

P and total
p70S6K

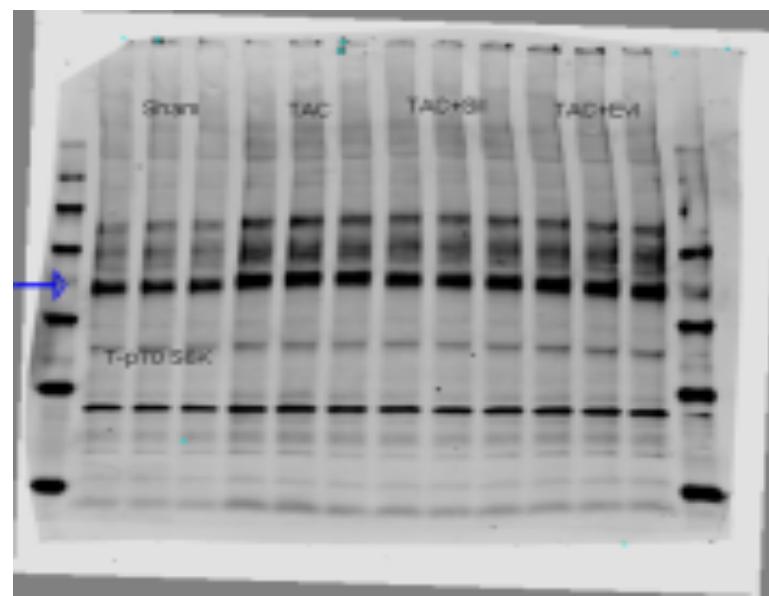
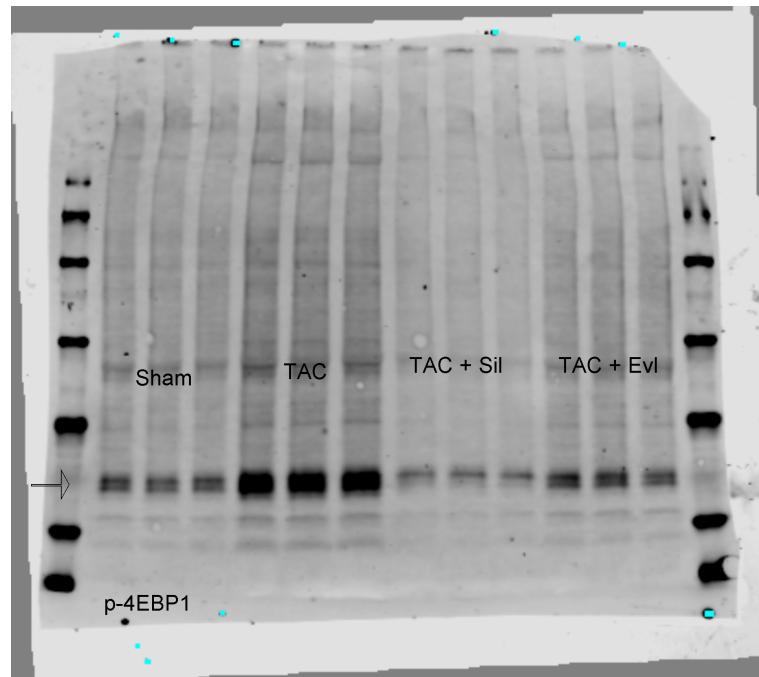


Figure 1A upper (Replicate 1)



P and total
4EBP1

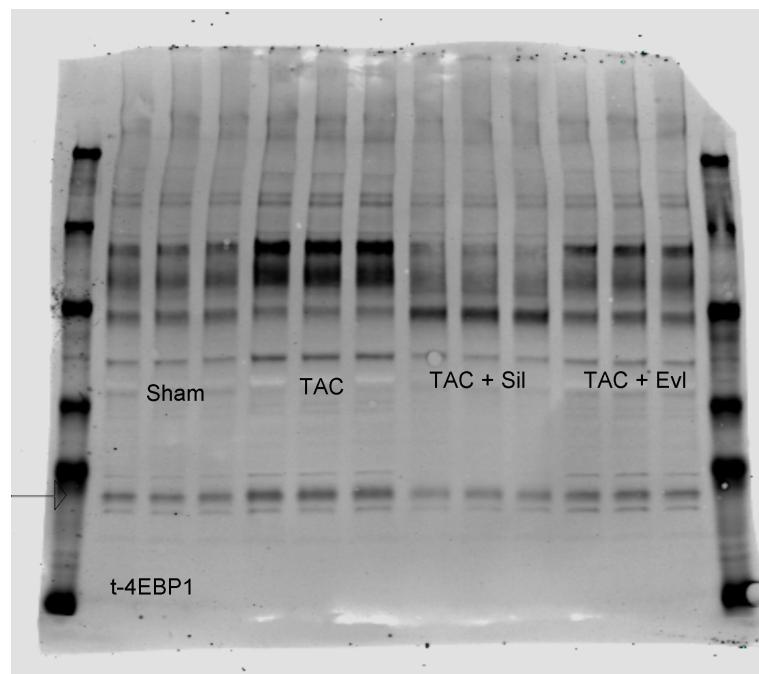
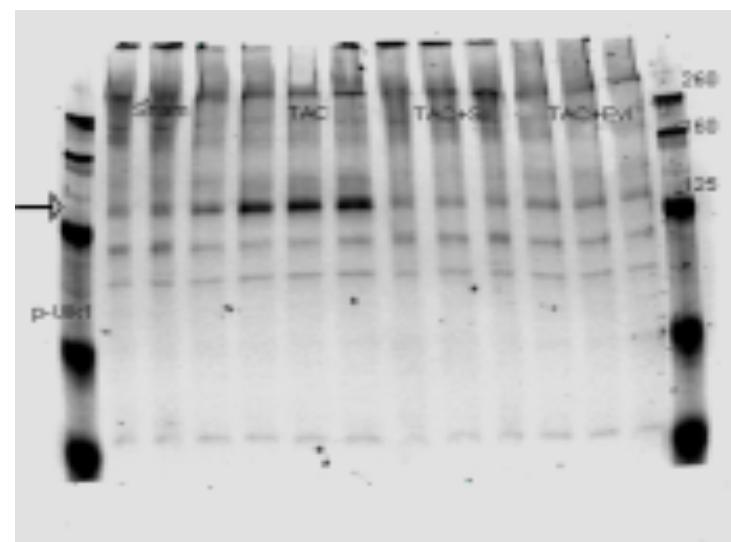


Figure 1A mid (Replicate 1)



P and total
Ulk1

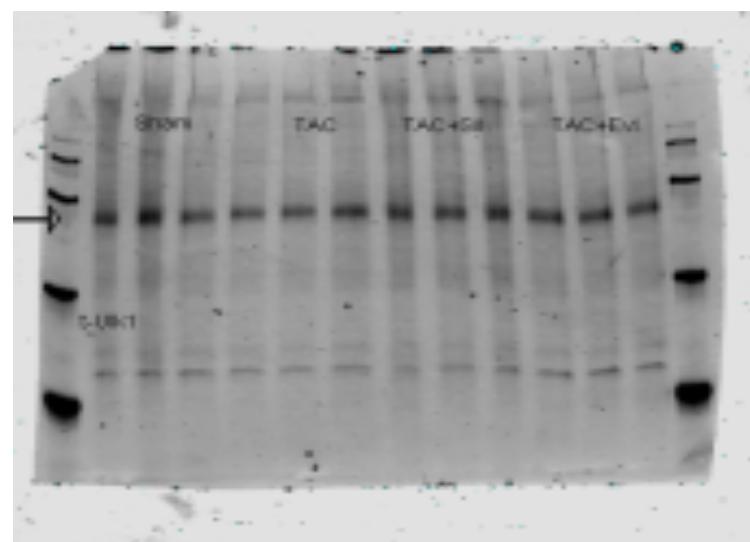
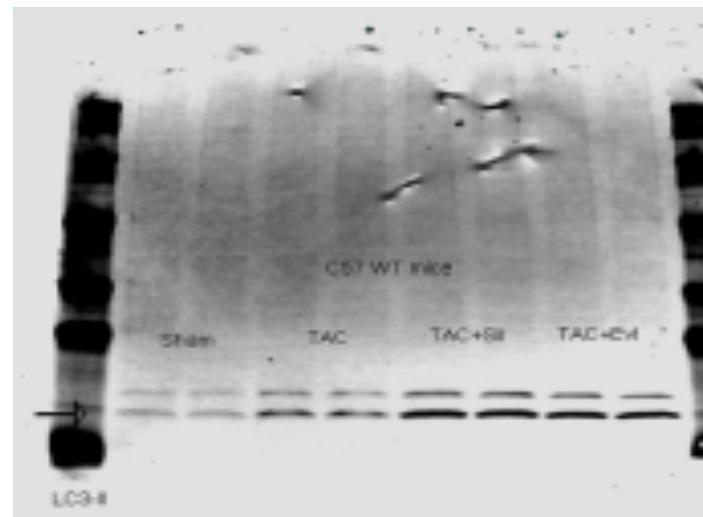


Figure 1A lower (Replicate 1)



Upper LC3-II and lower
GAPDH

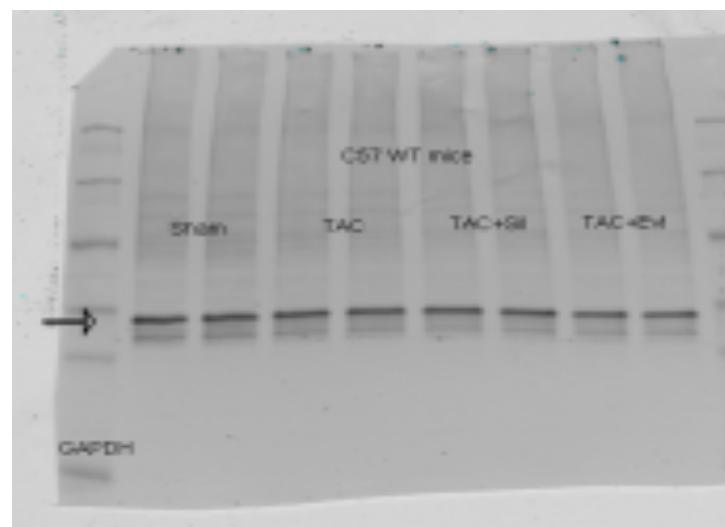
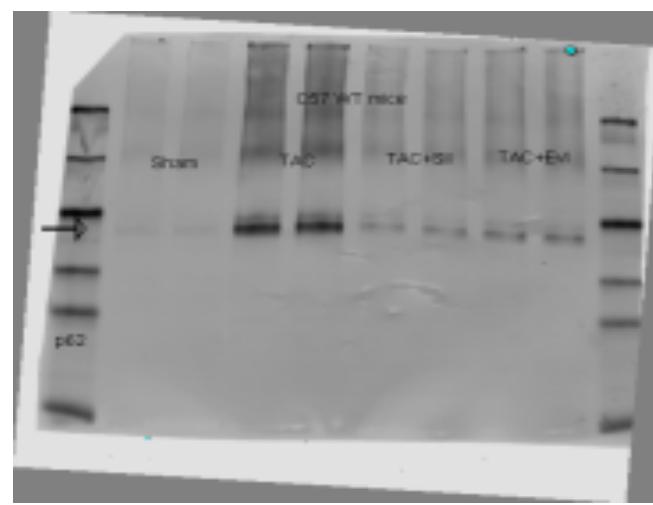


Figure 1B: upper Replicate 3



P62 and GAPDH

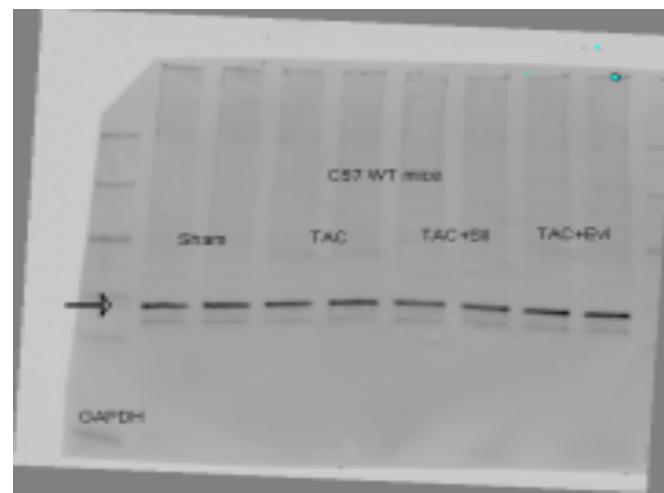
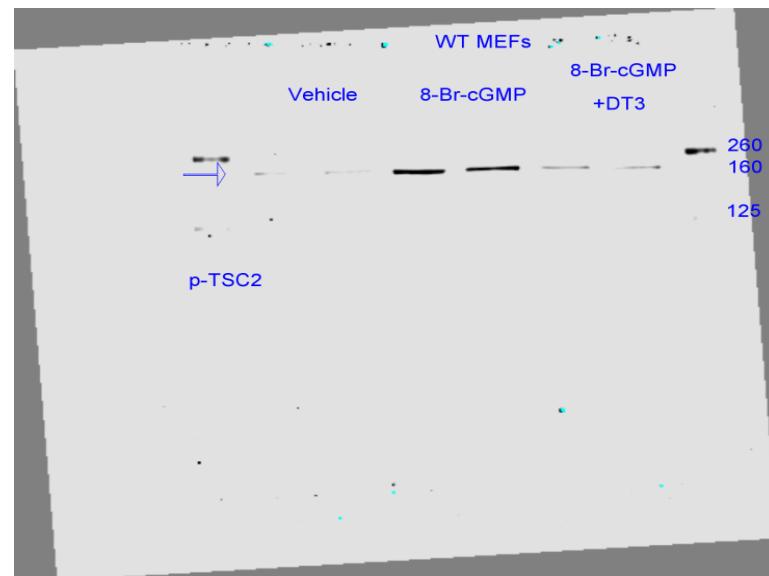


Figure 1B: lower Replicate 2



pTSC2-1365and total TSC2

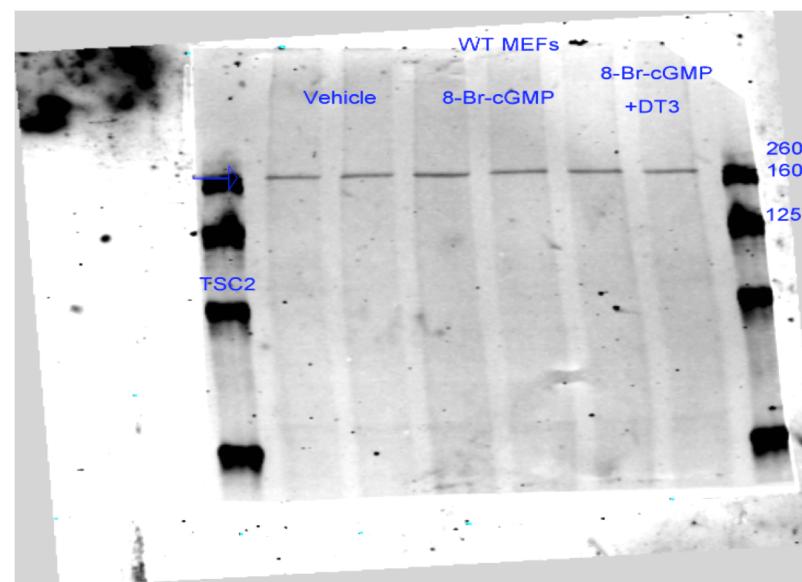
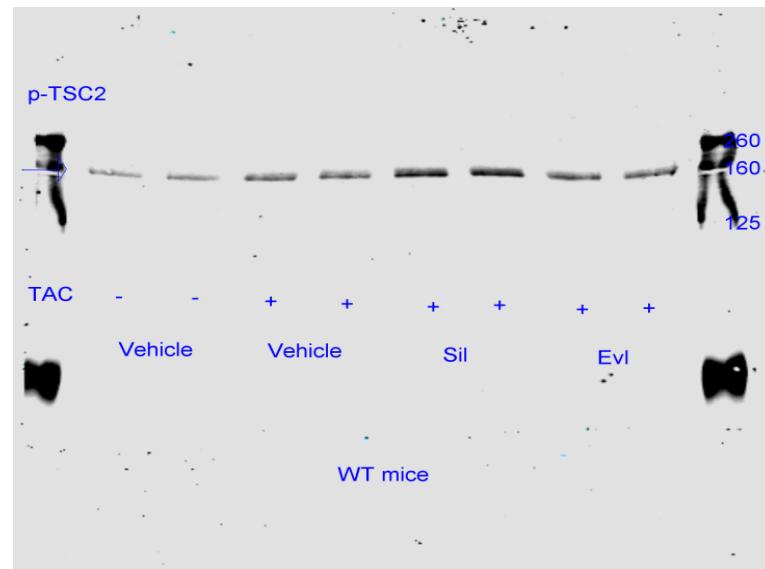


Figure 1e upper. Replicate 3



pTSC2-1365 and total TSC2
For intact heart data

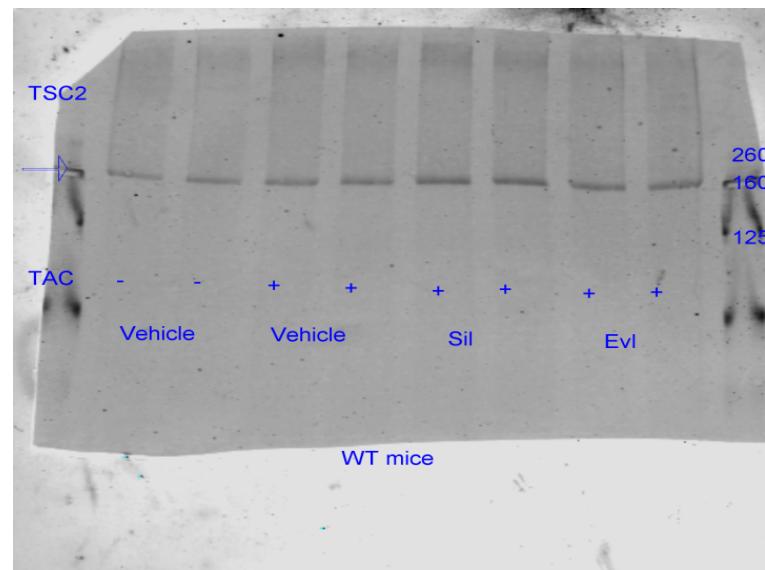
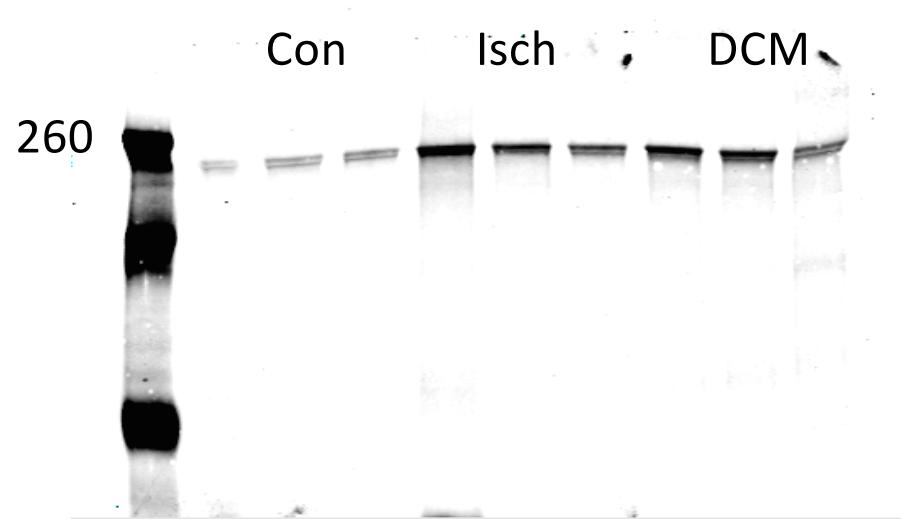
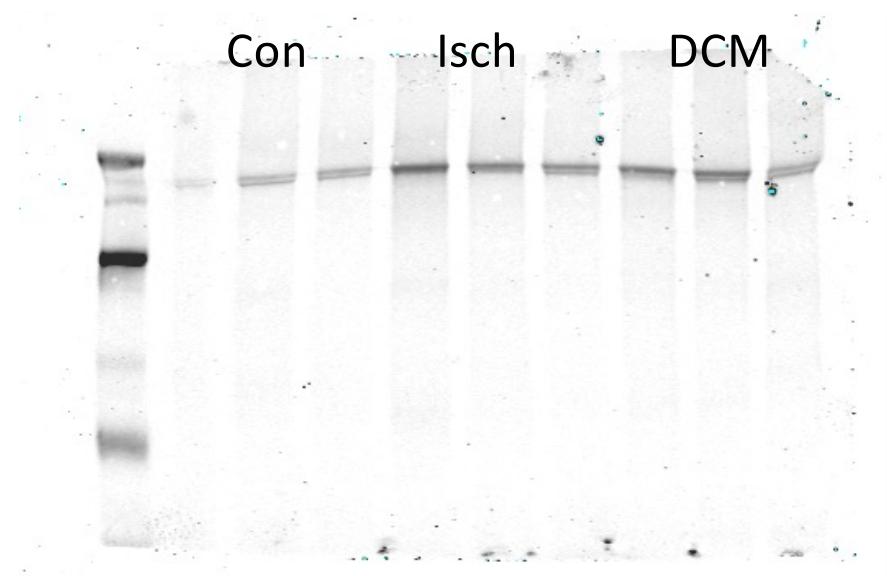


Figure 1e lower. Replicate 1

pTSC2-1365 and total TSC2
For human data

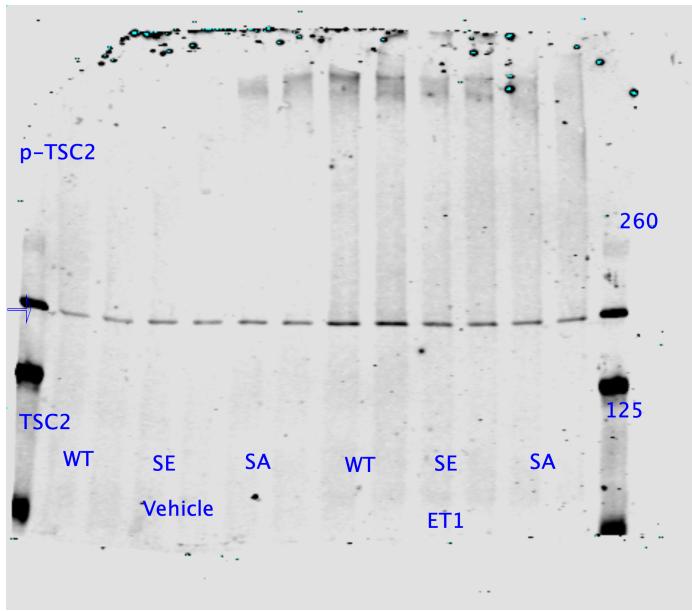


pTSC2 S1365



tTSC2 S1365

Figure 1h. Gel 2 20171228



pTSC2-1365 and total TSC2
For cultured cardiomyocyte data

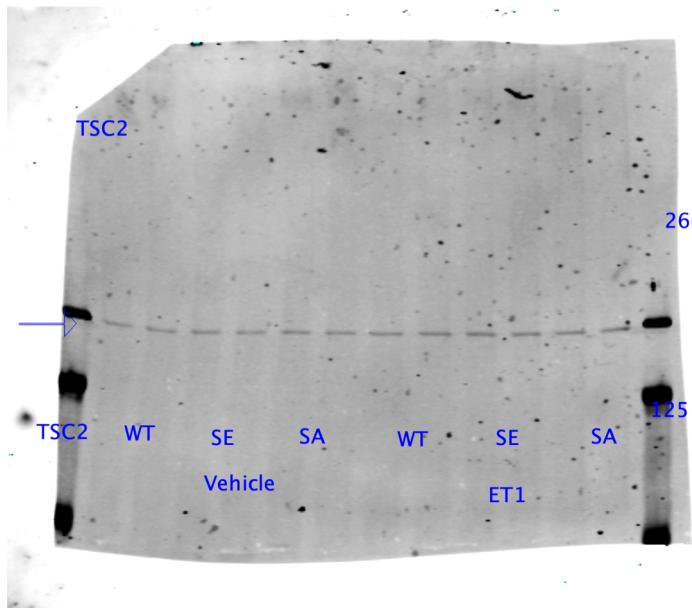
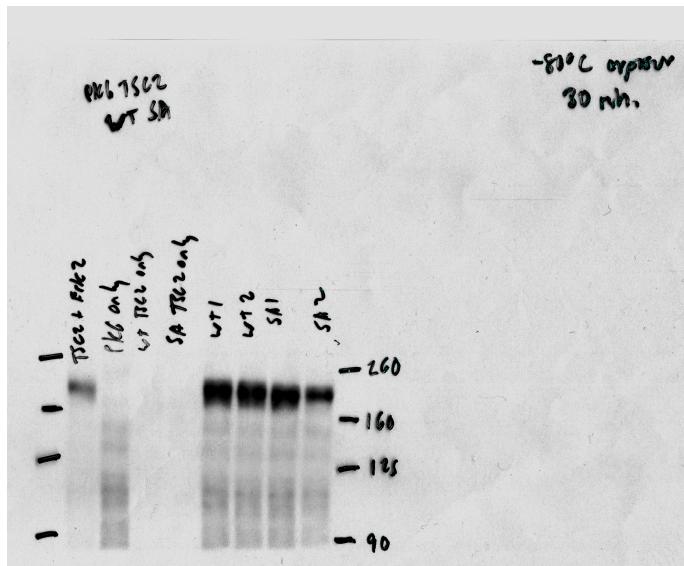


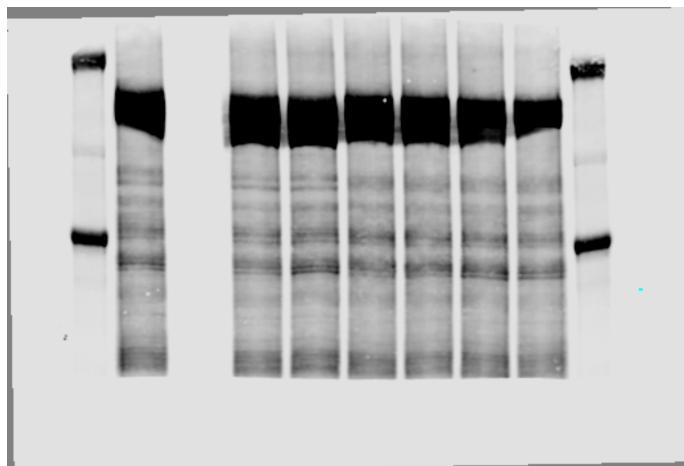
Figure 1i – Gel 1. Phospho and Total TSC2

³³P-TSC2 (top gel)



TSC2 phosphorylation, total
TSC2, and HA-TSC2
For radioactive kinase assay

TSC2 (middle gel)



HA (lower gel)

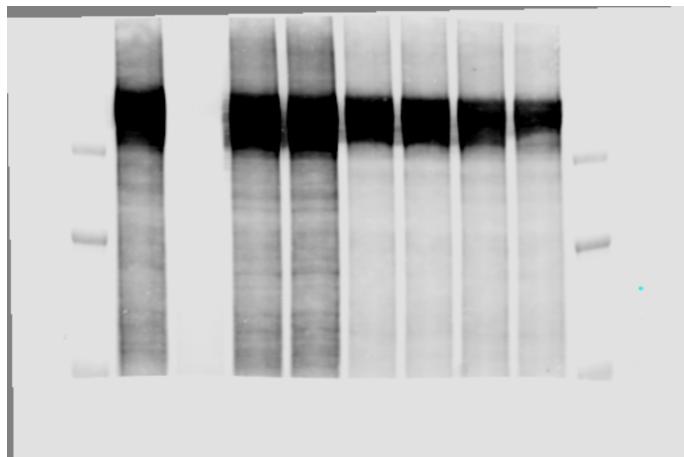


Figure 1j

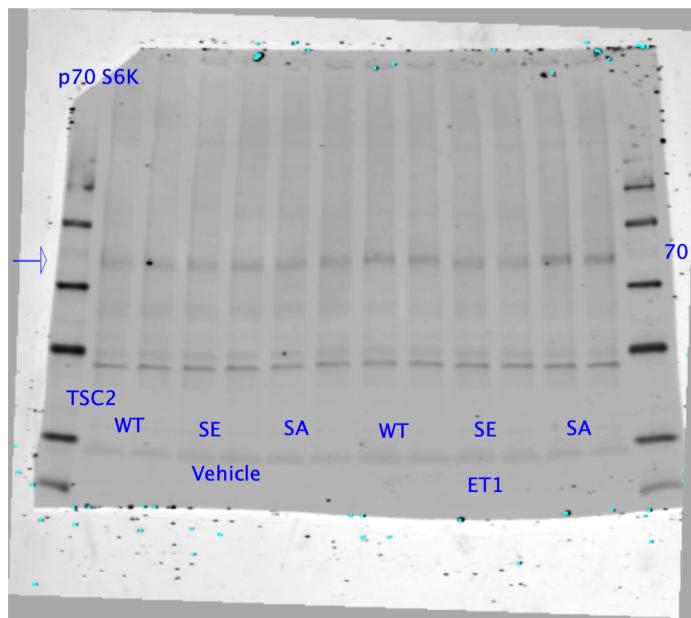
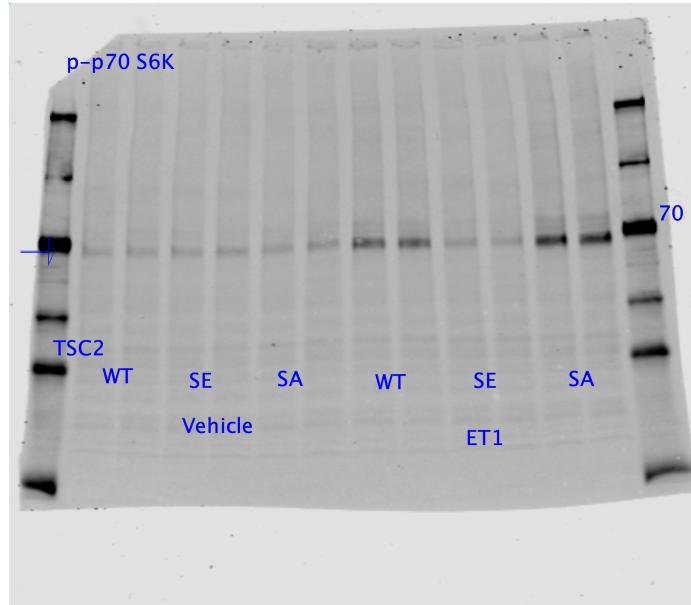


Figure 2b (upper panels) – Gel 5. p/t p70S6K

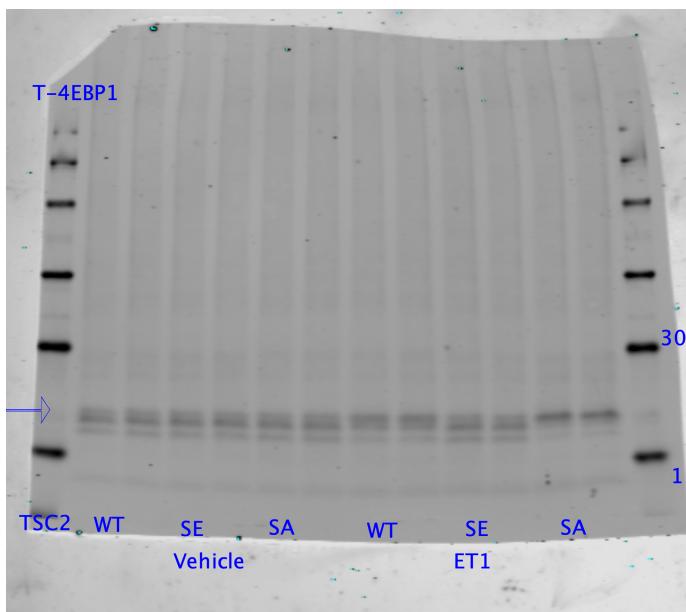
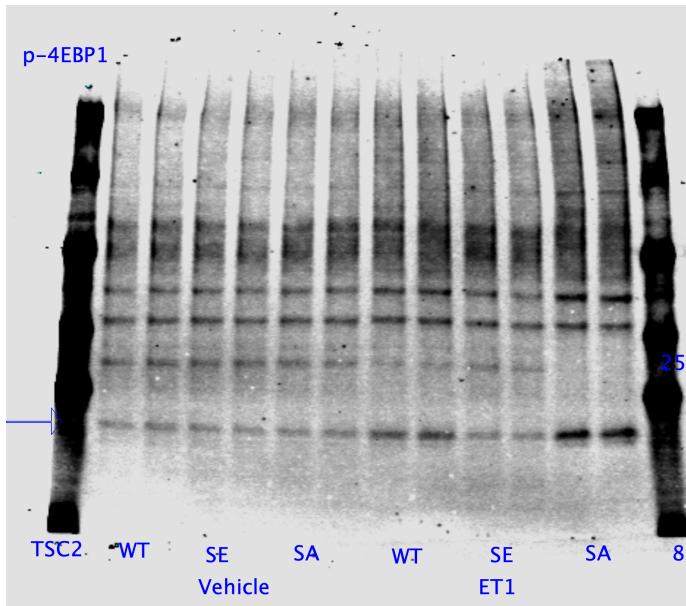


Figure 2b (middle panels)– Gel 3. p/t 4EBP1

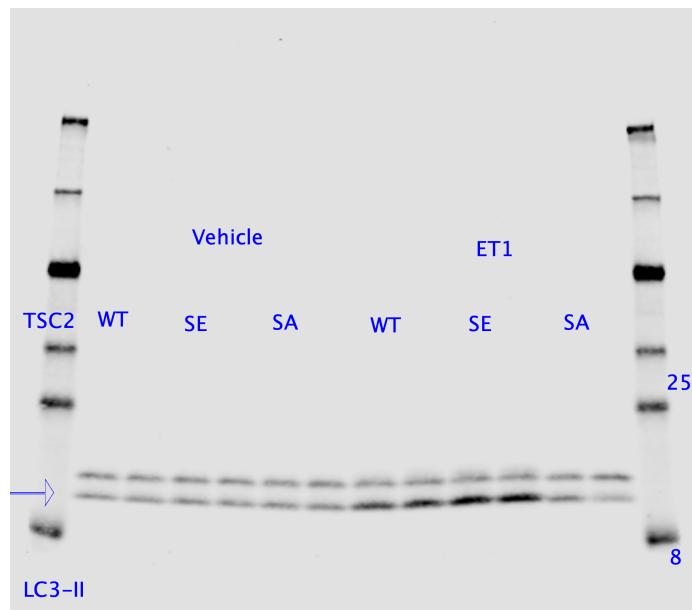
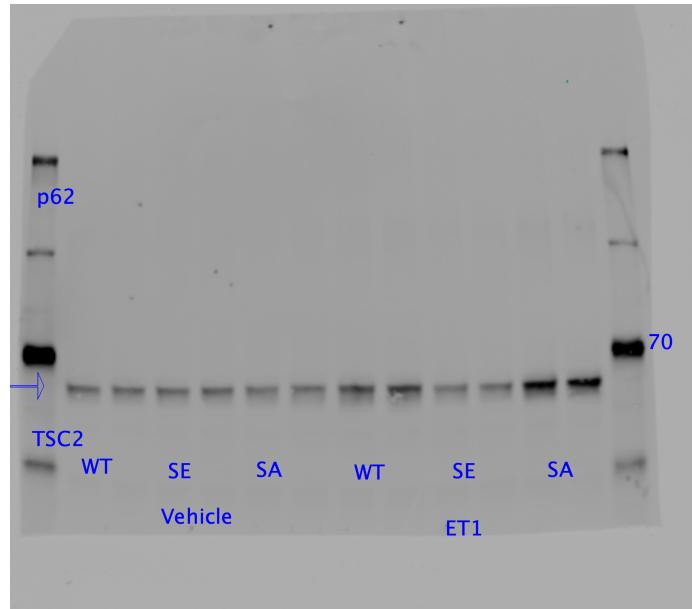


Figure 2b (lower panels)– Gel 3. p62 and Gel1. LC3

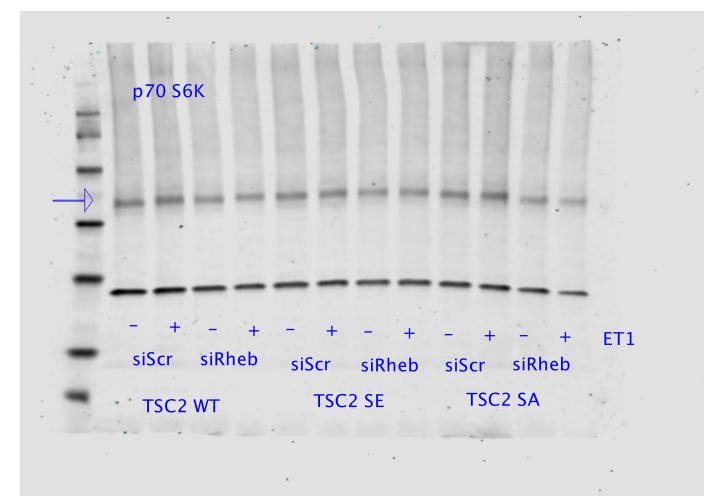
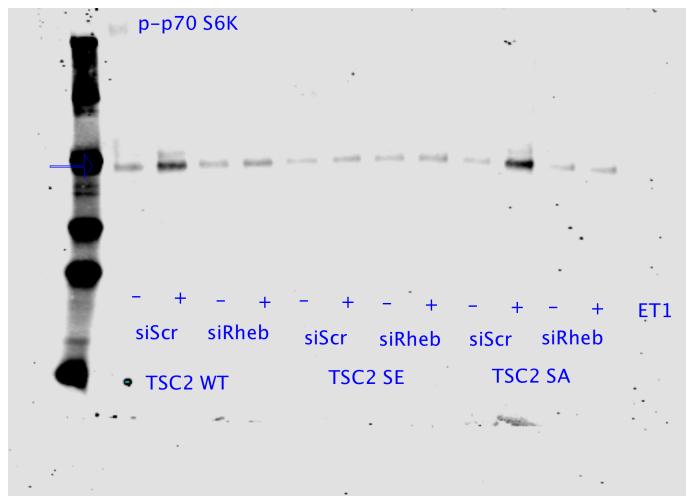
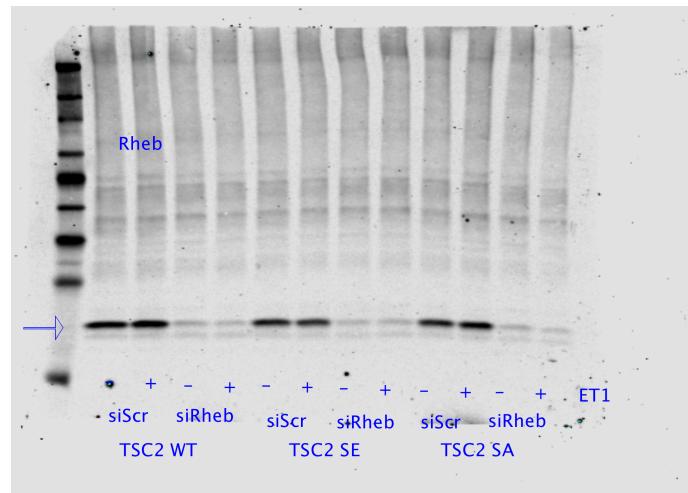


Figure 2d – replicate 4. Rheb total protein; p/t p70S6K

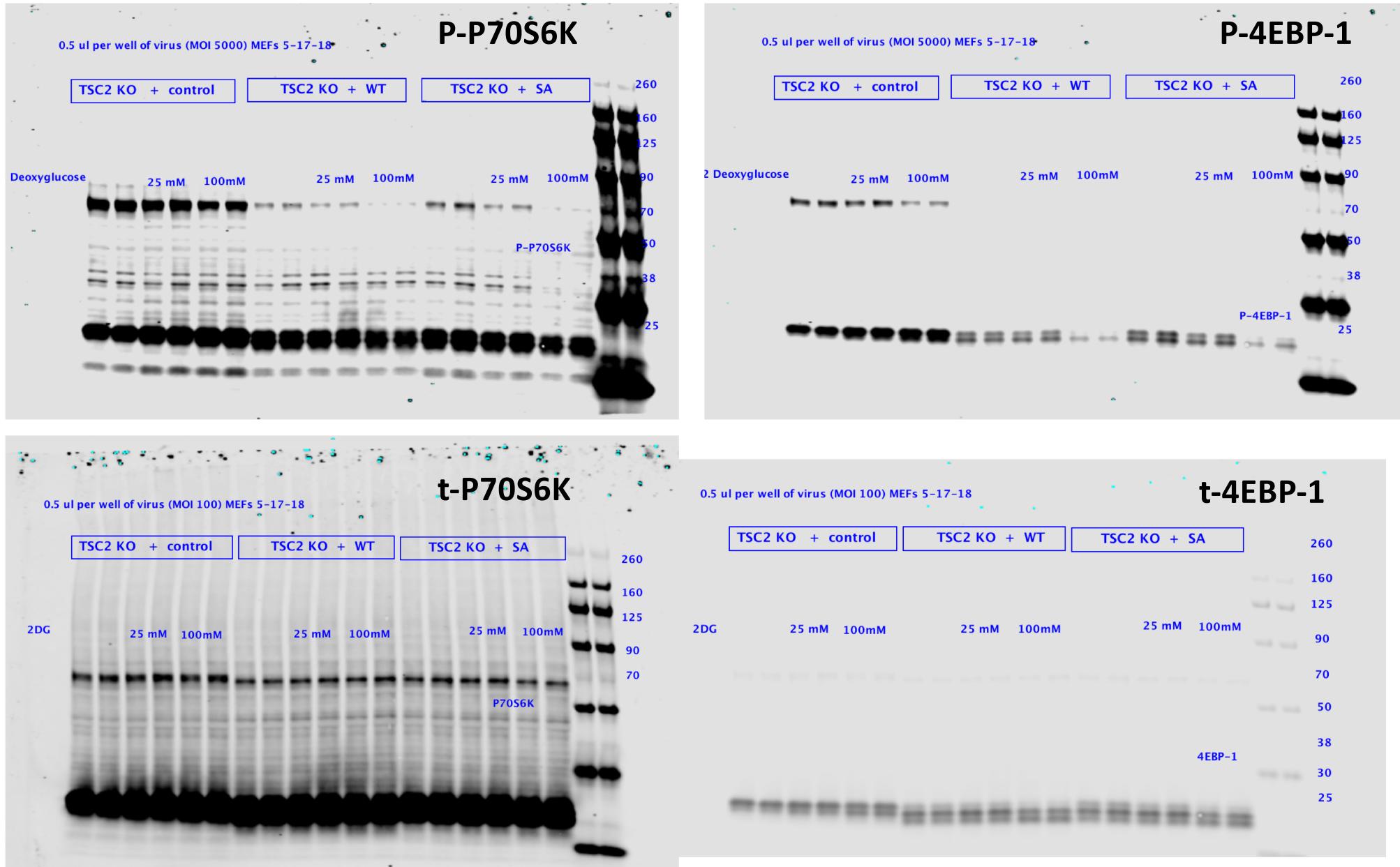
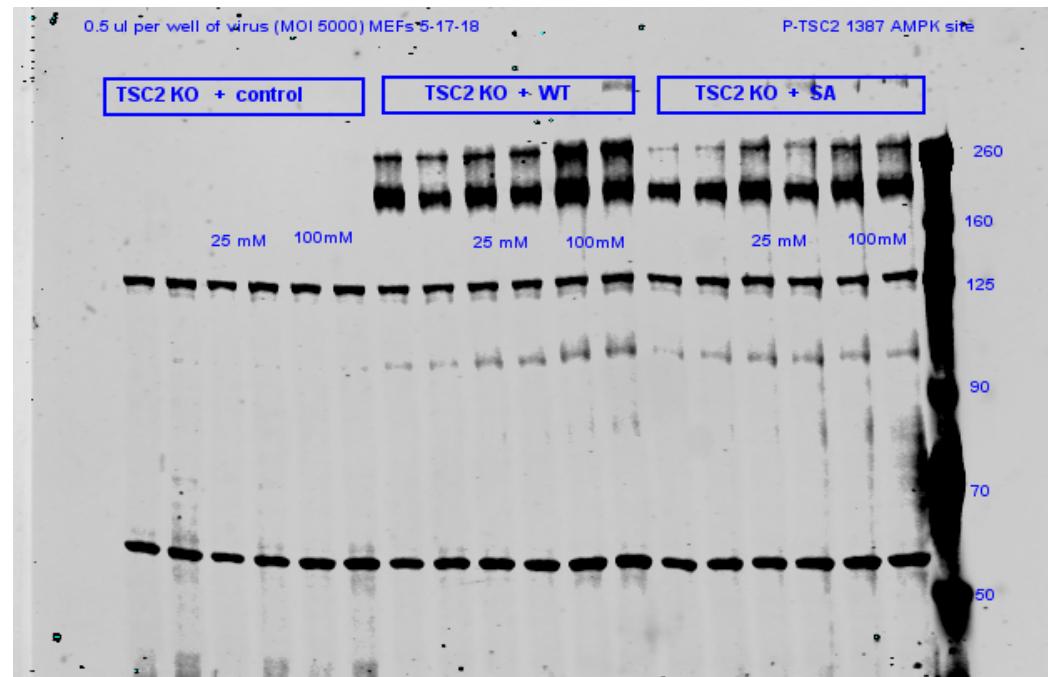


Figure 2E (Run set 1)

→
p-TSC2 S1387



Total TSC2

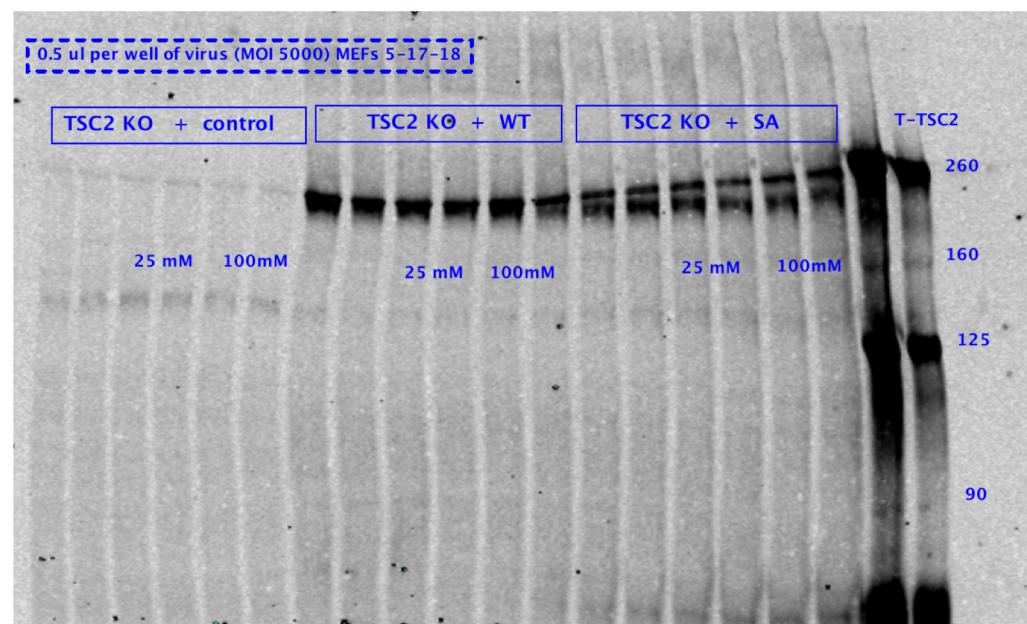
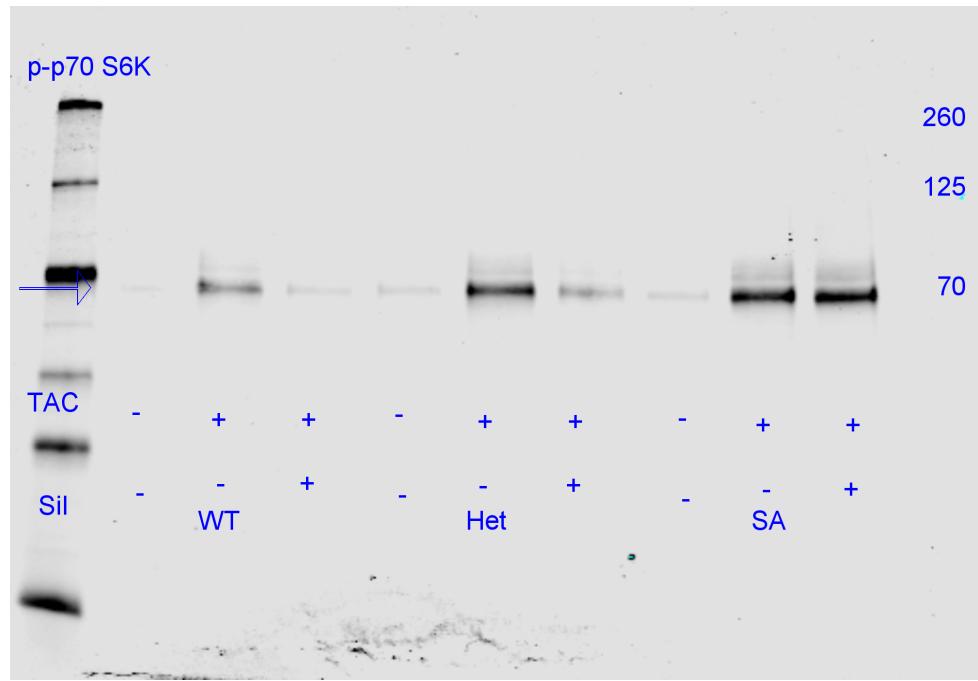


Figure 2E (Run set 1)



Phospho- (upper)
and total (lower)
p70S6K gels

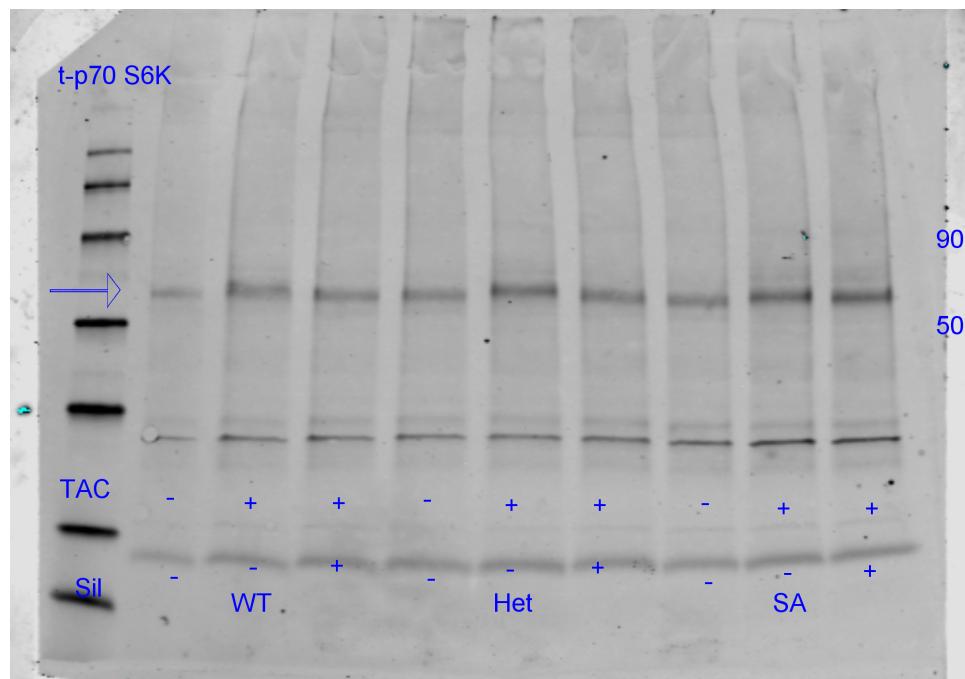


Figure 3e – upper. Replicate 4

p62 (upper) and α-
tubulin (lower)

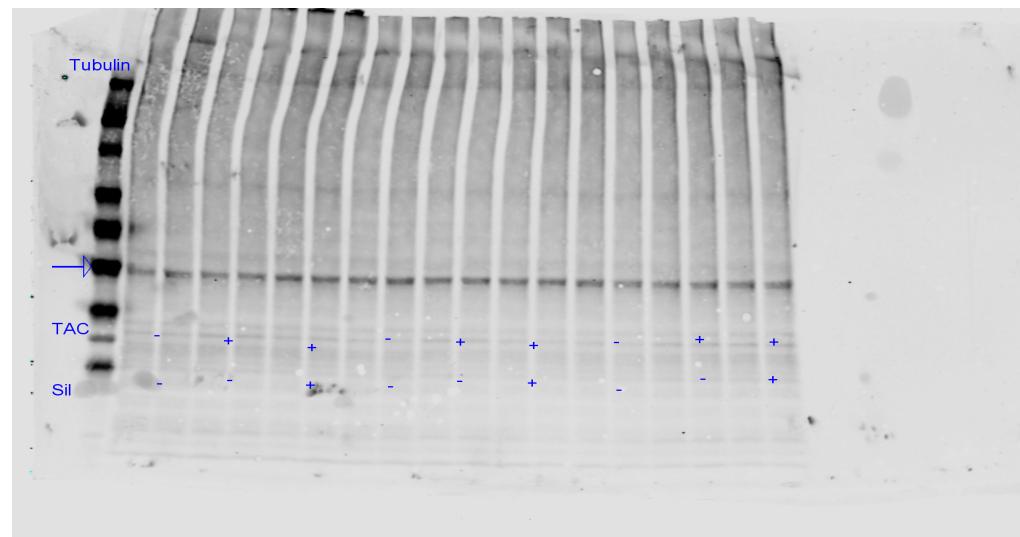
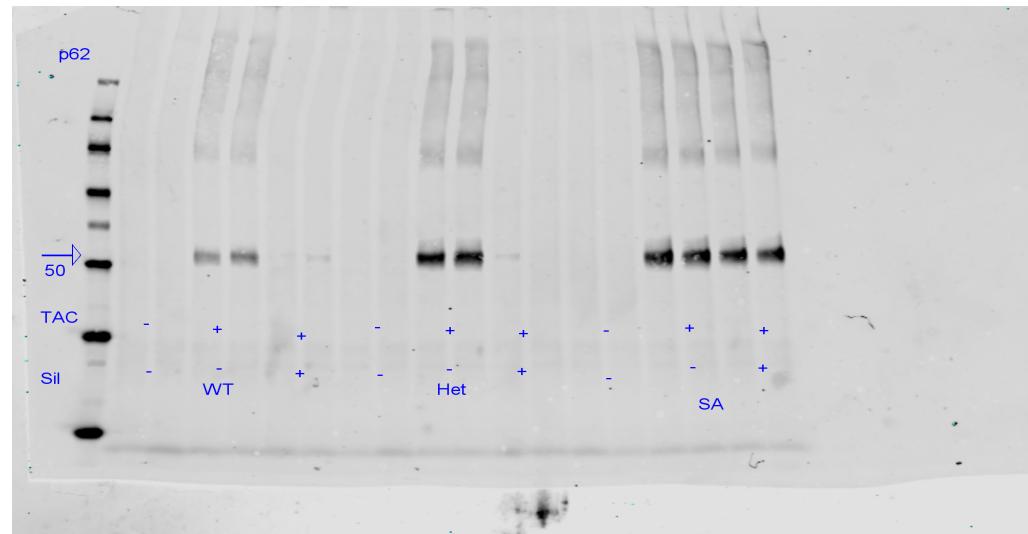


Figure 3e – lower. Replicate 4

Phospho- (upper)
and total (lower) for
p70S6K

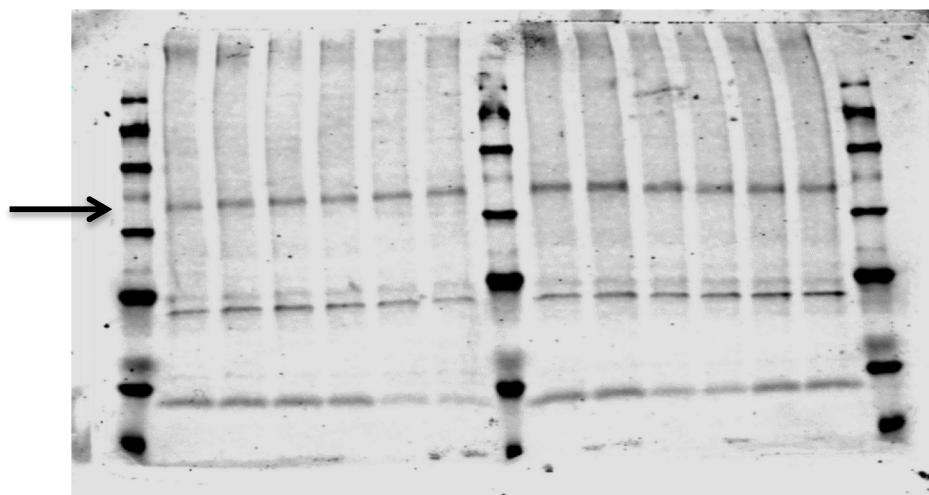
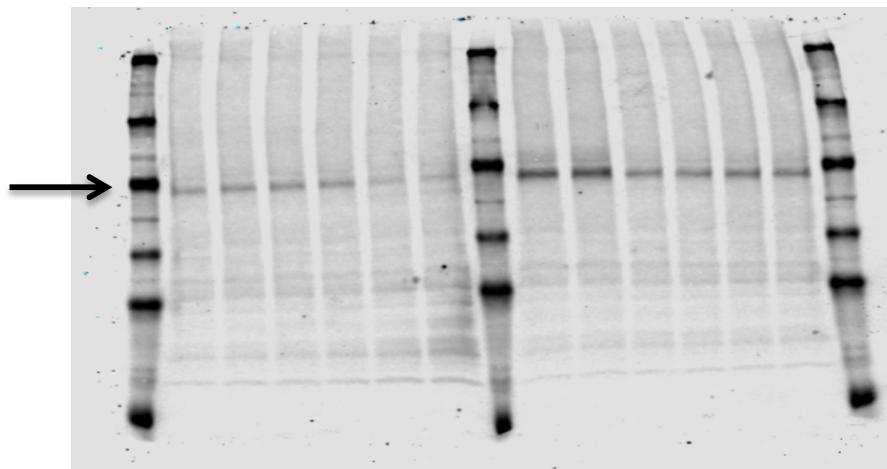


Figure 4f – upper. 11-10-17 membrane run 1

p62 and α -tubulin

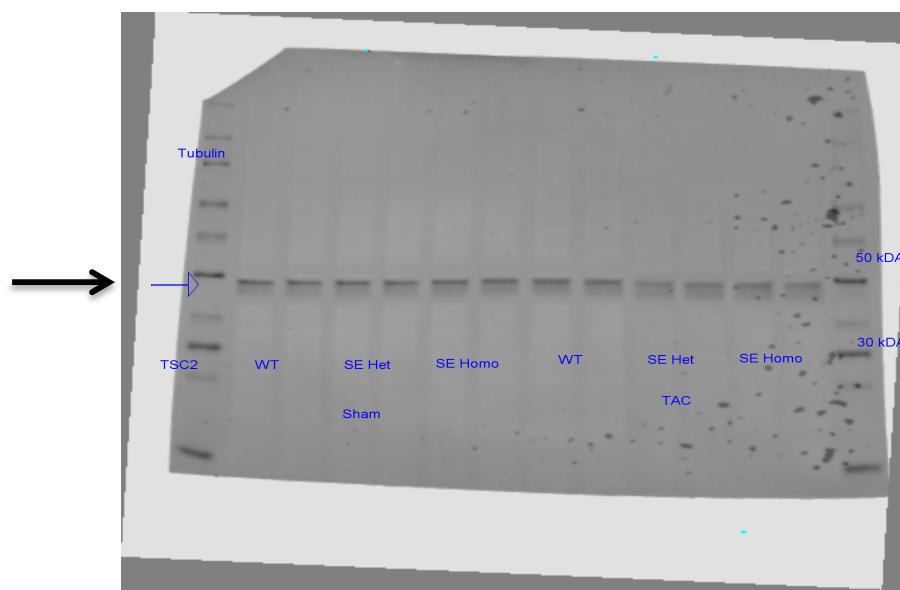
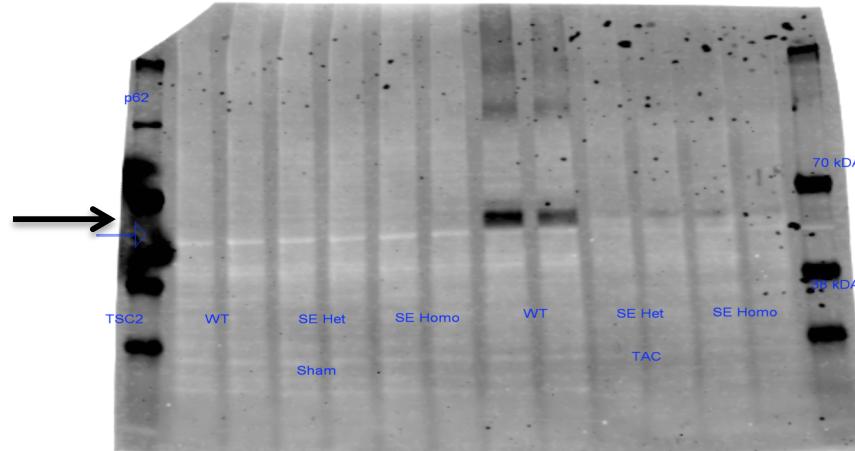


Figure 4f – mid. Gel 1-replicate

LC3-II and total protein gel

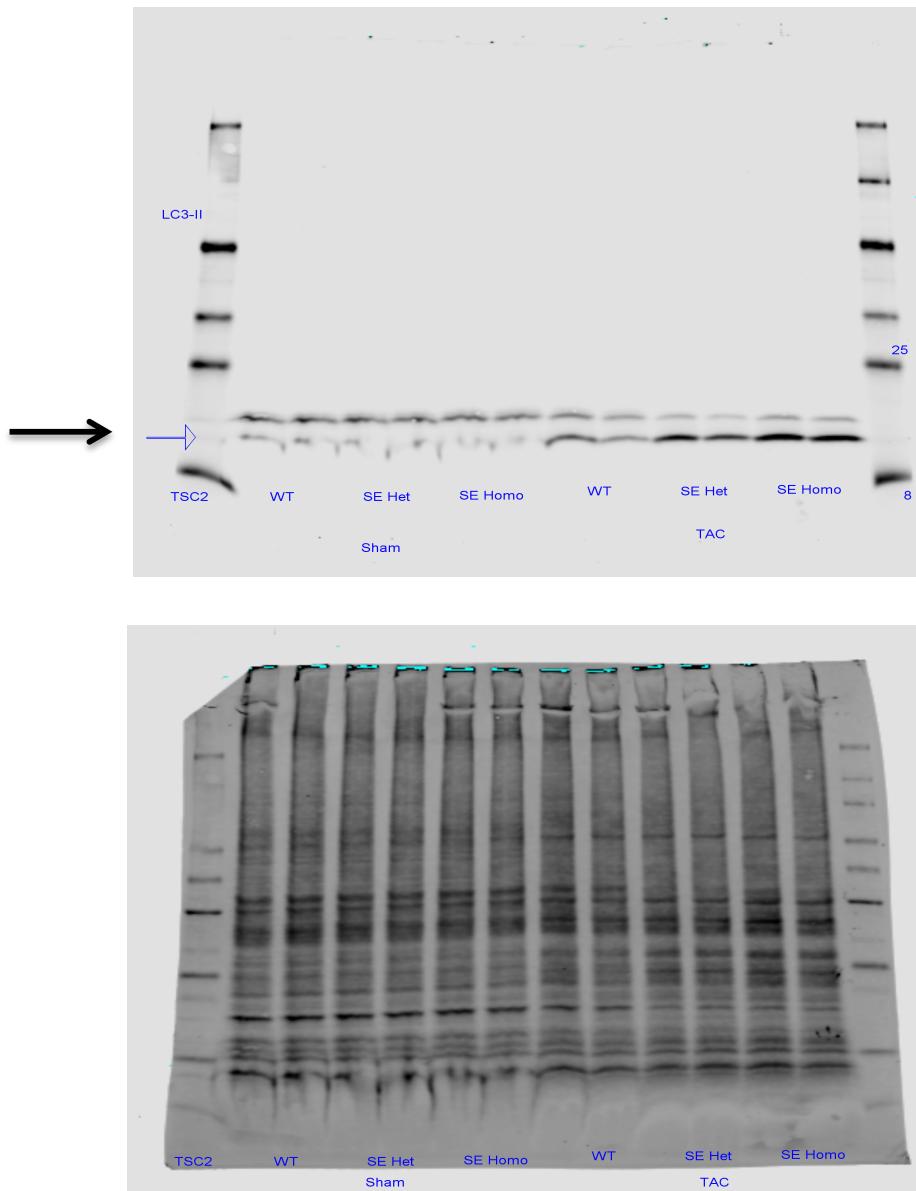
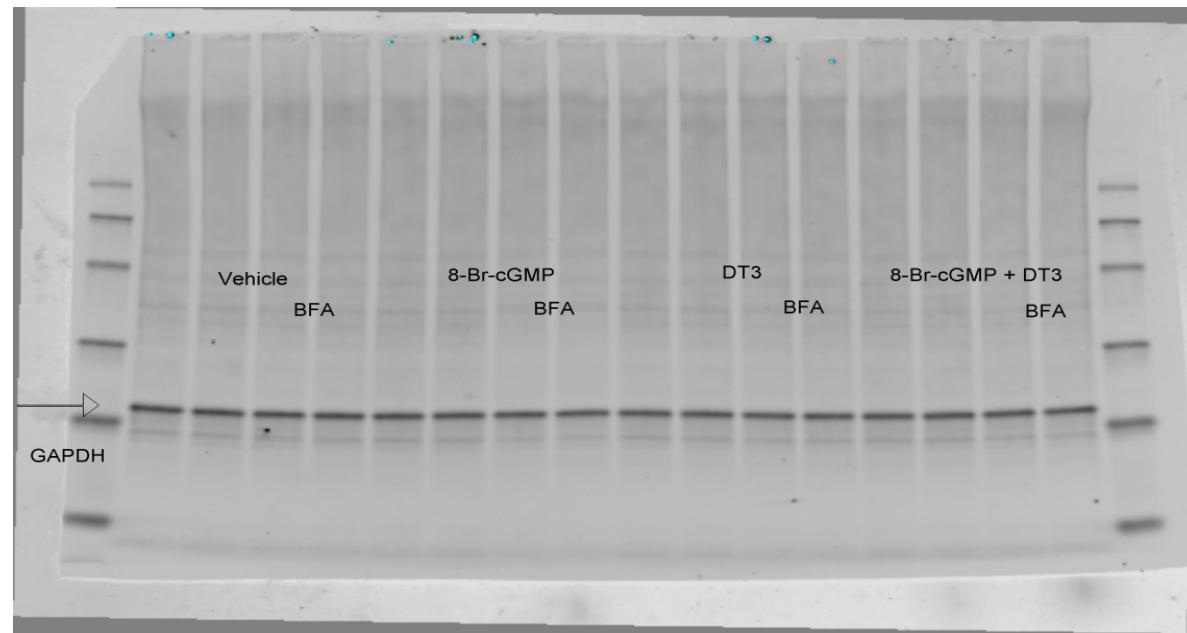
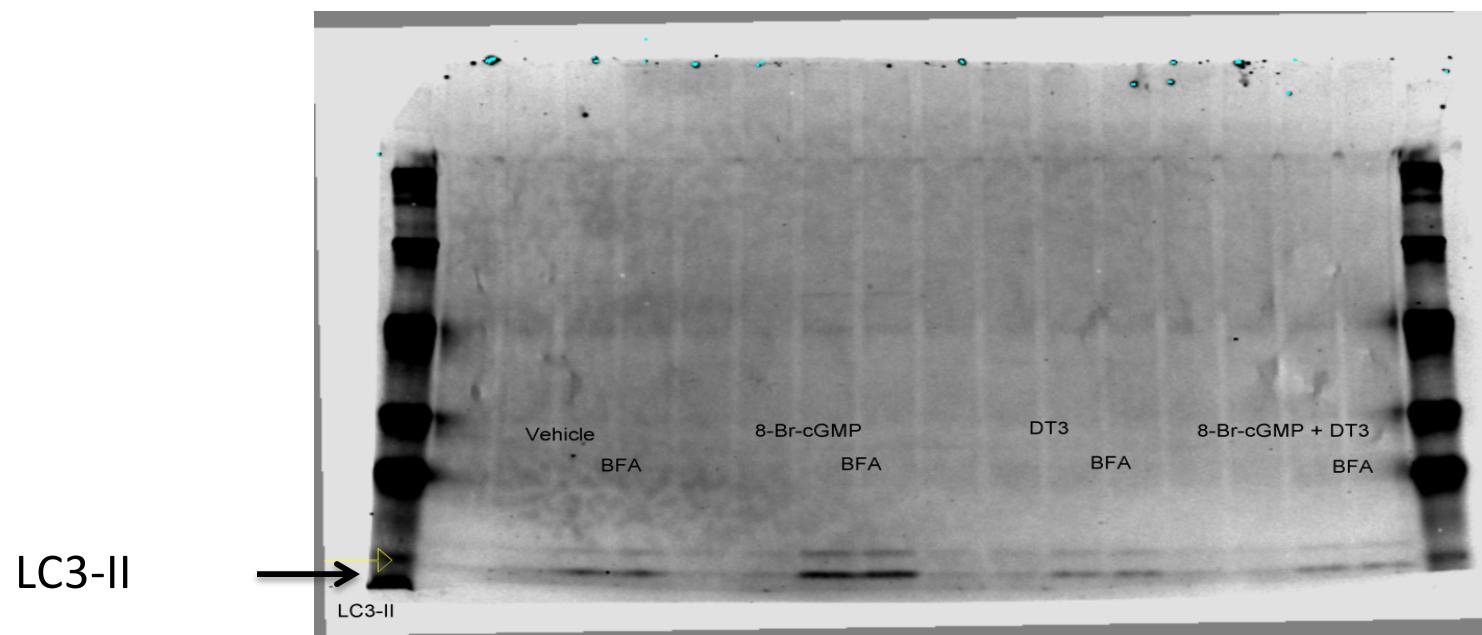


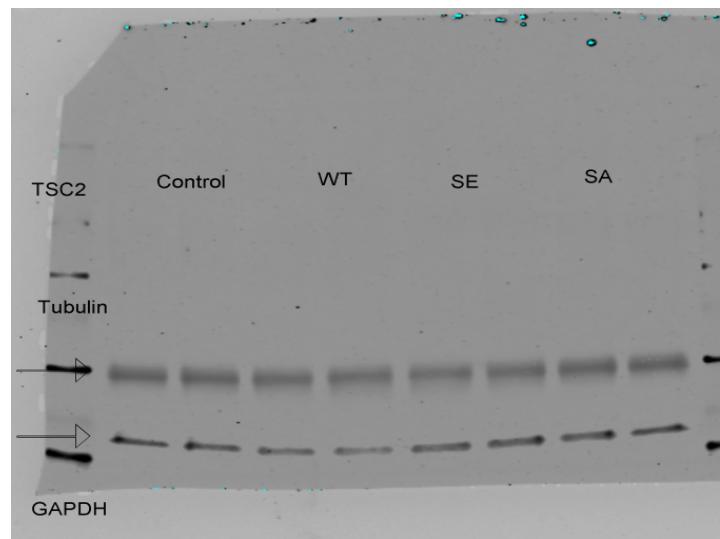
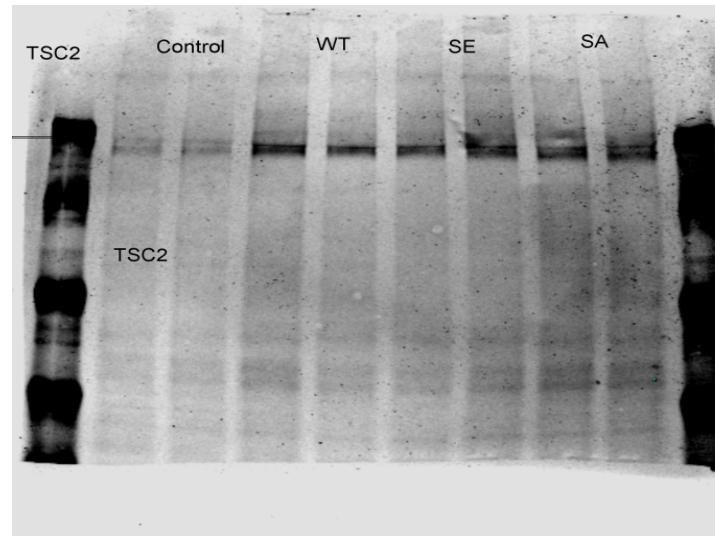
Figure 4f – lower. Gel 1



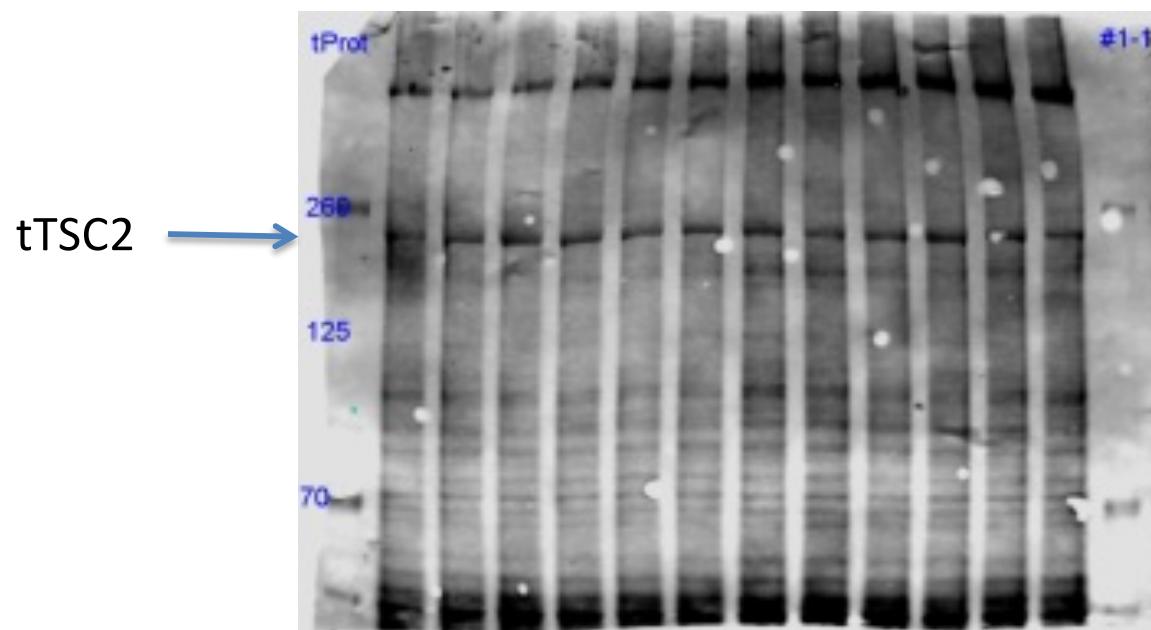
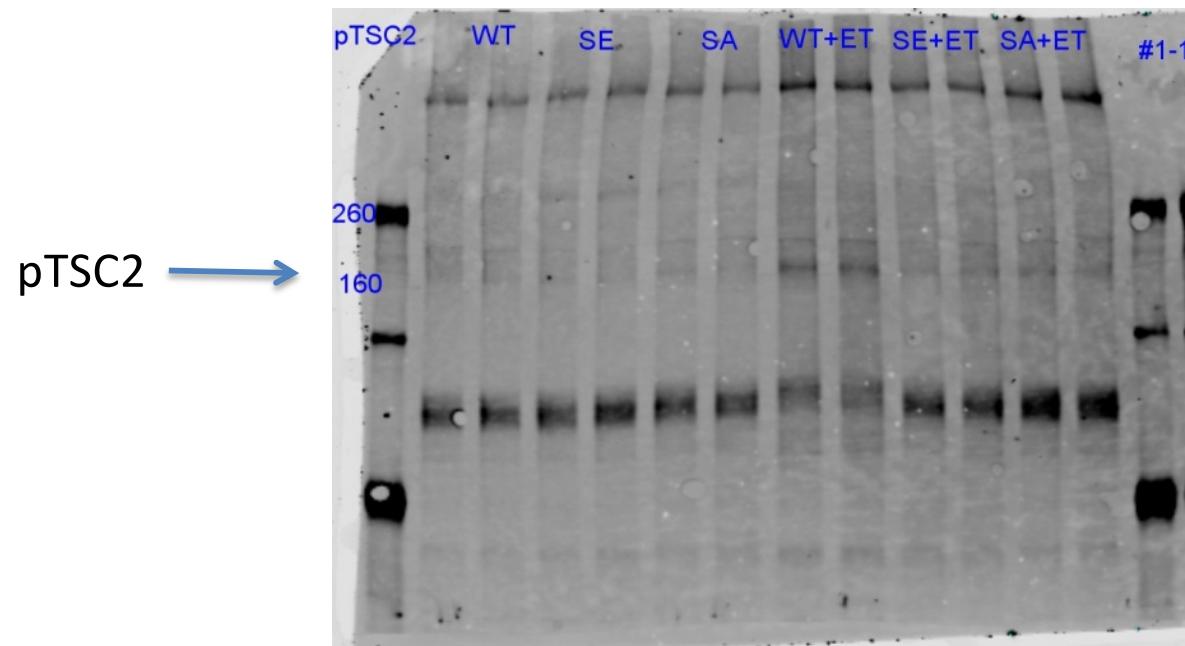
Extended Data 2A Gel 1

Total TSC2 at top,

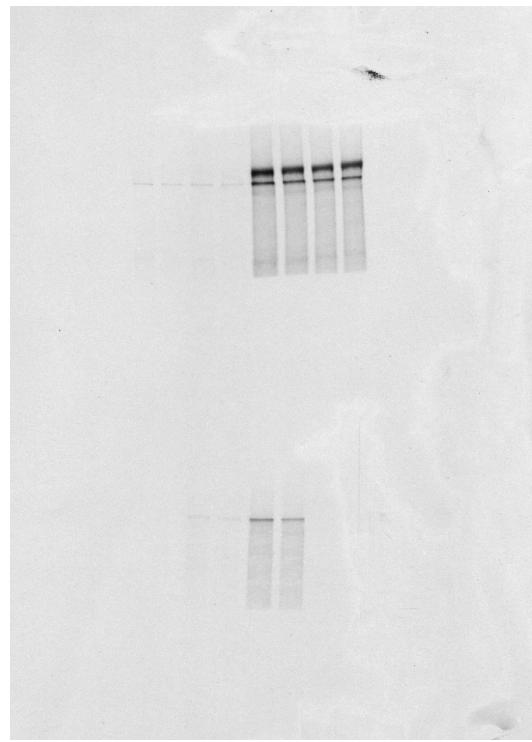
Alpha Tubulin below



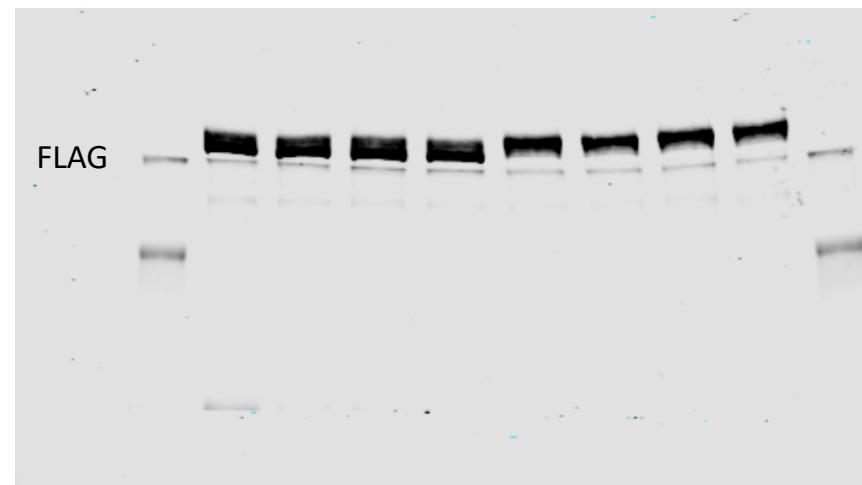
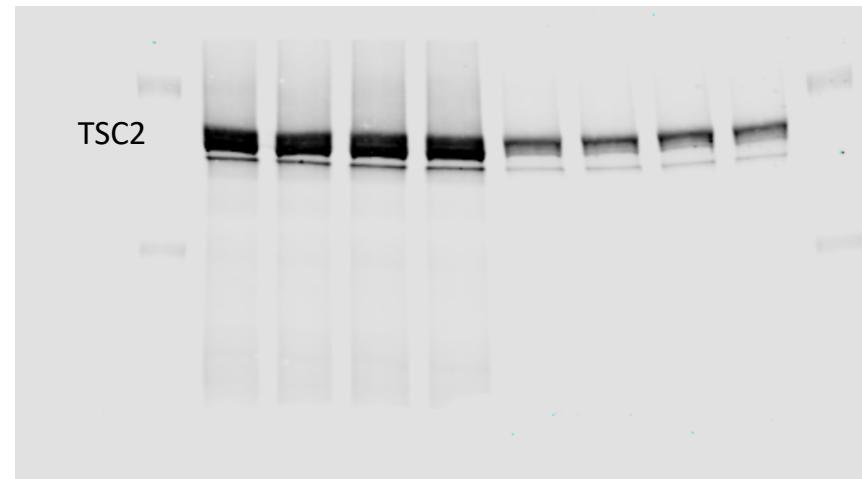
Extended Data 2e Gel



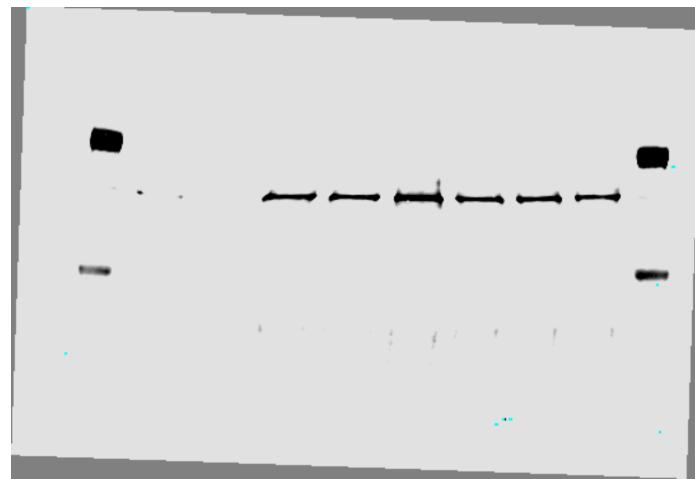
Extended Data 3d - Run 1 from 48 hr exp.



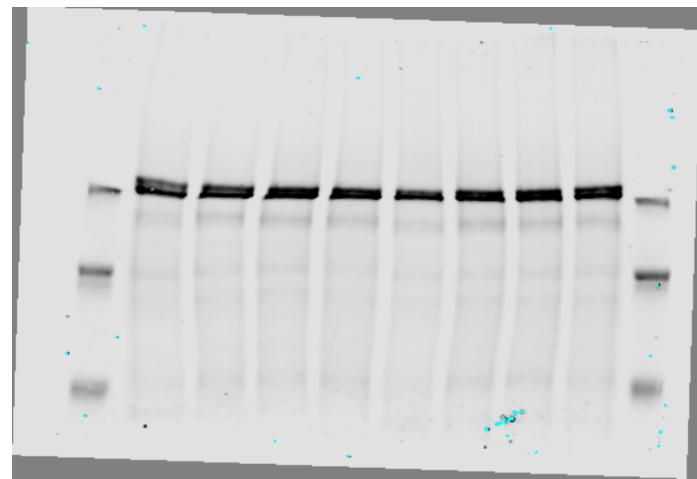
^{33}P -TSC2 (top gel)



Extended Data Figure 3e.

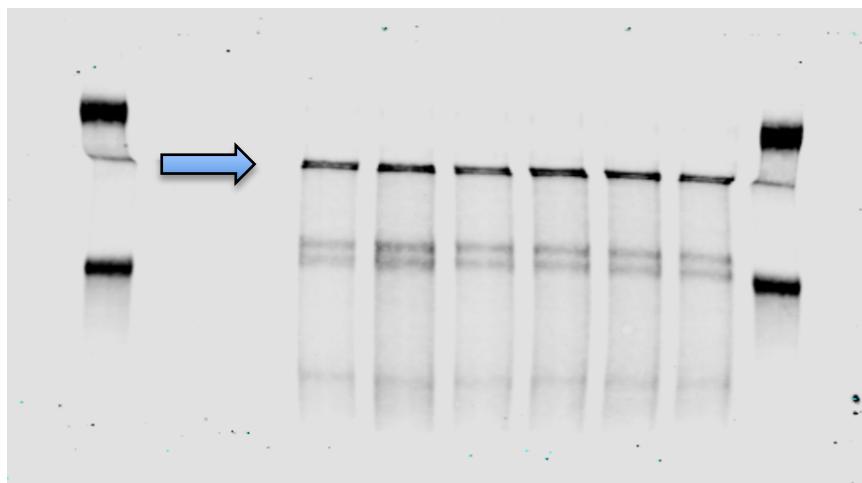


Thiophosphate ester

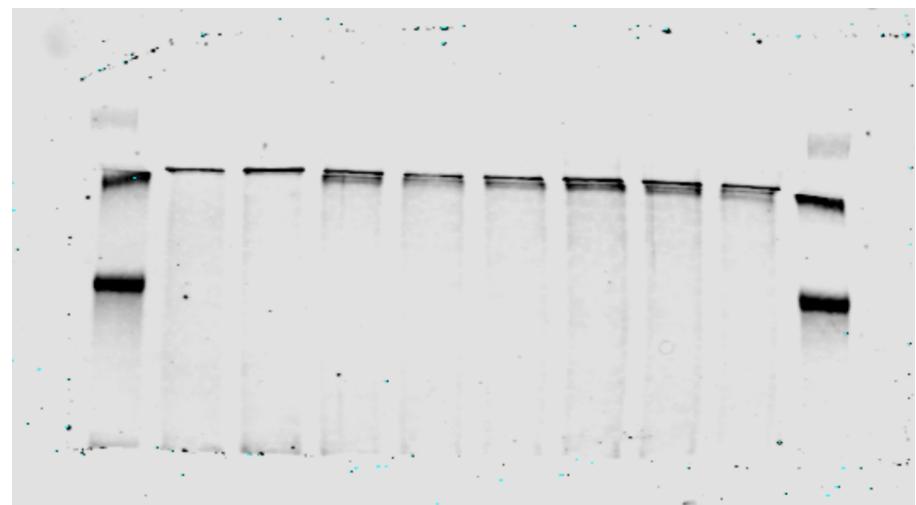


HA

Extended Data Figure 3f (upper panels).

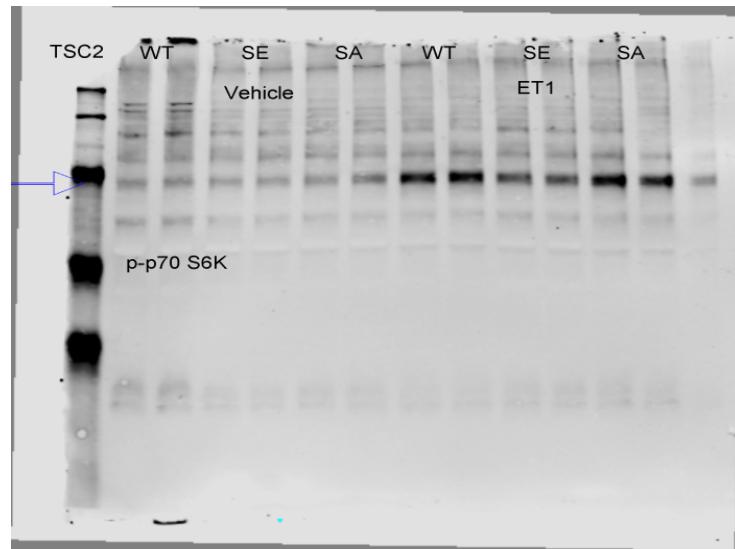


Thiophosphate ester

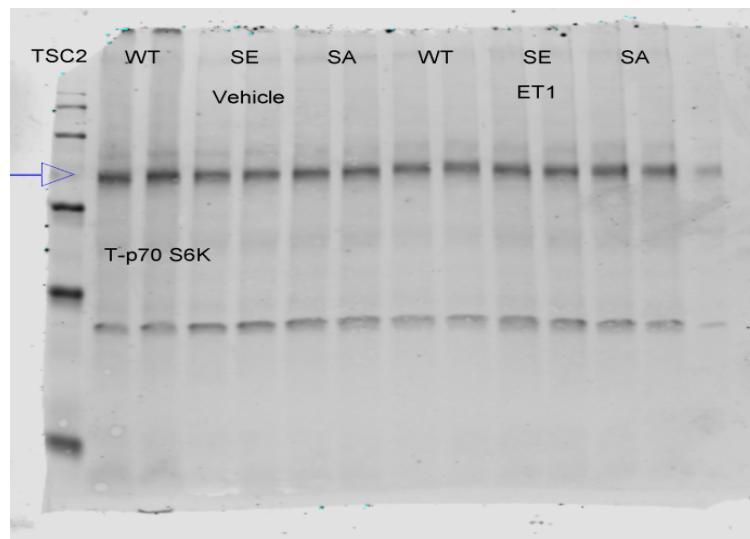


FLAG

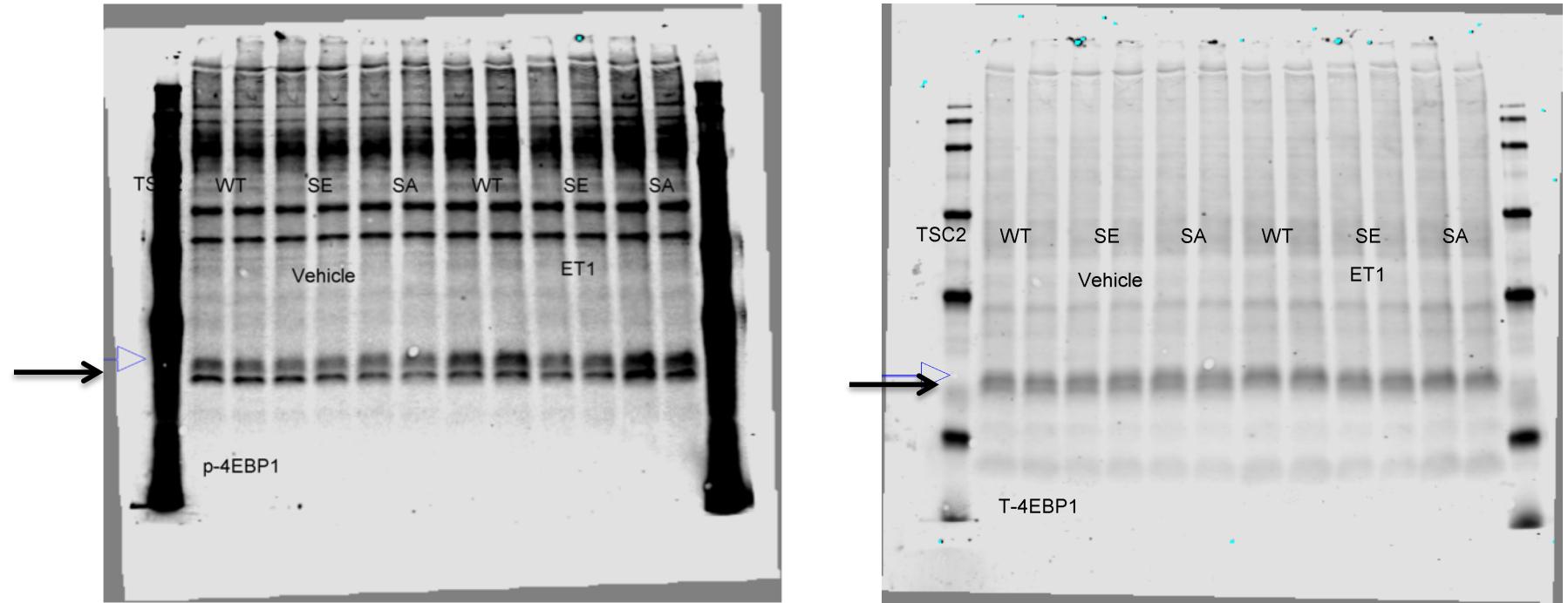
Extended Data Figure 3f (lower panels).



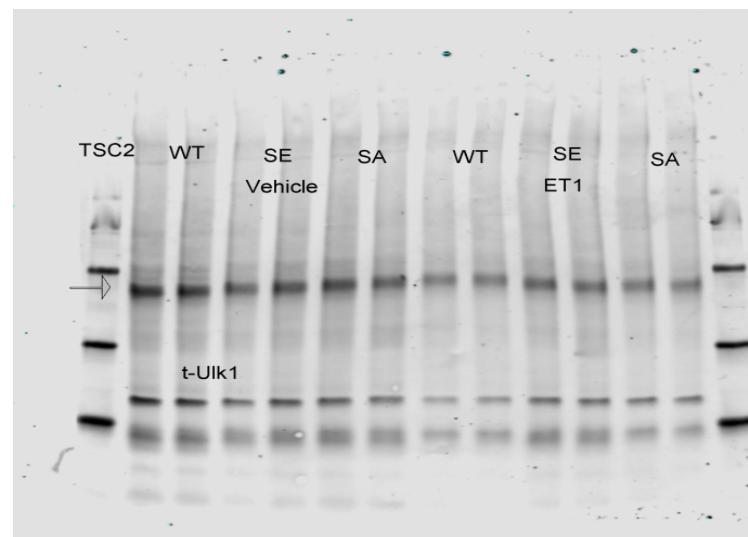
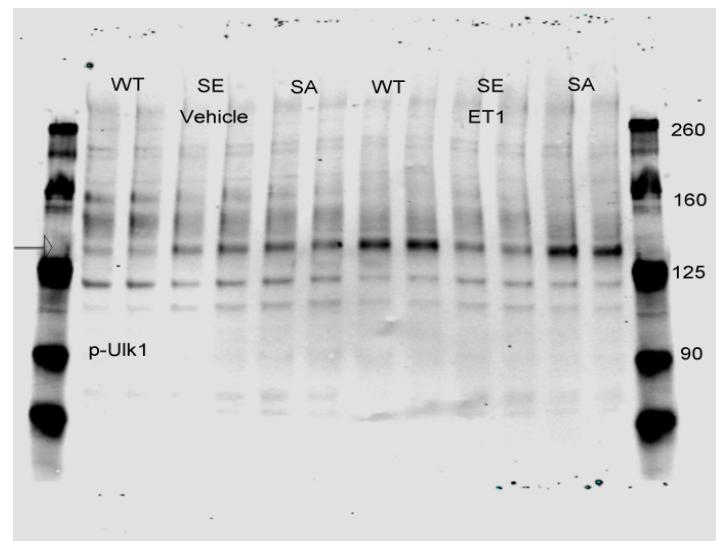
p70S6K cell with
mutants
Phospho upper,
total lower



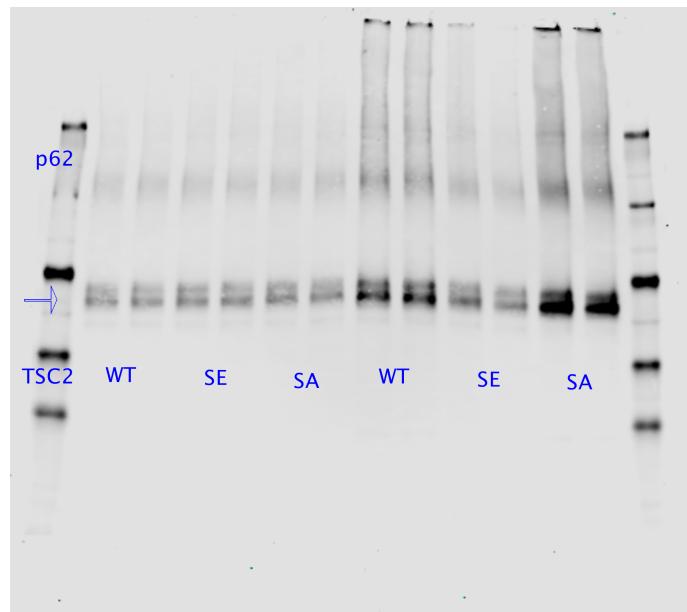
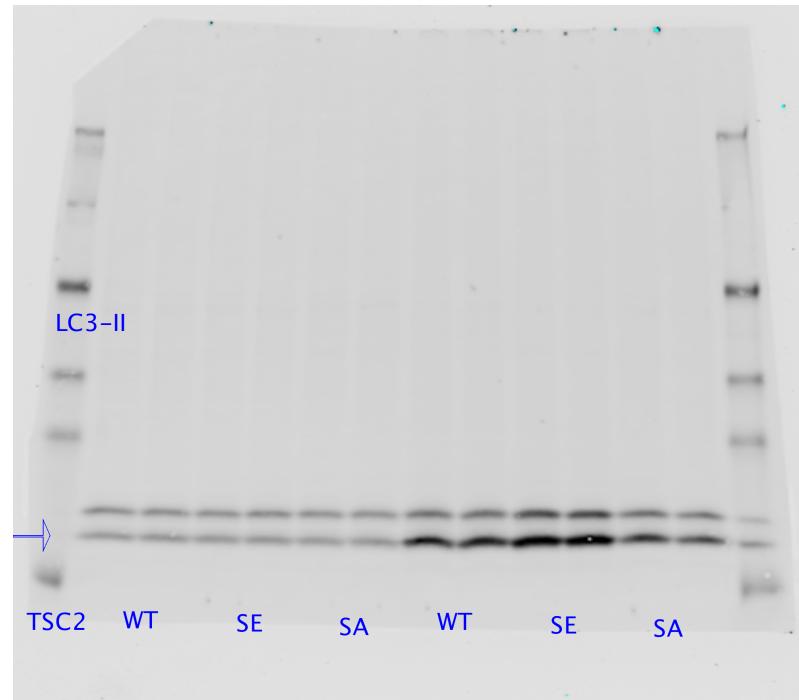
Extended Data 4c (upper panels). replicate 2 – 4-21-16



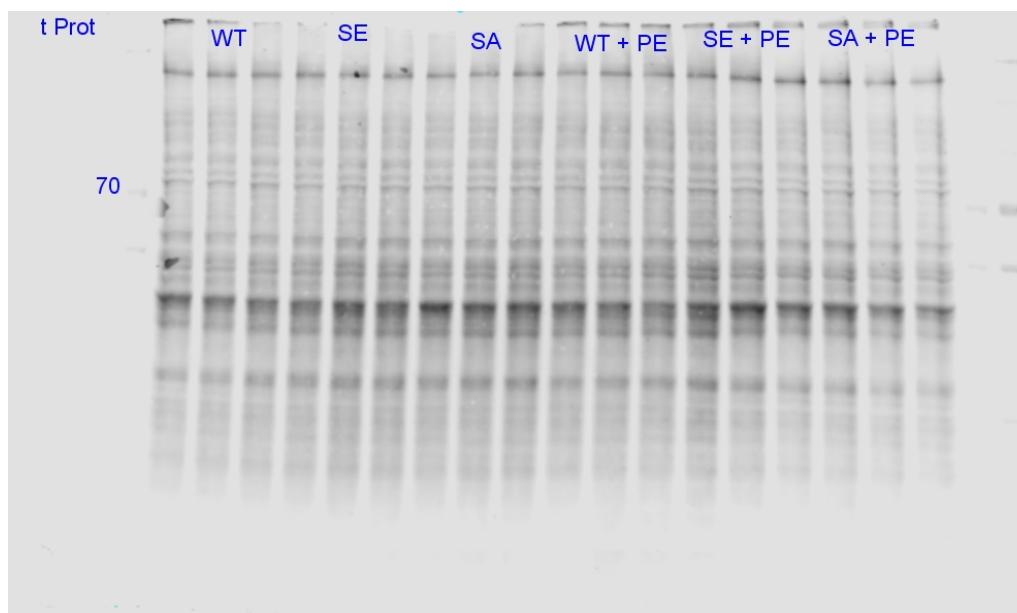
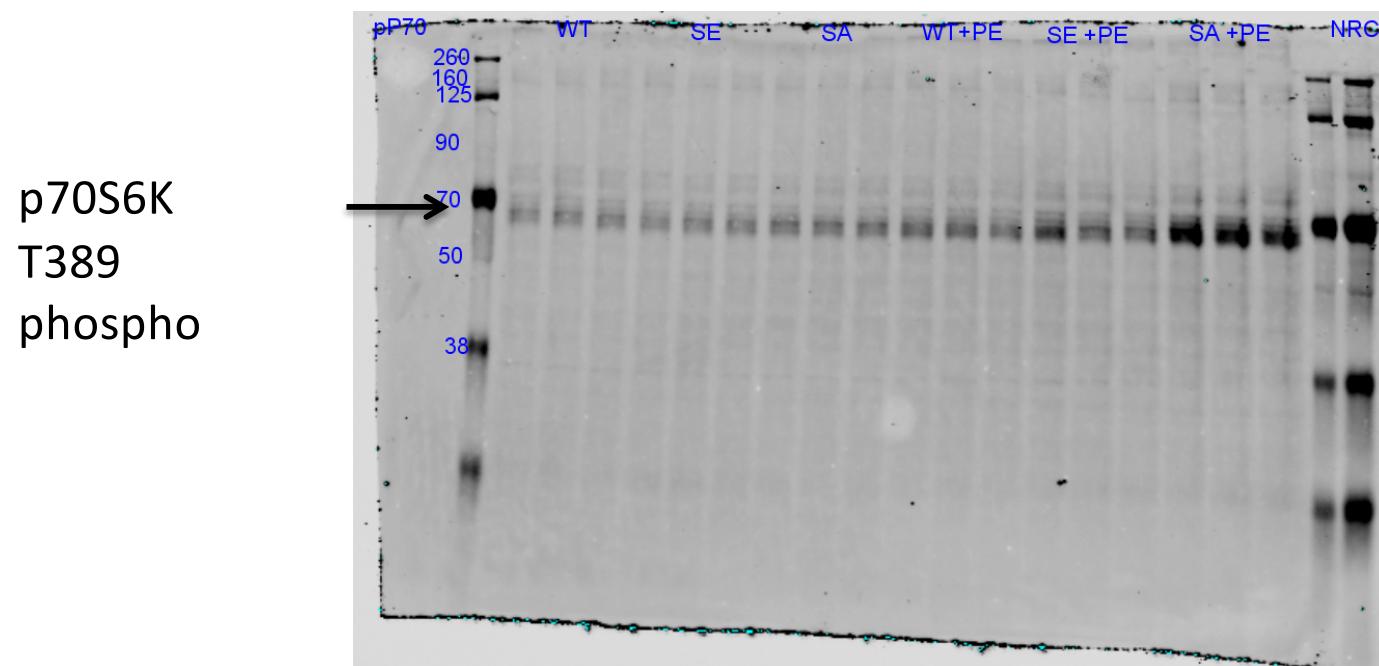
Extended data 4c (middle panels). Technical replicate B; 4-21-16 gel First run.



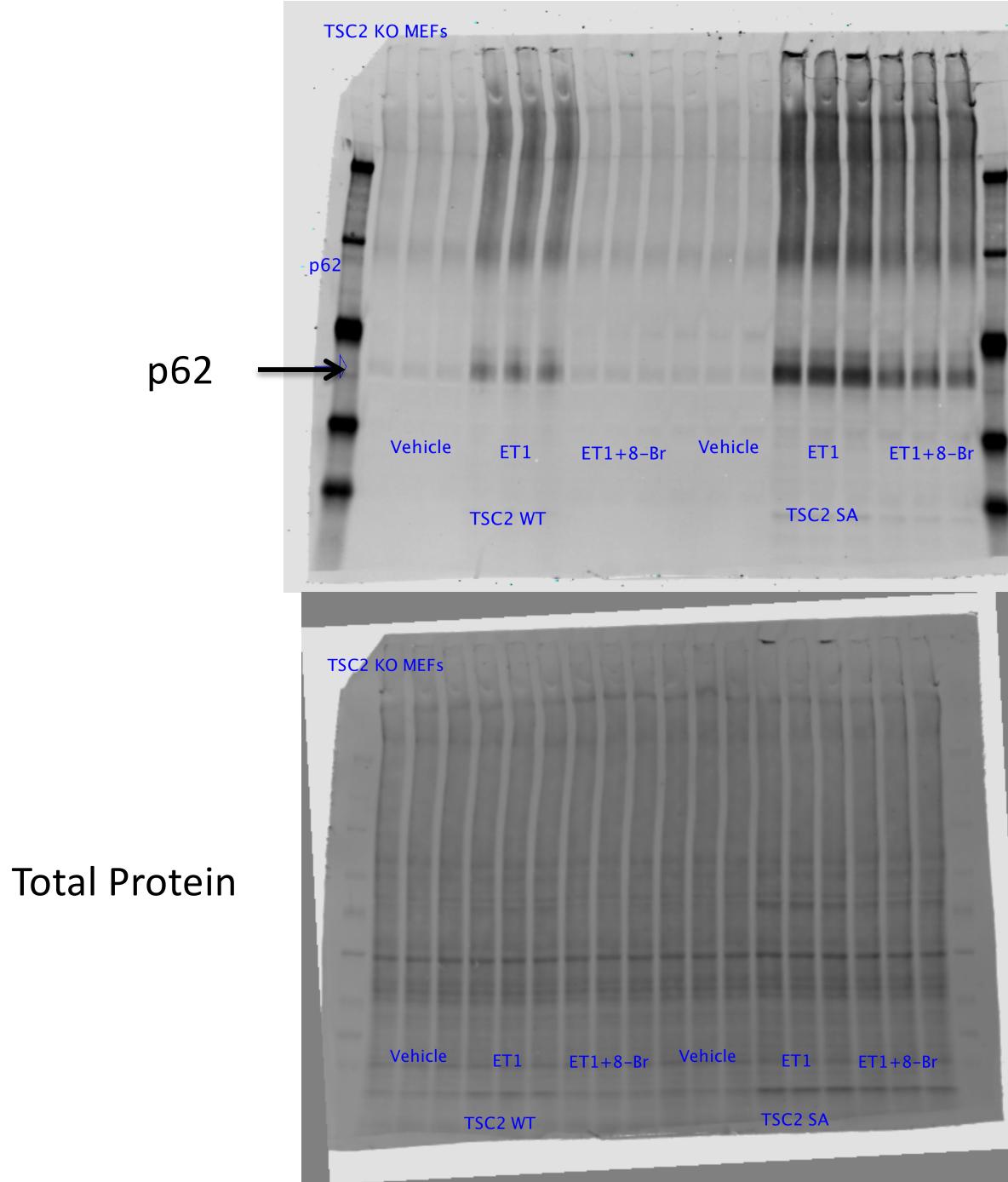
Extended Data 4c (middle panels). replicate 2 – 10/4/16



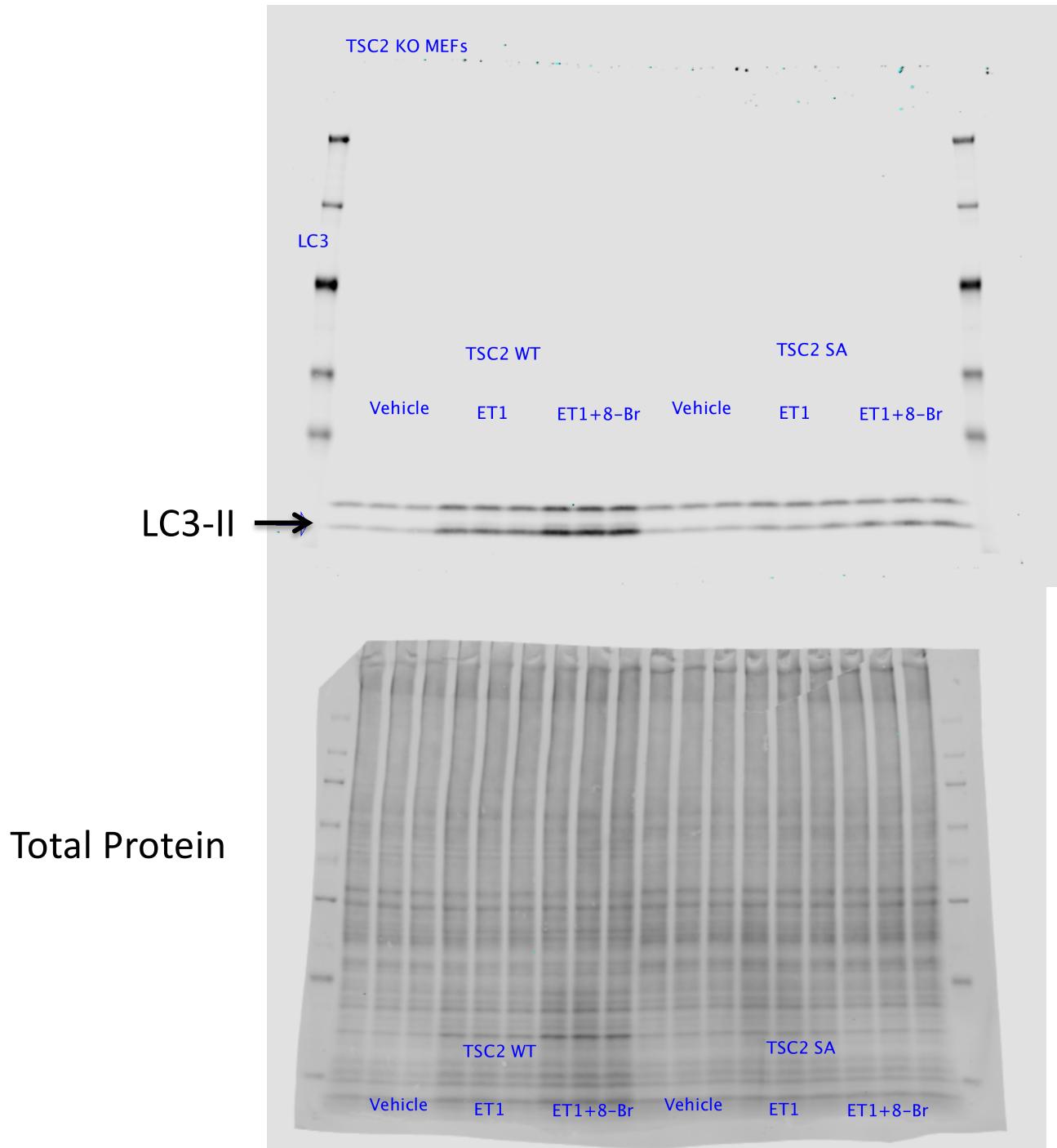
Extended data 4c (lower panels). LC3 – gel 2; p62 Gel 1



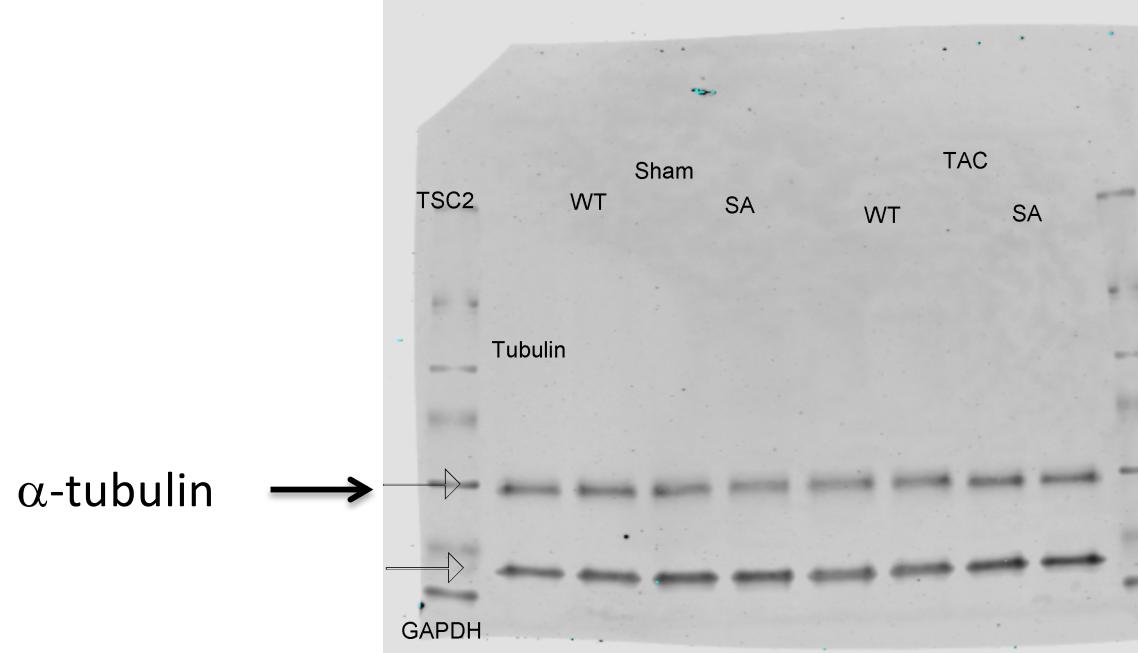
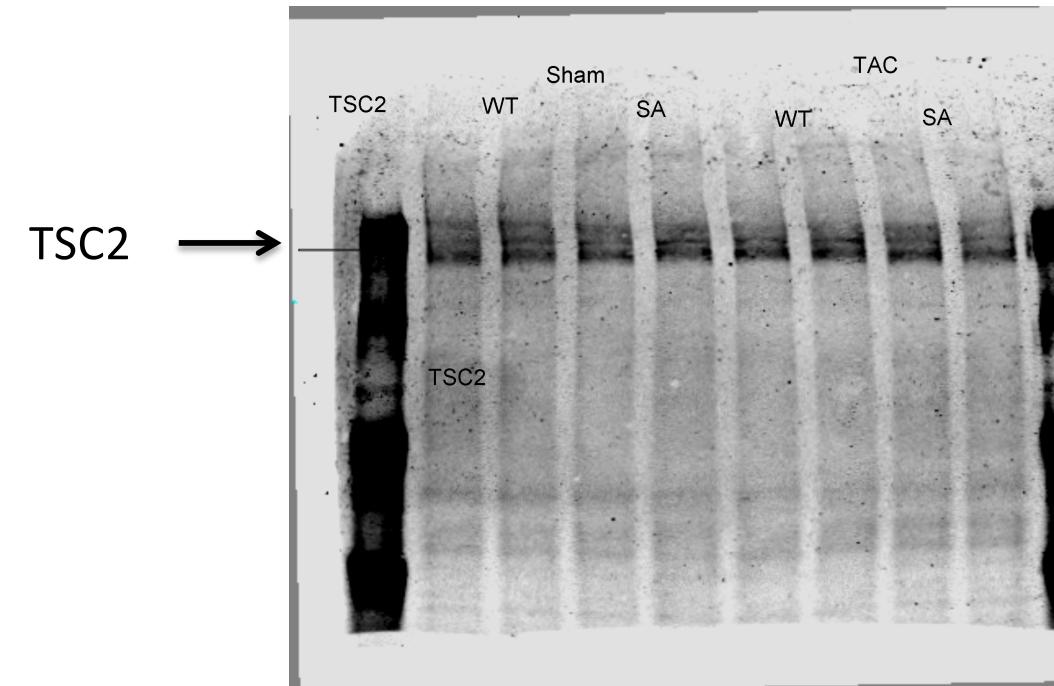
Extended Data 5a - Run 1 – slide 1



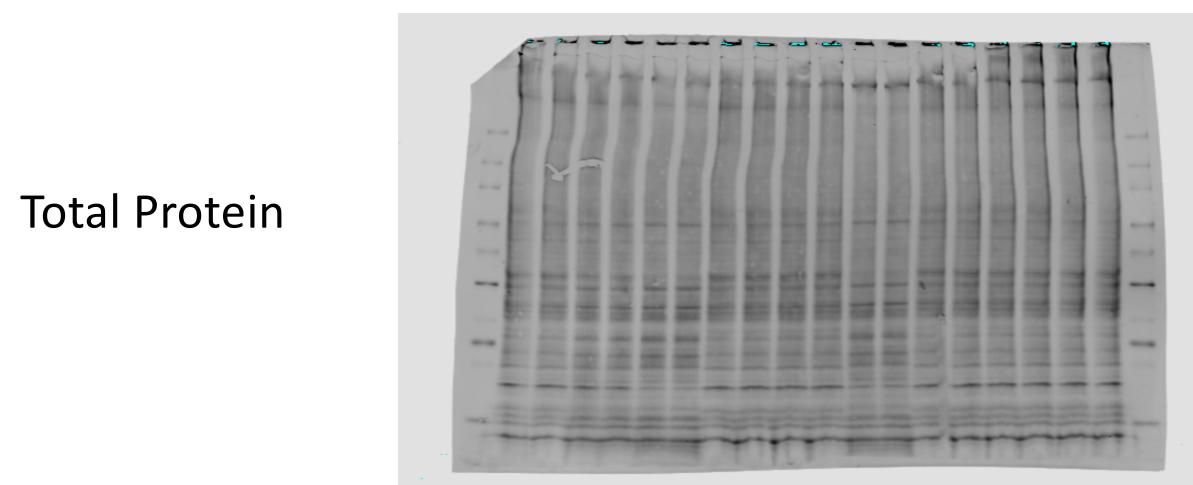
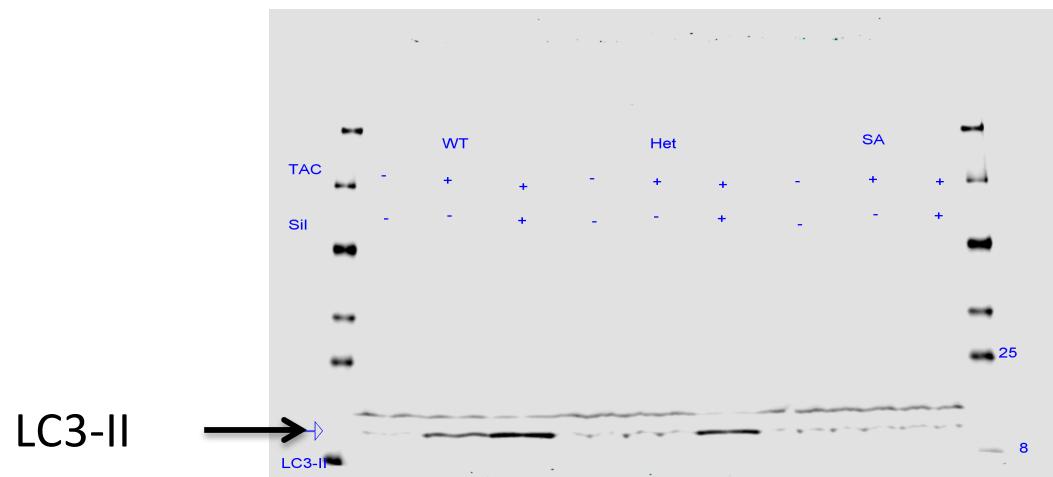
Extended Data 5b - Upper for p62 Run 1 – slide 1



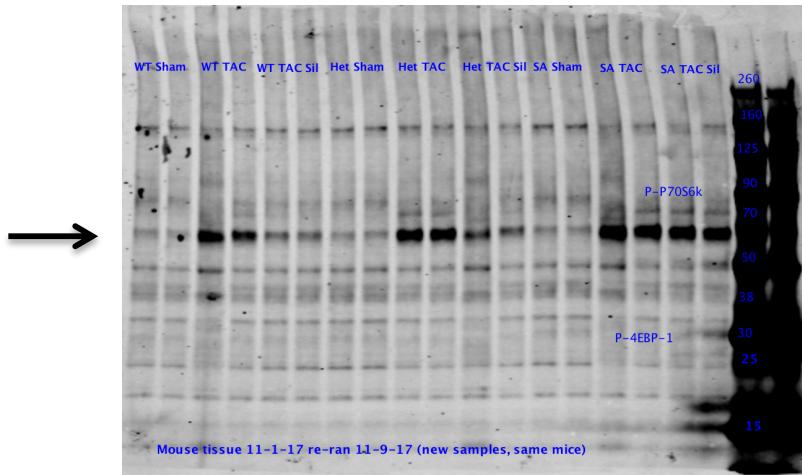
Extended Data 5b - Lower for LC3-II Run 1 – slide 1



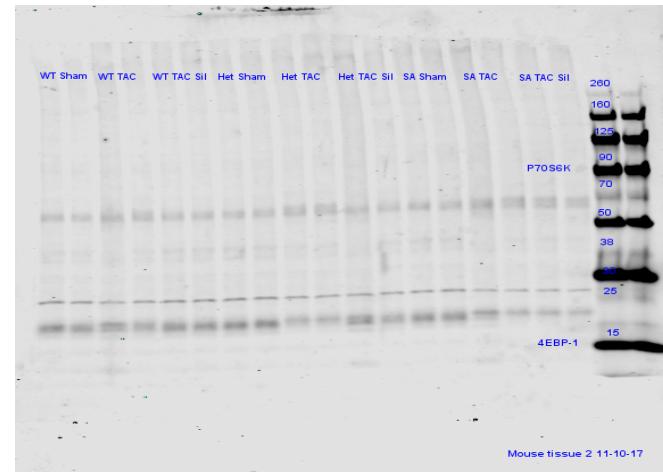
Extended Data 6b



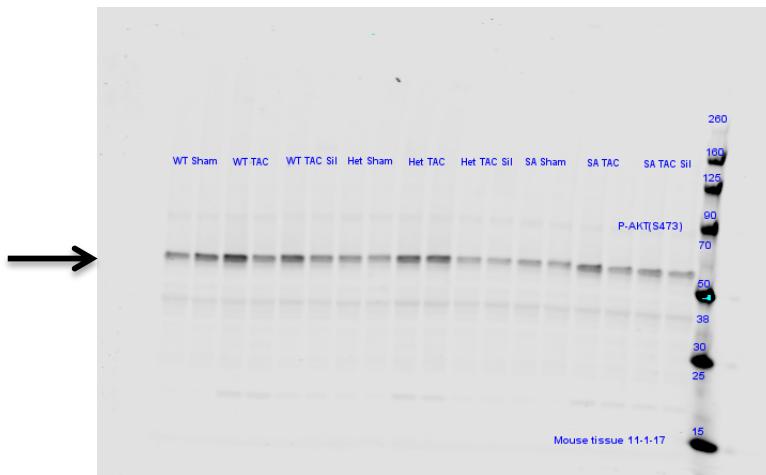
P-p70S6K



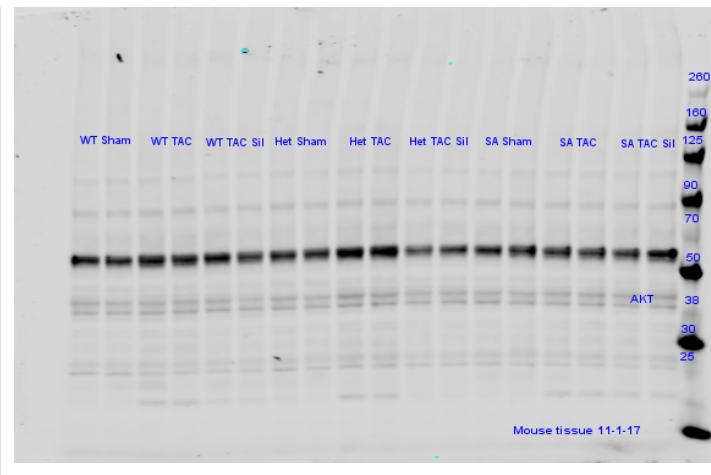
Total-p70S6K



P-Akt

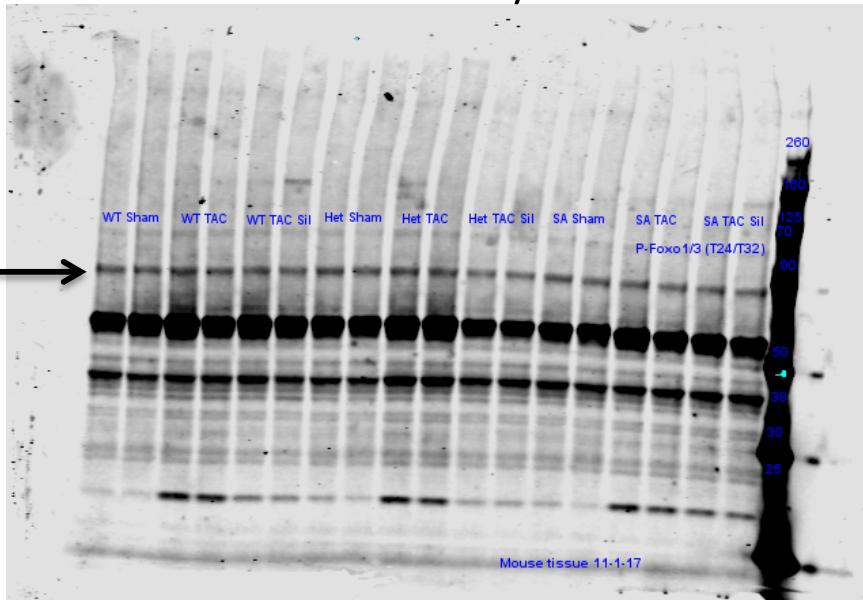


Total-Akt

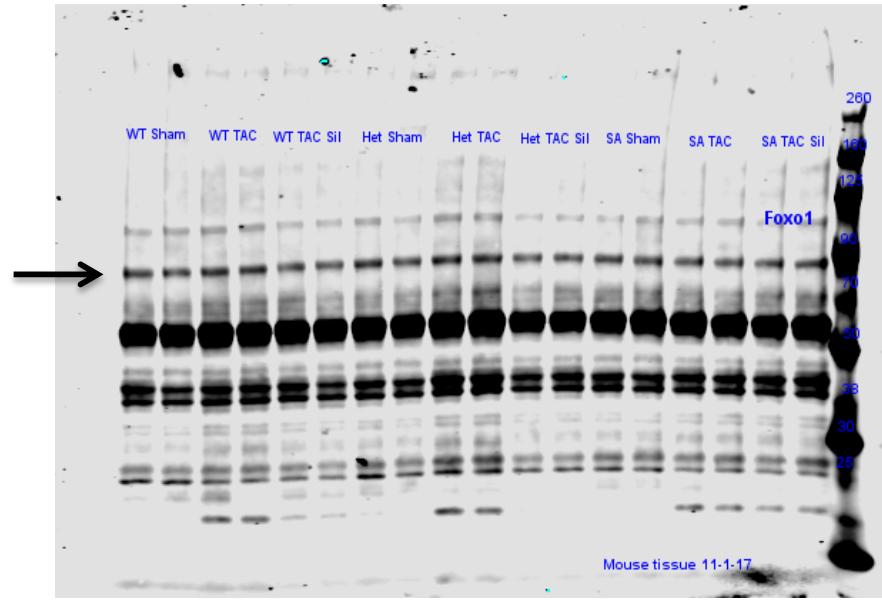


Extended Data 7a

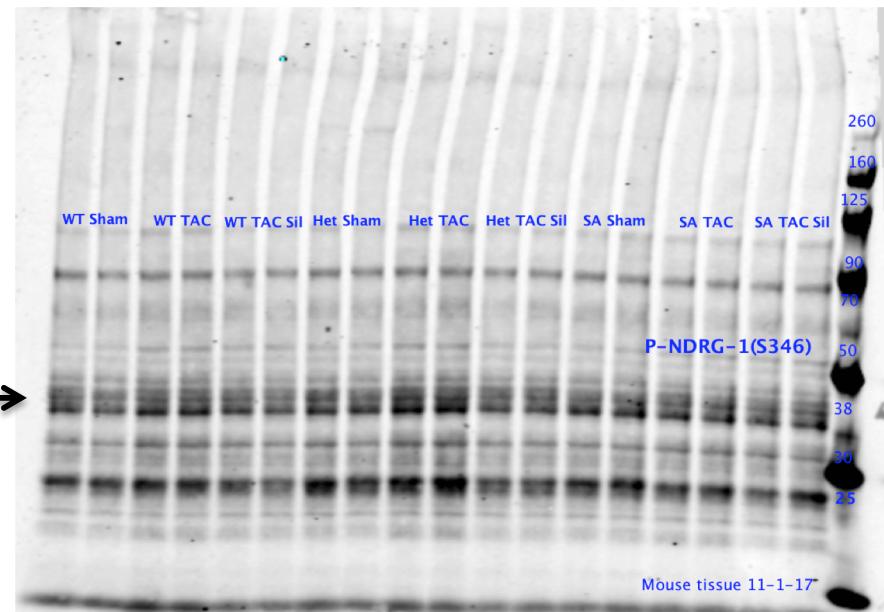
P-FOXO1/3



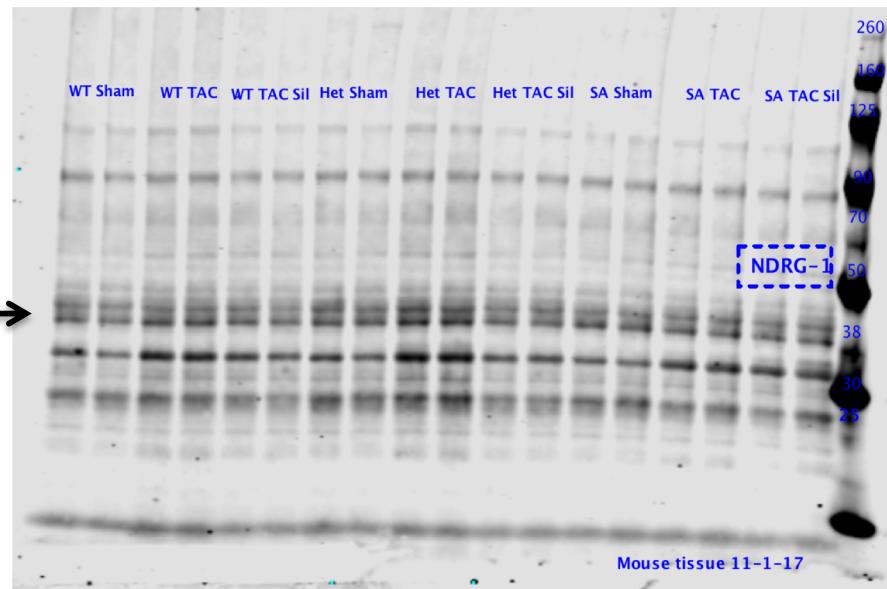
Total-FOXO1



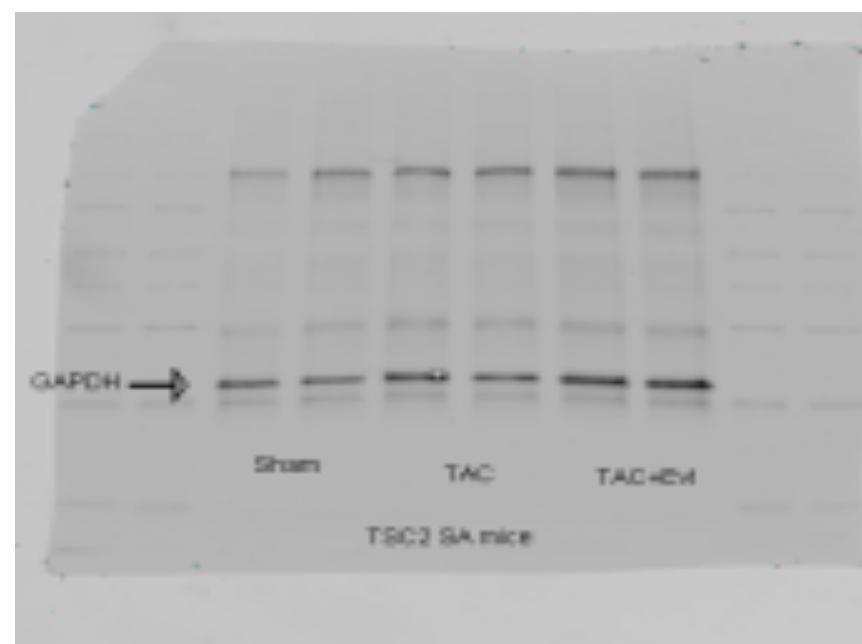
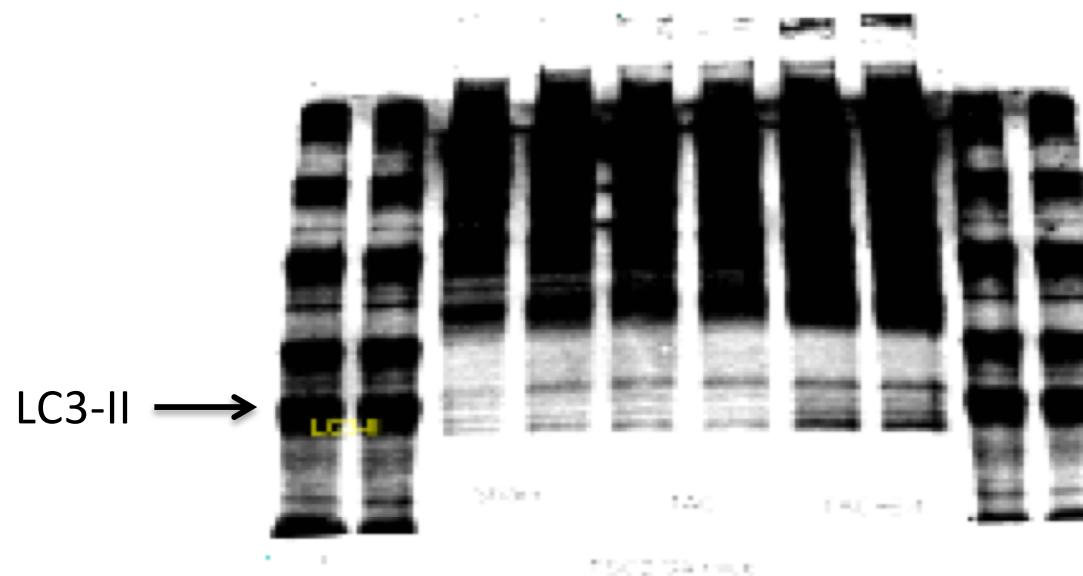
P-NRGD1



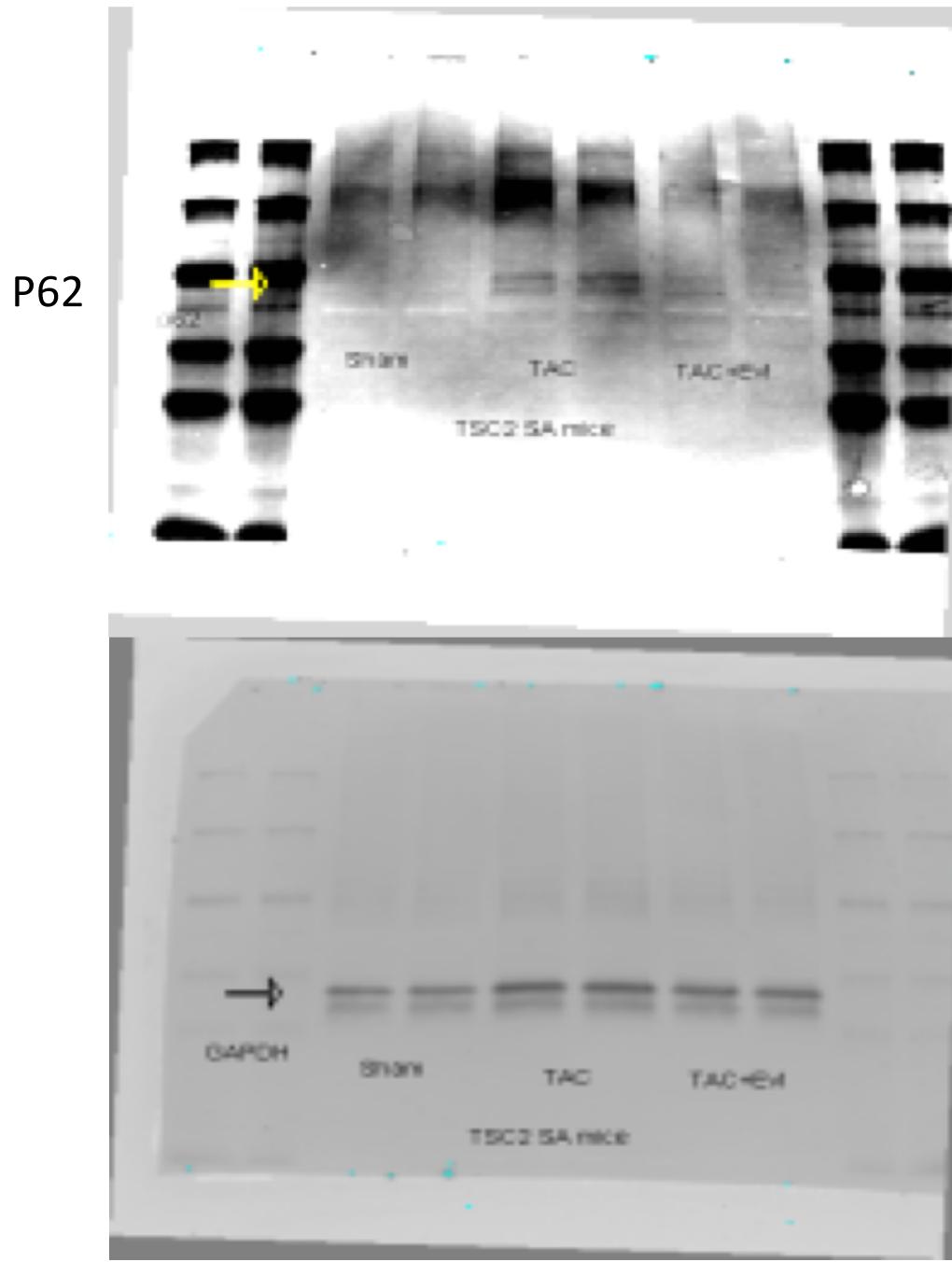
Total-NRDG1



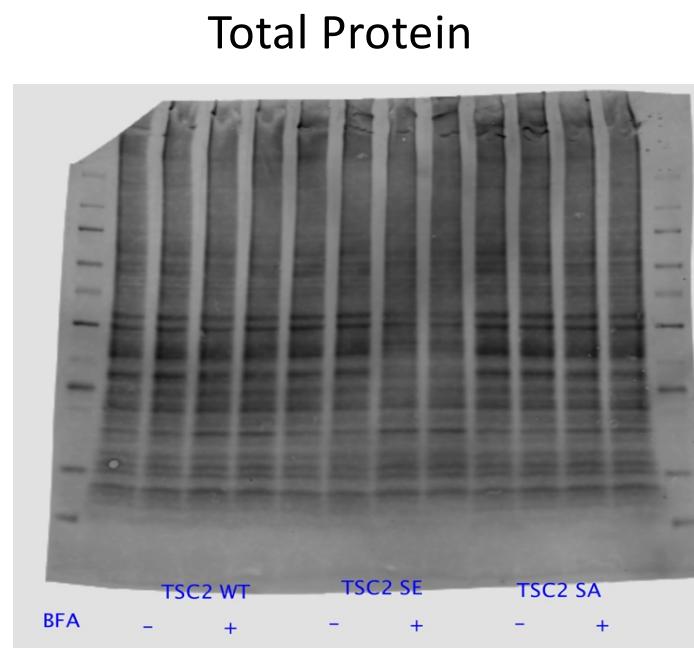
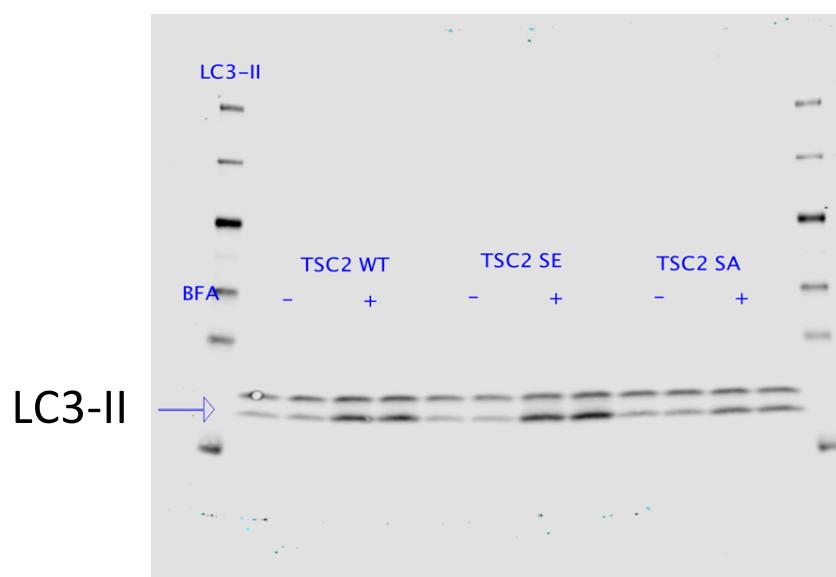
Extended Data 7a - continued



Extended Data 7b – Gel 1



Extended Data 7c – Gel 1



Extended Data 8c – Gel 3