$ III+EV Post-IP, HER3 $\Delta$ III+ASP<sub>N</sub> Input, HER3 $\Delta$ III+ASP<sub>N</sub> IP, HER3 $\Delta$ III+ASP<sub>N</sub> Post-IP



ASP<sub>N</sub>

Lanes: HER3 $\Delta$ III+EV Input, HER3 $\Delta$ III+EV IP, HER3 $\Delta$ III+EV Post-IP, HER3 $\Delta$ III+ASP<sub>N</sub> Input, HER3 $\Delta$ III+ASP<sub>N</sub> IP, HER3 $\Delta$ III+ASP<sub>N</sub> Post-IP

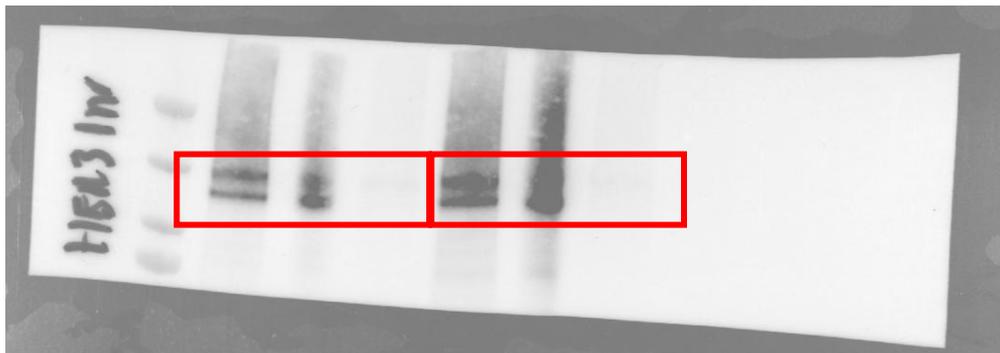


## Full and Unedited Figure 4K

HEK293 HER3ΔI/III-3xFLAG

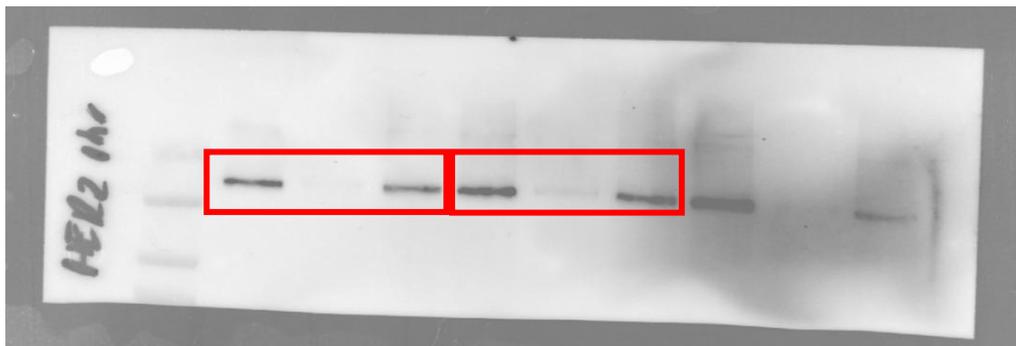
HER3

Lanes: HER3Δ I/III + EV Input, HER3Δ I/III + EV IP, HER3Δ I/III + Post-IP, HER3Δ I/III + ASPN Input, HER3Δ I/III + ASPN IP, HER3Δ I/III + ASPN Post-IP, ASPN only Input, ASPN only IP, ASPN only Post-IP



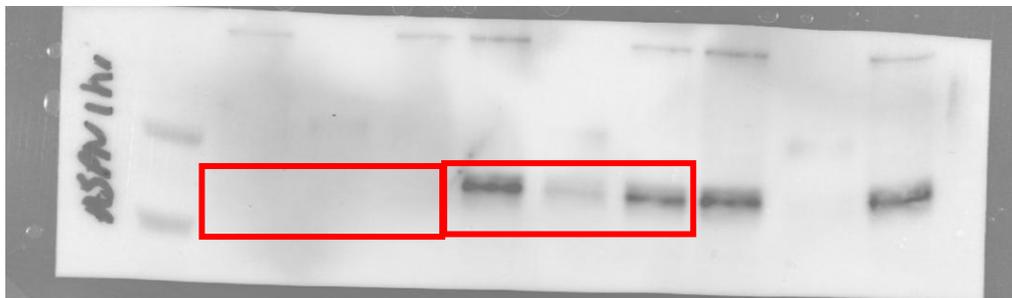
HER2

Lanes: HER3Δ I/III + EV Input, HER3Δ I/III + EV IP, HER3Δ I/III + Post-IP, HER3Δ I/III + ASPN Input, HER3Δ I/III + ASPN IP, HER3Δ I/III + ASPN Post-IP, ASPN only Input, ASPN only IP, ASPN only Post-IP



ASPN

Lanes: HER3Δ I/III + EV Input, HER3Δ I/III + EV IP, HER3Δ I/III + Post-IP, HER3Δ I/III + ASPN Input, HER3Δ I/III + ASPN IP, HER3Δ I/III + ASPN Post-IP, ASPN only Input, ASPN only IP, ASPN only Post-IP

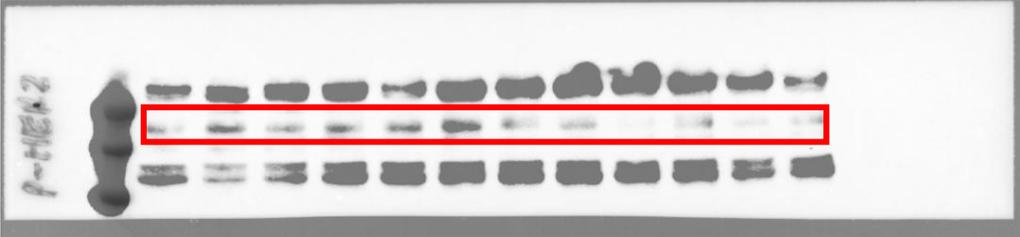


**Full and Unedited Blots for Figure 5A**

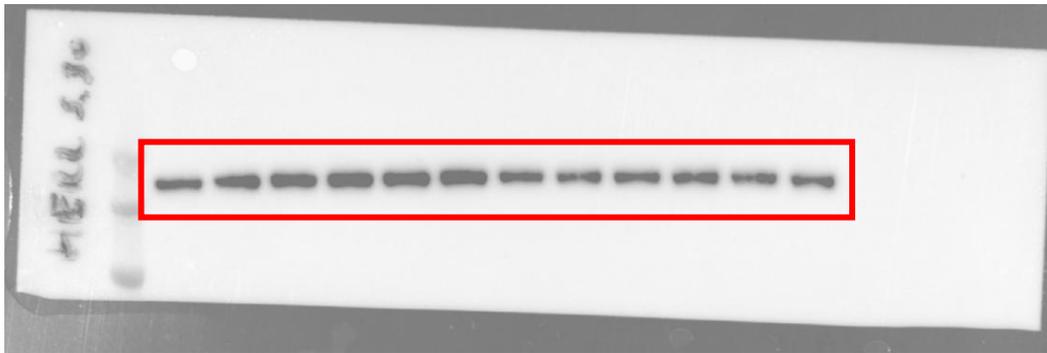
HER3 TWT E11, HER3 TKD E3

Lanes: TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60 unless noted

P-HER2



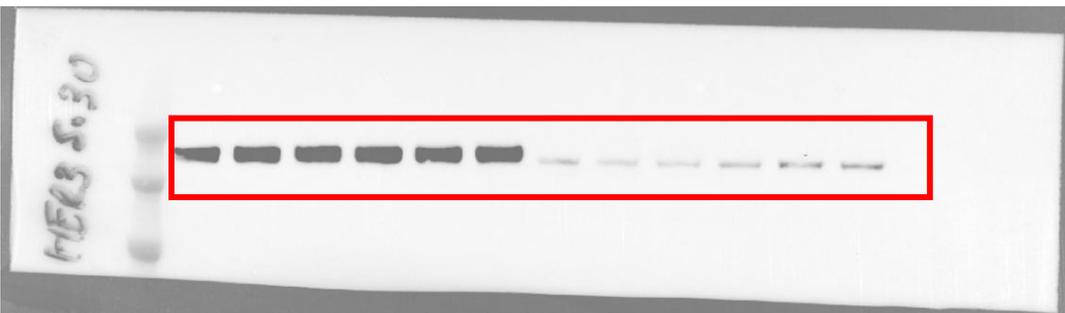
HER2



P-HER3

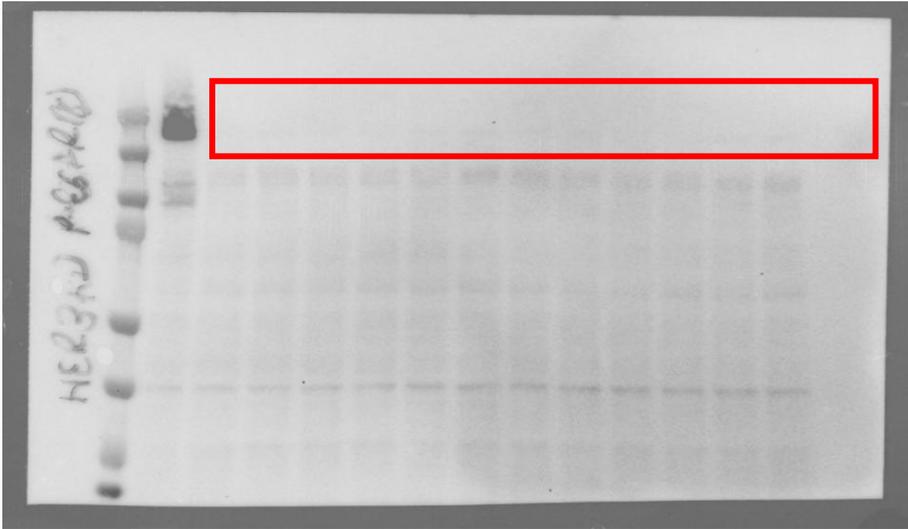


HER3

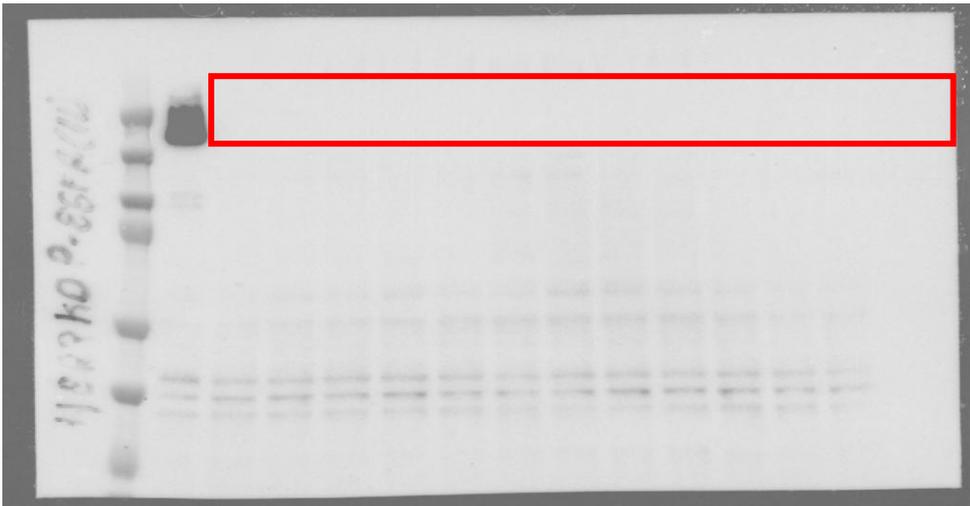


**Full and Unedited Blots for Figure 5A Continued**

Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
P-EGFR Y845

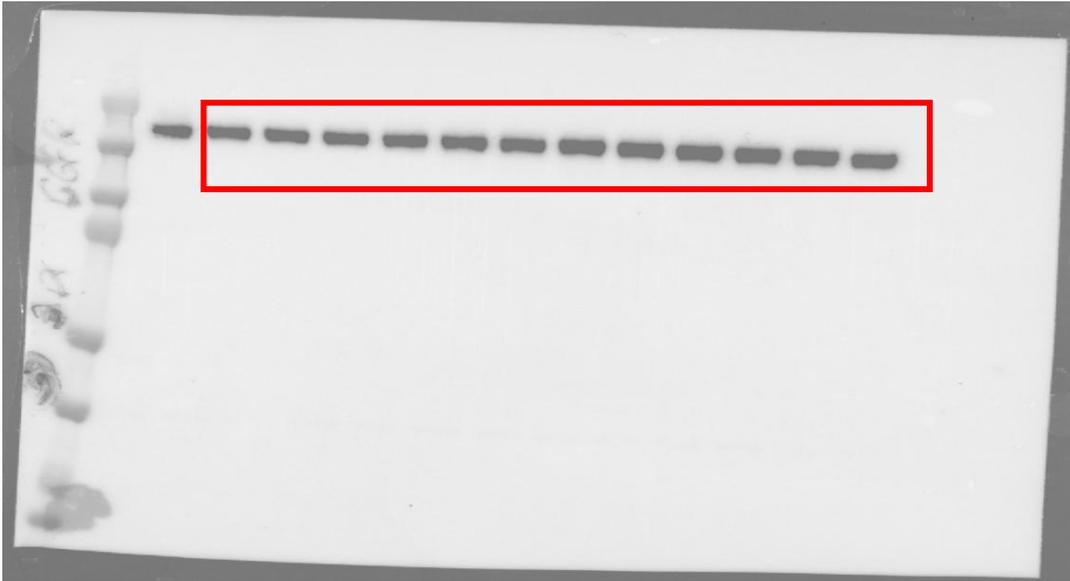


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
P-EGFR Y1173

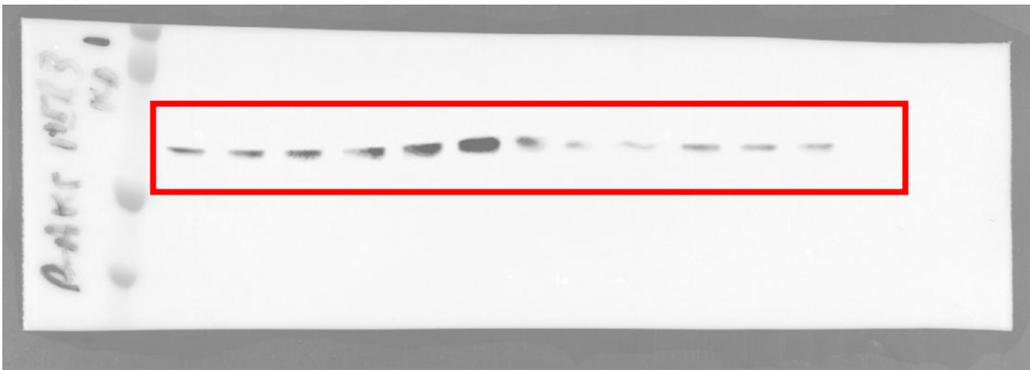


**Full and Unedited Blots for Figure 5A Continued**

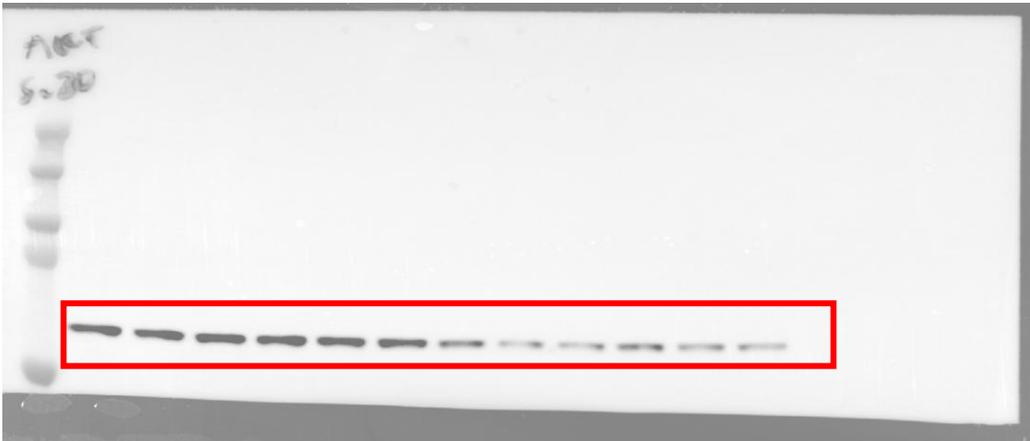
Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
EGFR



P-AKT

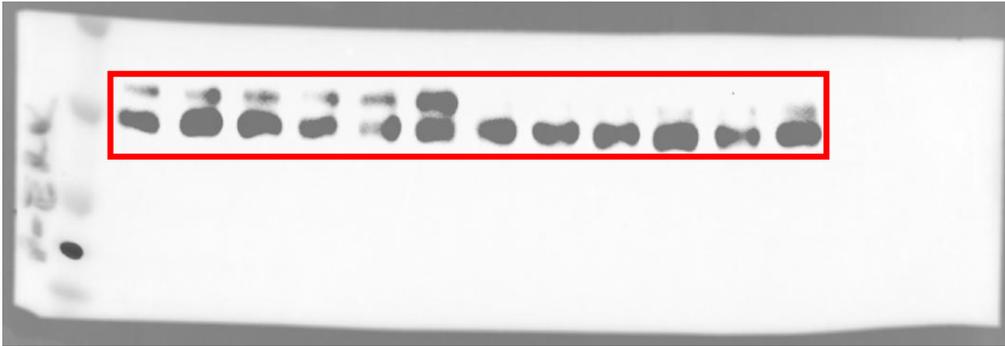


AKT

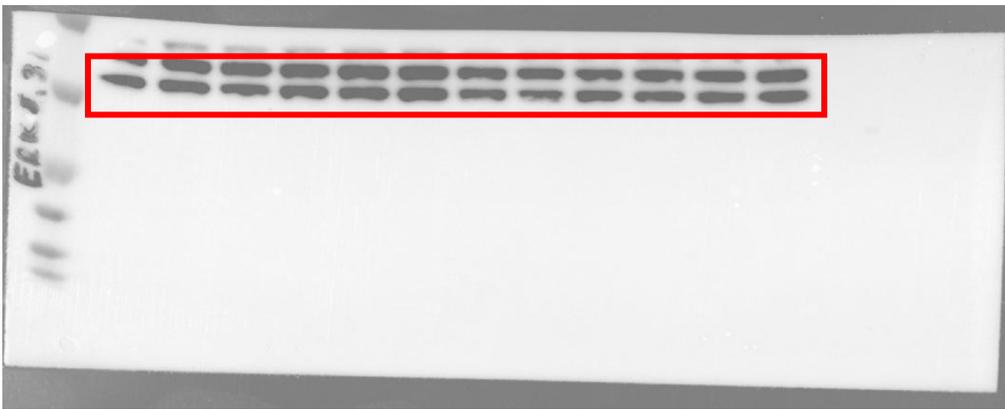


Full and Unedited Blots for Figure 5A Continued

P-ERK



ERK



P-PLC



PLC

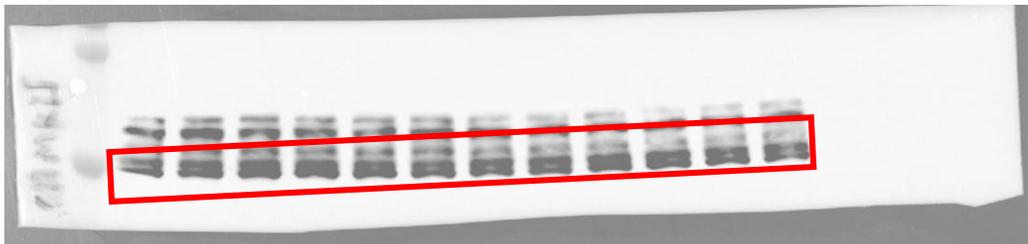


Full and Unedited Blots for Figure 5A Continued

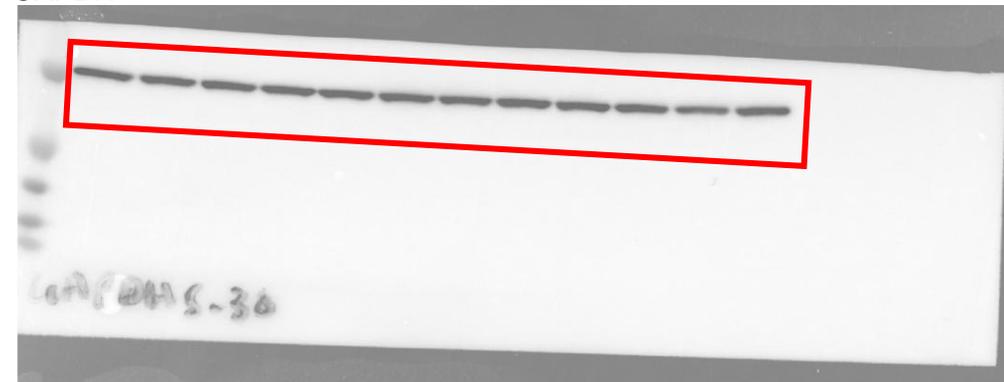
P-CAMKII



CAMKII



GAPDH

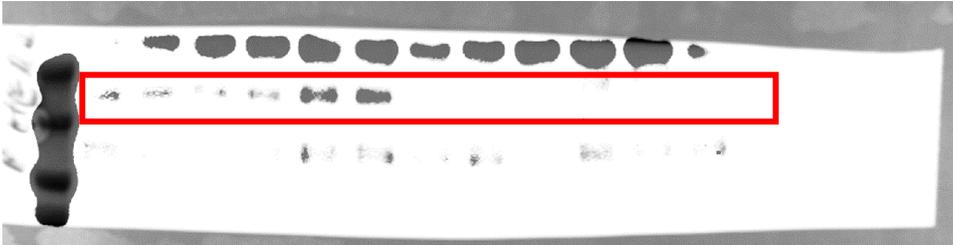


### Full and Unedited Blots for Figure 5C

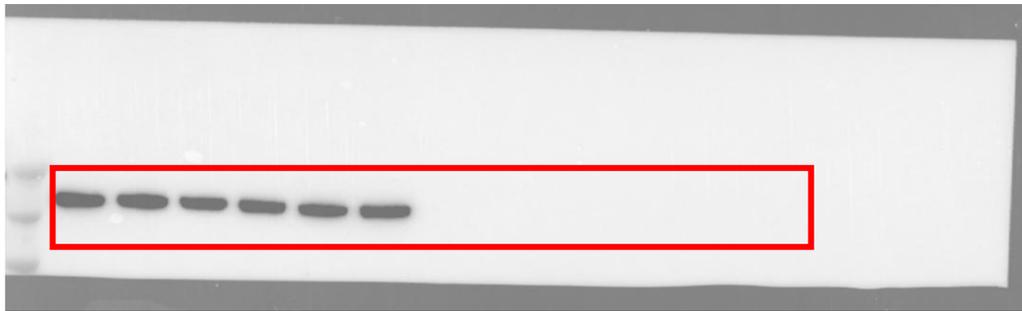
HER2 TWT C9, HER2 KO C12

Lanes: TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60 unless noted

P-HER2



HER2



P-HER3

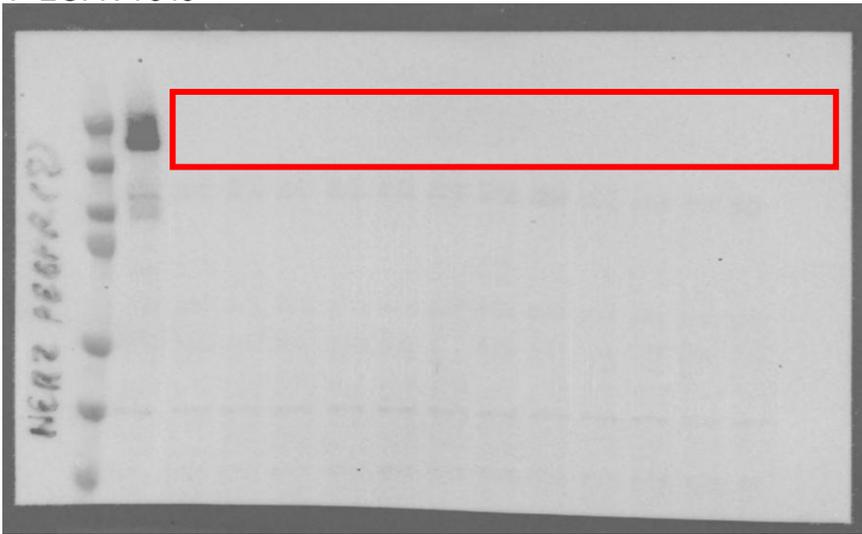


HER3

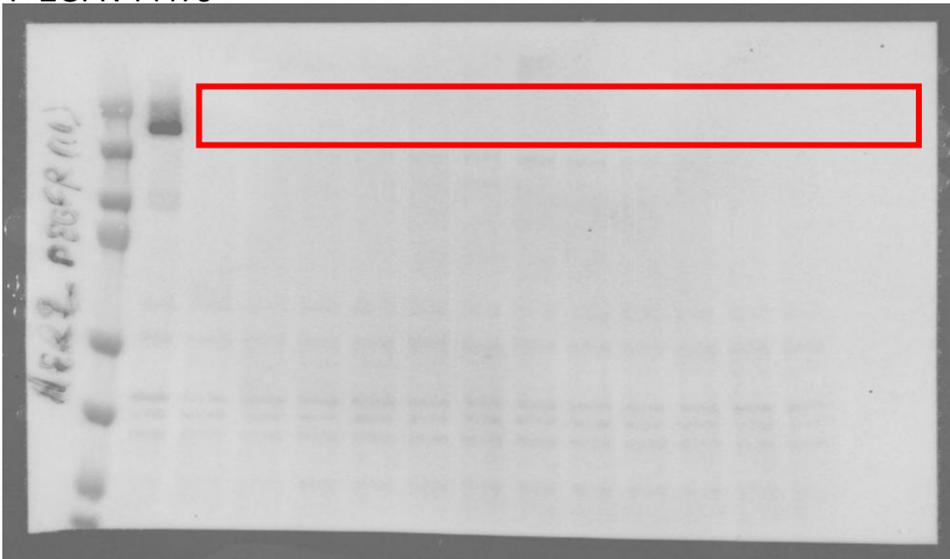


**Full and Unedited Blots for Figure 5C Continued**

Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y845

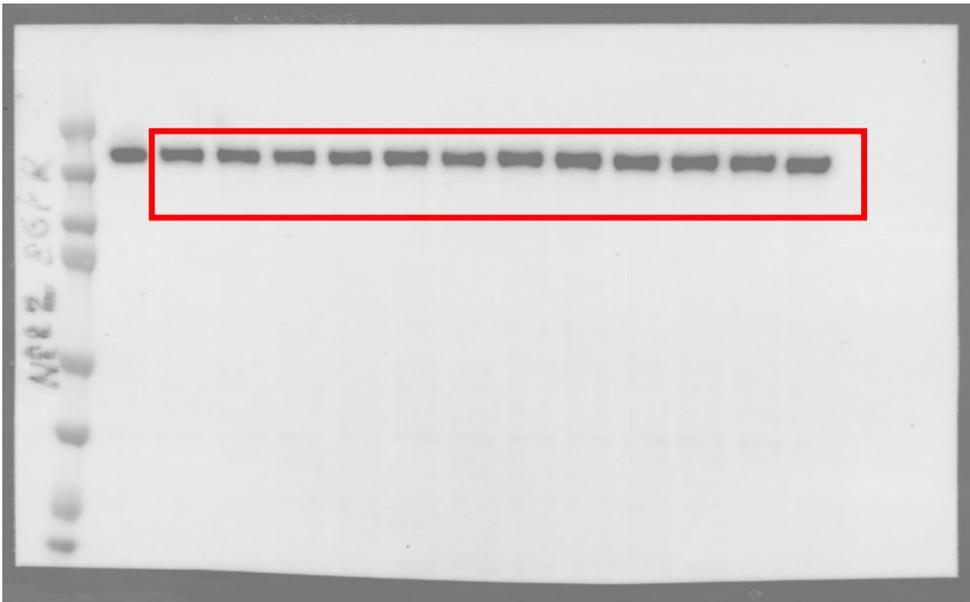


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y1173



**Full and Unedited Blots for Figure 5C Continued**

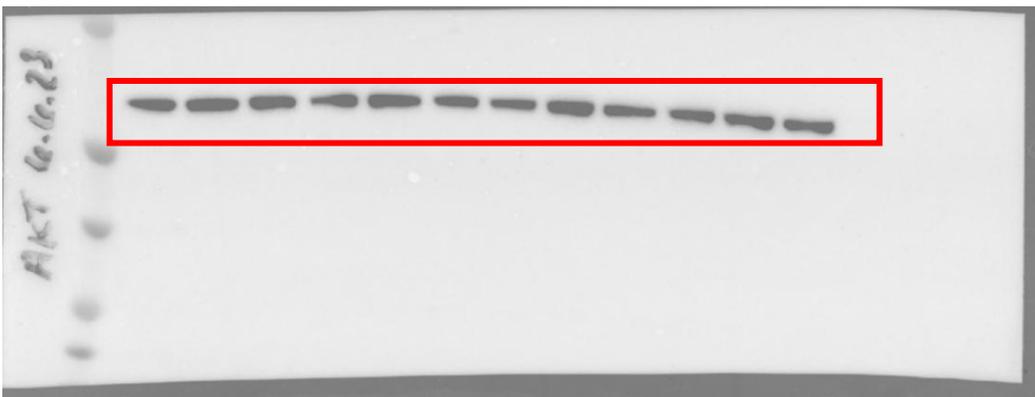
Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
EGFR



P-AKT

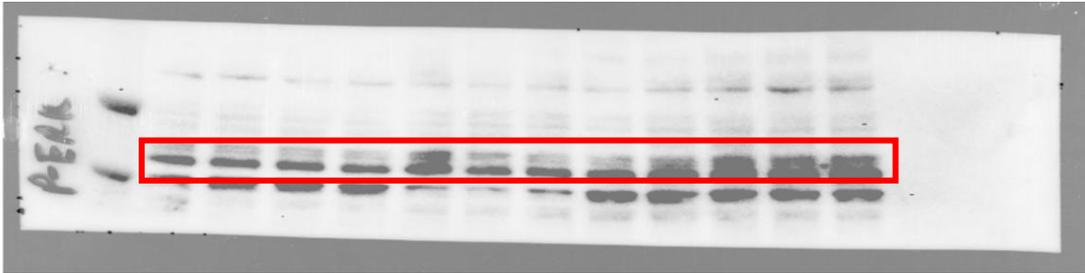


AKT

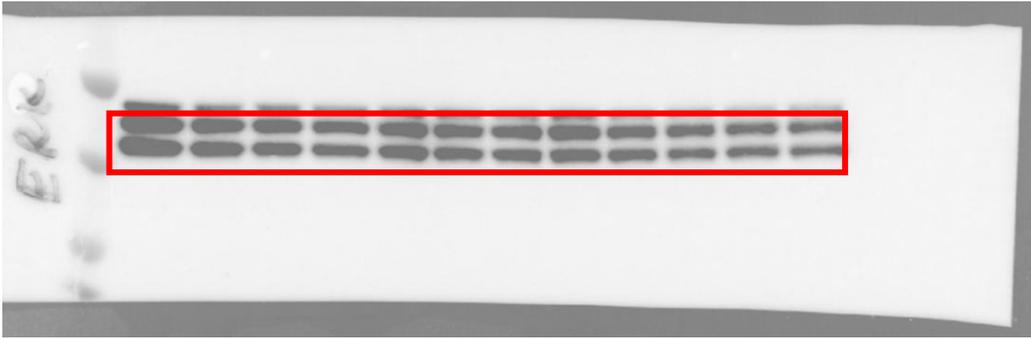


Full and Unedited Blots for Figure 5C Continued

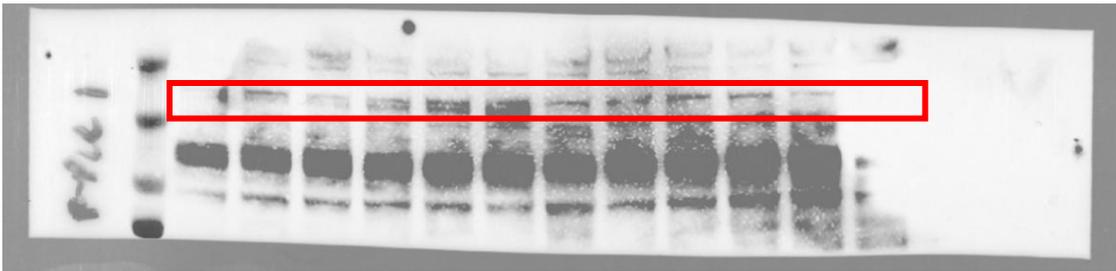
P-ERK



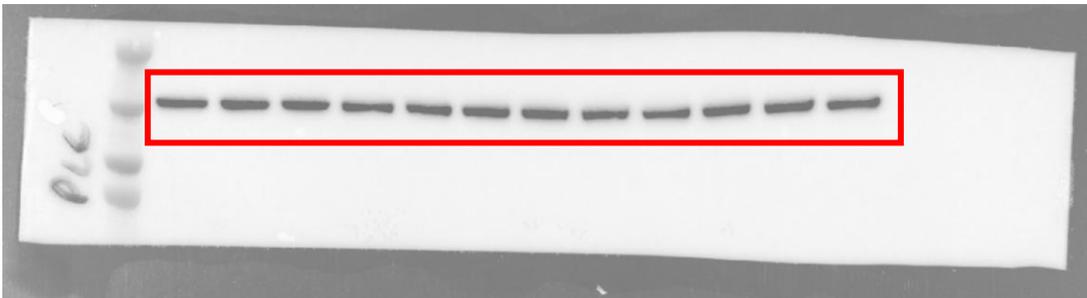
ERK



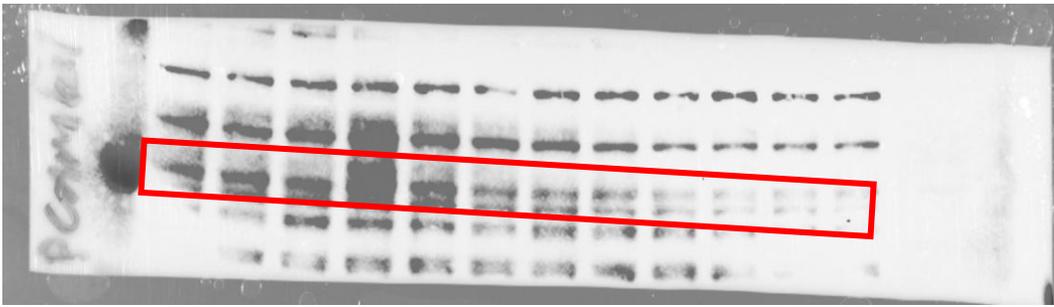
P-PLC



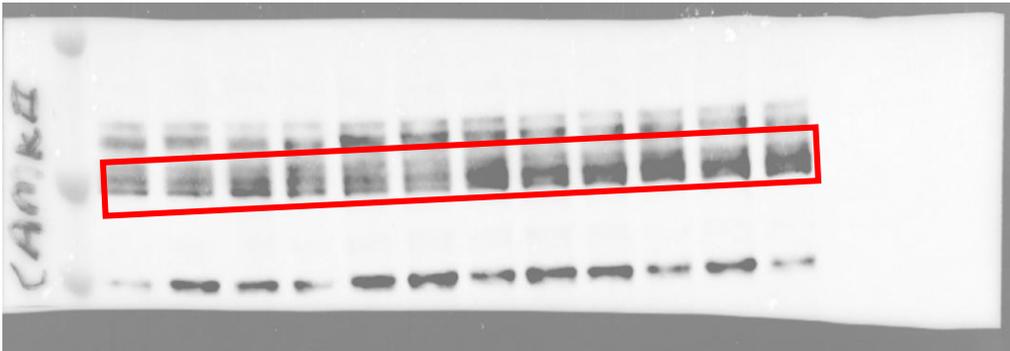
PLC



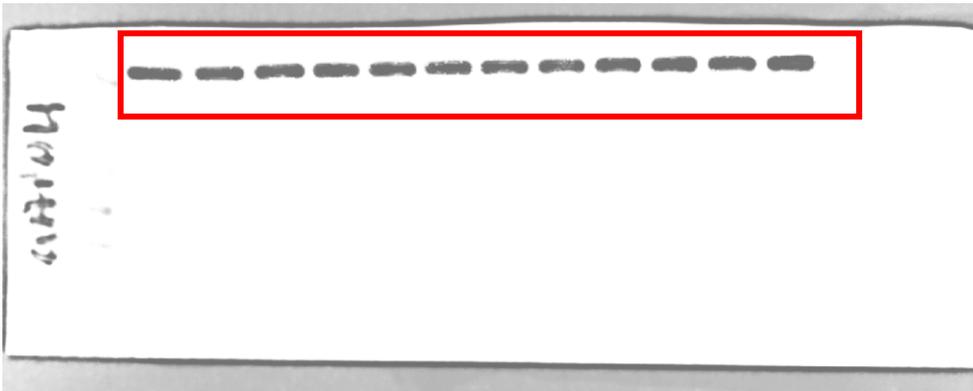
Full and Unedited Blots for Figure 5C Continued  
P-CAMKII



CAMKII

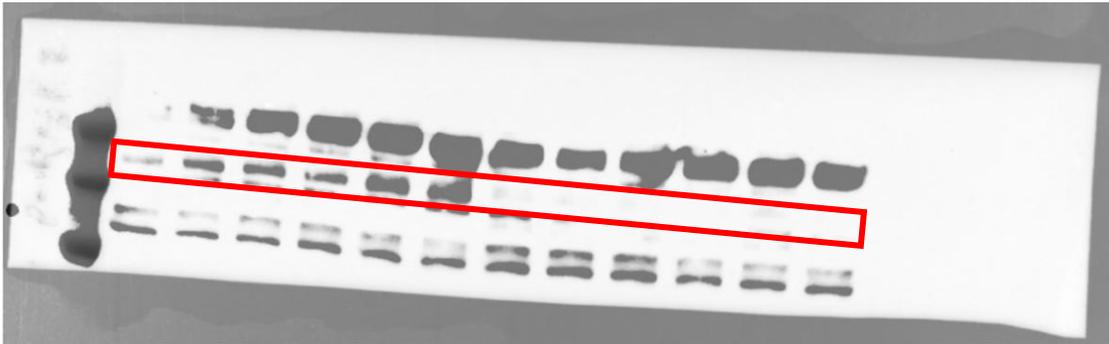


GAPDH



**Full and Unedited Blots for Figure 6A**

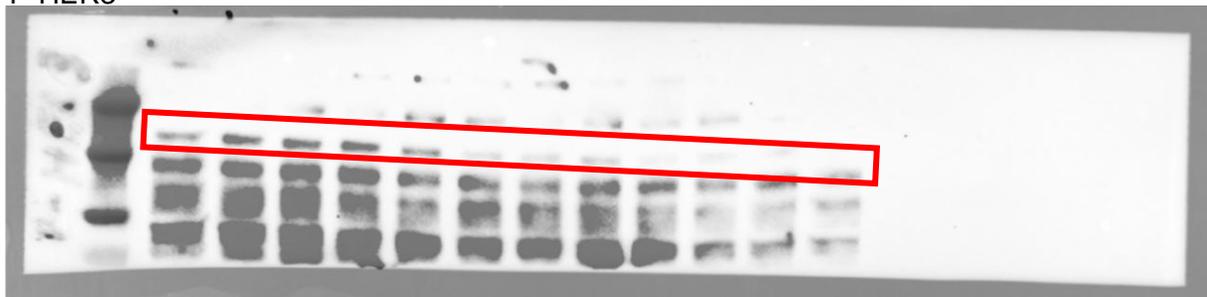
Lanes: ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60 unless noted  
P-HER2



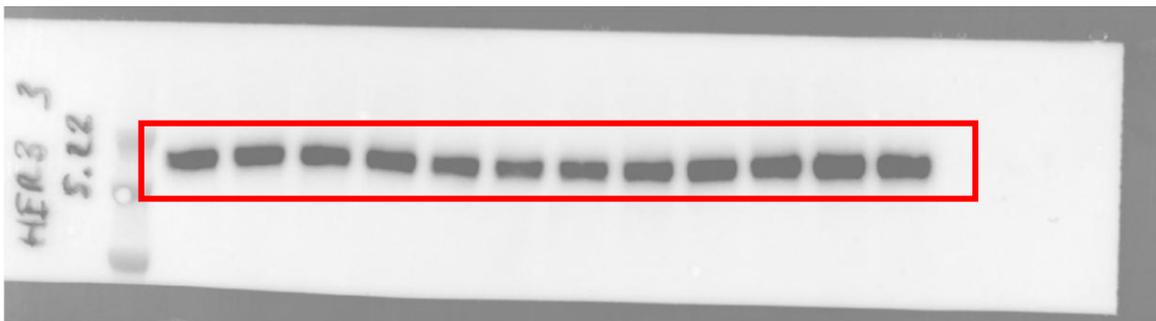
HER2



P-HER3

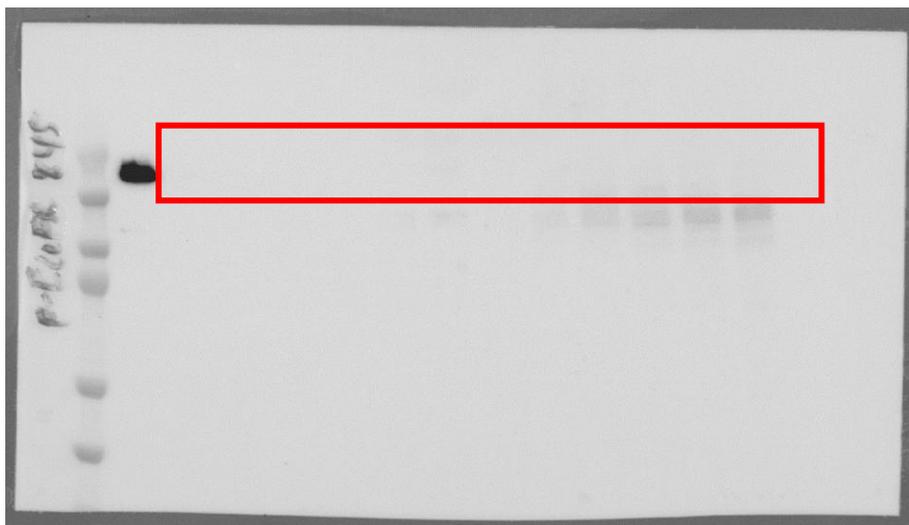


HER3

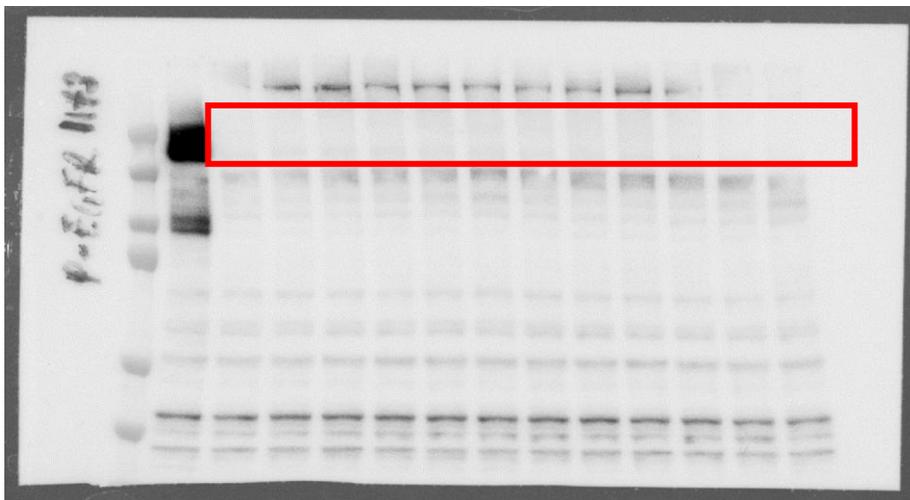


**Full and Unedited Blots for Figure 6A Continued**

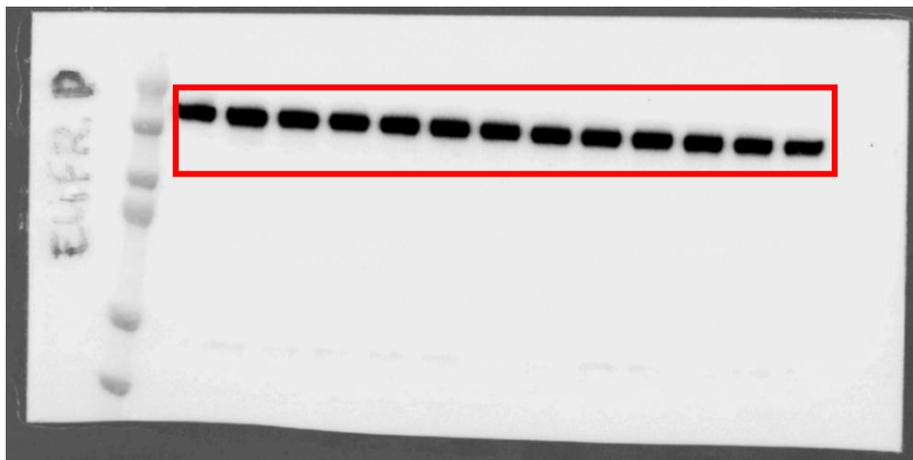
Lanes: EGF ctrl, ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60  
P-EGFR Y845



Lanes: EGF ctrl, ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60  
P-EGFR Y1173

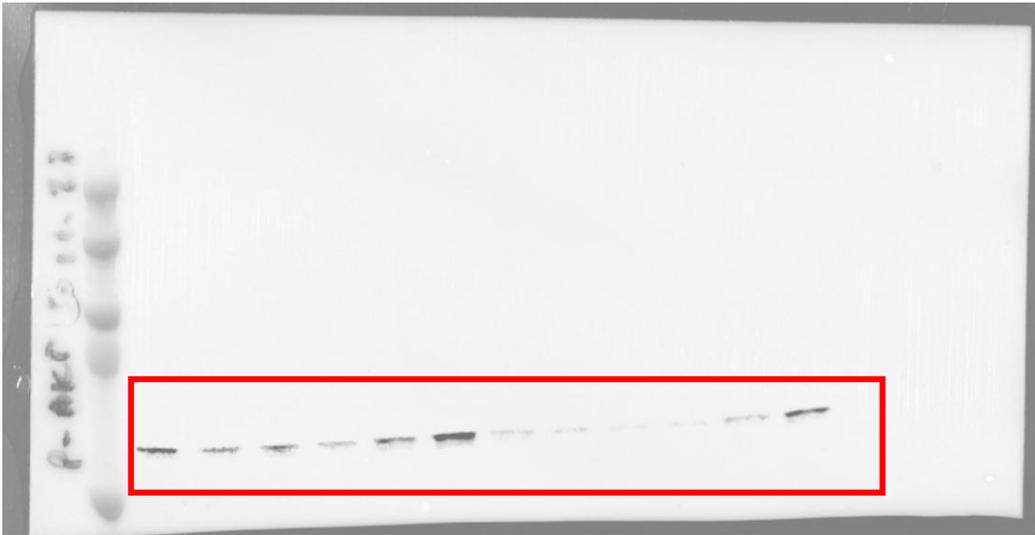


Lanes: EGF ctrl, ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60  
EGFR

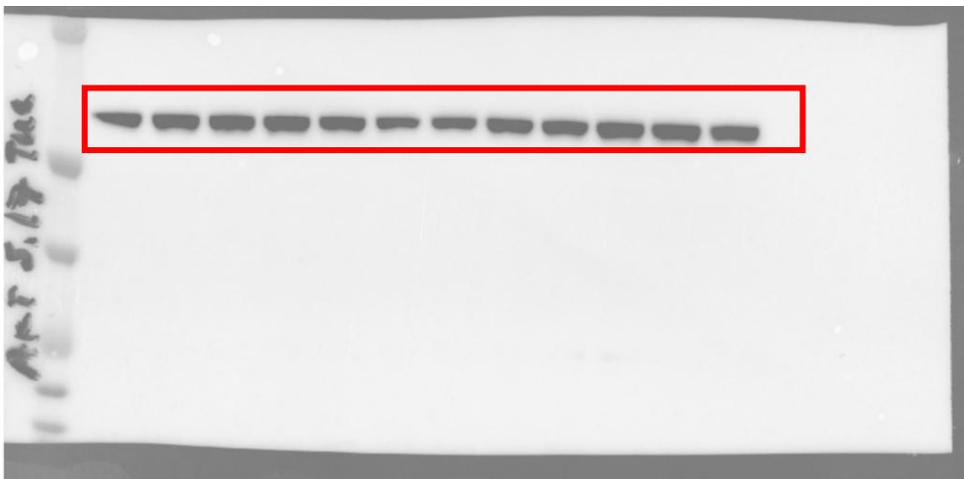


Full and Unedited Blots for Figure 6A Continued

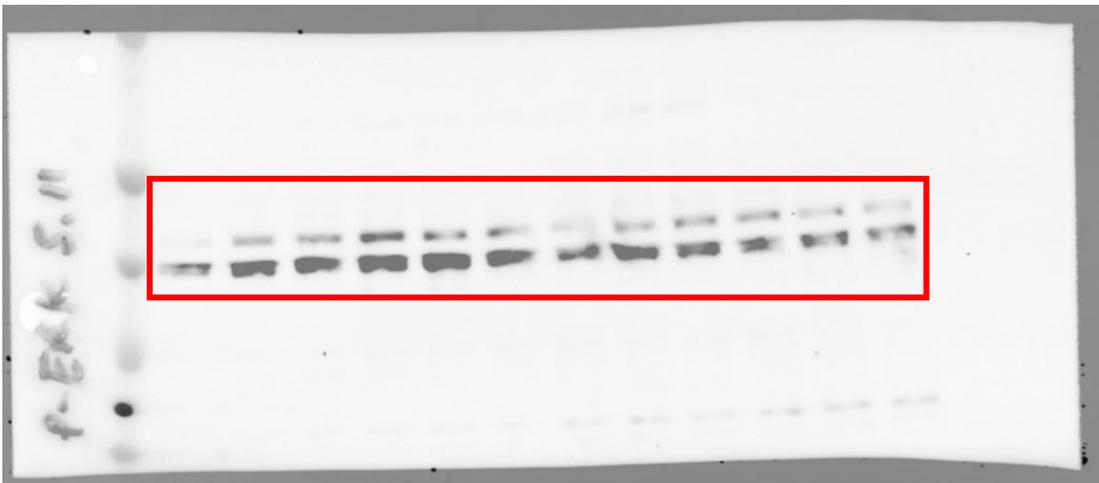
P-AKT



AKT



P-ERK

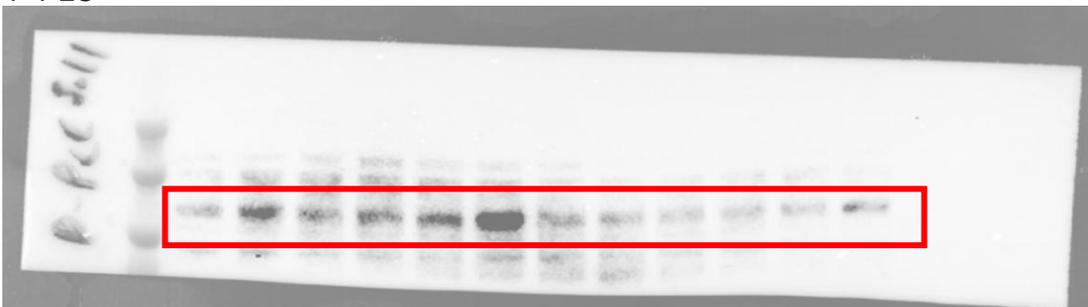


Full and Unedited Blots for Figure 6A Continued

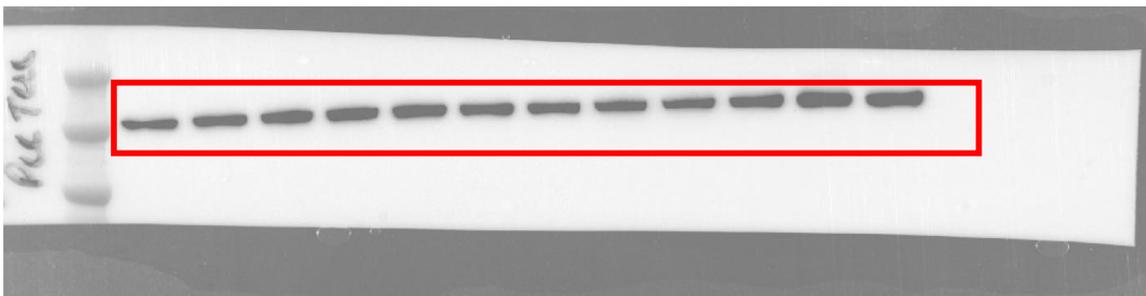
ERK



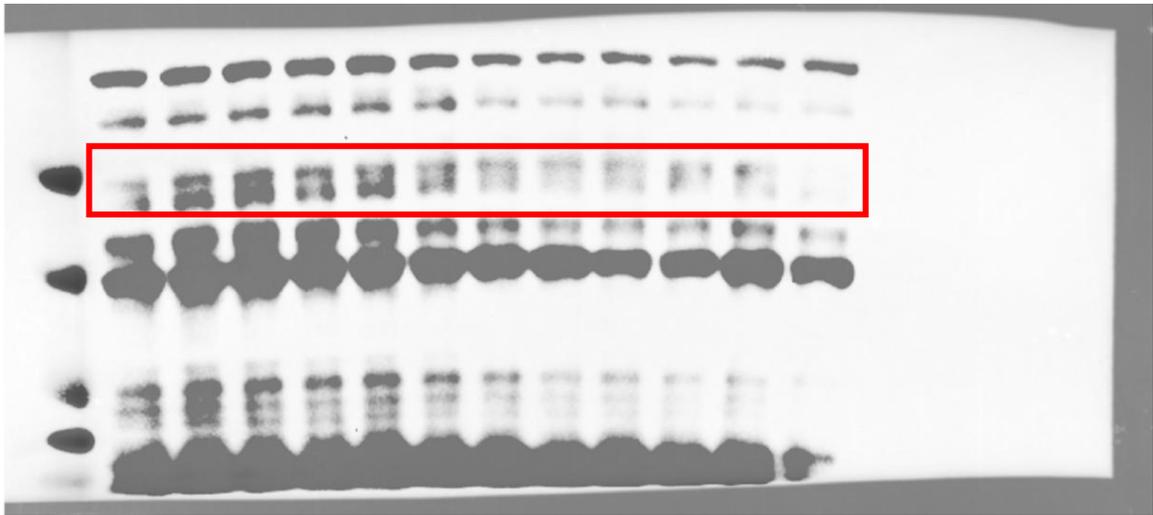
P-PLC



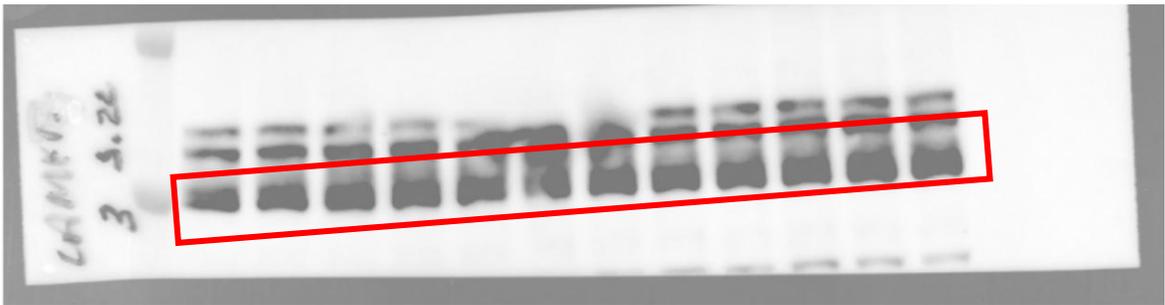
PLC



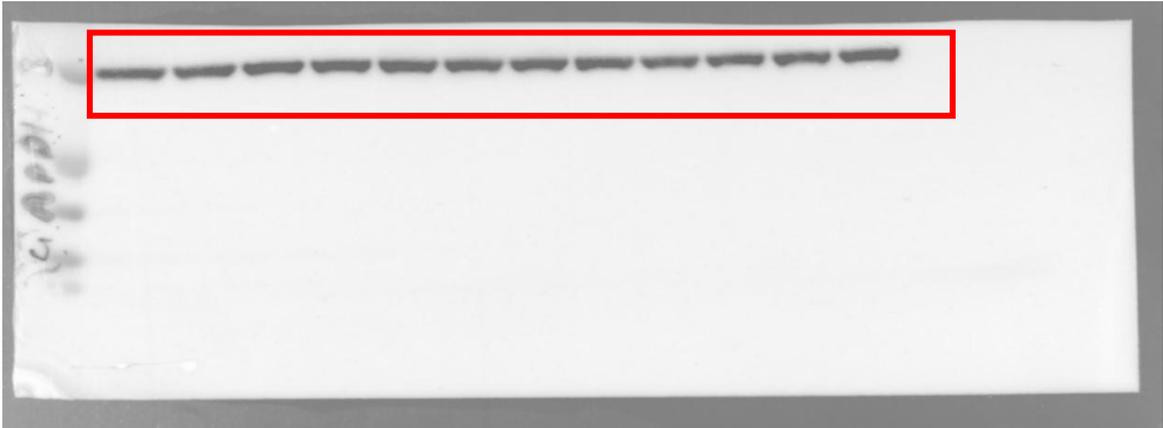
Full and Unedited Blots for Figure 6A Continued  
P-CAMKII



CAMKII



GAPDH

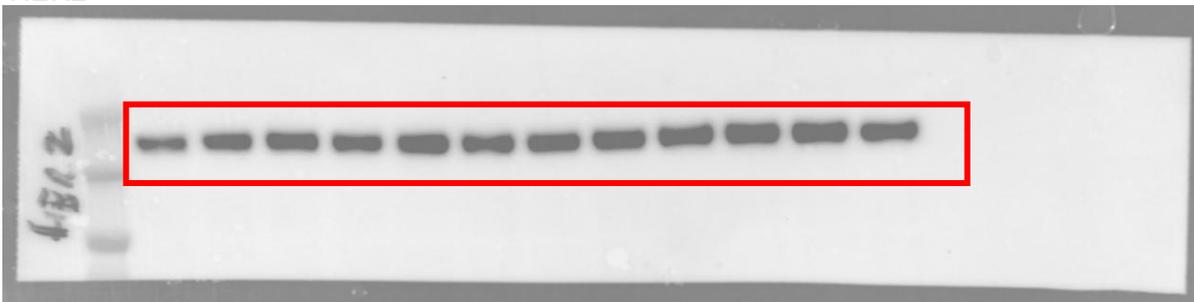


### Full and Unedited Blots for Figure 6C

Lanes: ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60 unless noted  
P-HER2



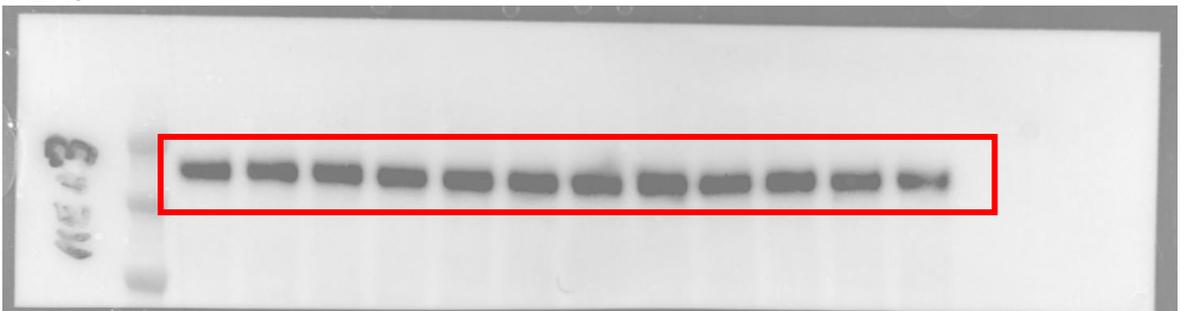
HER2



P-HER3



HER3

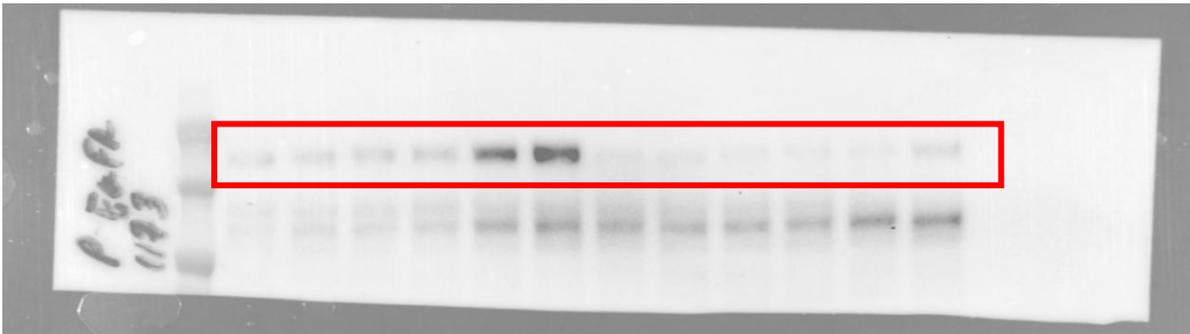


Full and Unedited Blots for Figure 6C Continued

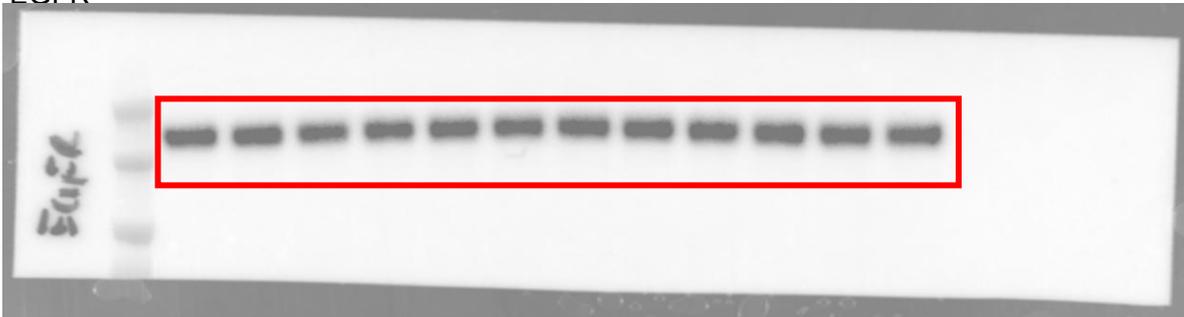
P-EGFR Y845



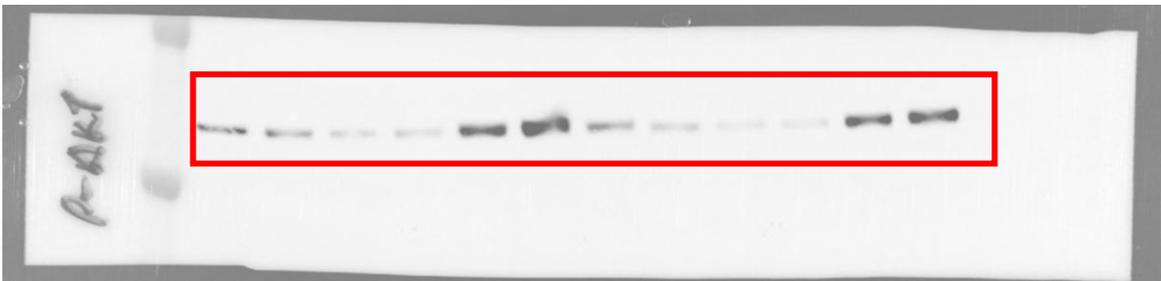
P-EGFR Y1173



EGFR



P-AKT

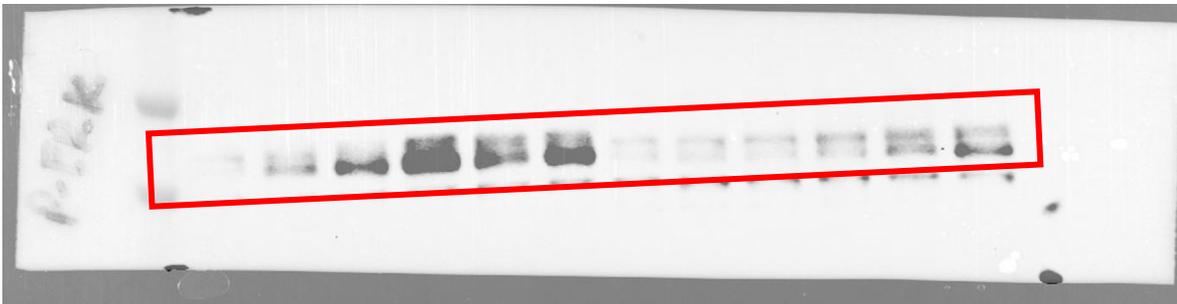


Full and Unedited Blots for Figure 6C Continued

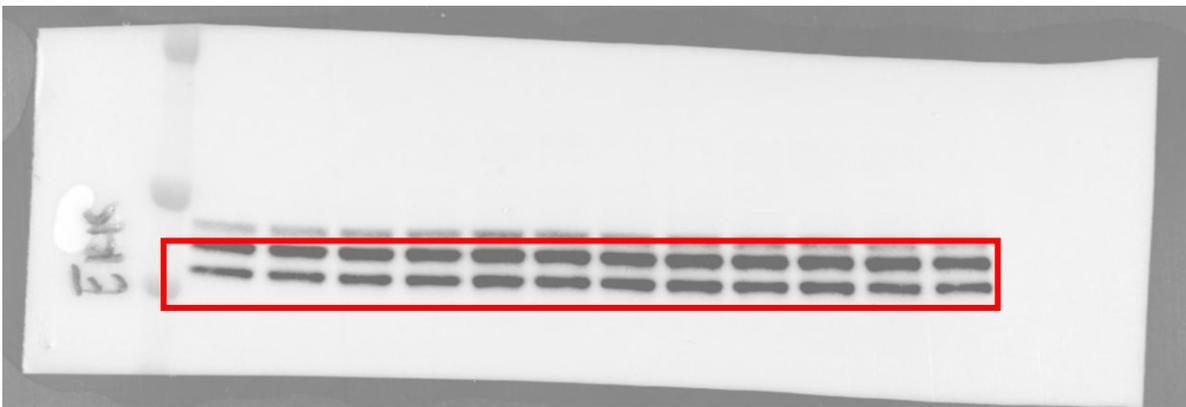
AKT



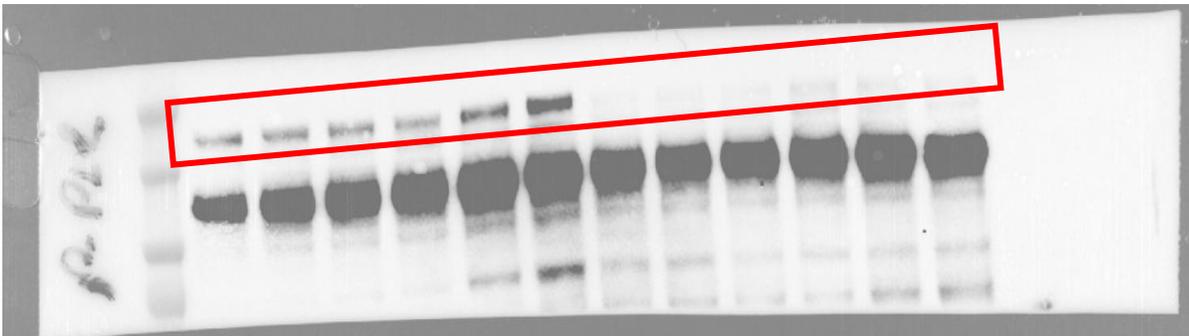
P-ERK



ERK

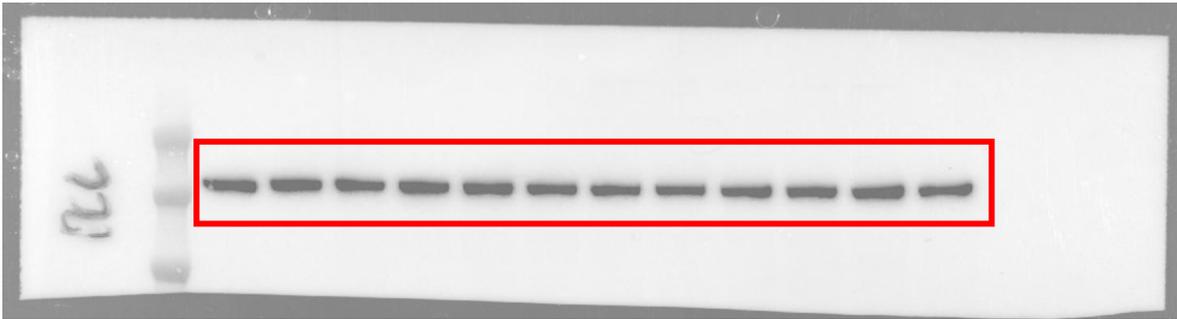


P-PLC



Full and Unedited Blots for Figure 6C Continued

PLC



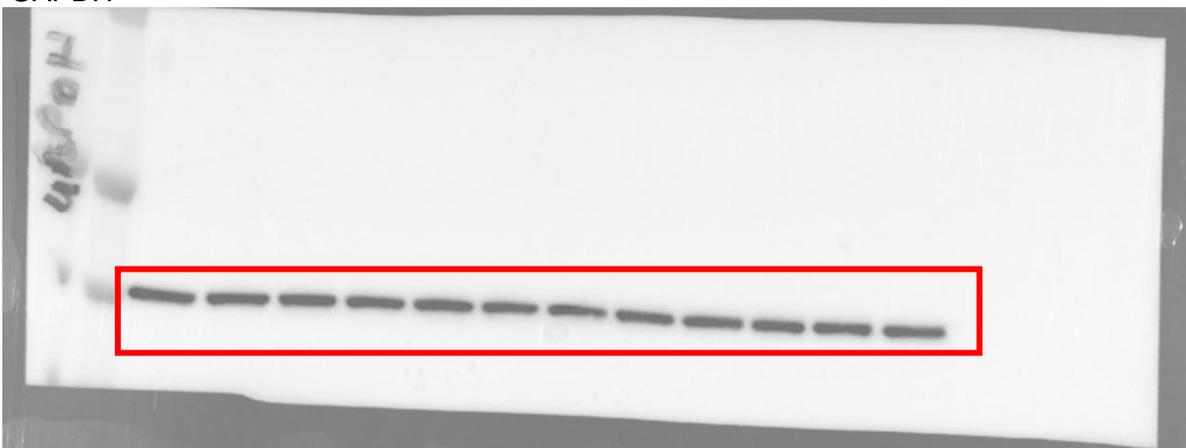
P-CAMKII



CAMKII

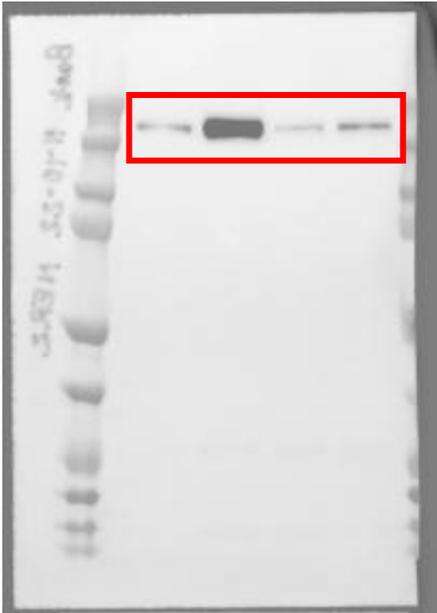


GAPDH

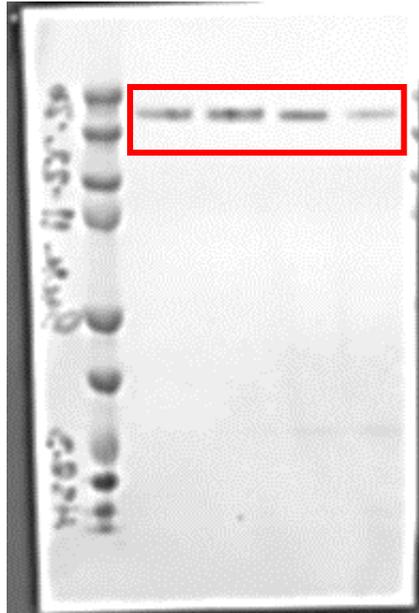


Full and Unedited Blots from Figure 9B

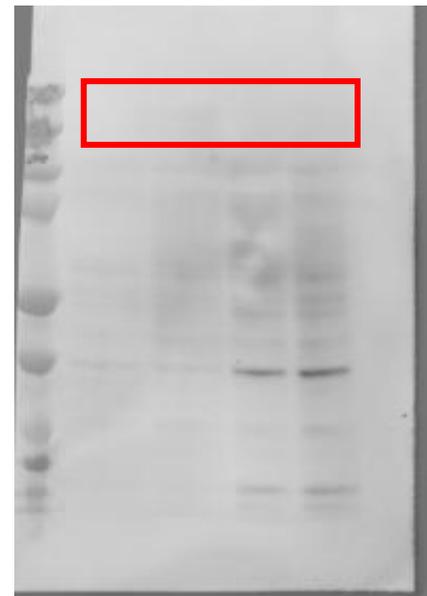
HER2



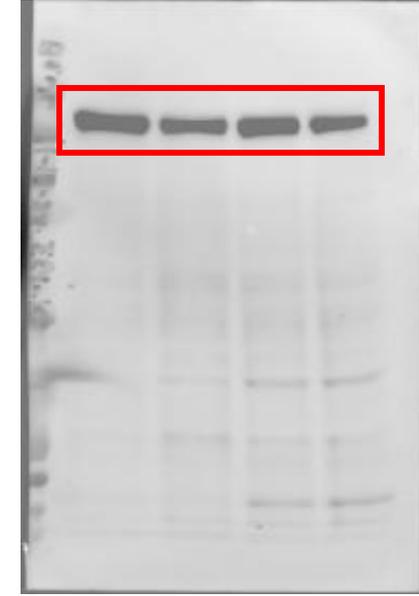
HER3



HER4

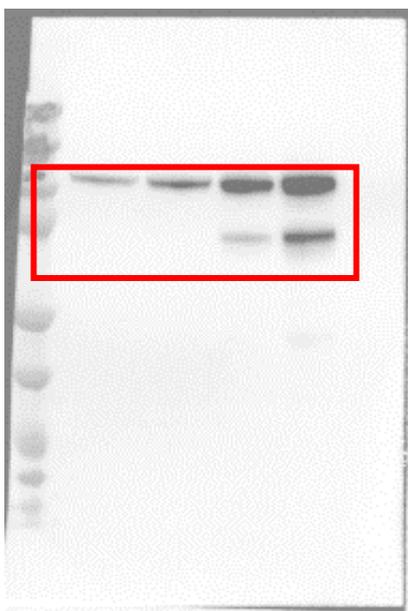


EGFR

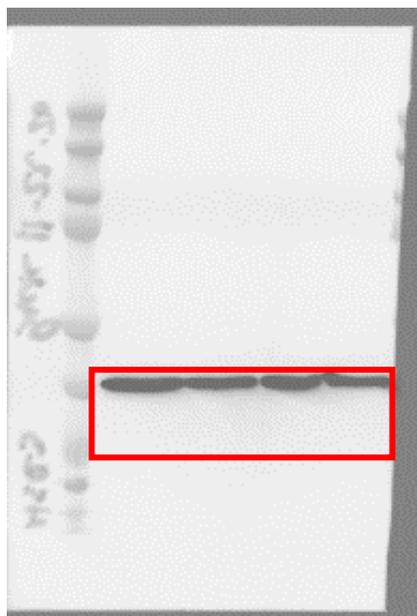


Full and Unedited Blots from Figure 9B Continued

AR



GAPDH

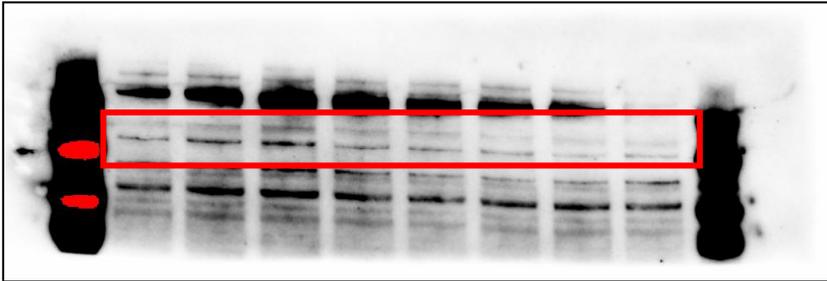


## Full and Unedited Blots for Supplemental Figure 2A

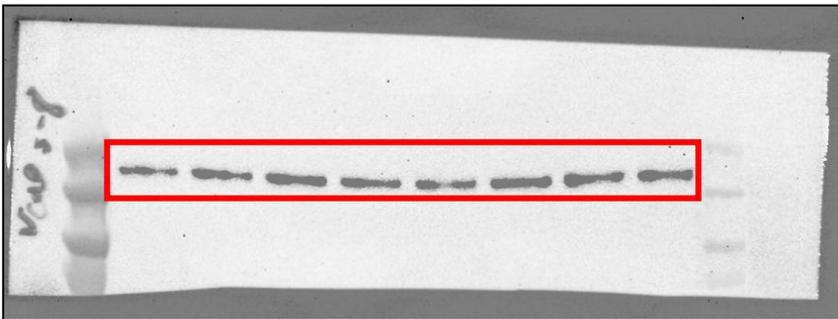
### VCaP + ASPN

Lanes: 0, 2, 5, 10, 15, 30, 60, 120 min ASPN unless noted

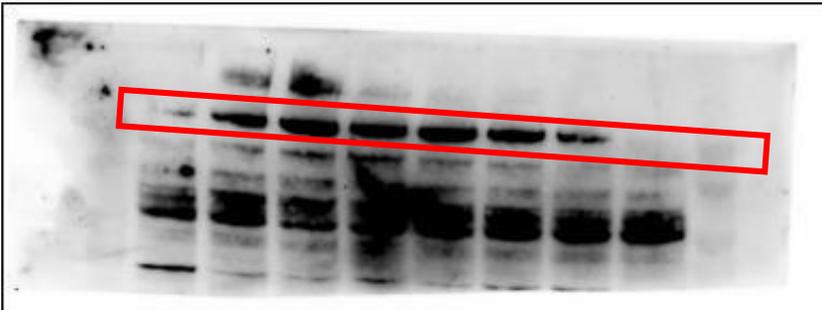
P-HER2



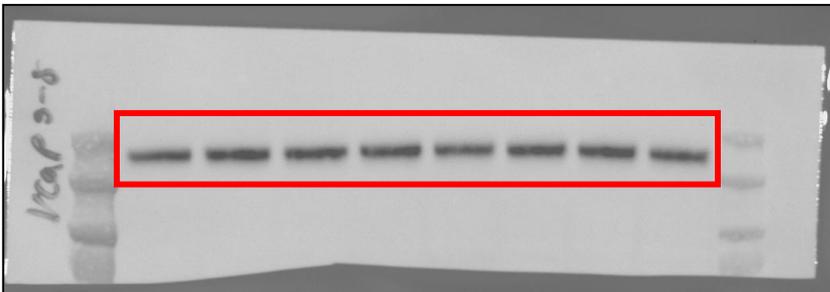
HER2



P-HER3



HER3

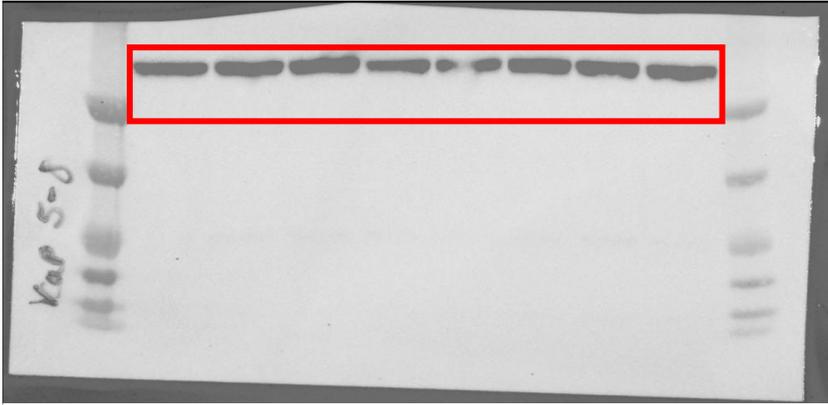


Full and Unedited Blots for Supplemental Figure 2A Continued

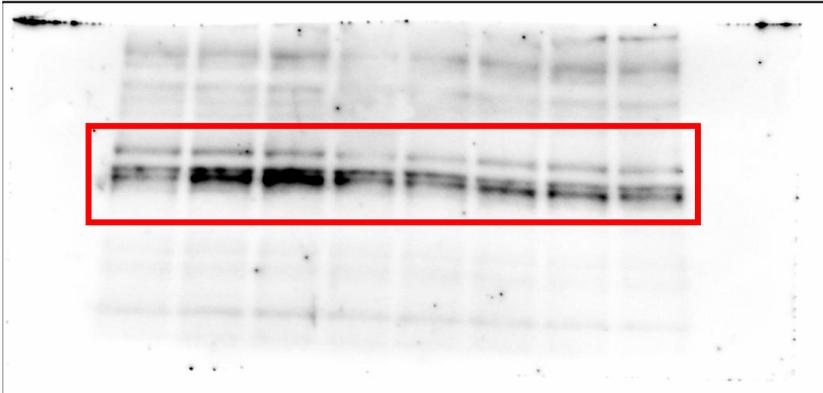
P-AKT



AKT

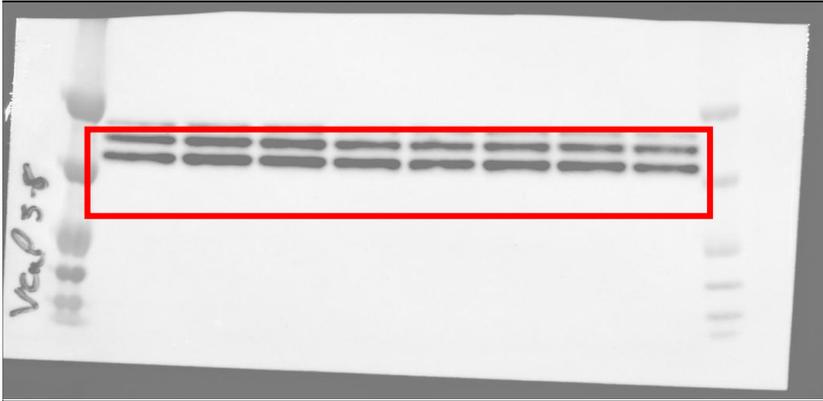


P-ERK



Full and Unedited Blots for Supplemental Figure 2A Continued

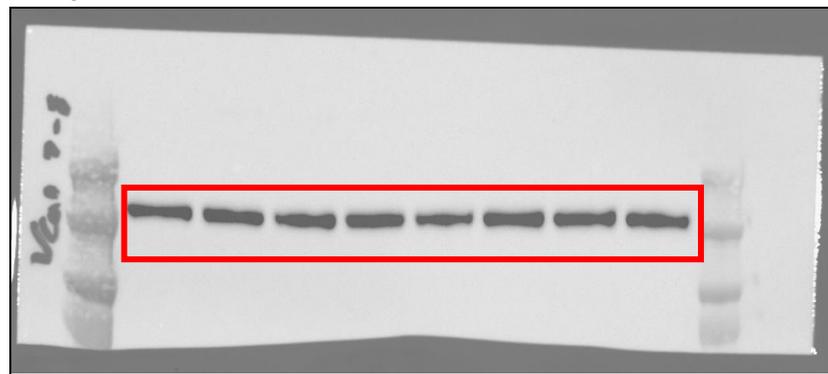
ERK



P-PLCg



PLCg

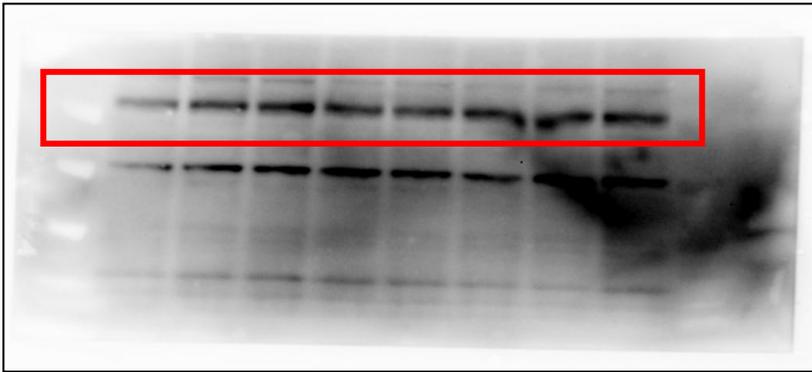


Full and Unedited Blots for Supplemental Figure 2A Continued

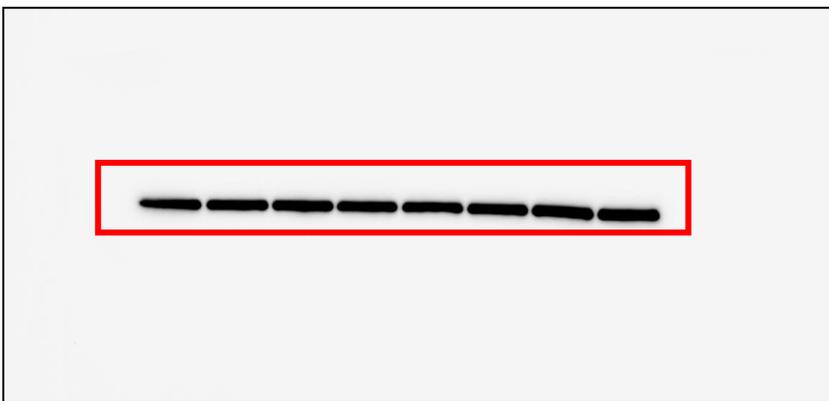
P-CAMKII



CAMKII



GAPDH

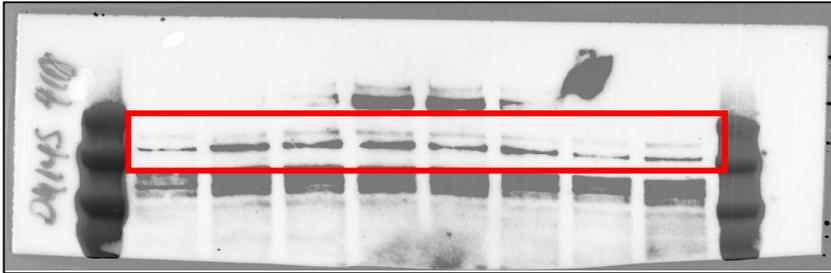


**Full and Unedited Blots for Supplemental Figure 2B**

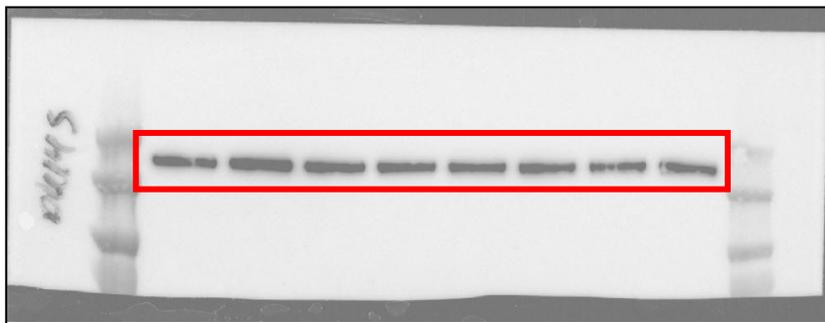
**DU145 + ASPN (100ng/mL)**

Lanes: 0, 2, 5, 10, 15, 30, 60, 120 min ASPN unless noted

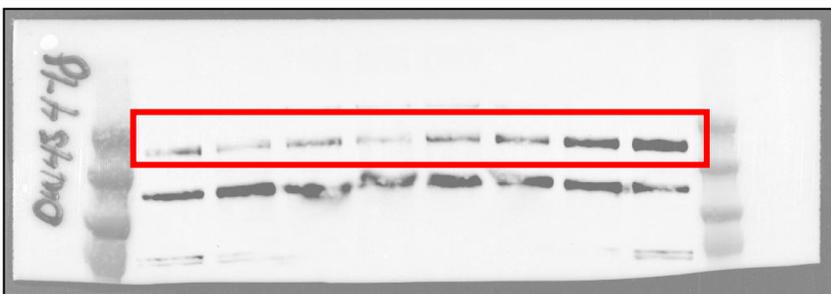
P-HER2



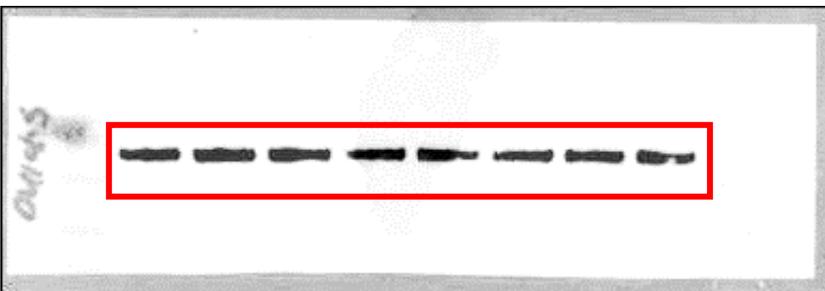
HER2



P-HER3



HER3

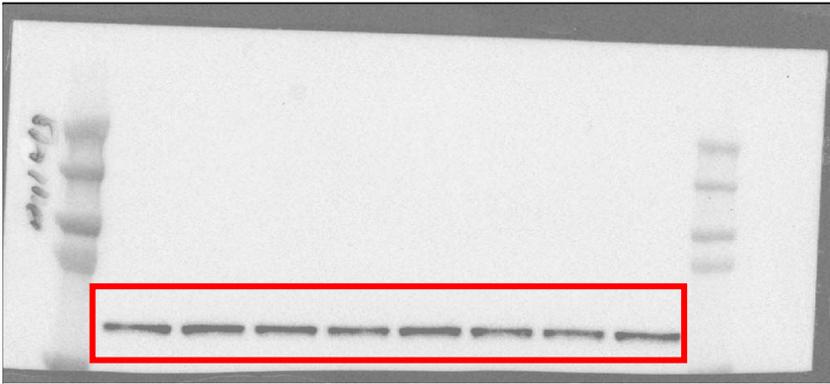


Full and Unedited Blots for Supplemental Figure 2B Continued

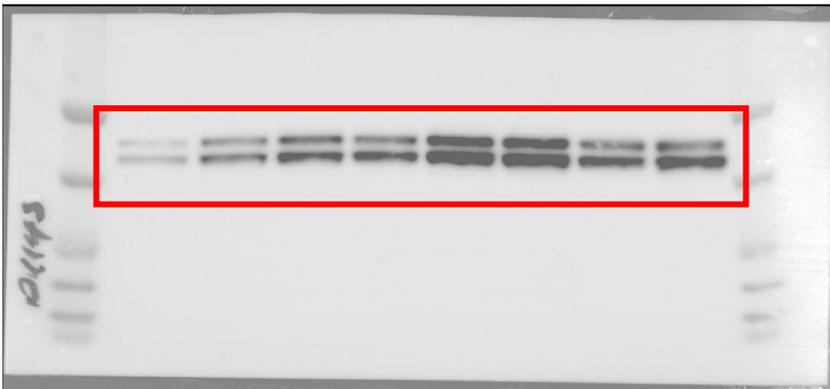
P-AKT



AKT

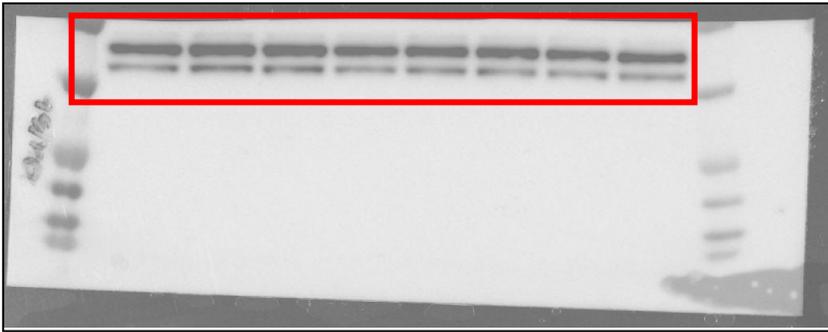


P-ERK

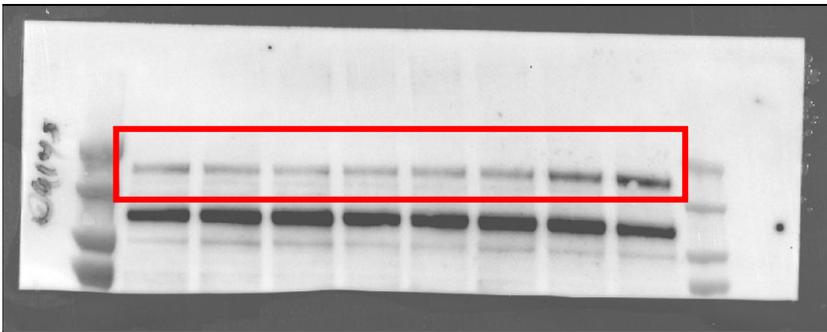


Full and Unedited Blots for Supplemental Figure 2B Continued

ERK



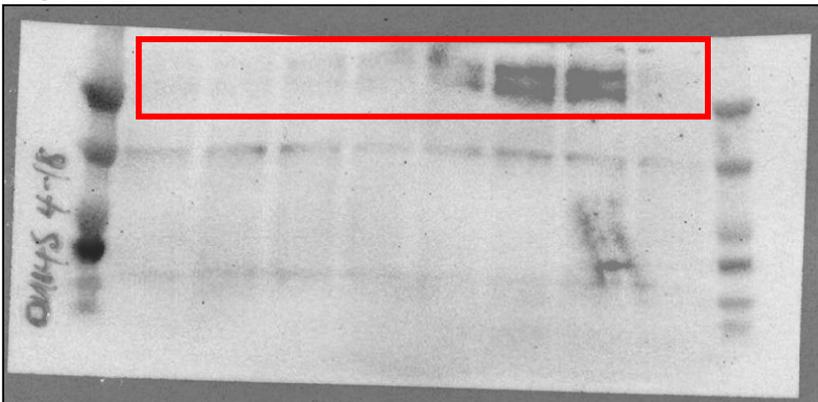
P-PLCg



PLCg

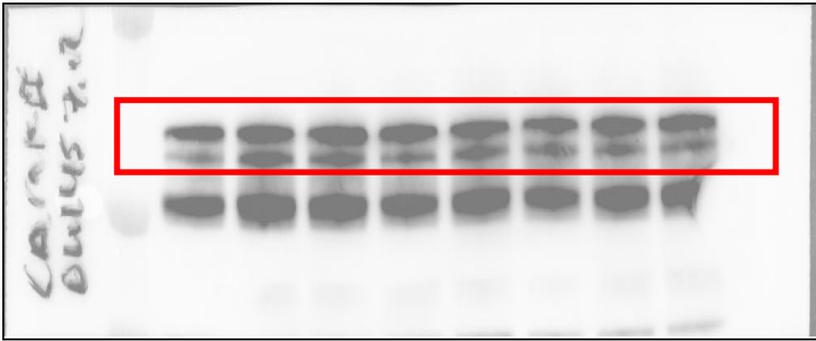


P-CAMKII

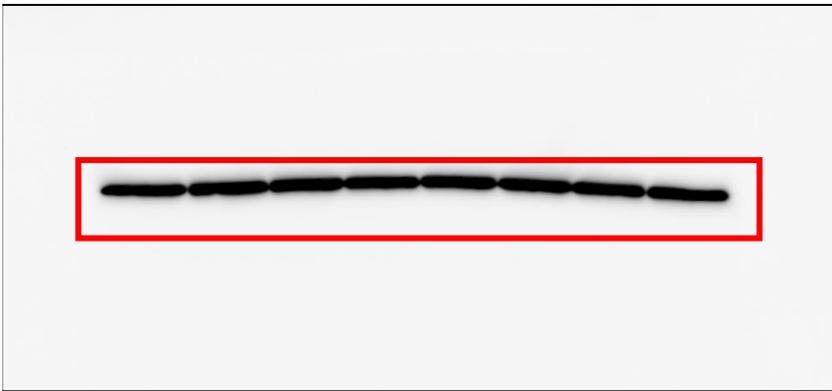


Full and Unedited Blots for Supplemental Figure 2B Continued

CAMKII



GAPDH

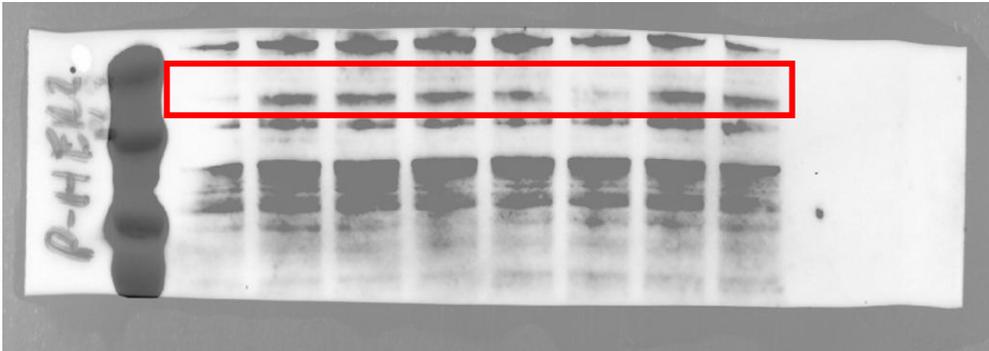


**Full and Unedited Blots for Supplemental Figure 2C**

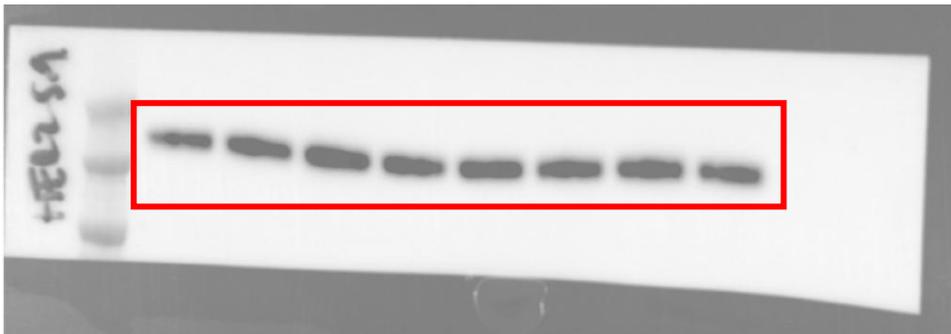
**PC3 + ASPN (100ng/mL)**

Lanes: 0, 2, 5, 10, 15, 30, 60, 120 min ASPN unless noted

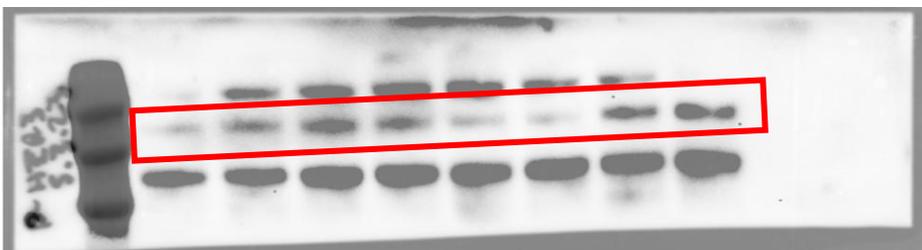
P-HER2



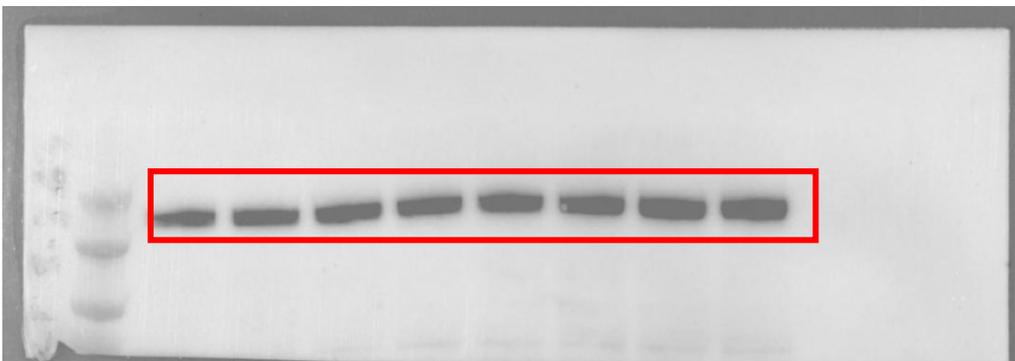
HER2



P-HER3

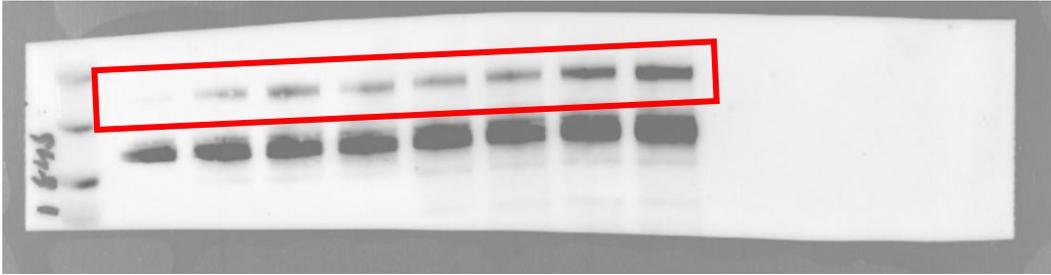


HER3

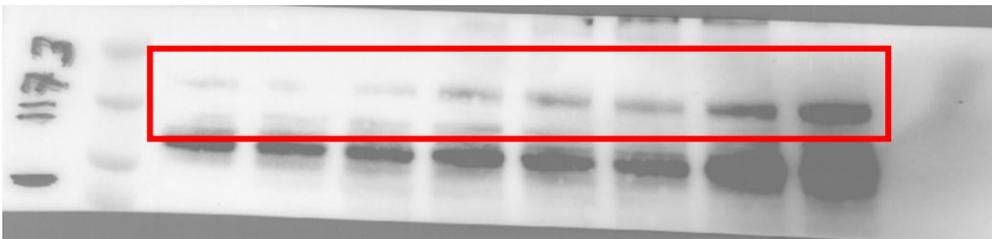


Full and Unedited Blots for Supplemental Figure 2C Continued

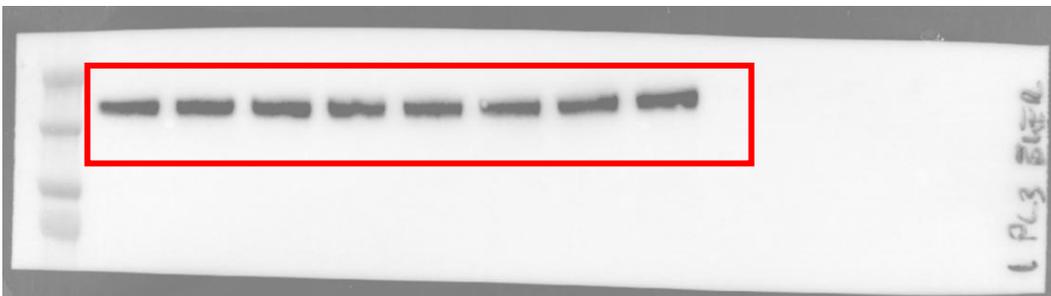
P-EGFR Y845



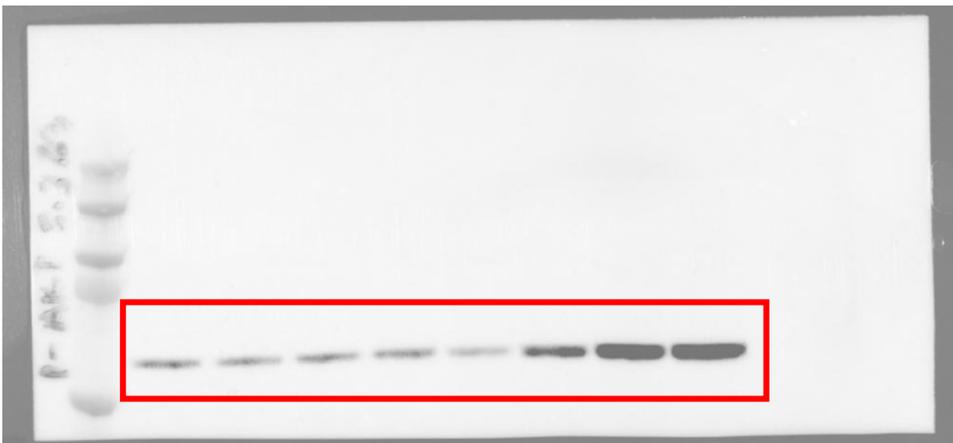
P-EGFR Y1173



EGFR

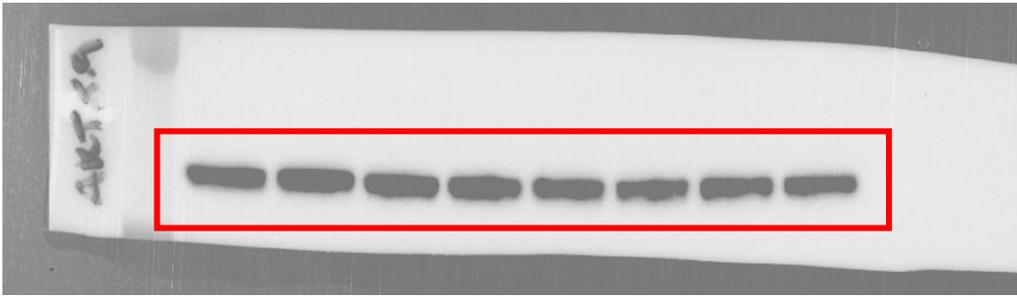


P-AKT

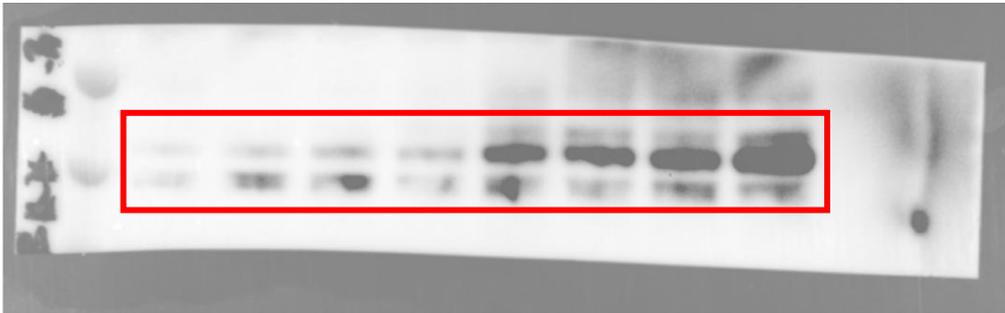


Full and Unedited Blots for Supplemental Figure 2C Continued

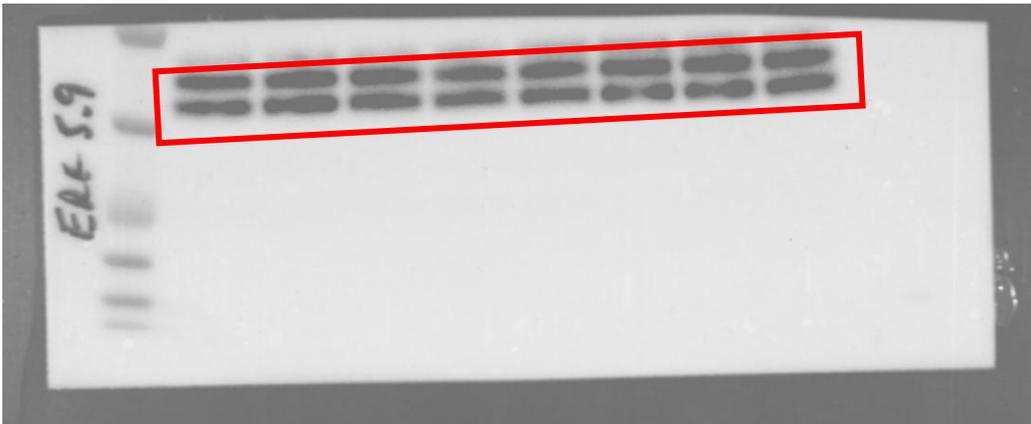
AKT



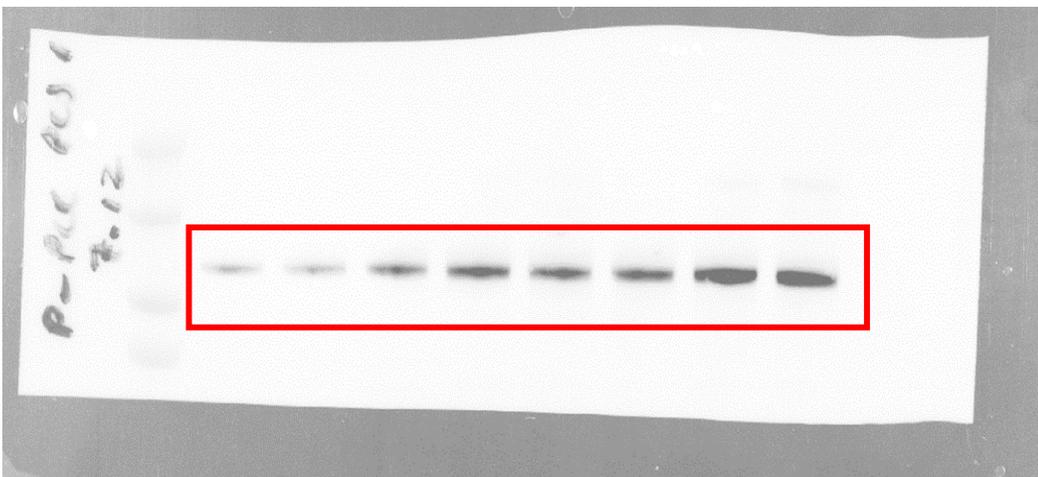
P-ERK



ERK



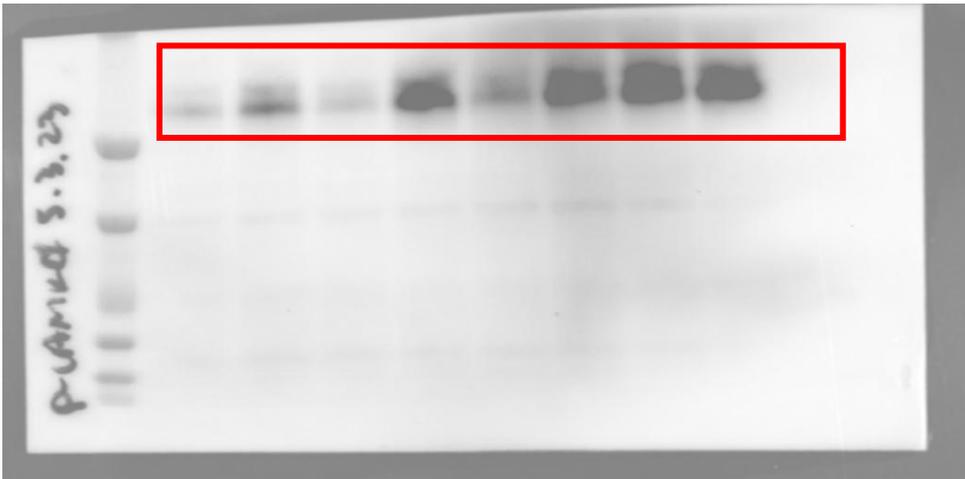
P-PLC



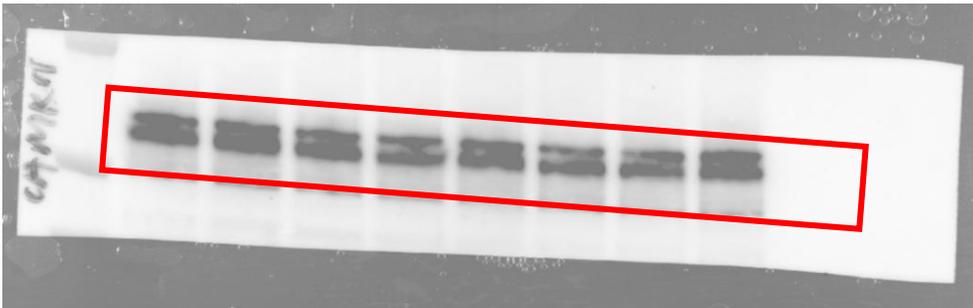
Full and Unedited Blots for Supplemental Figure 2C Continued  
PLC



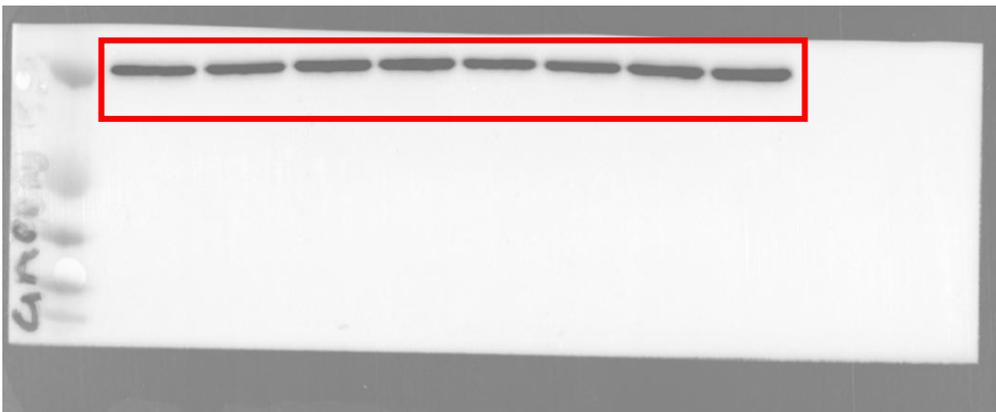
P-CAMKII



CAMKII



GAPDH



## Full and Unedited Blots for Supplemental Figure 2E

### LNCaP (Trial 2)

Lanes: EGF Control, ASPN 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y845



Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

P-EGFR Y1173



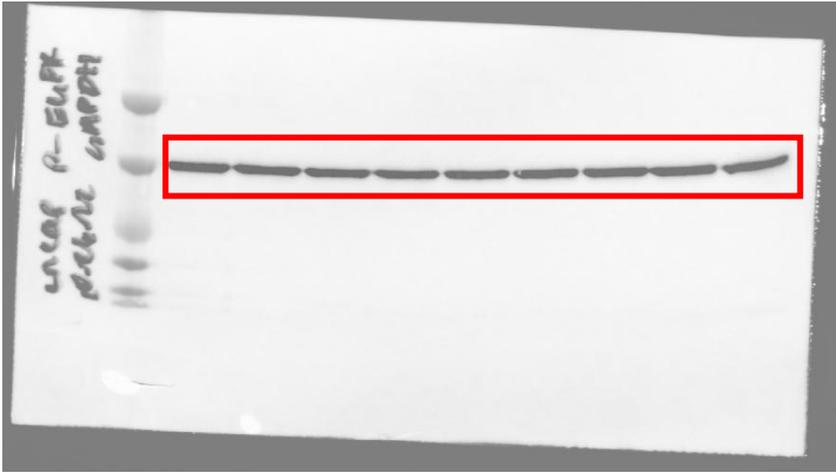
Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

EGFR



Full and Unedited Blots for Supplemental Figure 2E Continued

GAPDH



## Full and Unedited Blots for Supplemental Figure 2F

### VCaP

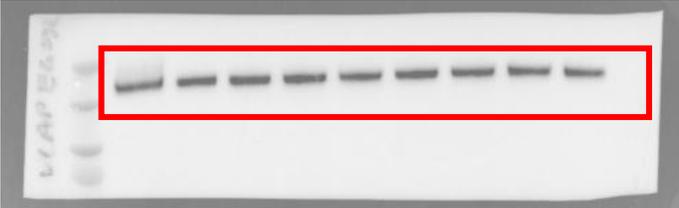
Lanes: EGF Control, ASPN 0, 2, 5, 10, 15, 30, 60, 120  
P-EGFR Y845



### P-EGFR Y1173



### EGFR



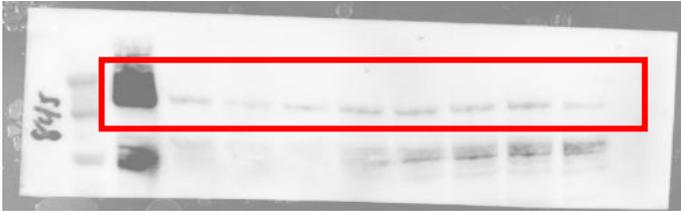
### GAPDH



**Full and Unedited Blots for Supplemental Figure 2G**

**LNCaP EnzaR**

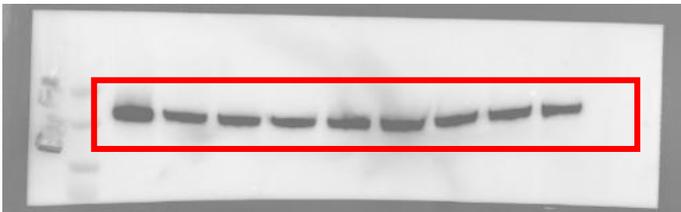
Lanes: EGF Control, ASPN 0, 2, 5, 10, 15, 30, 60, 120  
P-EGFR Y845



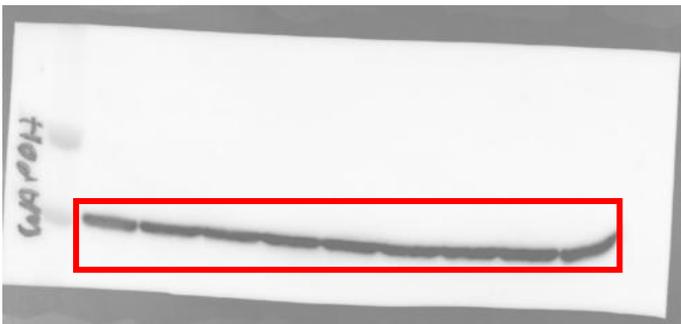
**P-EGFR Y1173**



**EGFR**



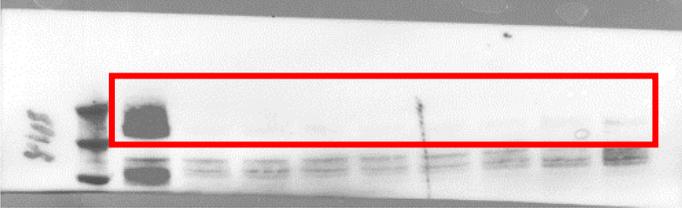
**GAPDH**



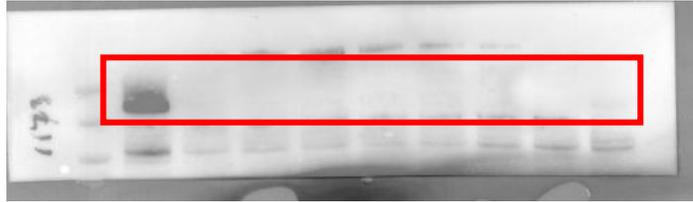
## Full and Unedited Blots for Supplemental Figure 2H

### VCaP EnzaR

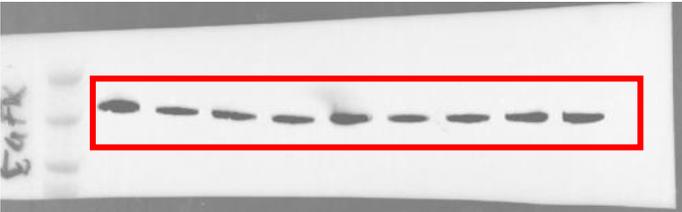
Lanes: EGF Control, ASPN 0, 2, 5, 10, 15, 30, 60, 120  
P-EGFR Y845



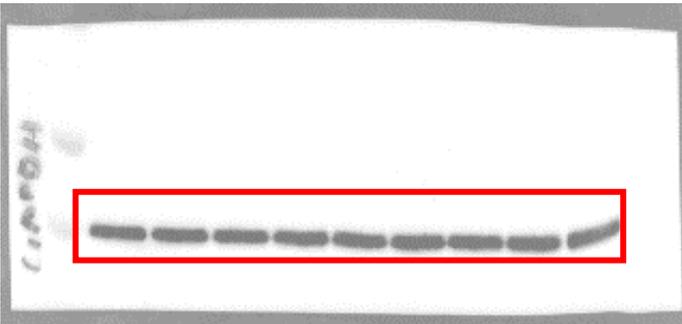
### P-EGFR Y1173



### EGFR



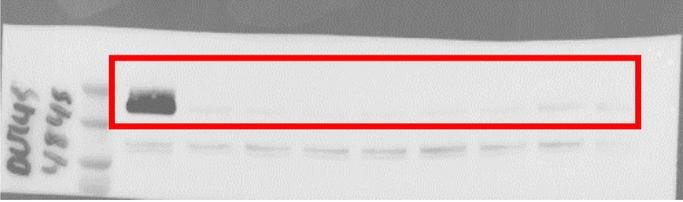
### GAPDH



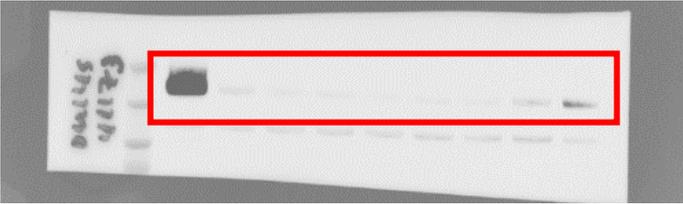
## Full and Unedited Blots for Supplemental Figure 2I

### DU145

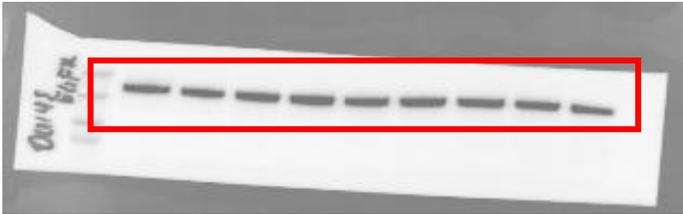
Lanes: EGF Control, ASPN 0, 2, 5, 10, 15, 30, 60, 120  
P-EGFR Y845



### P-EGFR Y1173



### EGFR



### GAPDH

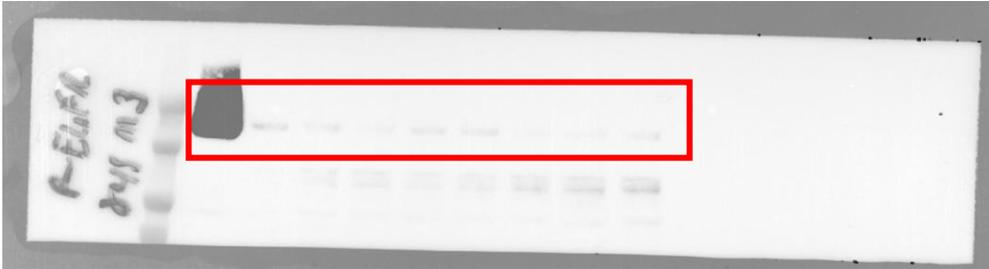


Full and Unedited Blots for Supplemental Figure 2J

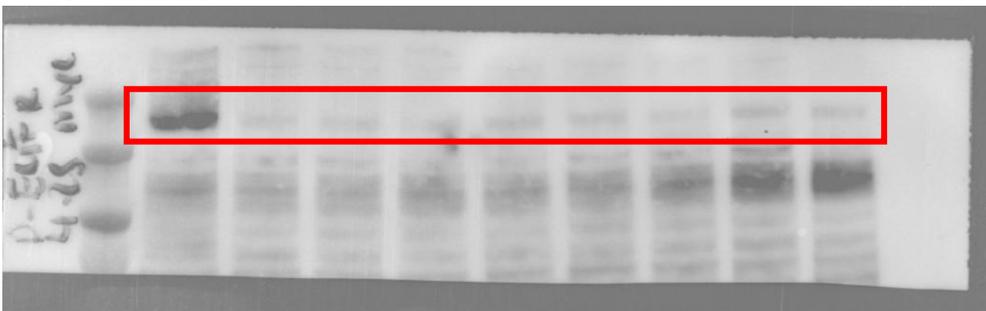
MyC-CaP (Trial 2)

Lanes: EGF control, 0, 2, 5, 10, 15, 30, 60, 120

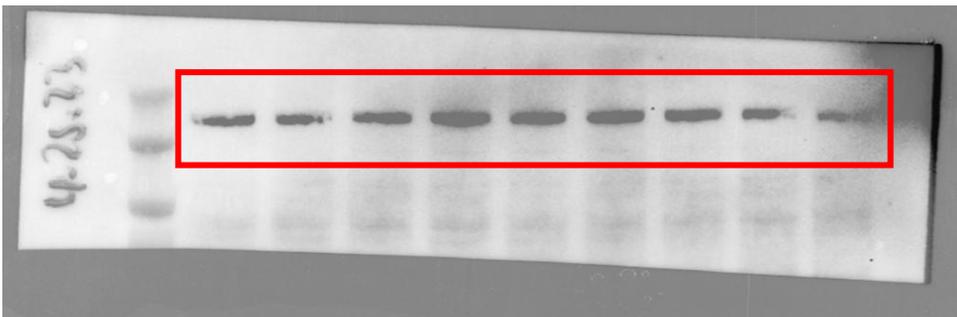
P-EGFR Y845



P-EGFR Y1173

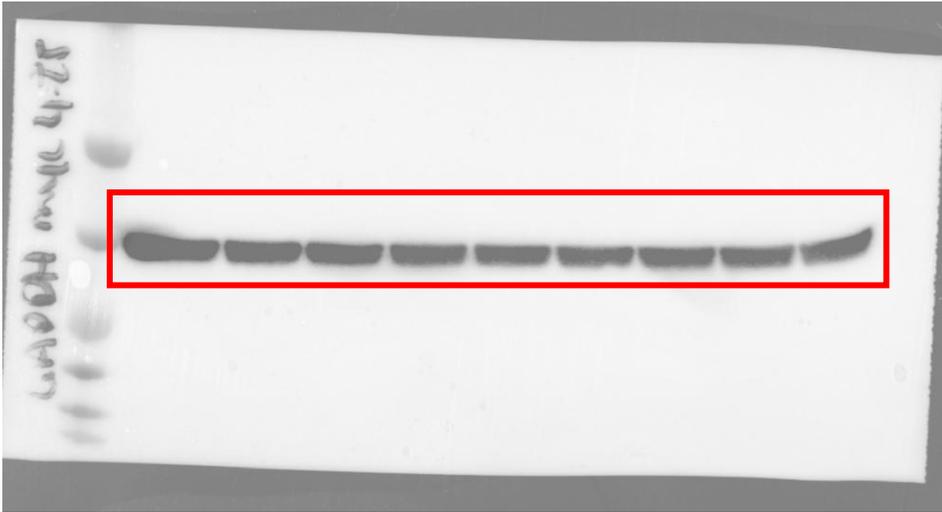


EGFR



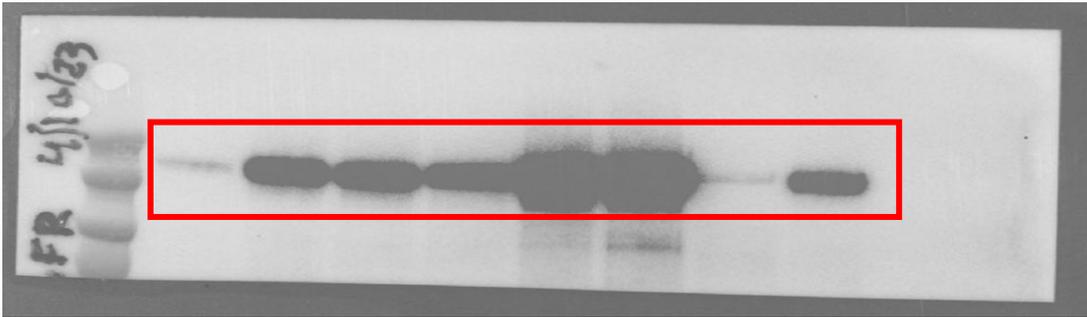
Full and Unedited Blots for Supplemental Figure 2J Continued

GAPDH

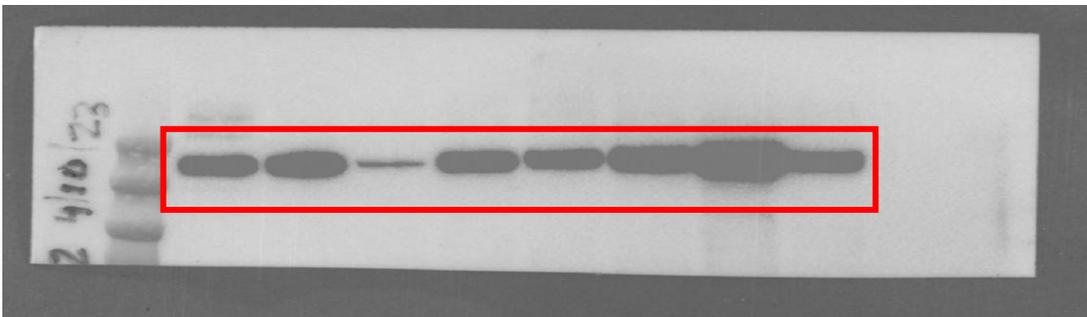


**Full and Unedited Blots for Supplemental Figure 2K**

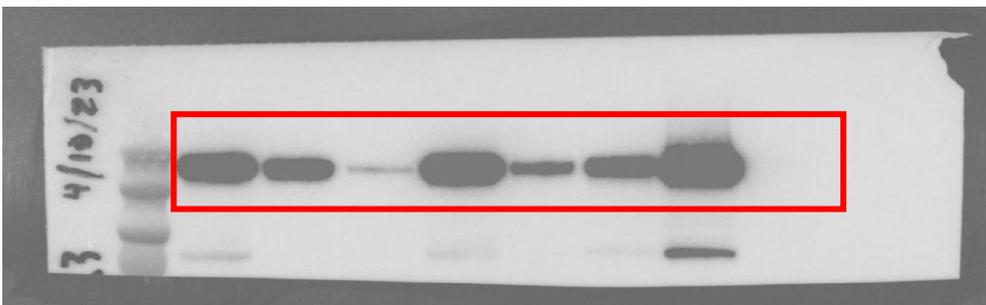
Lanes: MCF7, LNCaP, VCaP, 22RV1, PC3, DU145, MyC-CaP, HEK293  
EGFR



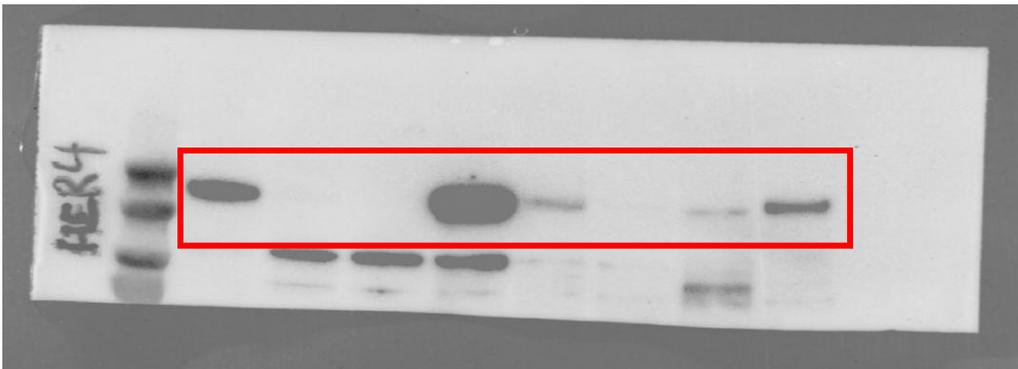
HER2



HER3

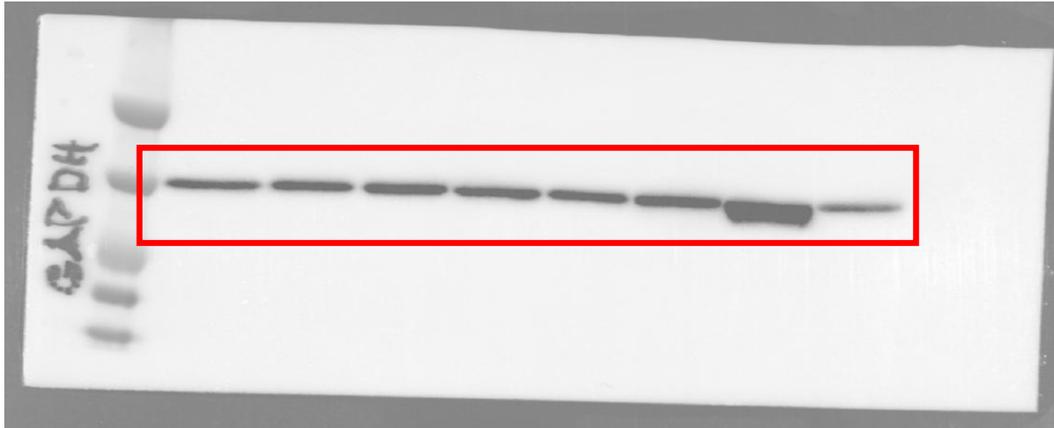


HER4



Full and Unedited Blots for Supplemental Figure 2K Continued

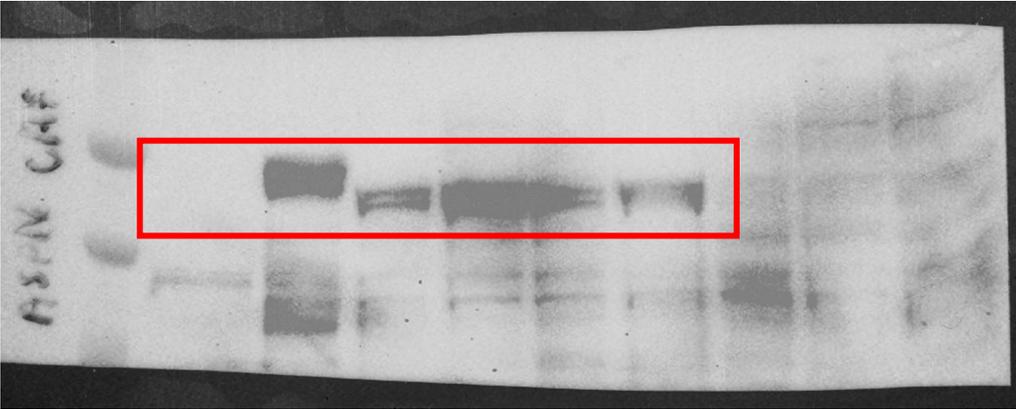
GAPDH



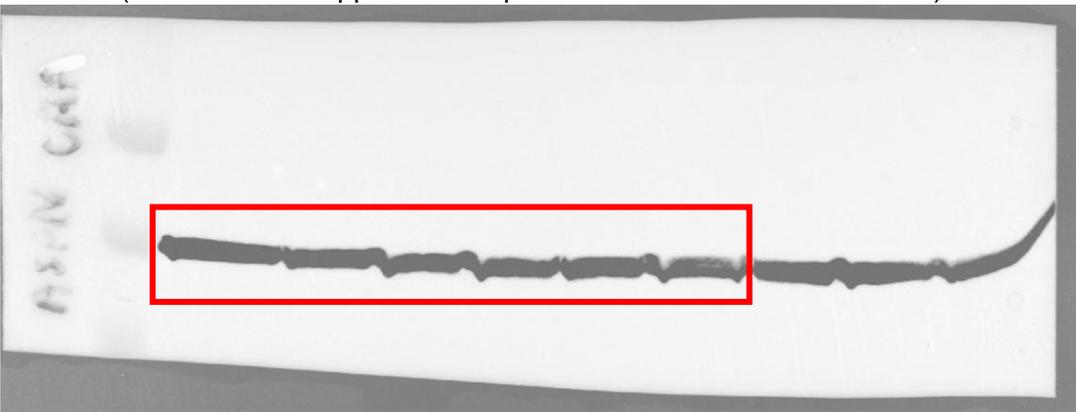
## Full and Unedited Blots for Supplemental Figure 2L

Lanes: WPMY EV PCAF 48 hr serum starved  
WPMY ASPN D14 3x FLAG  
PCAF 24 hr full serum  
PCAF 24 hr serum starved  
PCAF 48 hr full serum  
PCAF 48 hr serum starved

ASPN

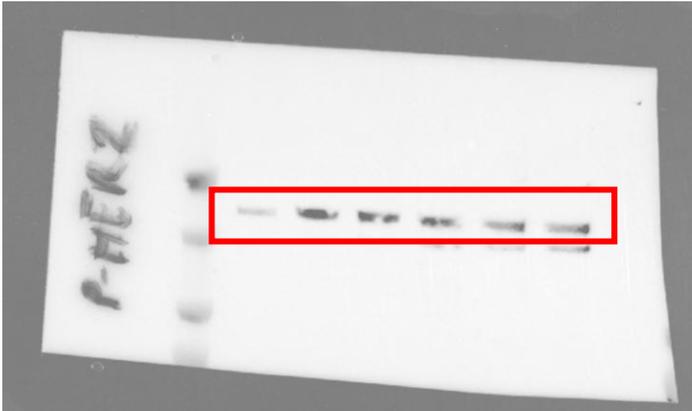


GAPDH (this blot was stripped and re-probed from the same blot above)

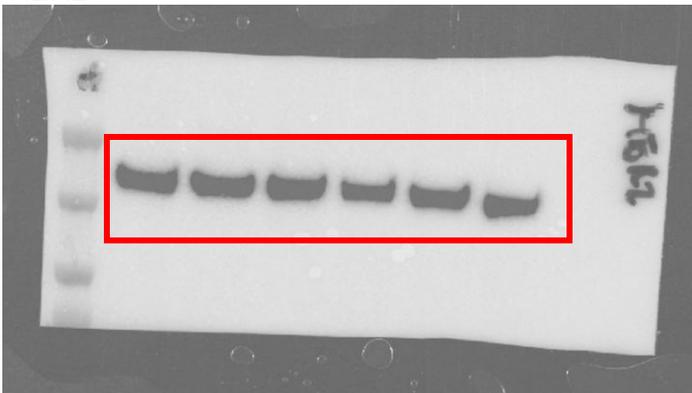


**Full and Unedited Blots for Supplemental Figure 2M**

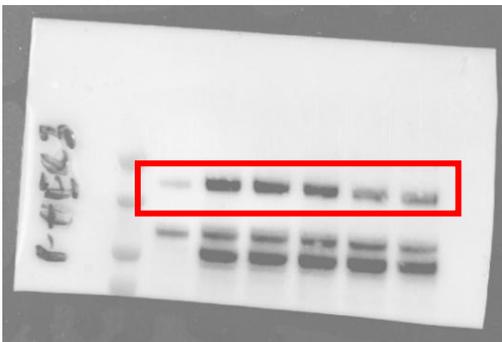
Lanes: 0, 10, 15, 30, 60 and 120 min unless noted  
P-HER2



HER2

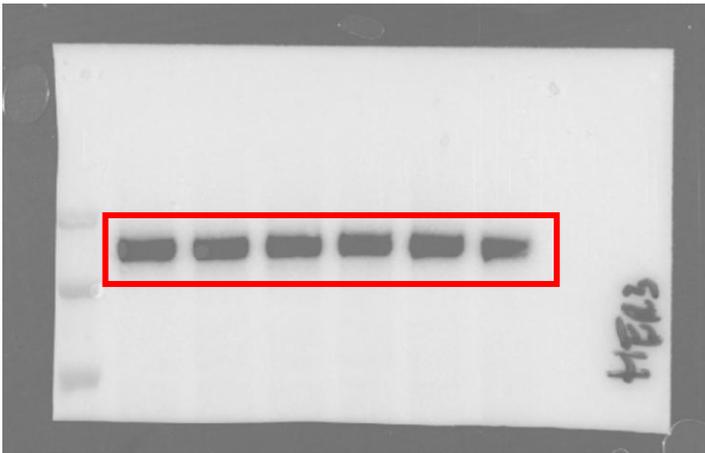


P-HER3



Full and Unedited Blots for Supplemental Figure 2M Continued

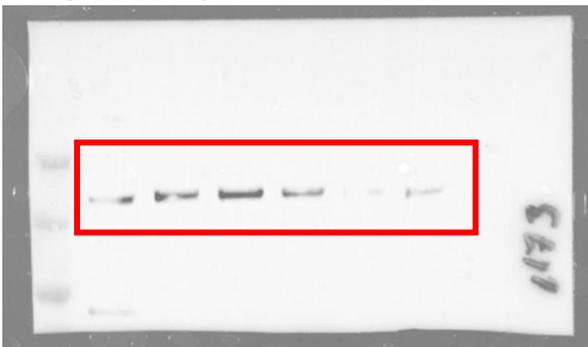
HER3



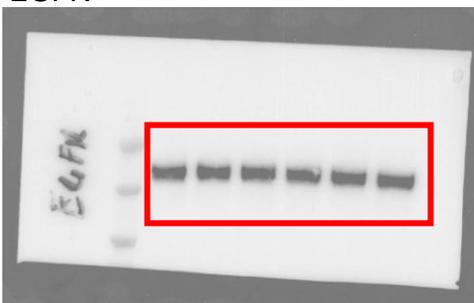
P-EGFR Y845



P-EGFR Y1173

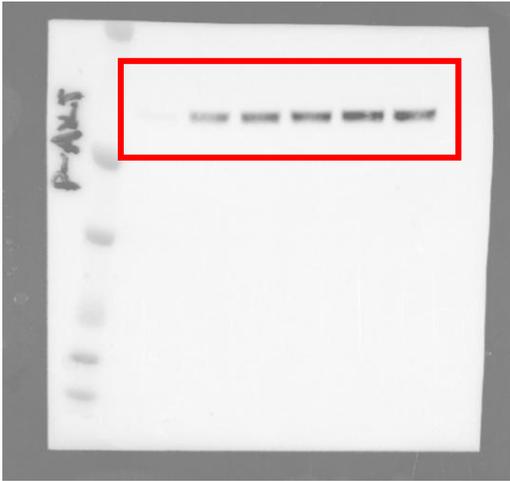


EGFR

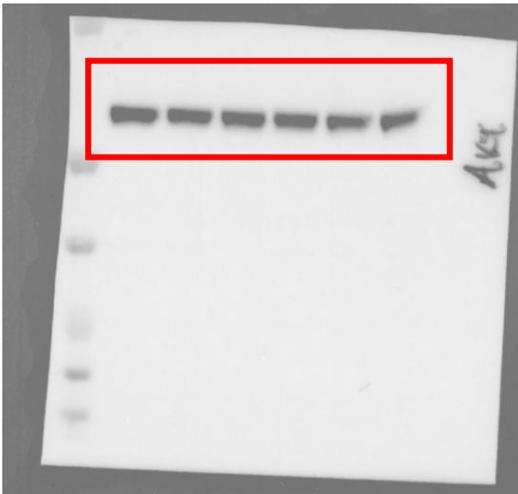


Full and Unedited Blots for Supplemental Figure 2M Continued

P-AKT



AKT

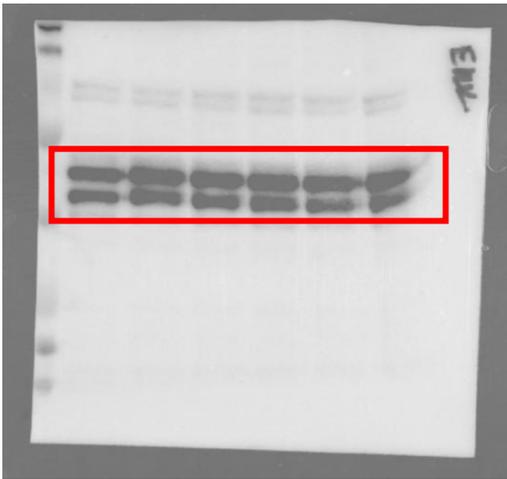


P-ERK

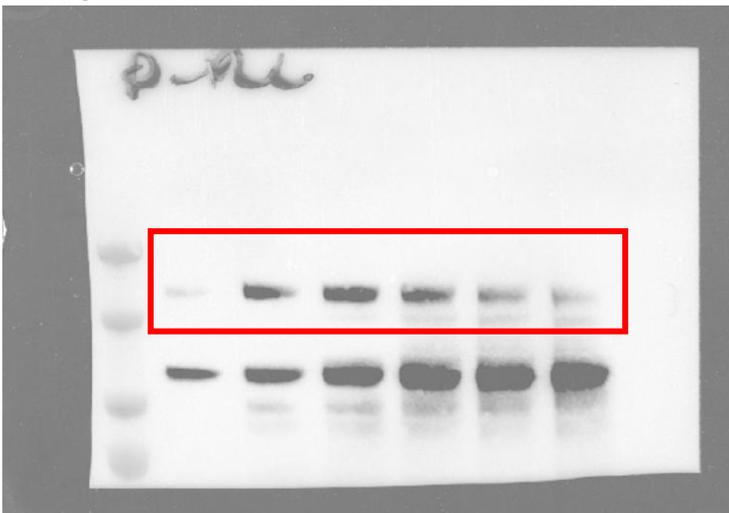


Full and Unedited Blots for Supplemental Figure 2M Continued

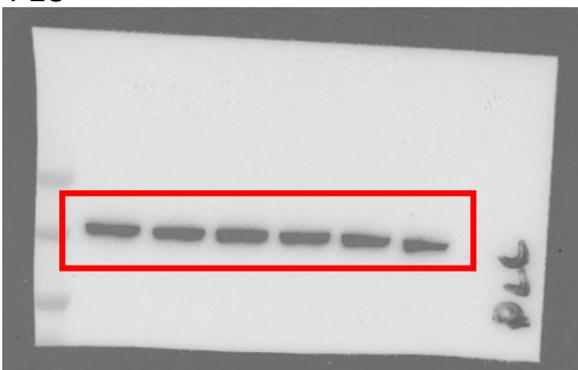
ERK



P-PLC

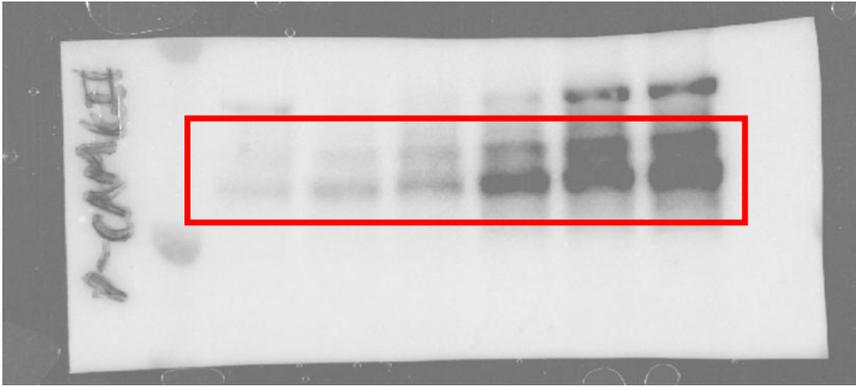


PLC

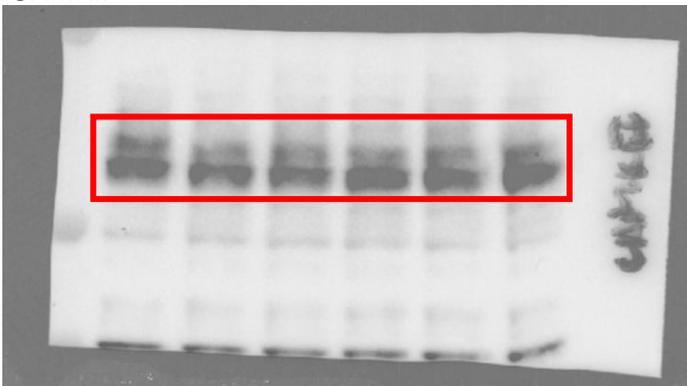


Full and Unedited Blots for Supplemental Figure 2M Continued

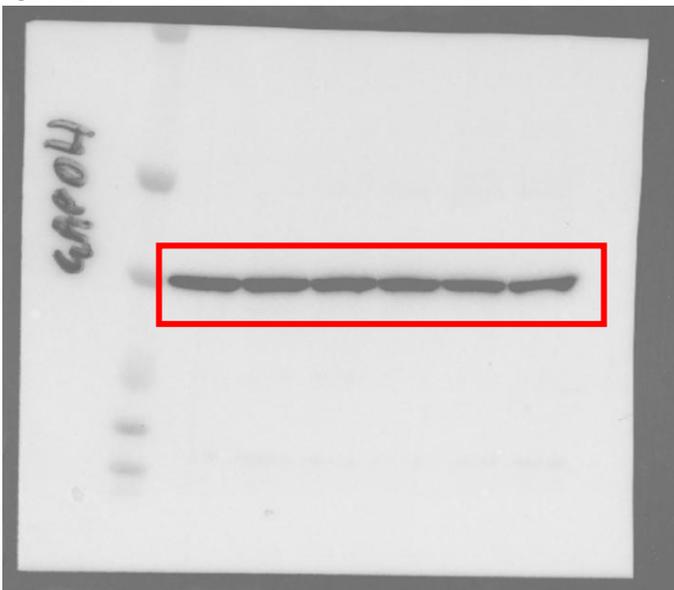
P-CAMKII



CAMKII



GAPDH



### Full Unedited Blots for Supplementary Figure 4B

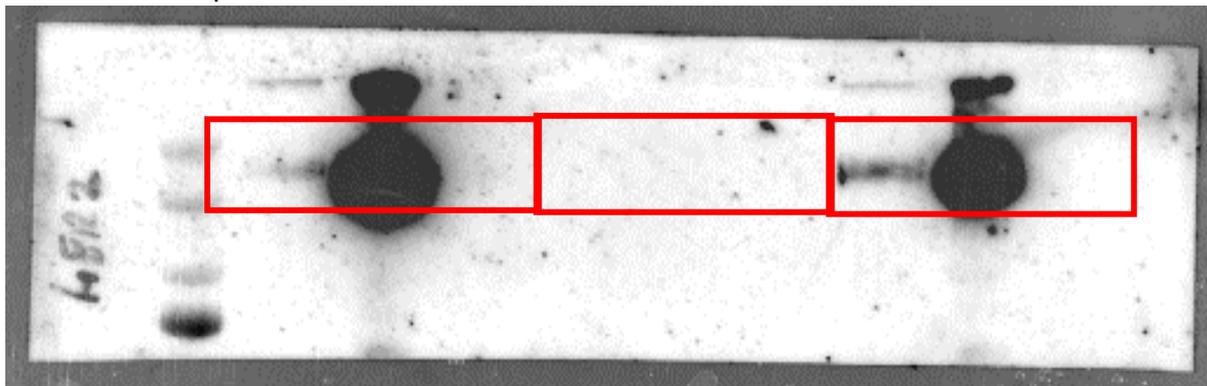
Recombinant Protein - HER2-FLAG

HER2

Lanes: HER2 input, HER2 IP, HER2 Post-IP

ASP input, ASPN IP, ASPN Post-IP

HER2+ASPN Input, HER2+ASPN IP, HER2+ASPN Post-IP

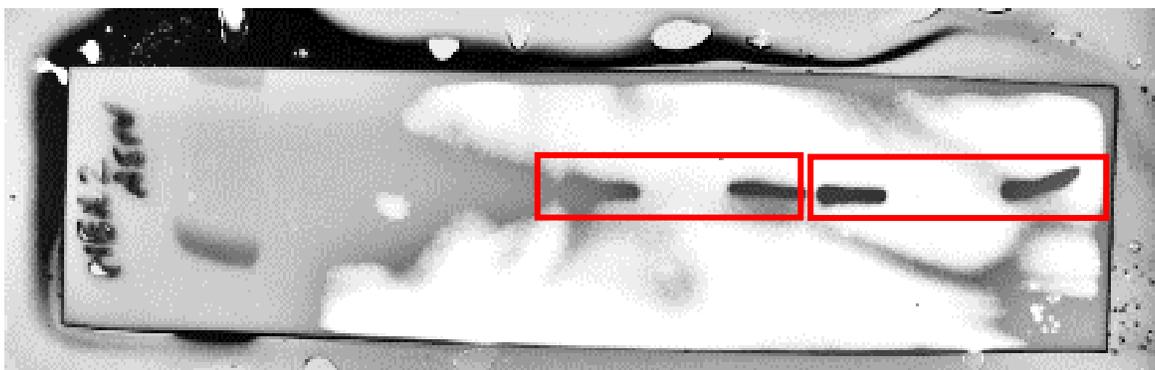


ASPN

Lanes: HER2 input, HER2 IP, HER2 Post-IP

ASPN input, ASPN IP, ASPN Post-IP

HER2+ASPN Input, HER2+ASPN IP, HER2+ASPN Post-IP



less exposed for HER2 band



**Full Unedited Blots for Supplementary Figure 4C**

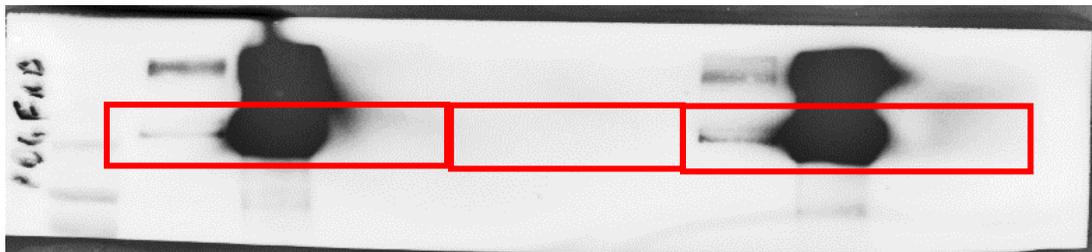
Recombinant Protein - PDGFRB-FLAG

PDGFRB

Lanes: PDGFRB input, PDGFRB IP, PDGFRB Post-IP

ASPEN input, ASPEN IP, ASPEN Post-IP,

PDGFRB+ASPEN Input, PDGFRB+ASPEN IP, PDGFRB+ASPEN Post-IP

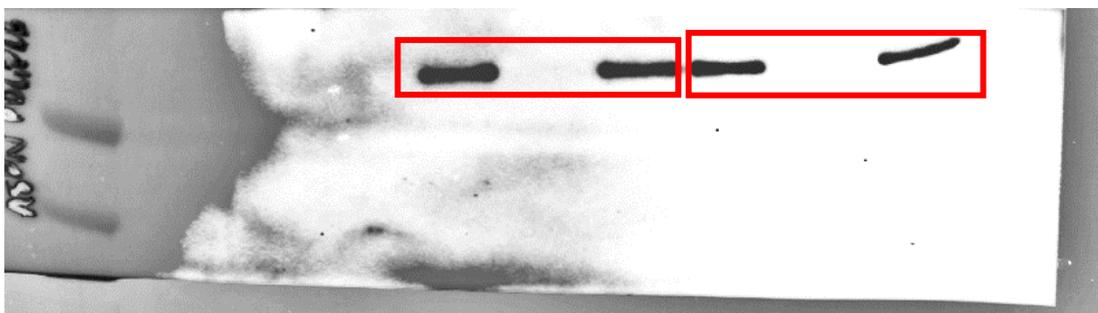


ASPEN

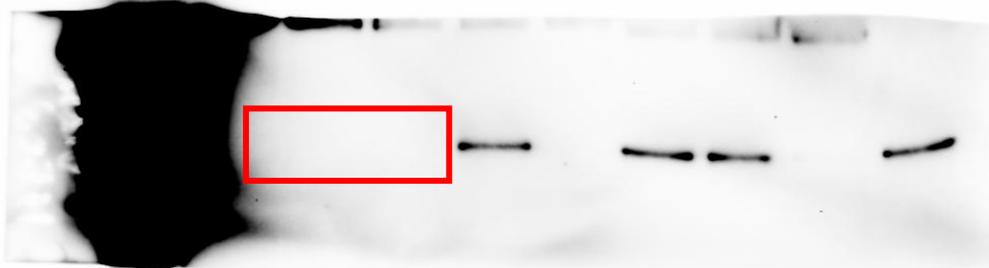
Lanes: PDGFRB input, PDGFRB IP, PDGFRB Post-IP

ASPEN input, ASPEN IP, ASPEN Post-IP

PDGFRB+ASPEN Input, PDGFRB+ASPEN IP, PDGFRB+ASPEN Post-IP



less exposed for PDGFRB band

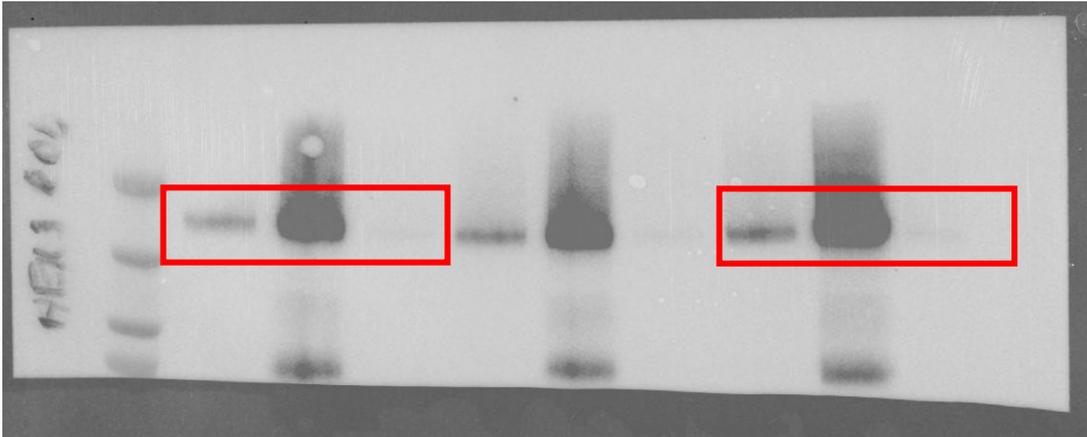


## Full and Unedited Blots for Supplemental Figure 4D

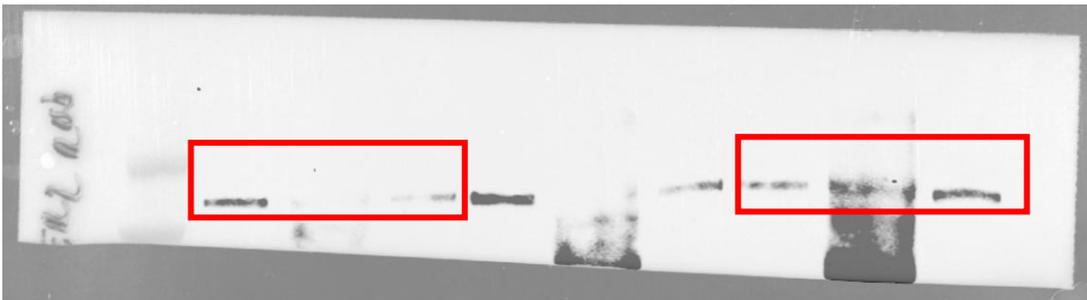
PC3 + recombinant ASPN and IP for endogenous HER3 and HER2

HER3

Lanes: Input 0 min, IP 0 min, Post-IP 0 min, Input 15 min, IP 15 min, Post-IP 15 min, Input 30 min, IP 30 min, Post-IP 30 min



HER2

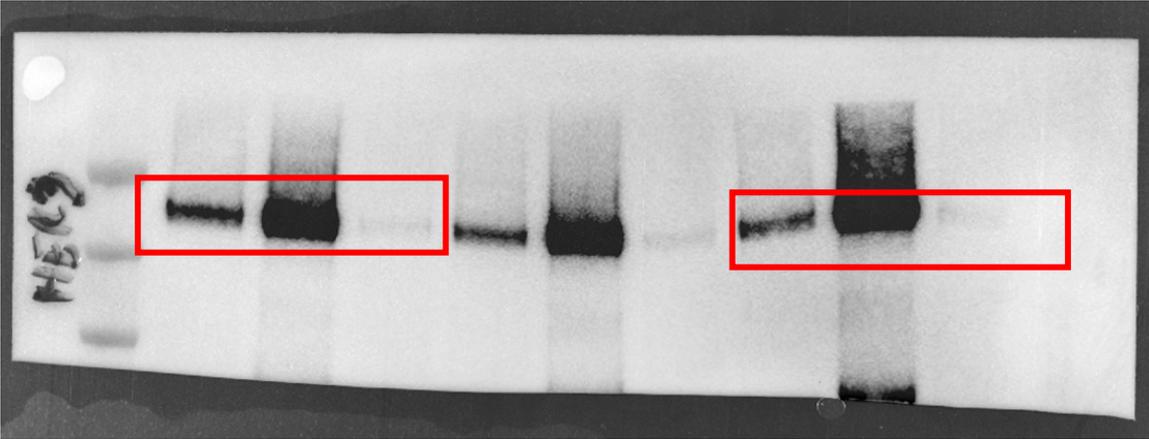


## Full and Unedited Blots for Supplemental Figure 4E

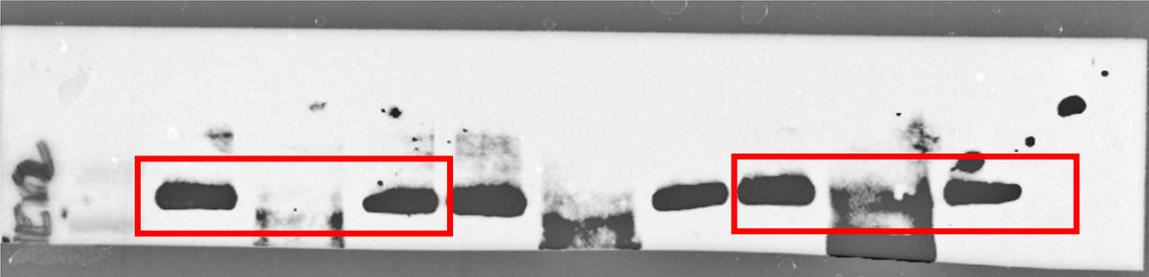
PC3 + PCAF CM IP for endogenous HER3 and HER2

Lanes: Input 0 min, IP 0 min, Post-IP 0 min, Input 15 min, IP 15 min, Post-IP 15 min, Input 30 min, IP 30 min, Post-IP 30 min

HER3



HER2

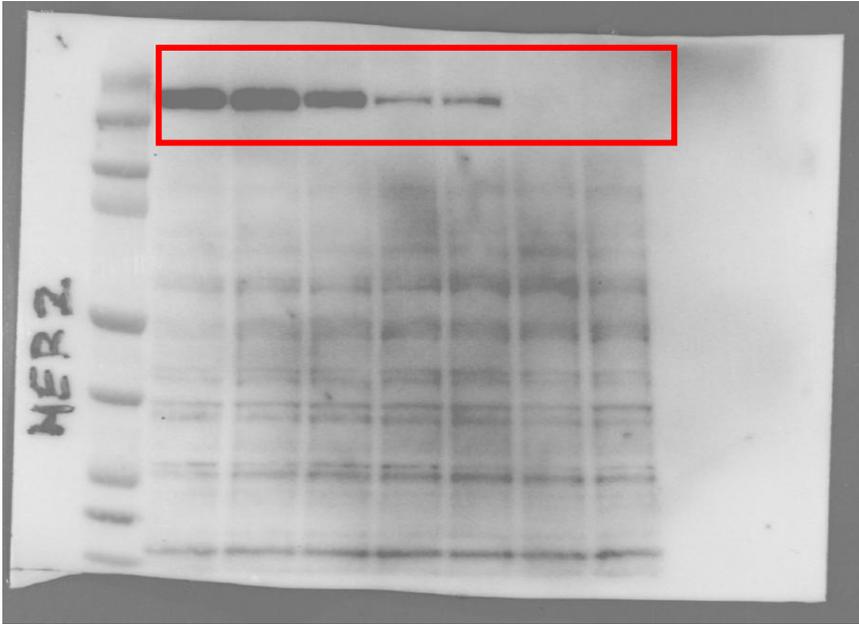


**Full and Unedited Blots for Supplemental Figure 4G**

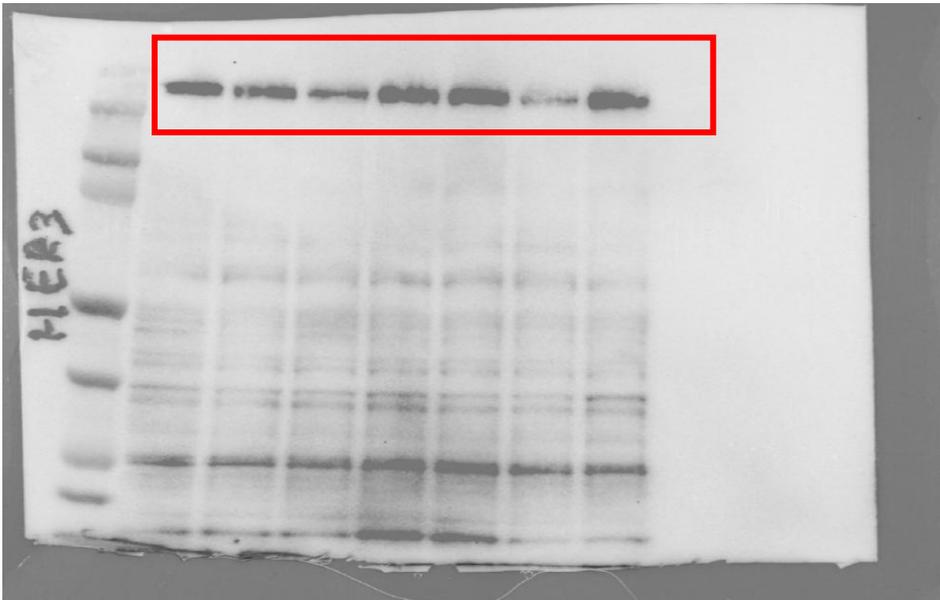
**LNCaP HER2 KO**

Lanes: Parental, TWT C9, TWT, D12, HET C6, HET C10, KO C12, KO D5

HER2

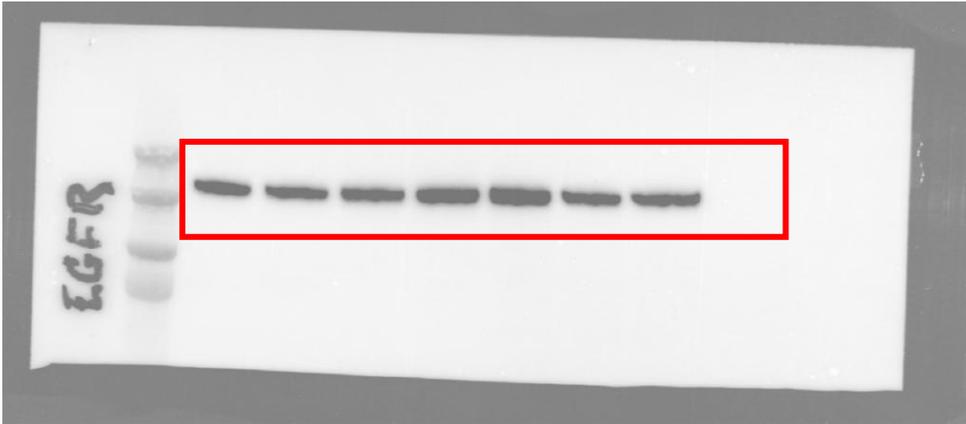


HER3



Full and Unedited Blots for Supplemental Figure 4G Continued

EGFR



HER4



Full and Unedited Blots for Supplemental Figure 4G Continued

GAPDH

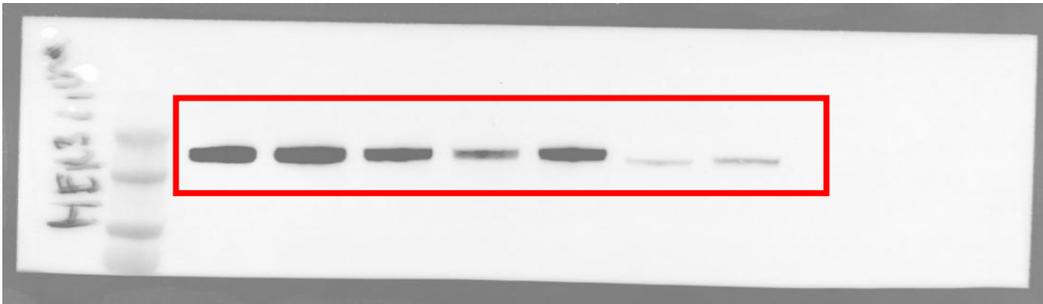


Full and Unedited Blots for Supplemental Figure 4I

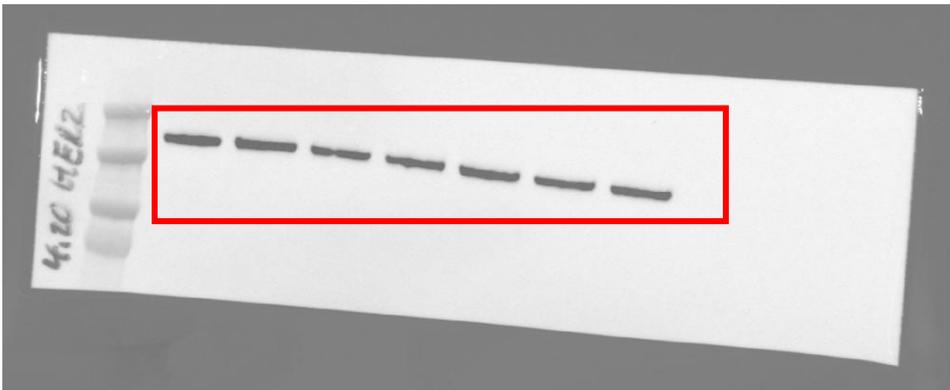
LNCaP HER3 TKD

Lanes: Parental, TWT E4, TWT E11, HET E6, HET E10, TKD E3, TKD F1

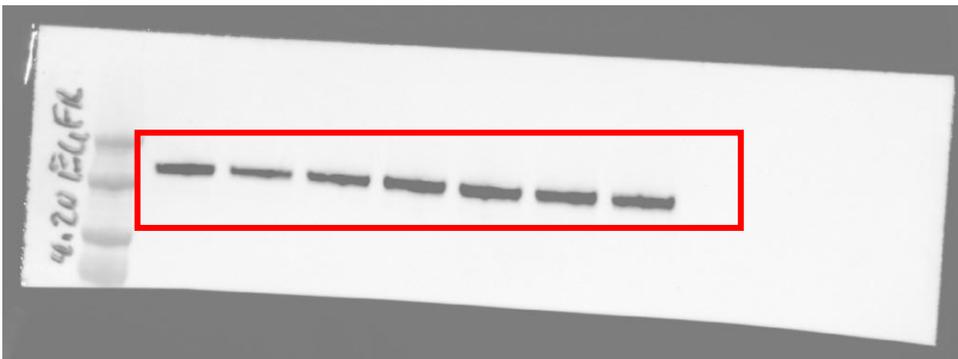
HER3



HER2

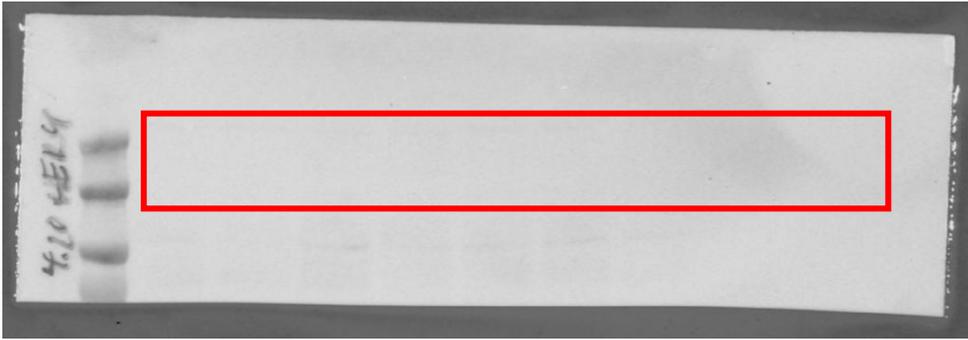


EGFR

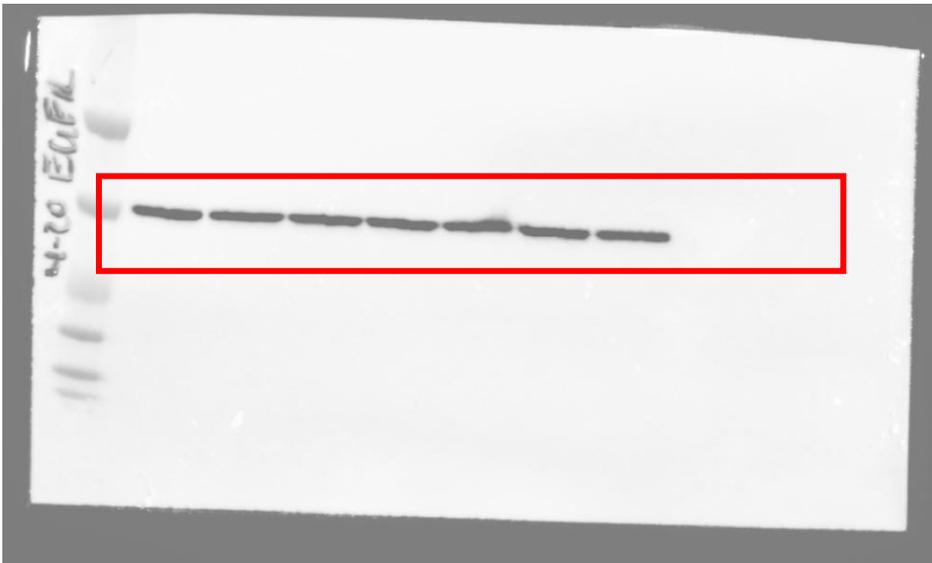


Full and Unedited Blots for Supplemental Figure 4I Continued

HER4



GAPDH

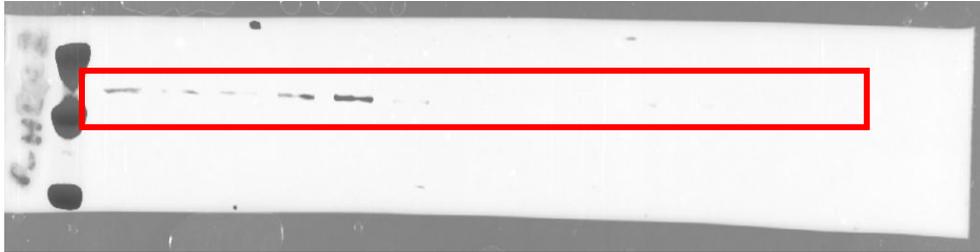


**Full and Unedited Blots for Supplemental Figure 5A**

**LNCaP HER3 TKD + rASP (100 ng/mL)**

Lanes: TWT 0, 5, 10, 15, 30, 60, TKD 0, 5, 10, 15, 30, 60 unless noted

P-HER2



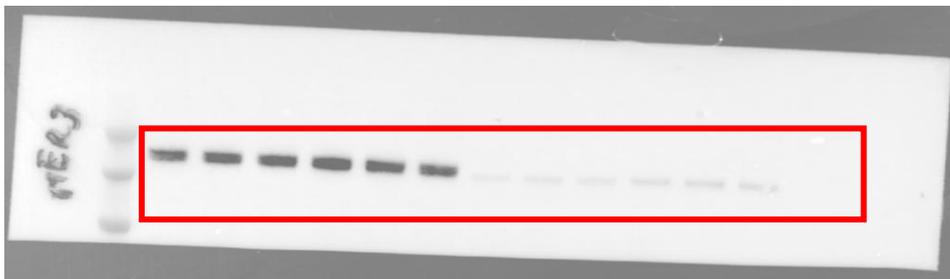
HER2



P-HER3

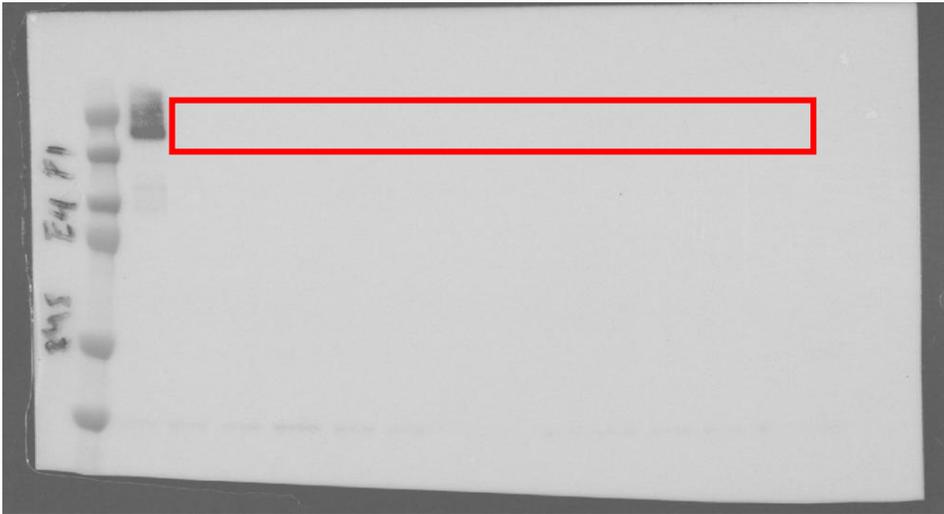


HER3

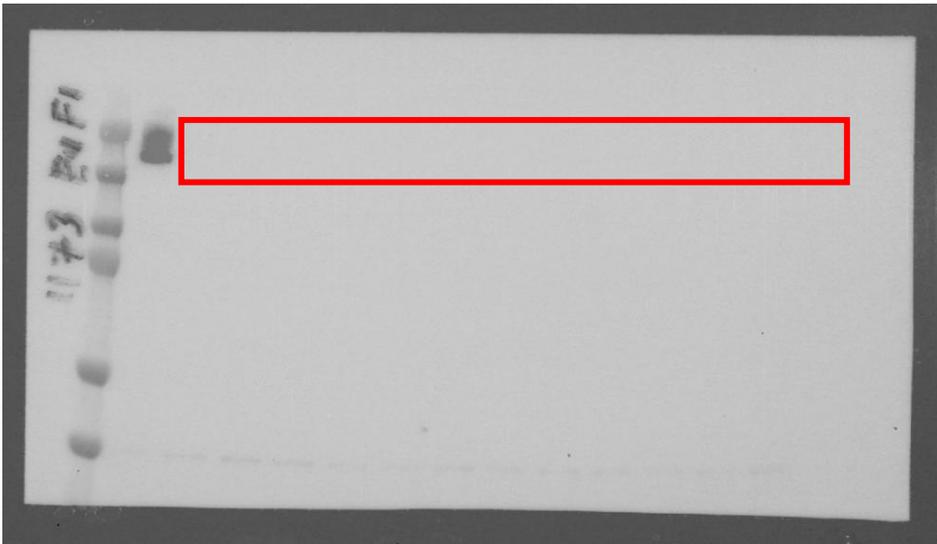


**Full and Unedited Blots for Supplemental Figure 5A continued**

Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
P-EGFR Y845

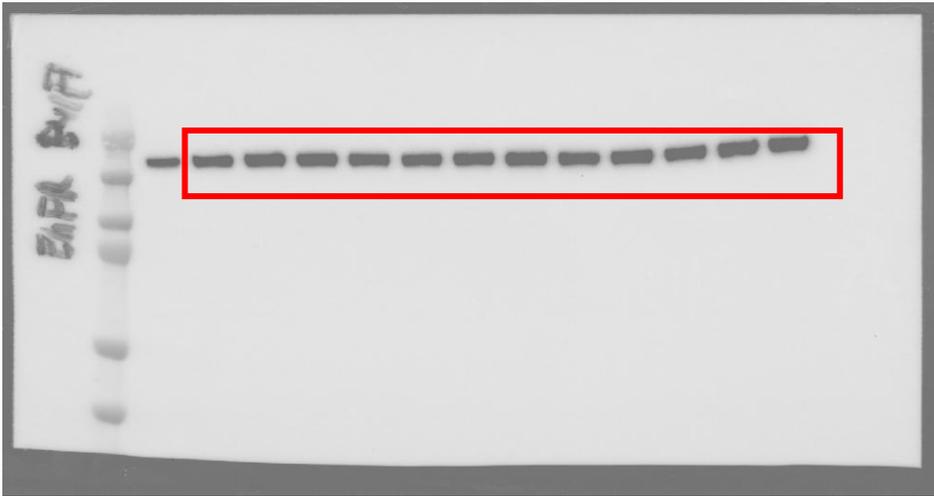


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
P-EGFR Y1173



**Full and Unedited Blots for Supplemental Figure 5A continued**

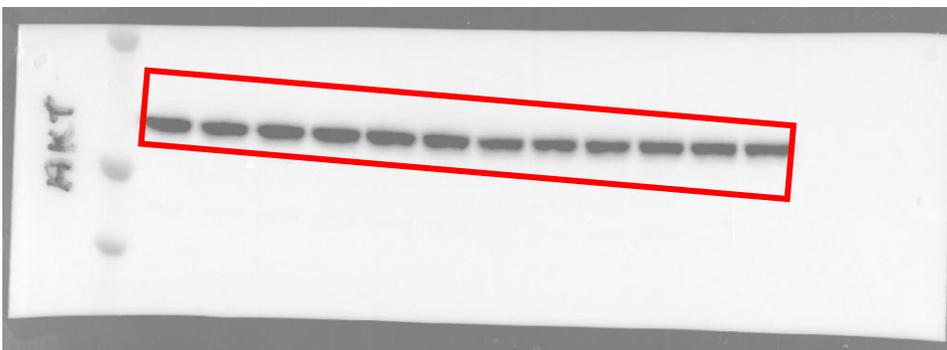
Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60  
EGFR



P-AKT

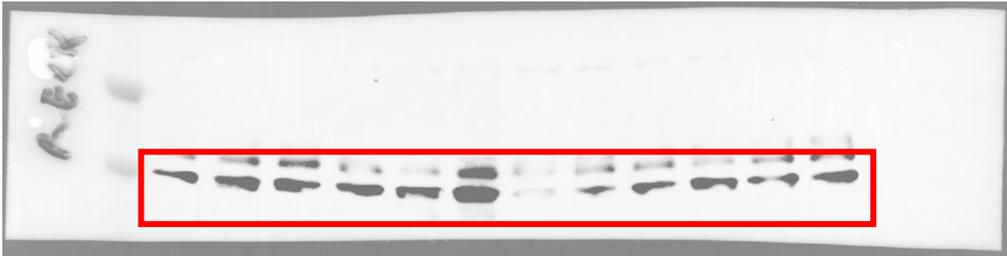


AKT

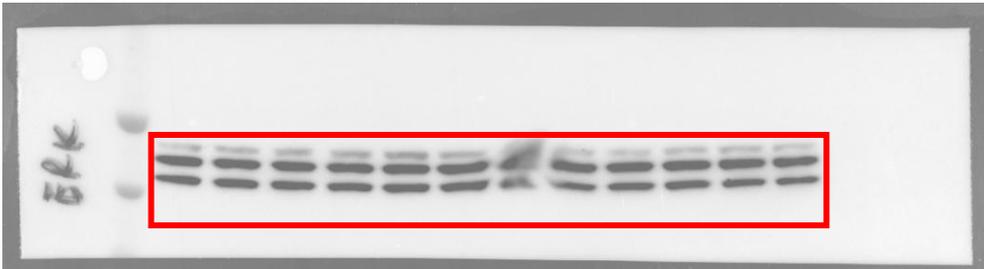


Full and Unedited Blots for Supplemental Figure 5A continued

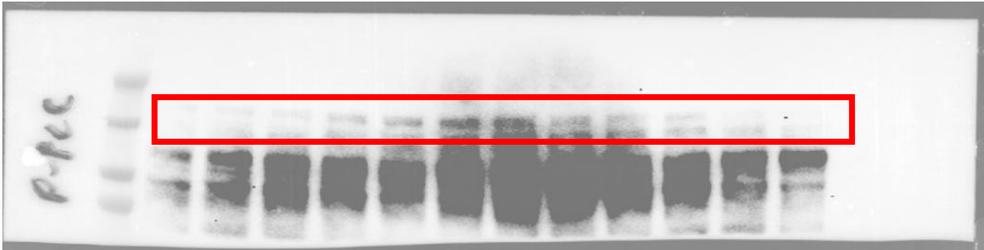
P-ERK



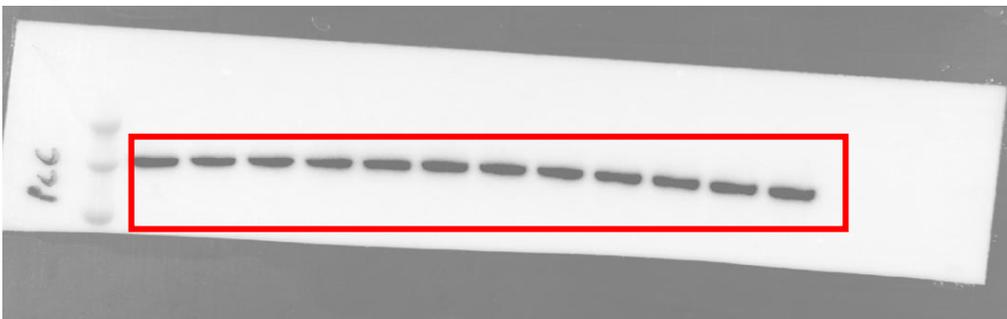
ERK



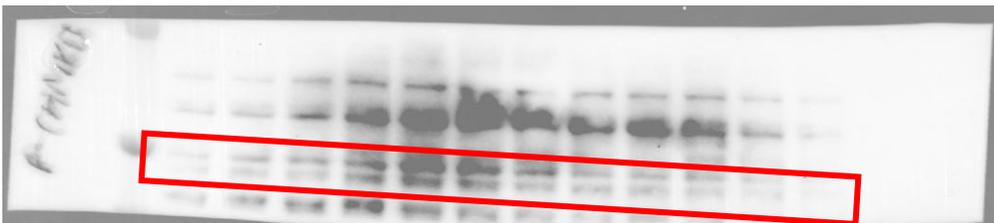
P-PLC



PLC

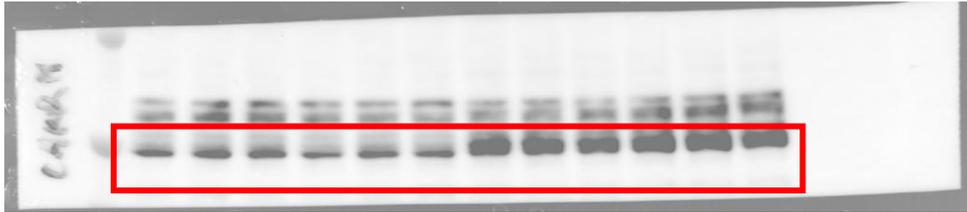


P-CAMKII

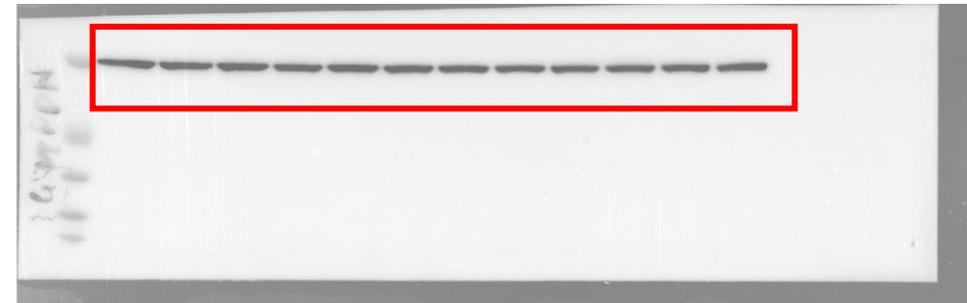


Full and Unedited Blots for Supplemental Figure 5A continued

CAMKII

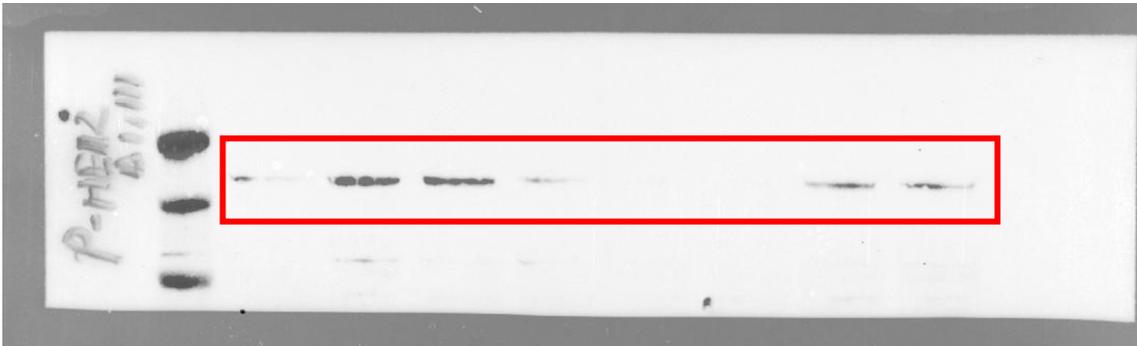


GAPDH

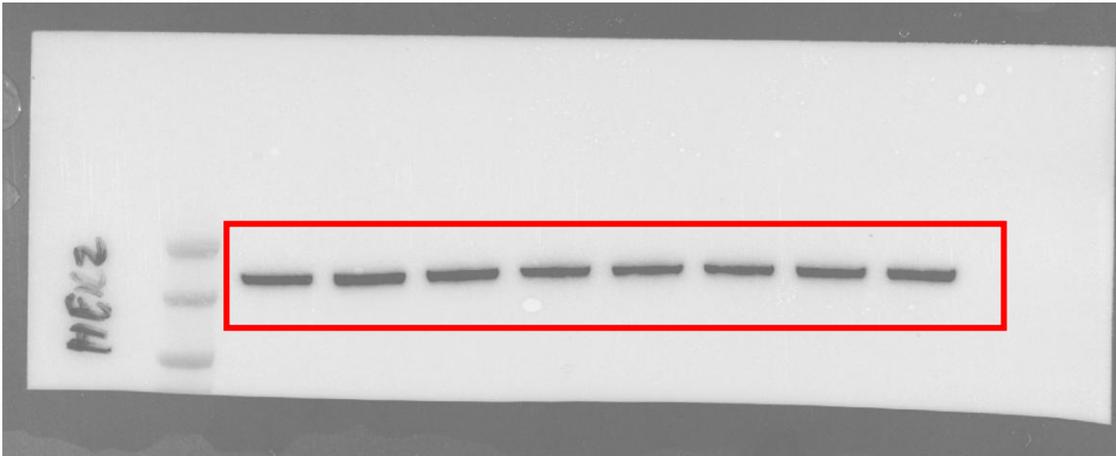


### Full and Unedited Blots for Supplemental Figure 5B

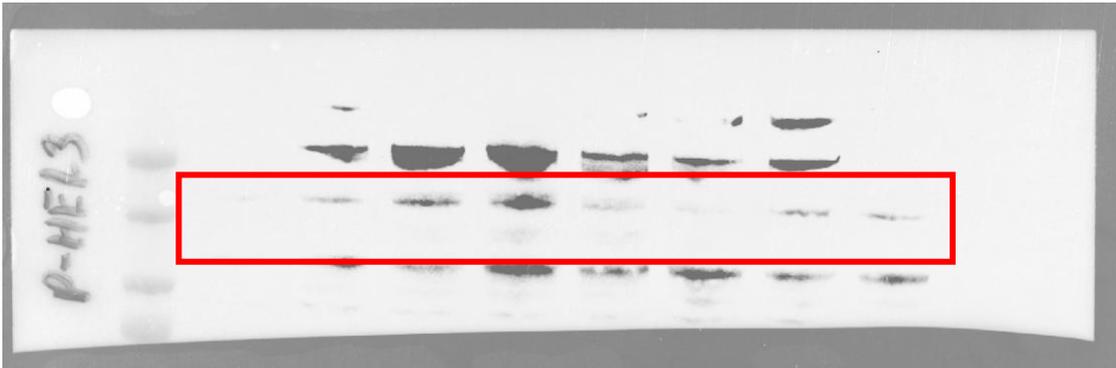
HER3 Truncated Knock Down transfected with WT HER3 or  $\Delta$ I/III HER3  
Lanes: WT 0, 10, 30, 60 min ASPN;  $\Delta$ I/III 0, 10, 30, 60 ASPN  
P-HER2



HER2

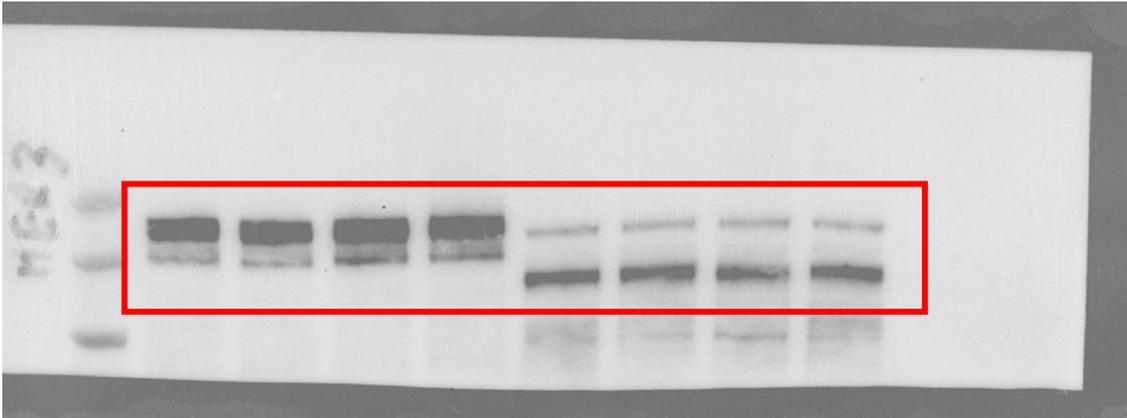


P-HER3

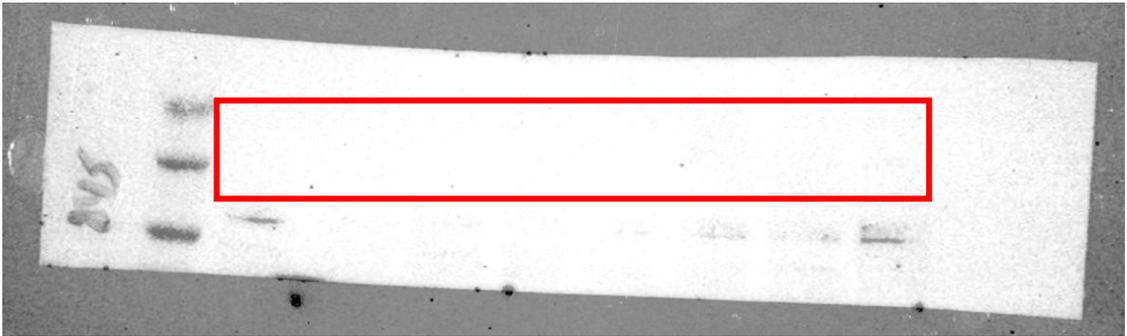


Full and Unedited Blots for Supplemental Figure 5B Continued

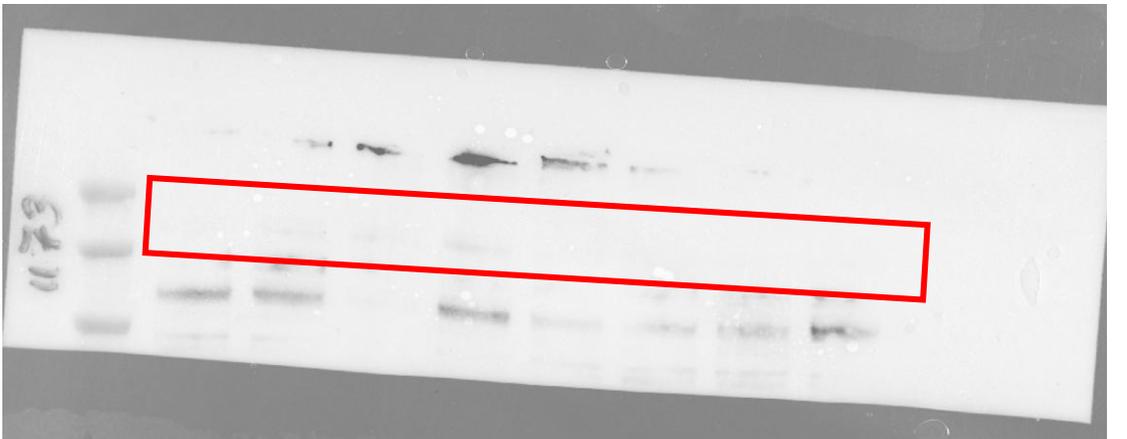
HER3



P-EGFR Y845

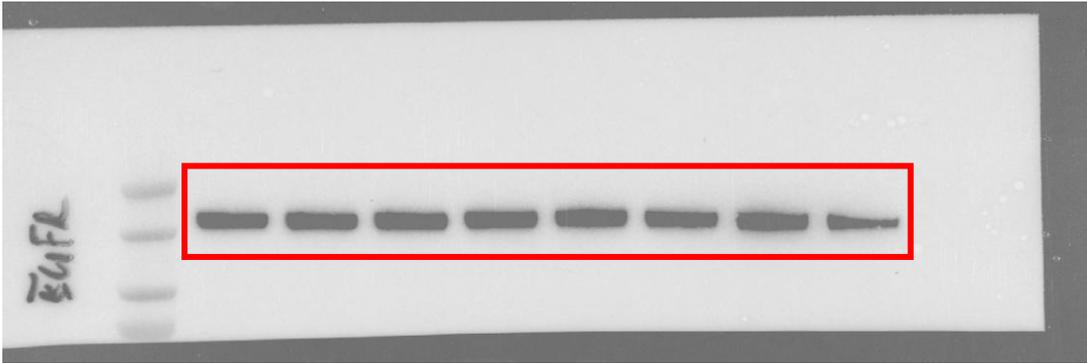


P-EGFR Y1173

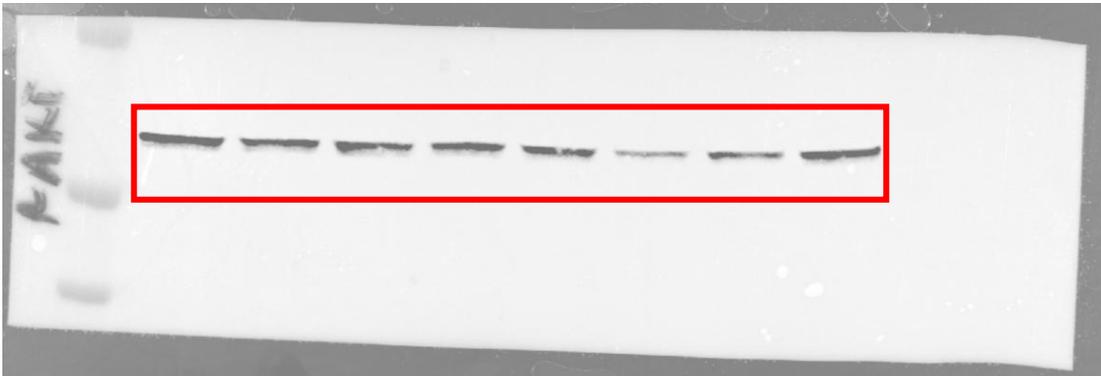


Full and Unedited Blots for Supplemental Figure 5B Continued

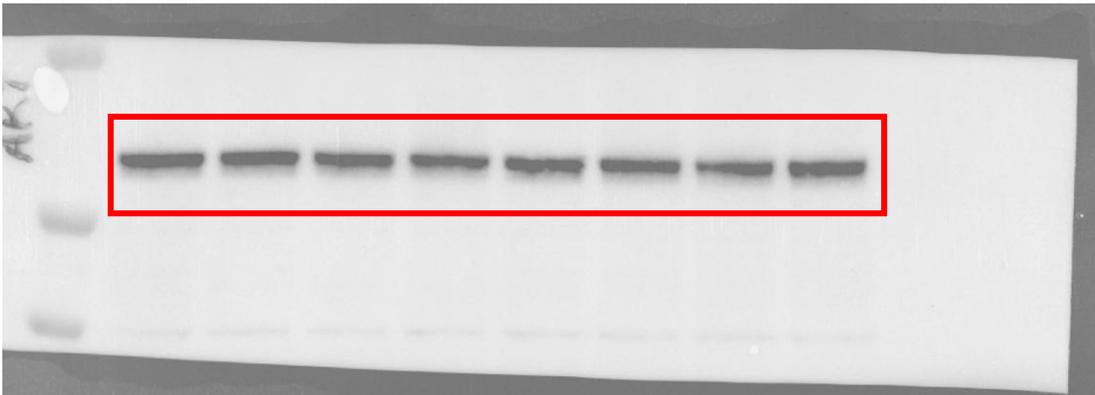
EGFR



P-AKT

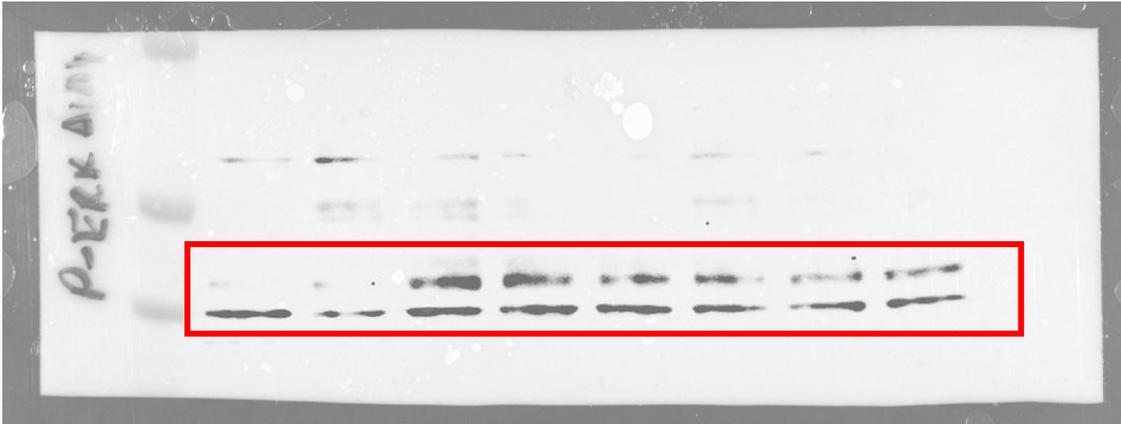


AKT

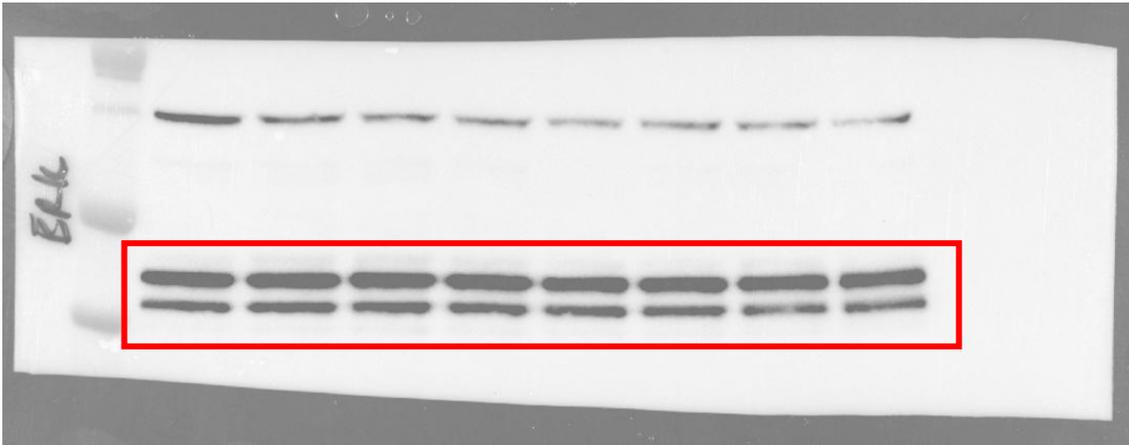


Full and Unedited Blots for Supplemental Figure 5B Continued

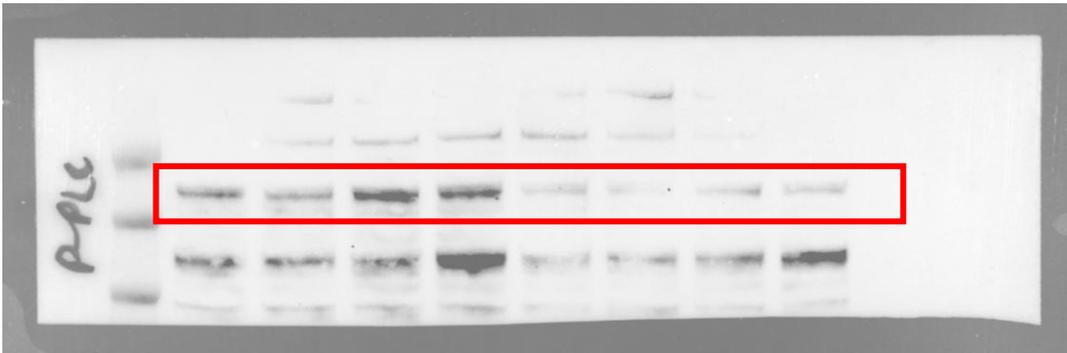
P-ERK



ERK

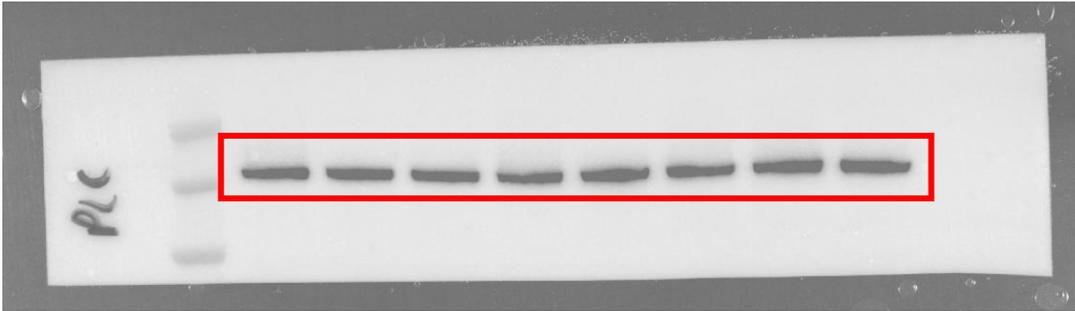


P-PLC

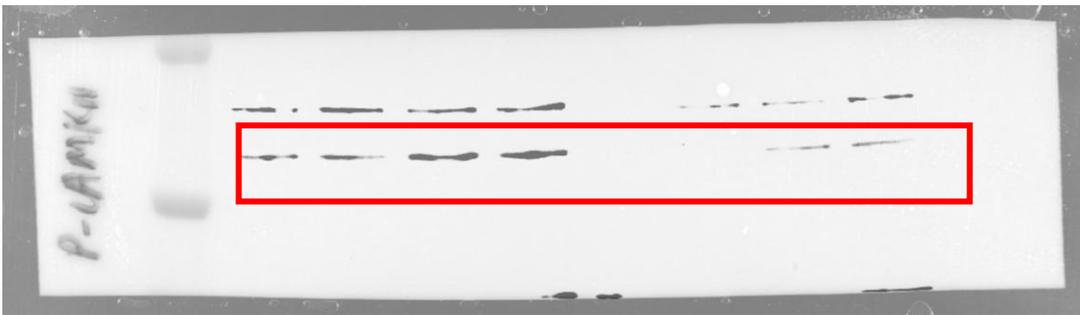


Full and Unedited Blots for Supplemental Figure 5B Continued

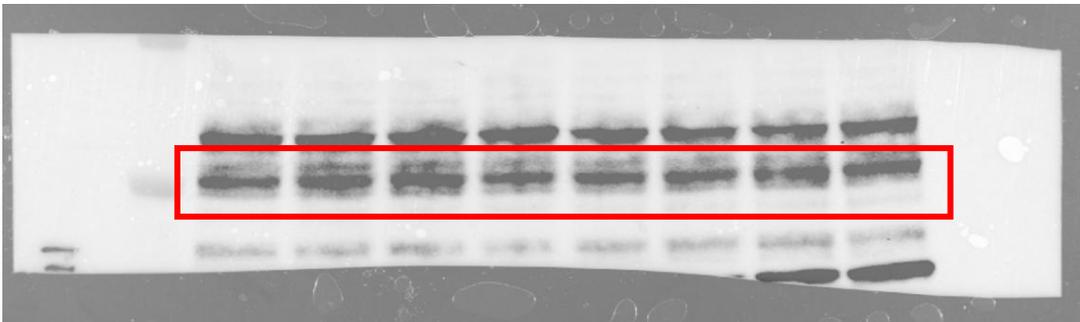
PLC



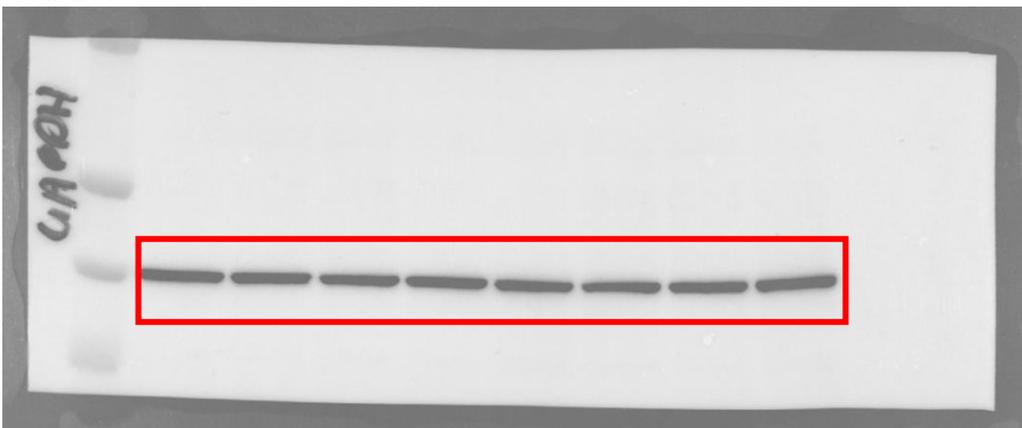
P-CAMKII



CAMKII



GAPDH

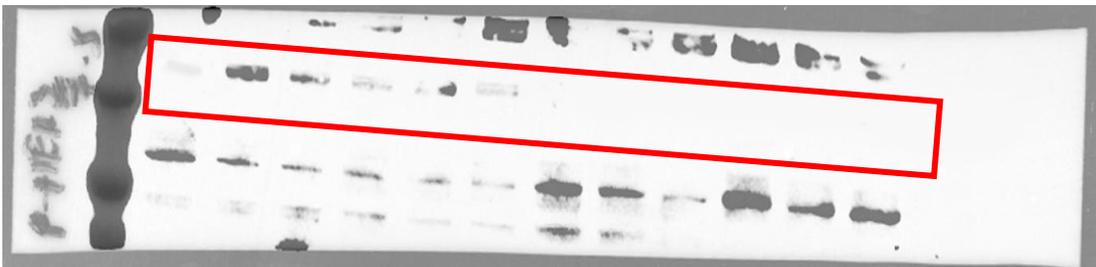


**Full and Unedited Blots for Supplemental Figure 5C**

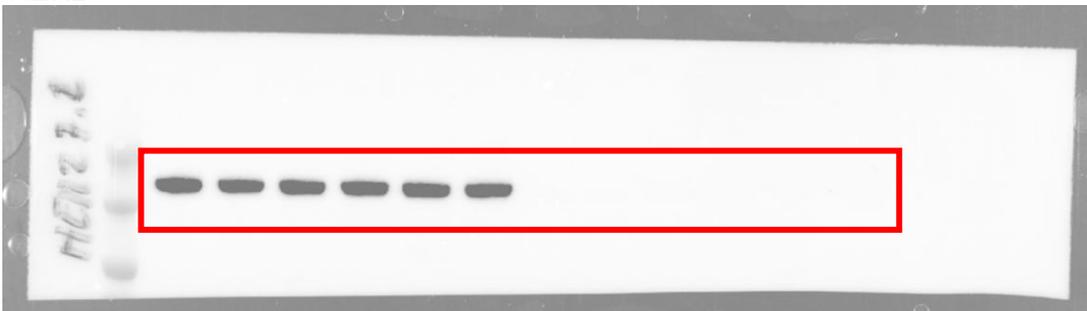
HER2 TWT C9, HER2 KO D4

Lanes: TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60 unless noted

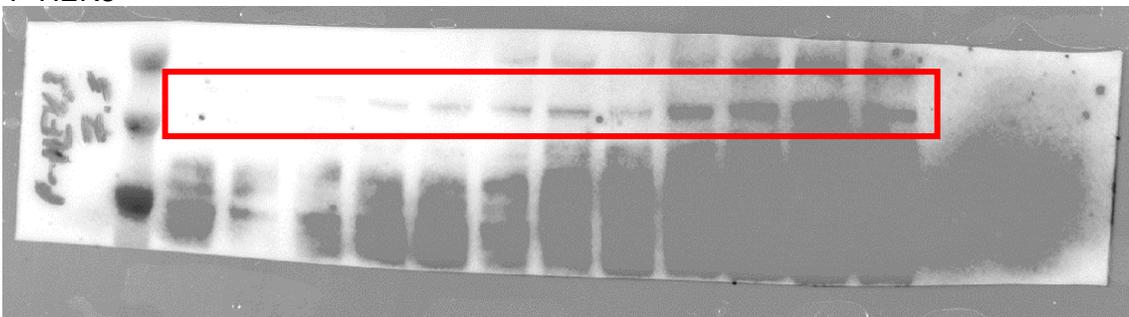
P-HER2



HER2

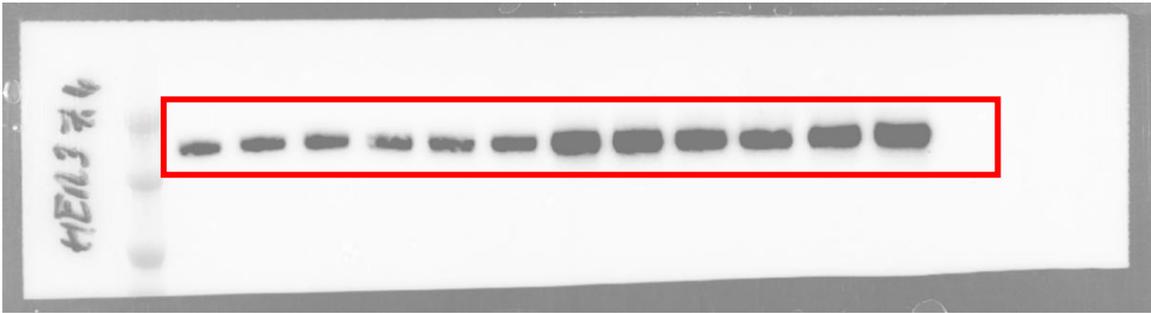


P-HER3

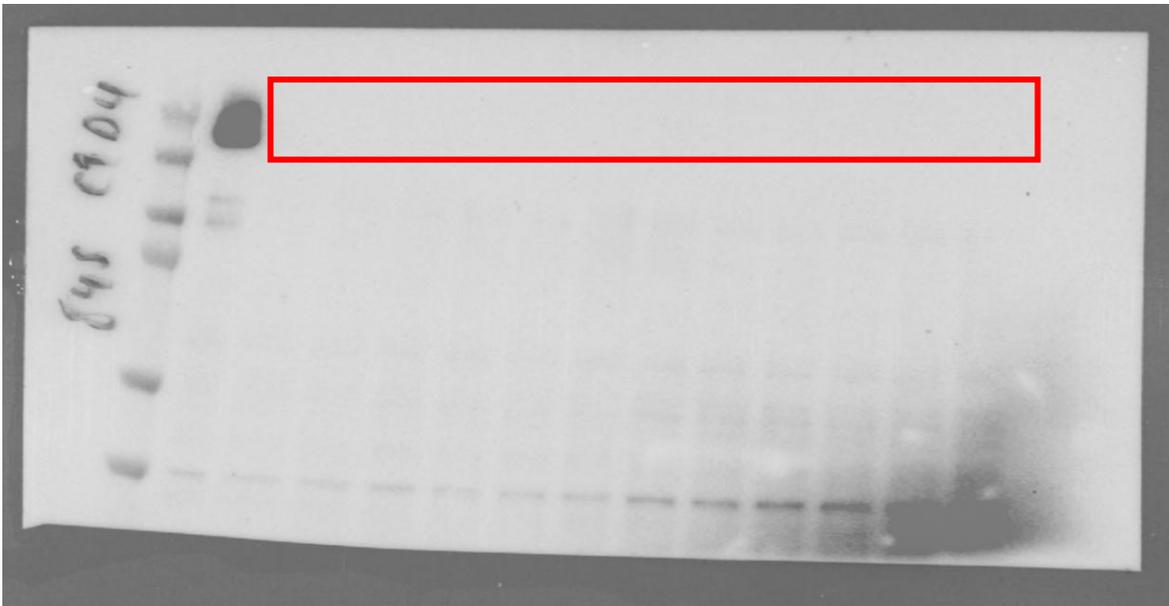


Full and Unedited Blots for Supplemental Figure 5C

HER3

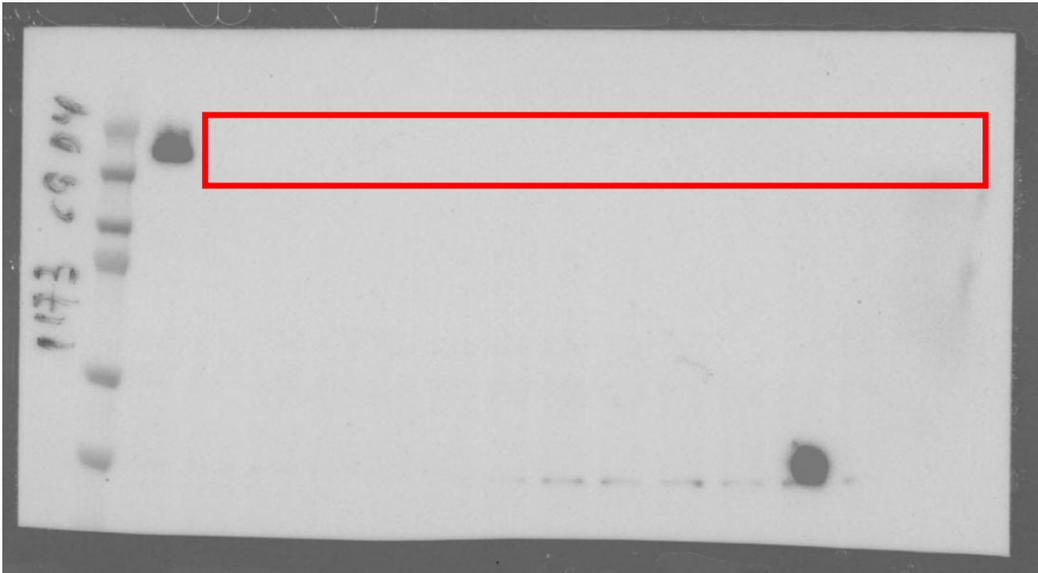


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y845

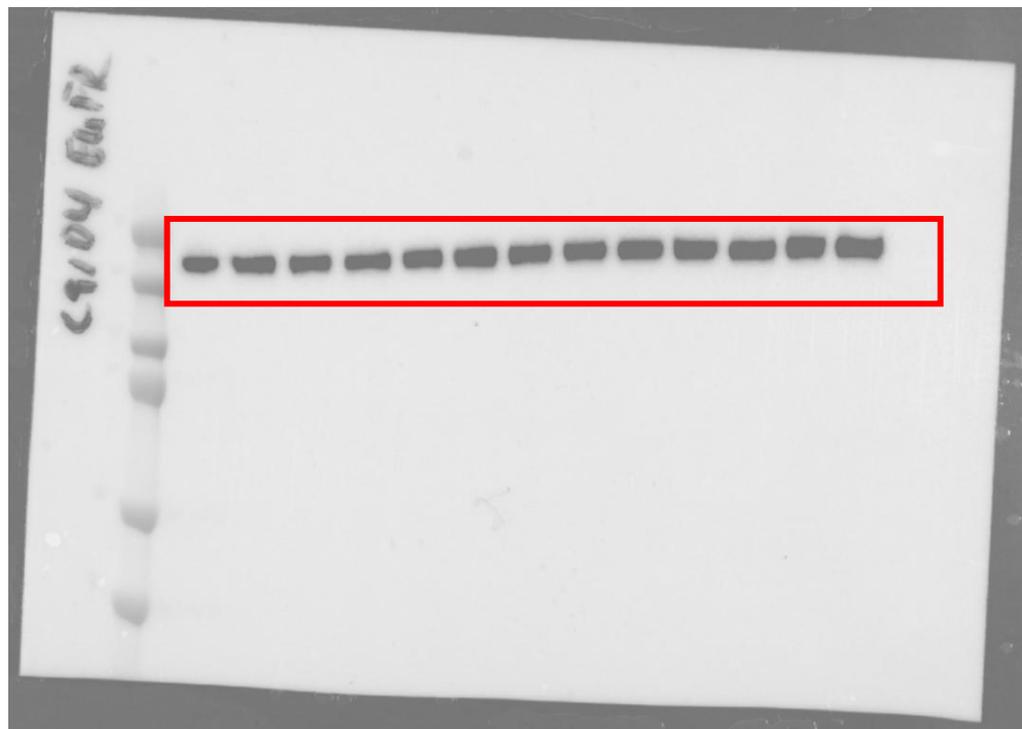


**Full and Unedited Blots for Supplemental Figure 5C Continued**

Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y1173

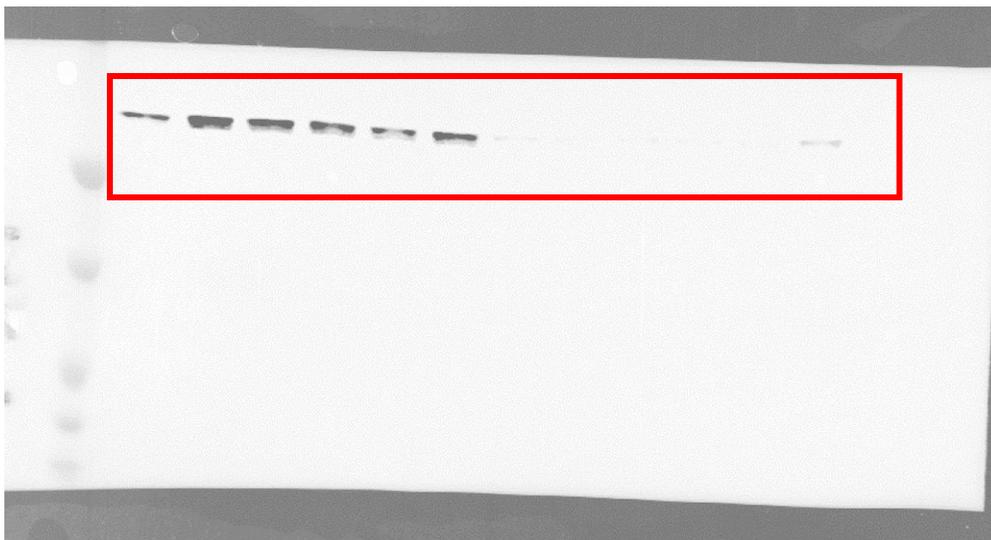


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
EGFR



Full and Unedited Blots for Supplemental Figure 5C

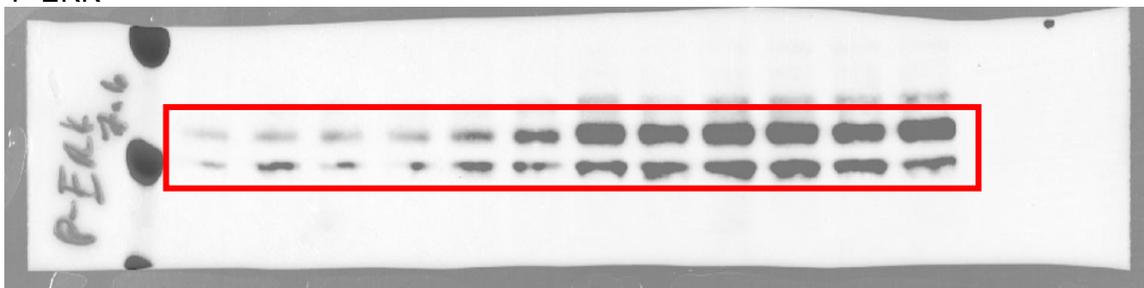
P-AKT



AKT

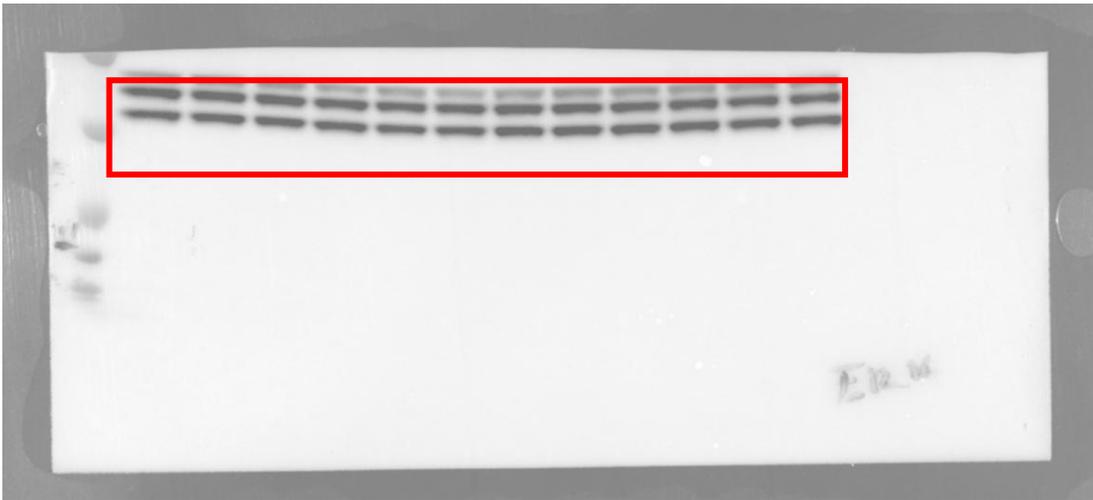


P-ERK

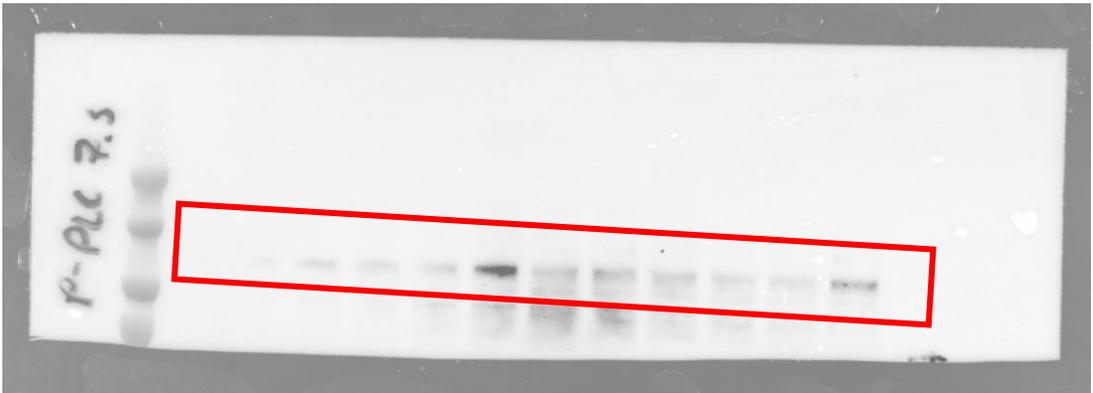


Full and Unedited Blots for Supplemental Figure 5C

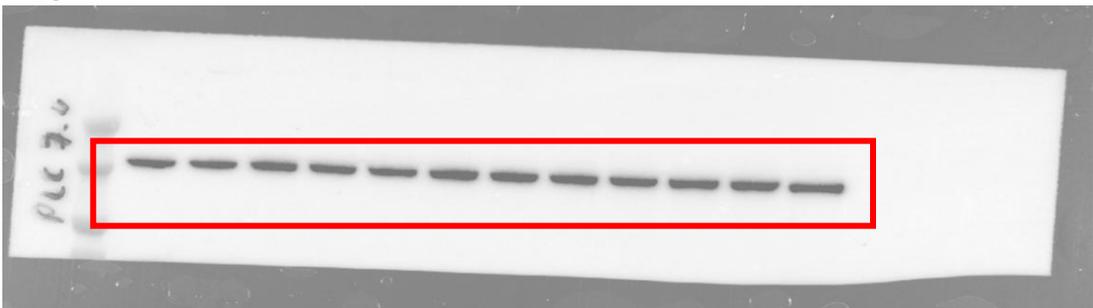
ERK



P-PLC

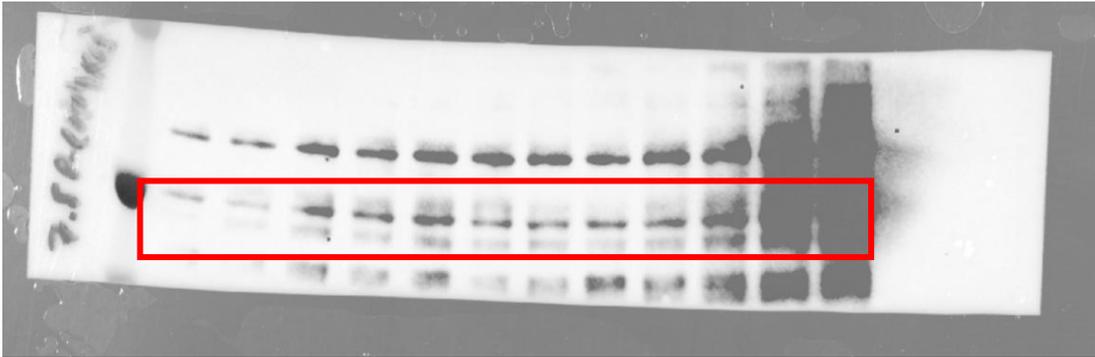


PLC

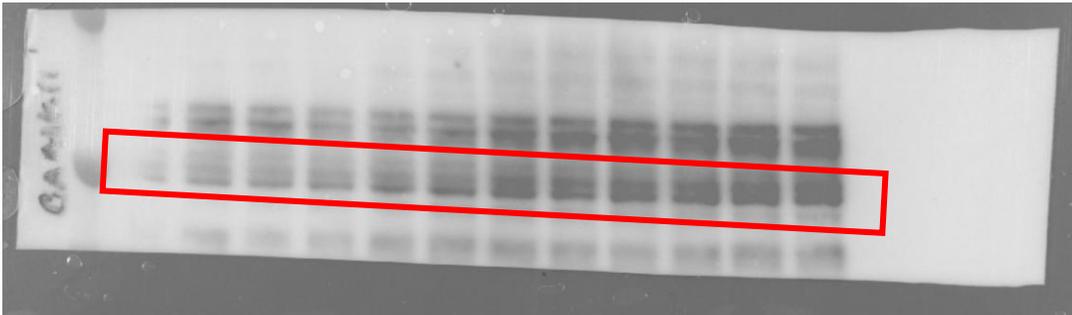


Full and Unedited Blots for Supplemental Figure 5C

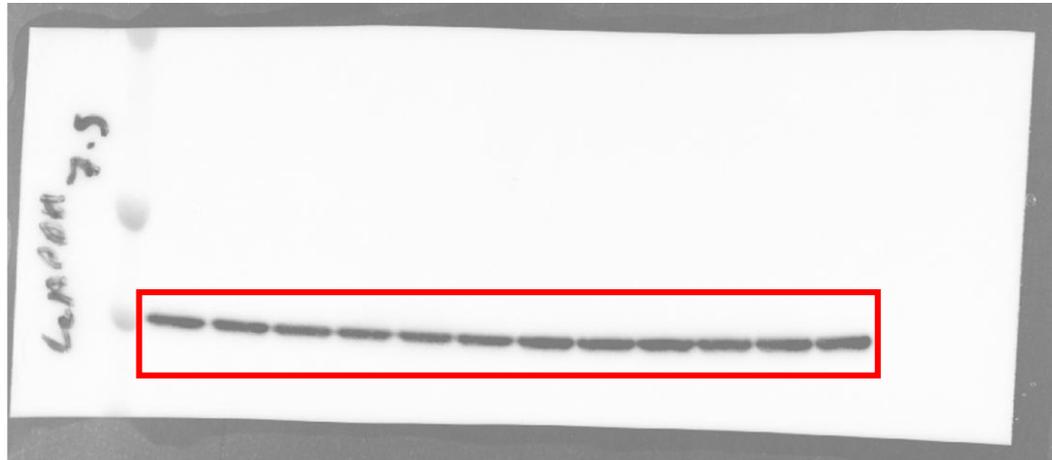
P-CAMKII



CAMKII



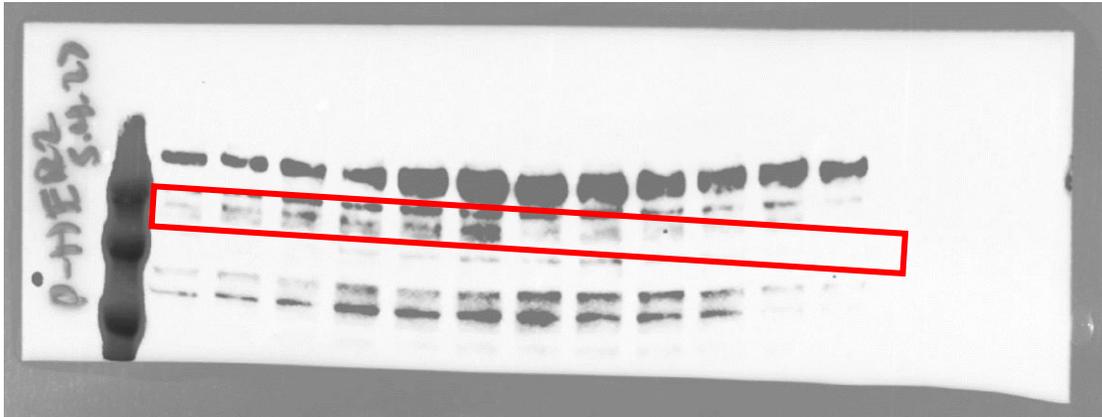
GAPDH



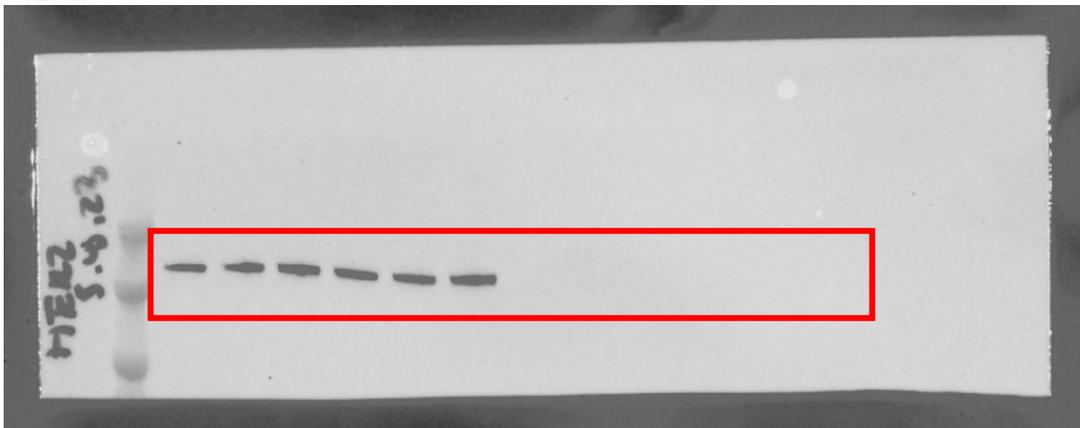
Full and Unedited Blots for Supplemental Figure 5C Continued

HER2 TWT D12, HER2 KO D5

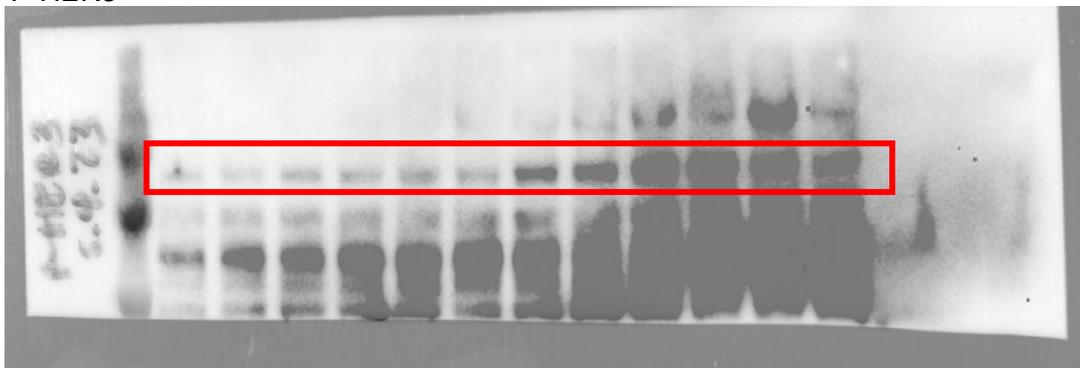
Lanes: TWT 0, 5, 10, 15, 30, 60, KD 0, 5, 10, 15, 30, 60 unless noted  
P-HER2



HER2

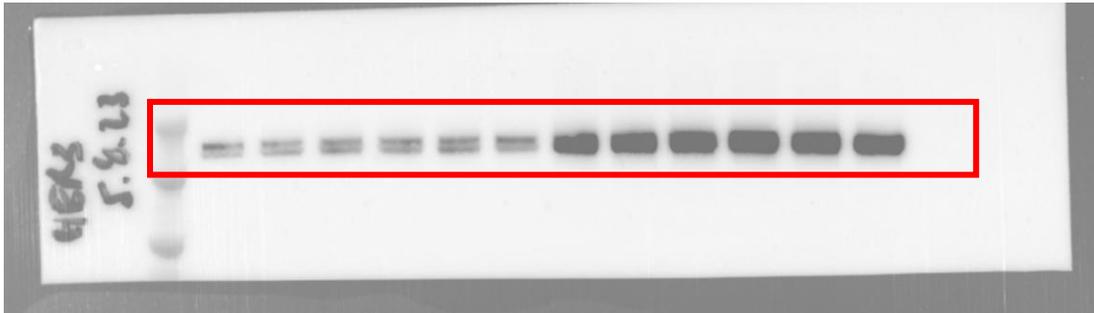


P-HER3



Full and Unedited Blots for Supplemental Figure 5C Continued

HER3

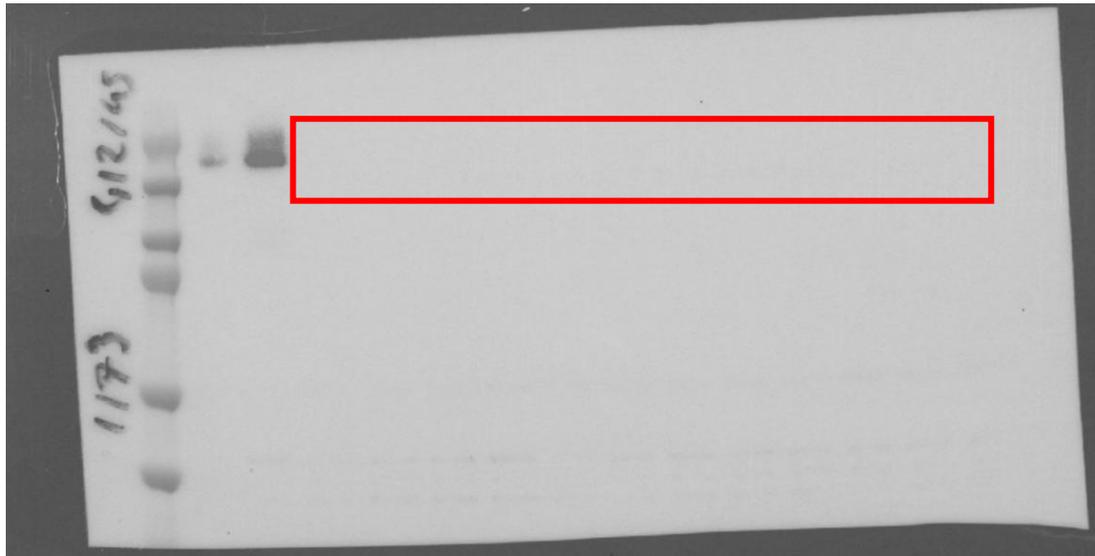


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y845

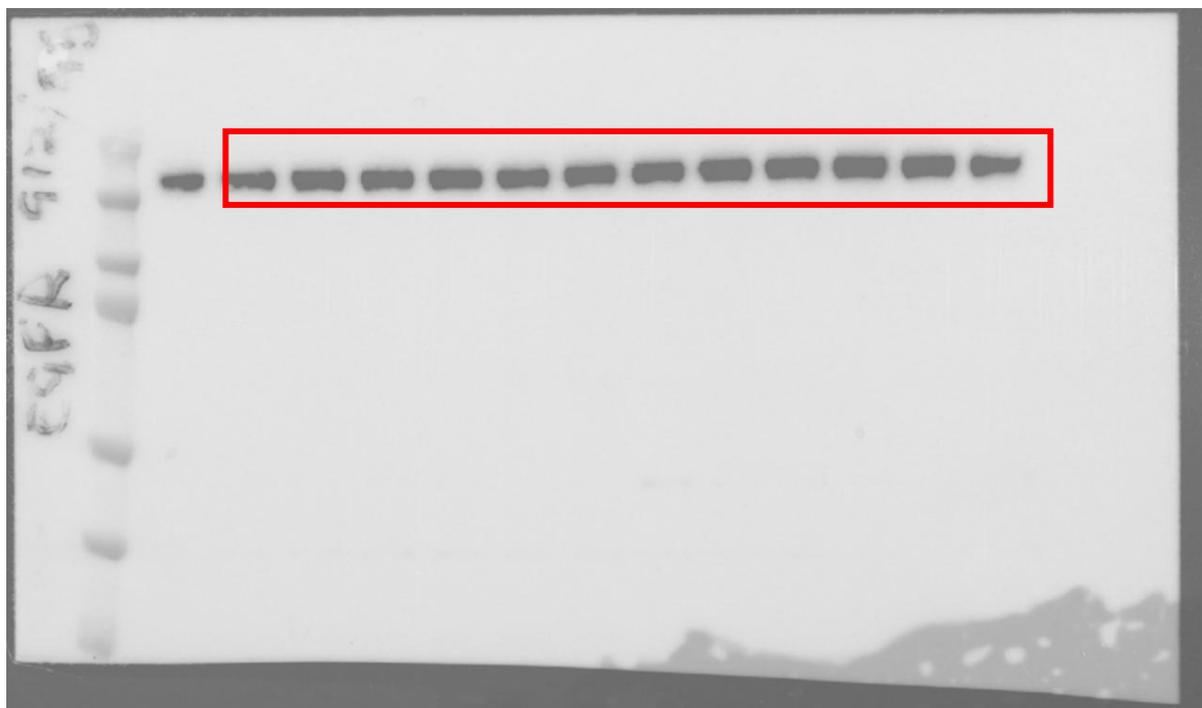


Full and Unedited Blots for Supplemental Figure 5C Continued

Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
P-EGFR Y1173

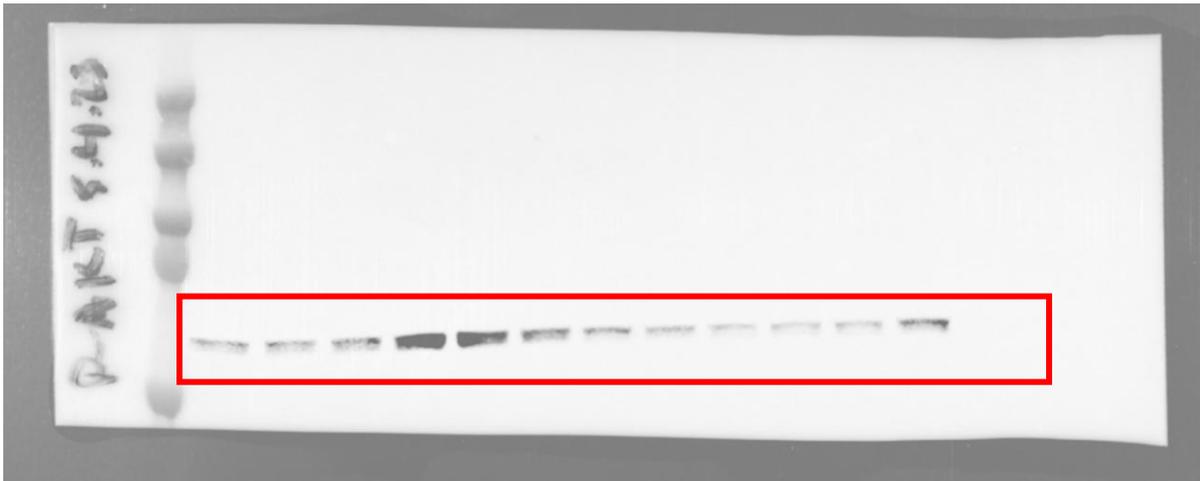


Lanes: EGF ctrl, TWT 0, 5, 10, 15, 30, 60, KO 0, 5, 10, 15, 30, 60  
EGFR

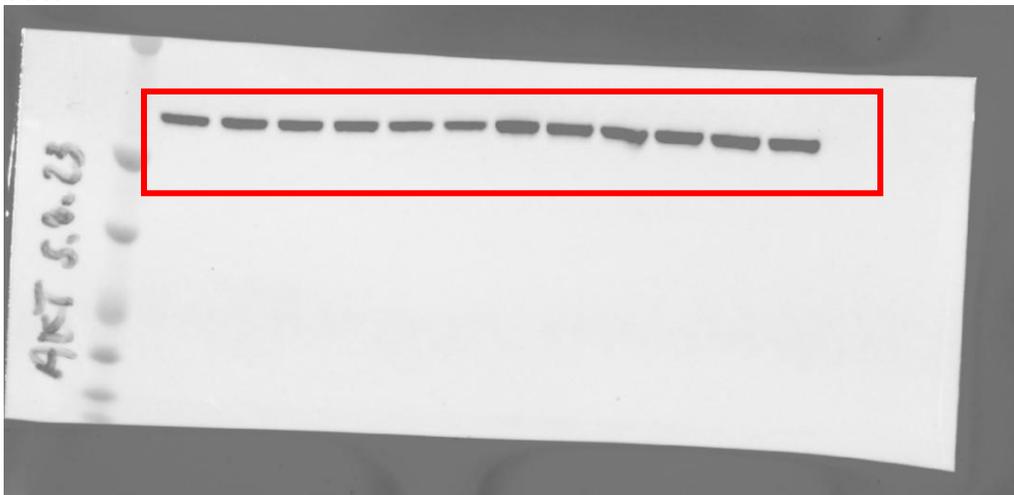


Full and Unedited Blots for Supplemental Figure 5C Continued

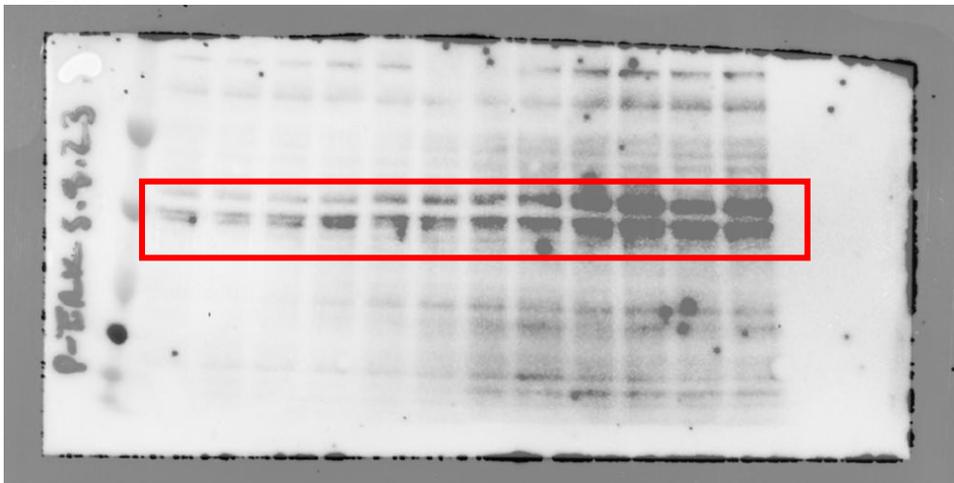
P-AKT



AKT

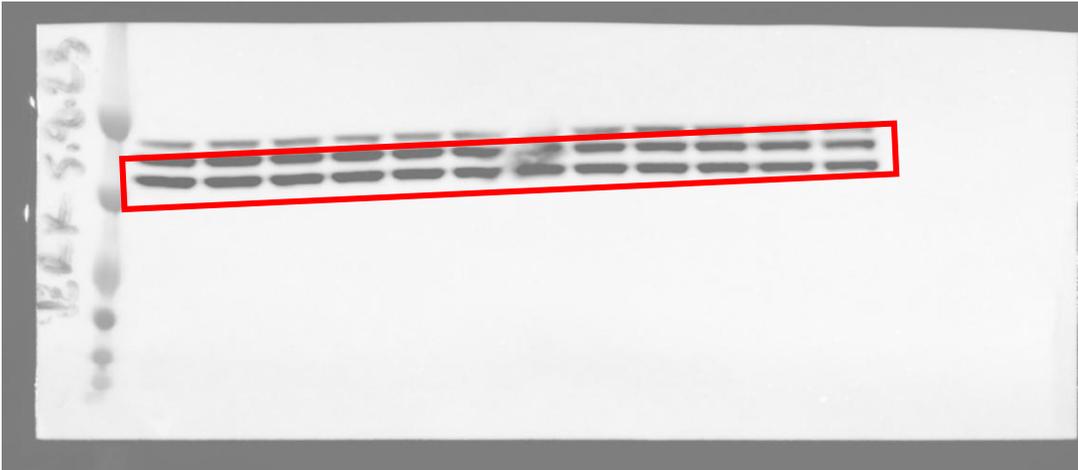


P-ERK

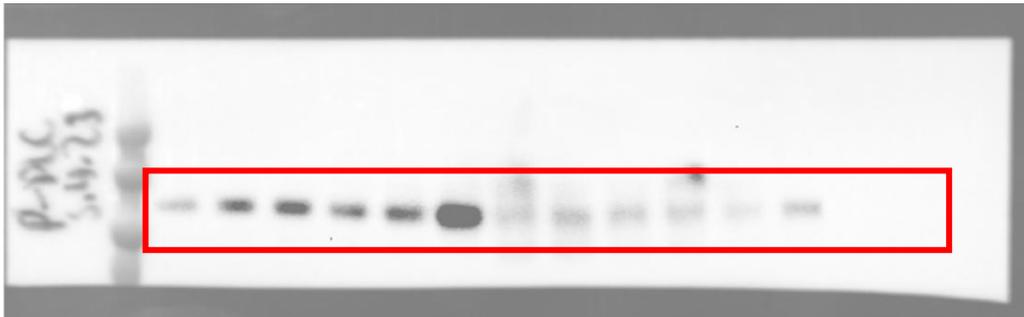


Full and Unedited Blots for Supplemental Figure 5C Continued

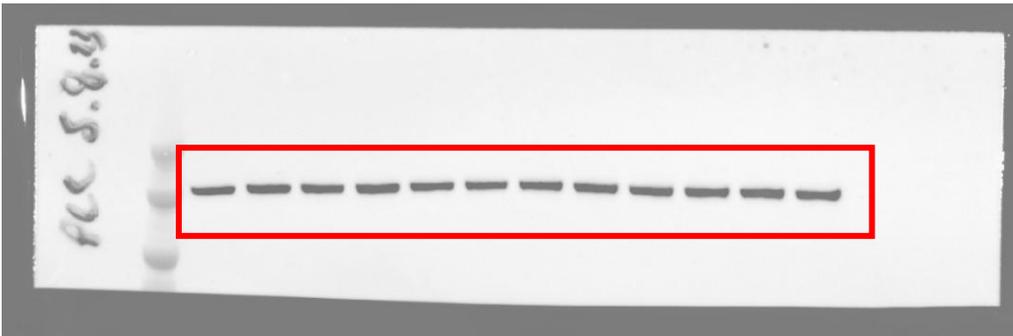
ERK



P-PLC

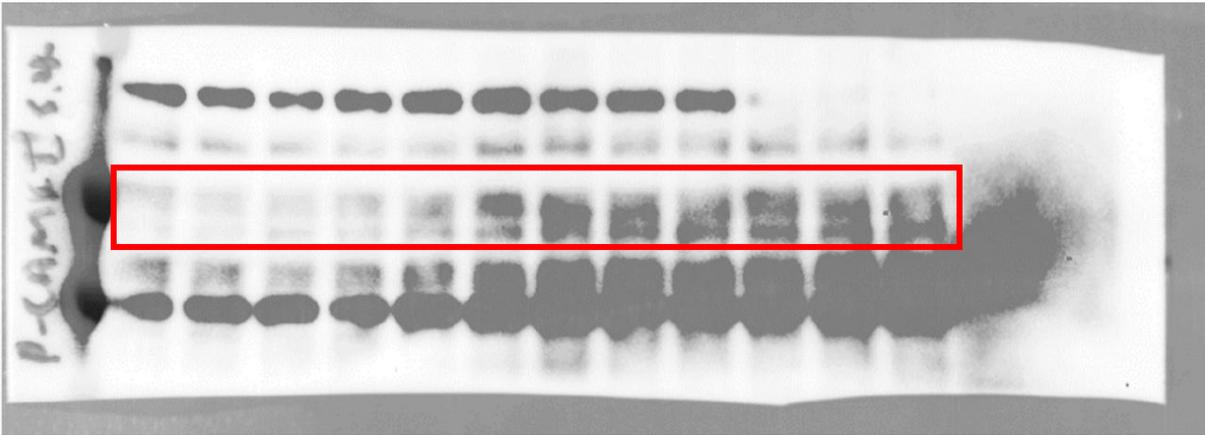


PLC

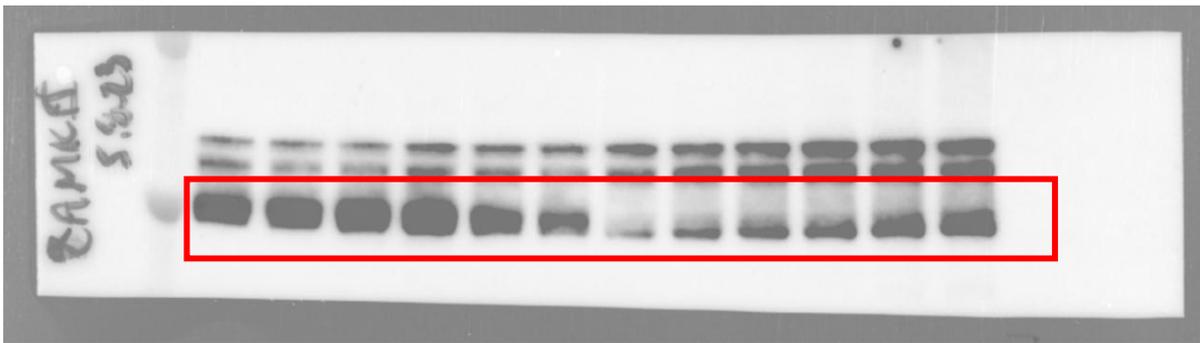


Full and Unedited Blots for Supplemental Figure 5C Continued

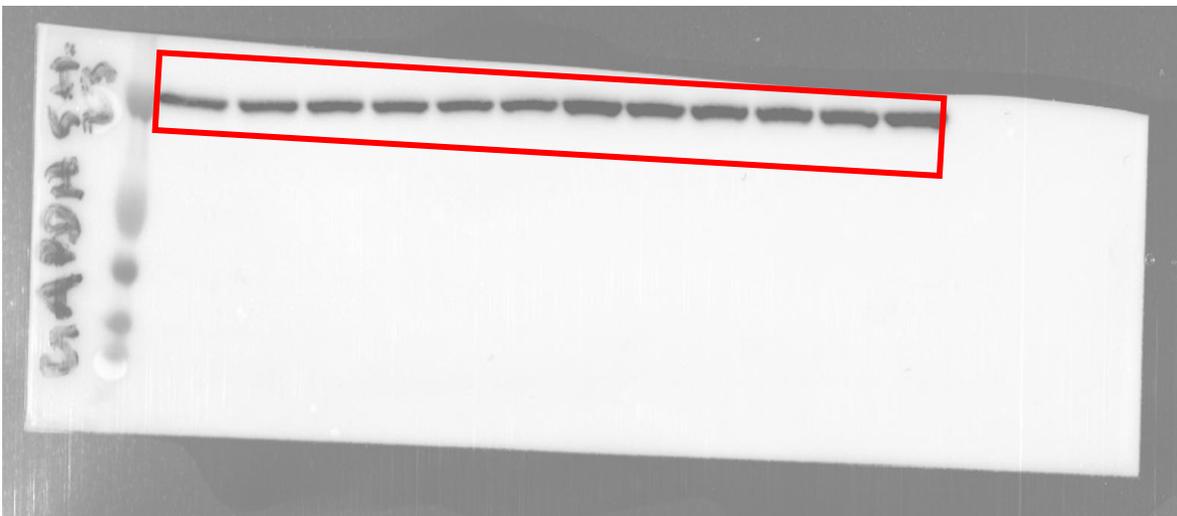
P-CAMKII



CAMKII



GAPDH

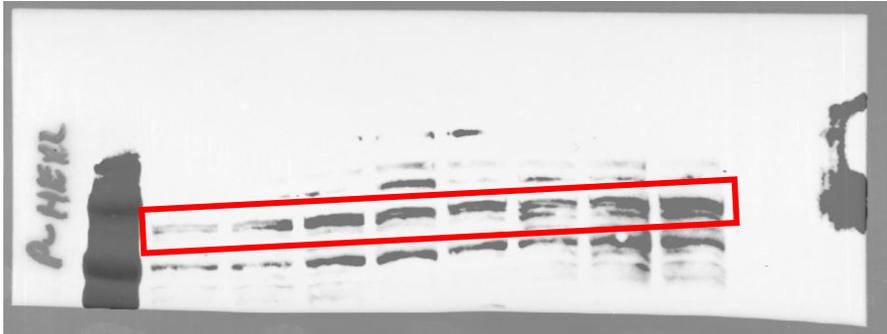


Full and Unedited Blots for Supplemental Figure 9A

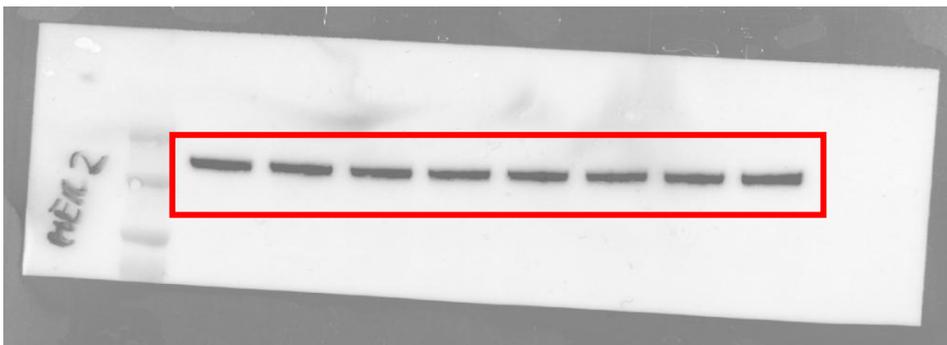
PC3+rmASP

Lanes: 0, 2, 5, 10, 15, 30, 60, 120 min ASPN unless noted

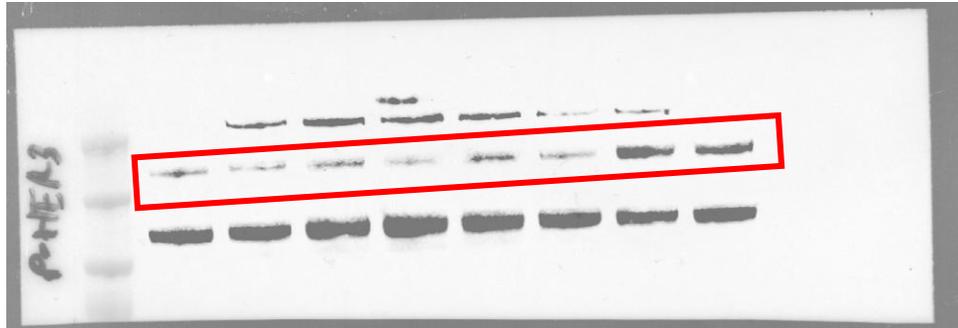
P-HER2



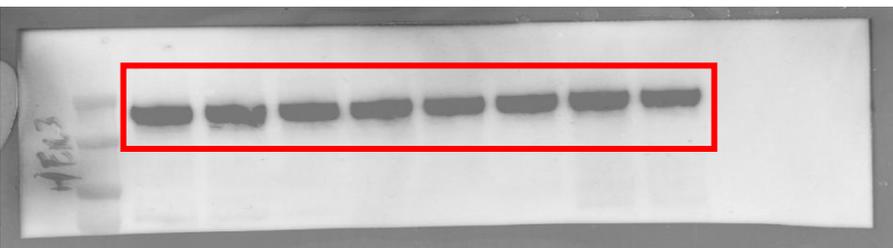
HER2



P-HER3



HER3



Full and Unedited Blots for Supplemental Figure 9A Continued

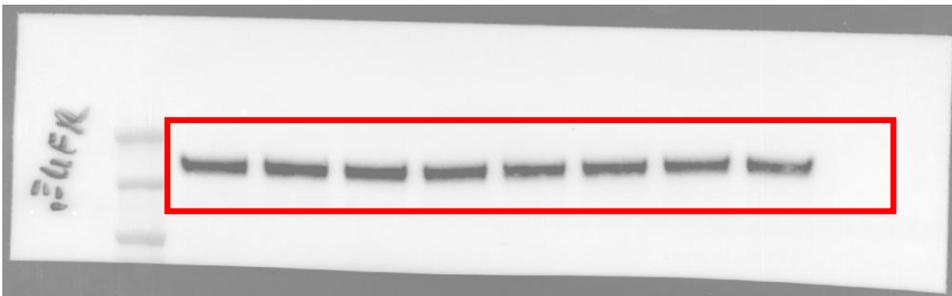
P-EGFR Y845



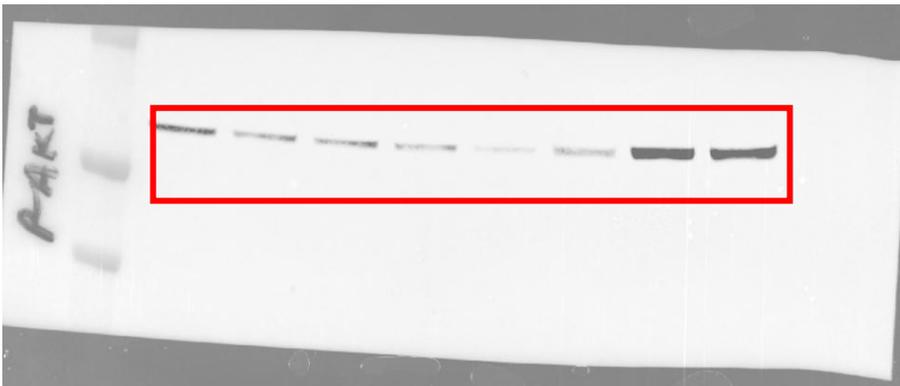
P-EGFR Y1173



EGFR

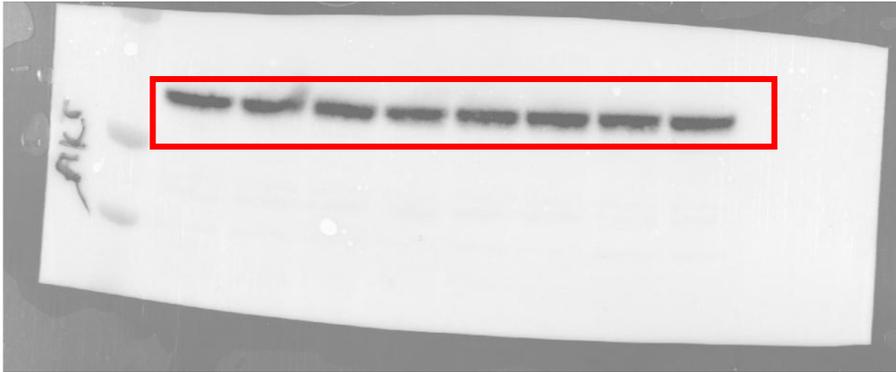


P-AKT

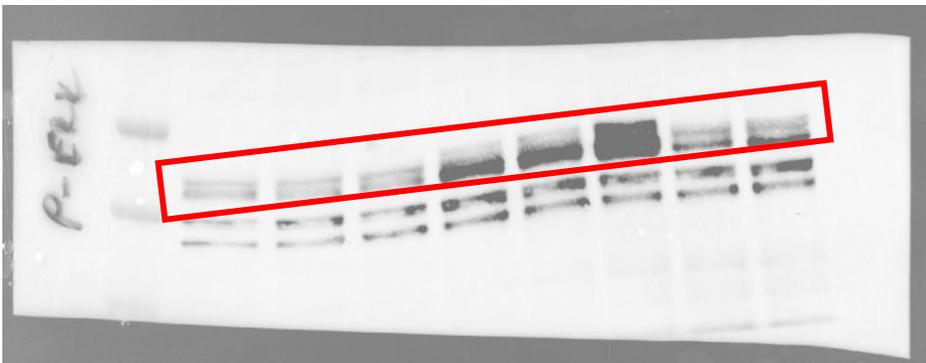


Full and Unedited Blots for Supplemental Figure 9A Continued

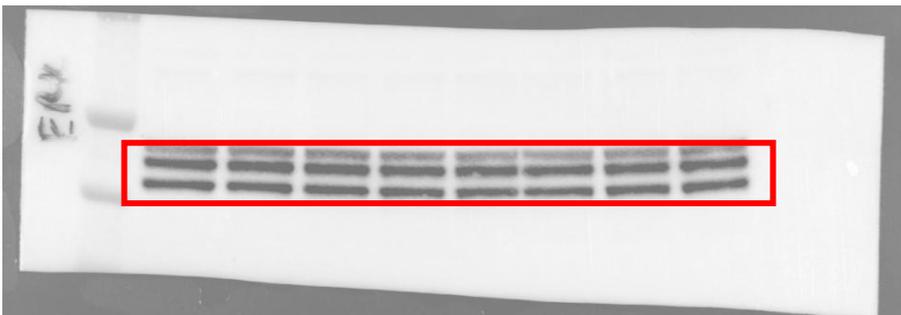
AKT



P-ERK



ERK

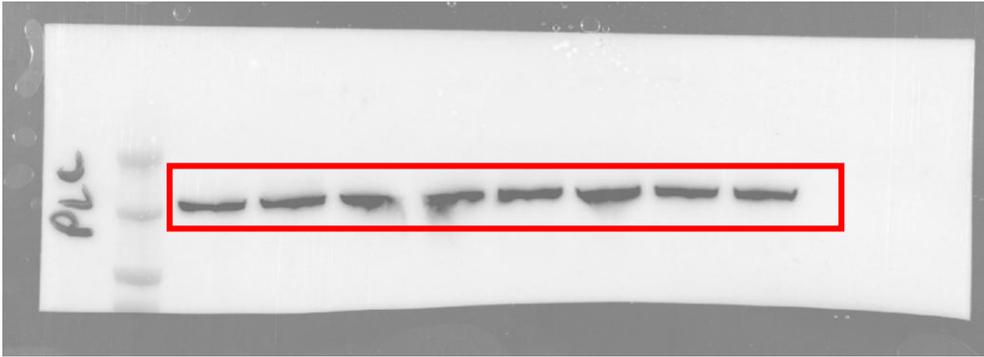


P-PLC

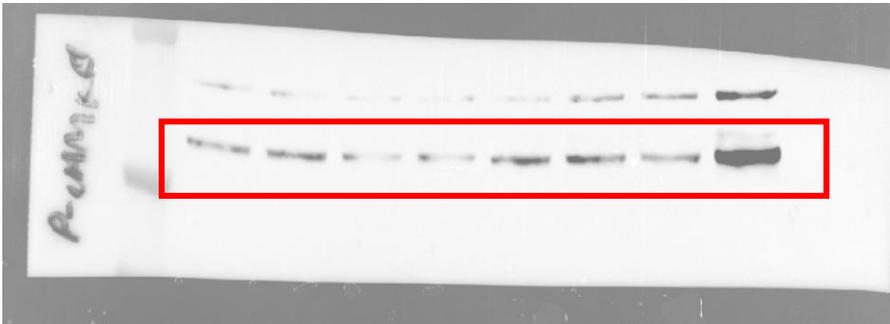


Full and Unedited Blots for Supplemental Figure 9A Continued

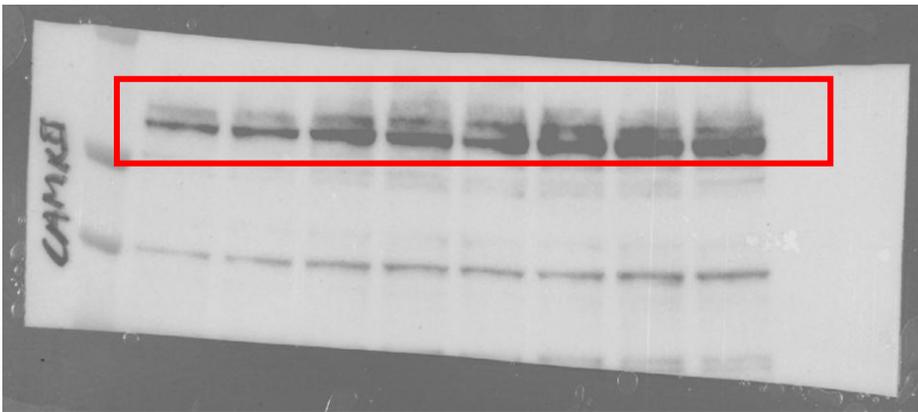
PLC



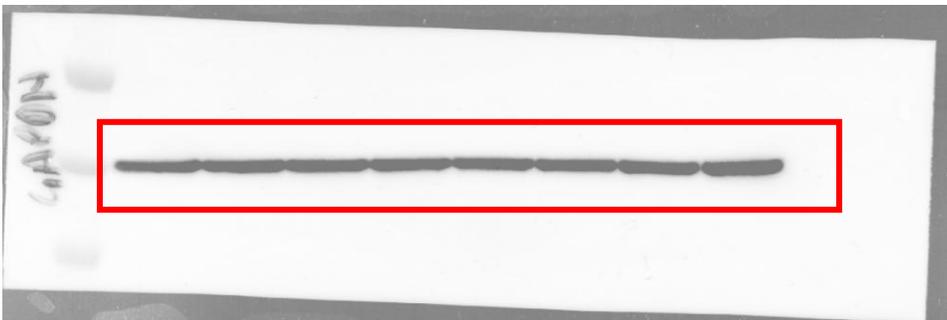
P-CAMKII



CAMKII



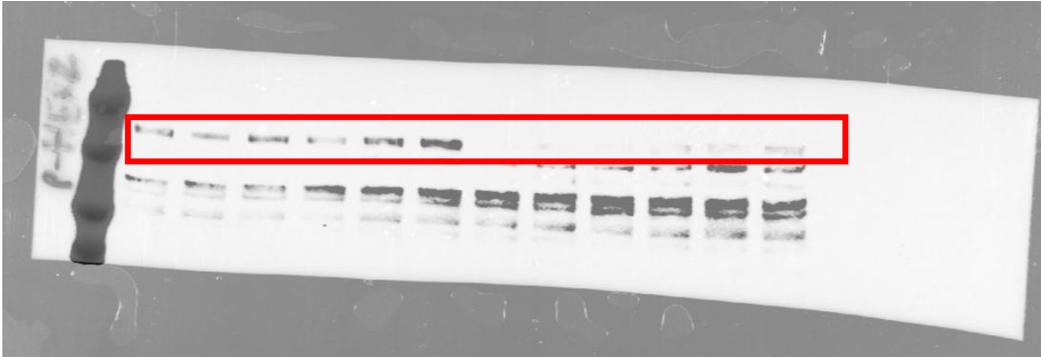
GAPDH



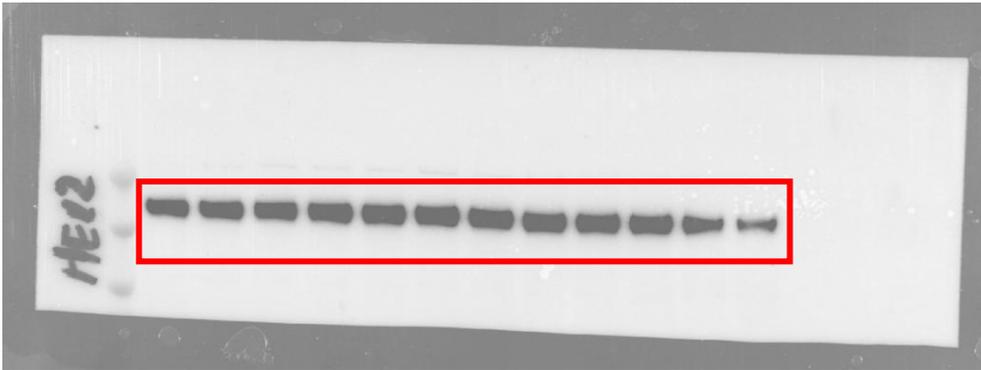
**Full and Unedited Blots for Supplemental Figure 9B**

**PC3+rmASPEN+Tucatinib**

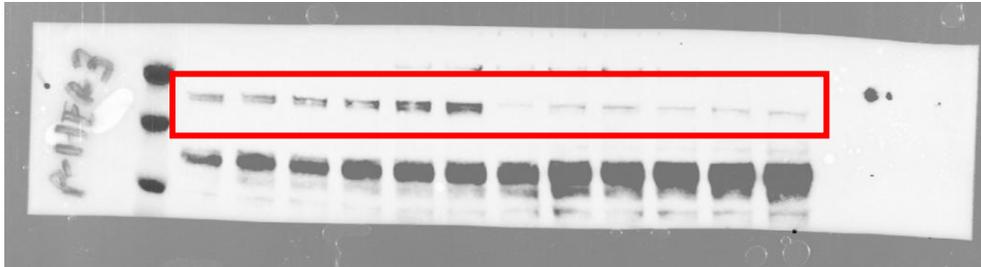
Lanes: ASPN 0, 5, 10, 15, 30, 60, ASPN+Tuc 0, 5, 10, 15, 30, 60 unless noted  
P-HER2



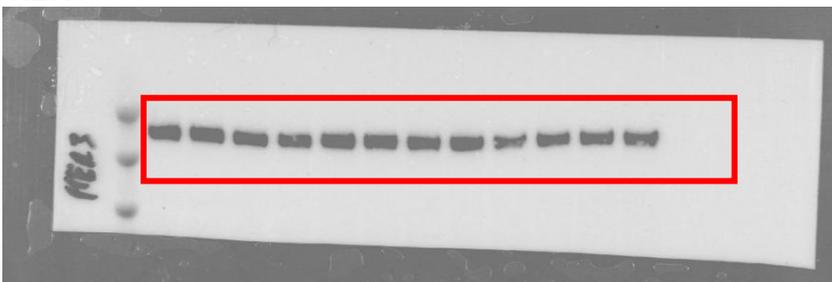
**HER2**



**P-HER3**

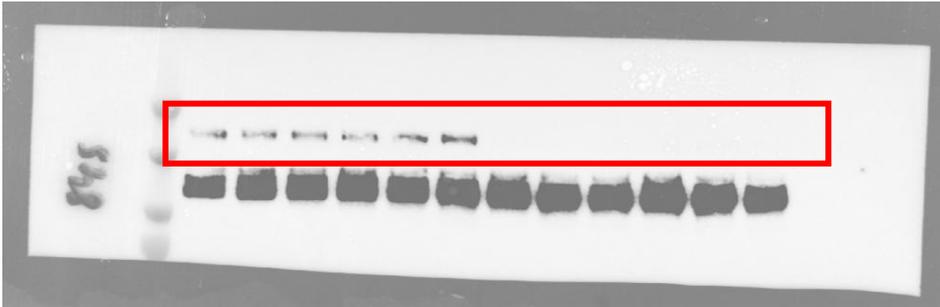


**HER3**

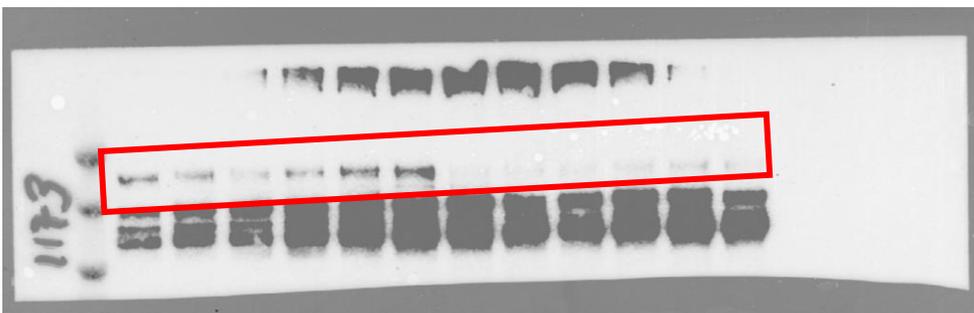


Full and Unedited Blots for Supplemental Figure 9B Continued

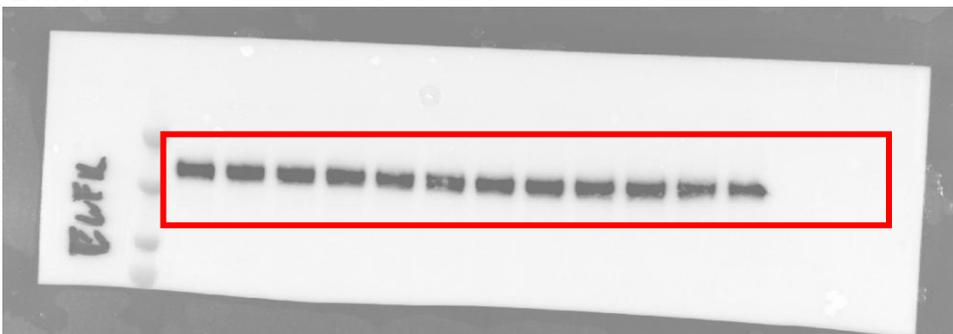
P-EGFR Y845



P-EGFR Y1173



EGFR

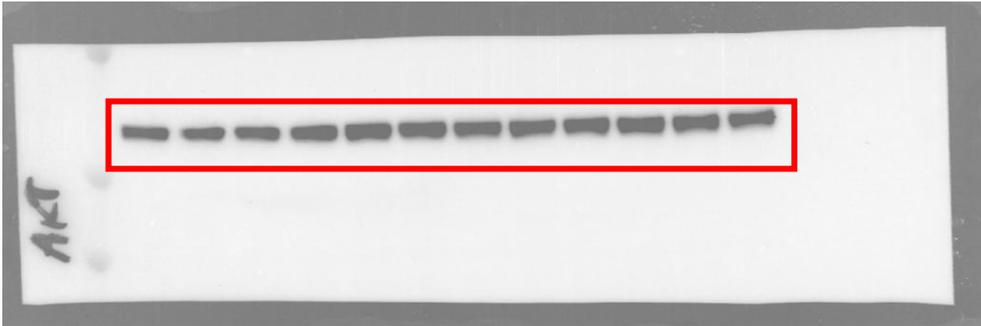


P-AKT

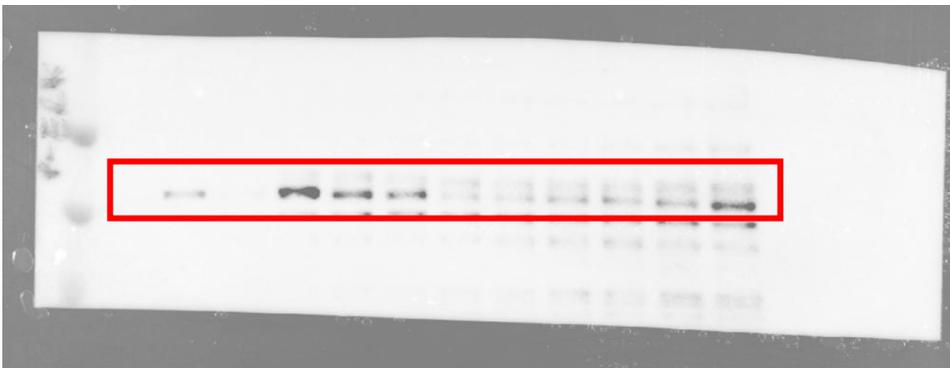


Full and Unedited Blots for Supplemental Figure 9B Continued

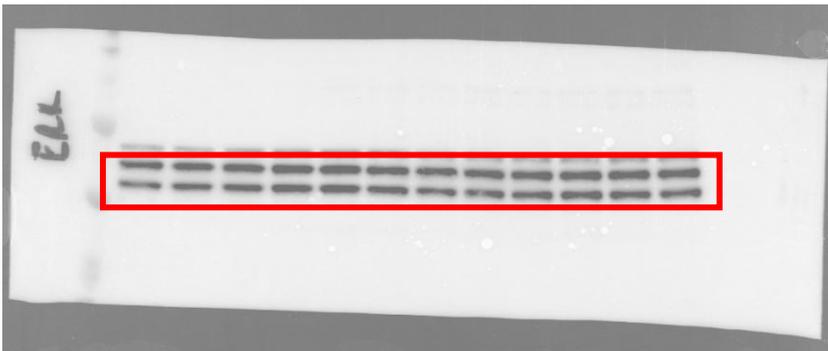
AKT



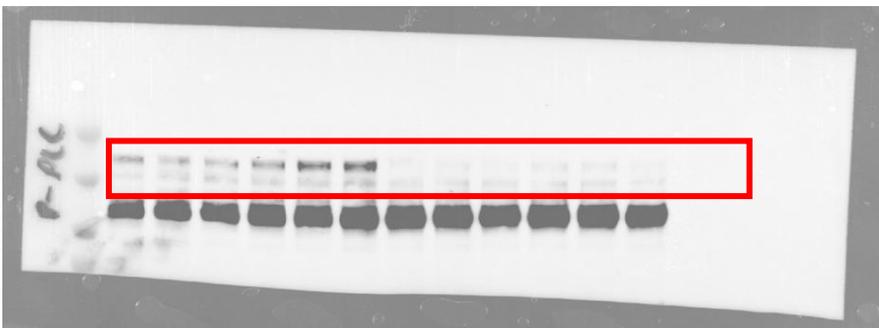
P-ERK



ERK

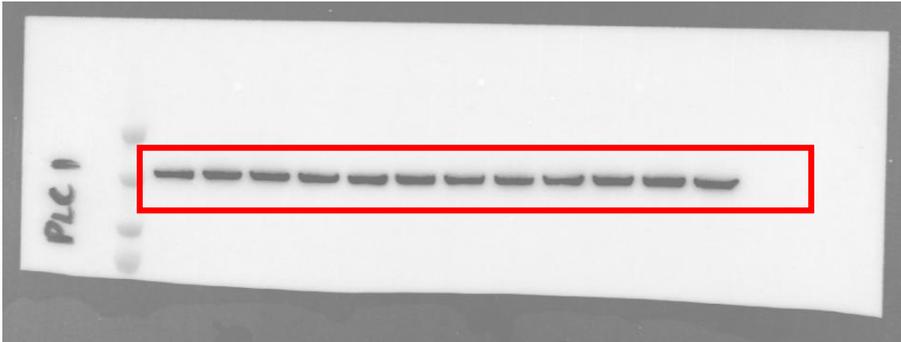


P-PLC

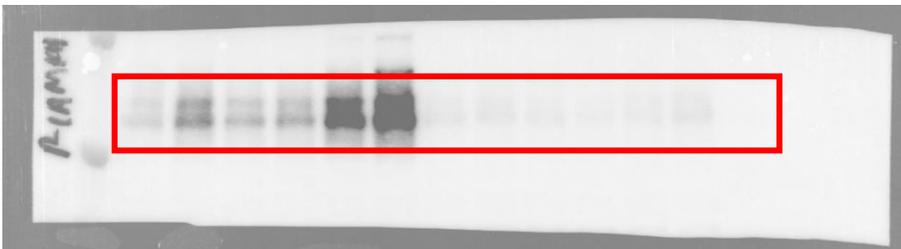


Full and Unedited Blots for Supplemental Figure 9B Continued

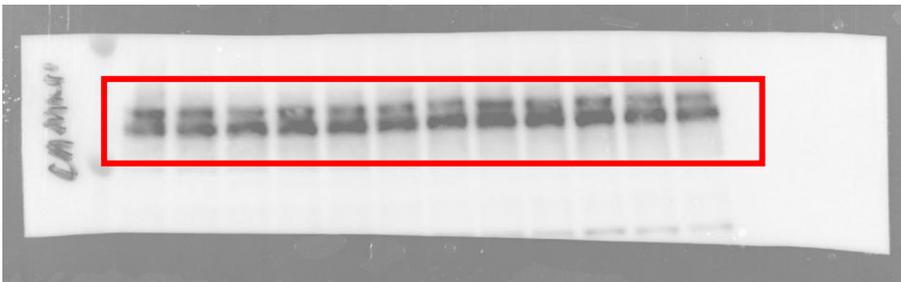
PLC



P-CAMKII



CAMKII



GAPDH

