

All DNA electrophoresis gels are presented in full in Extended Data Fig. 1e, 1f, 10f.
Silver stained SDS-PAGE gel is presented in full in Extended Data Fig. 9e.
All uncropped Western blots are presented below.

Fig. 1d

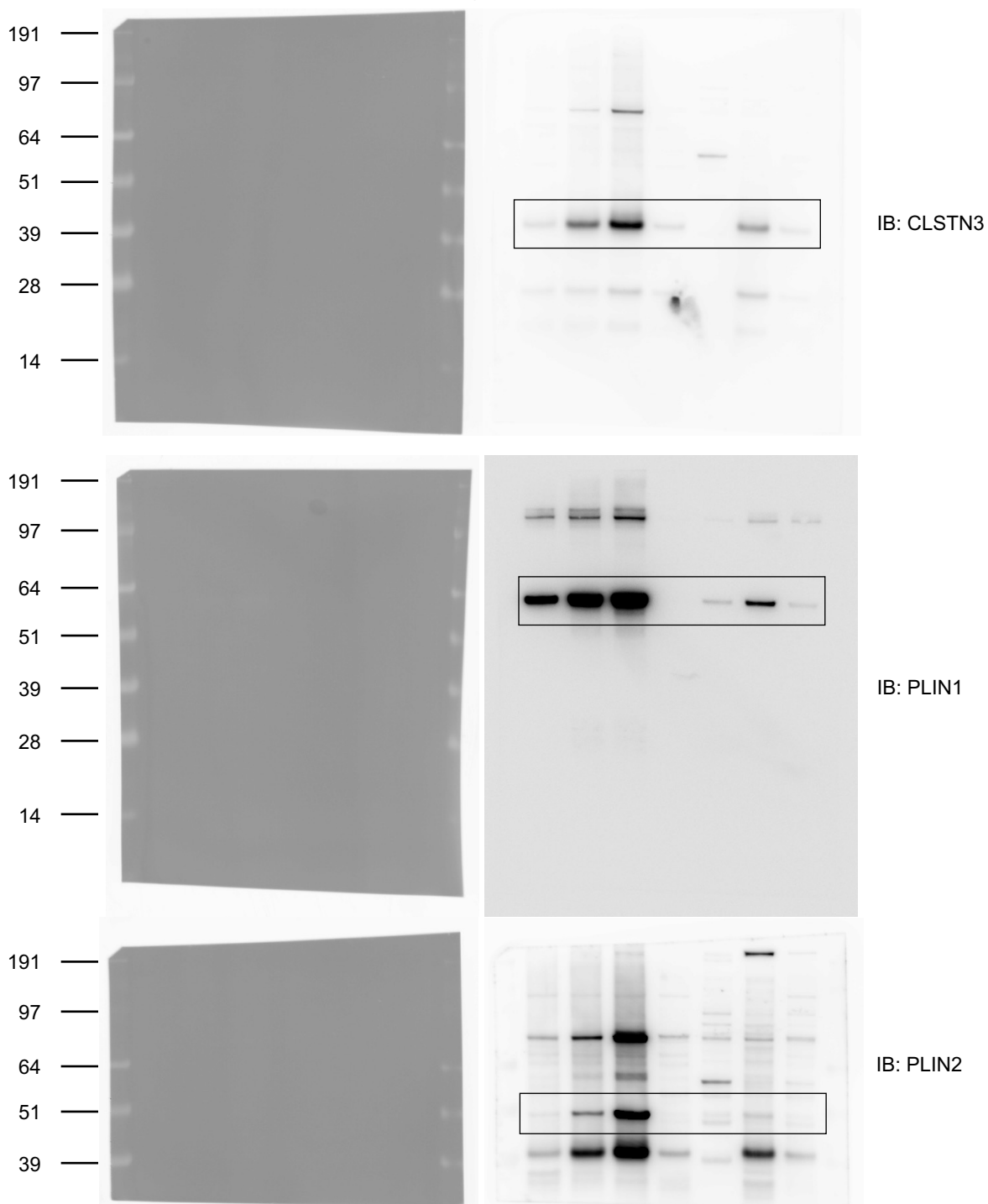


Fig. 1d, cont.

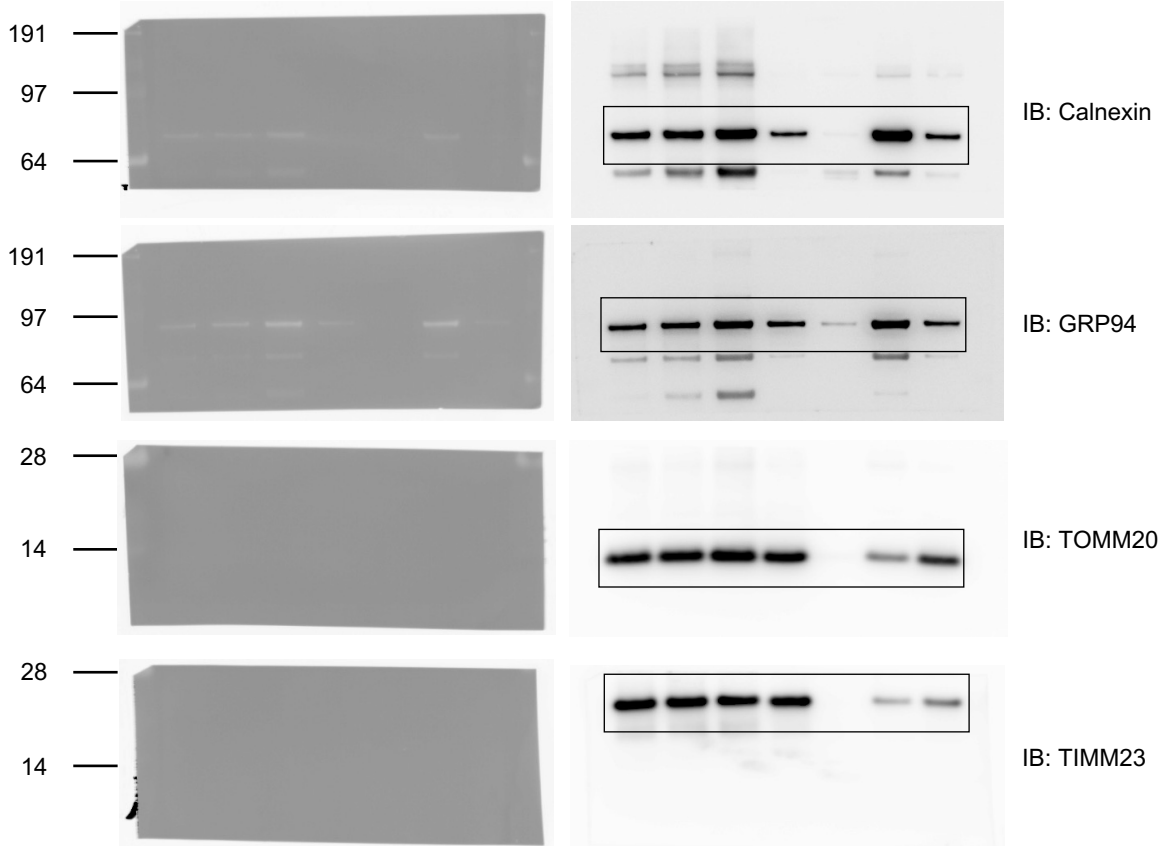


Fig. 3f

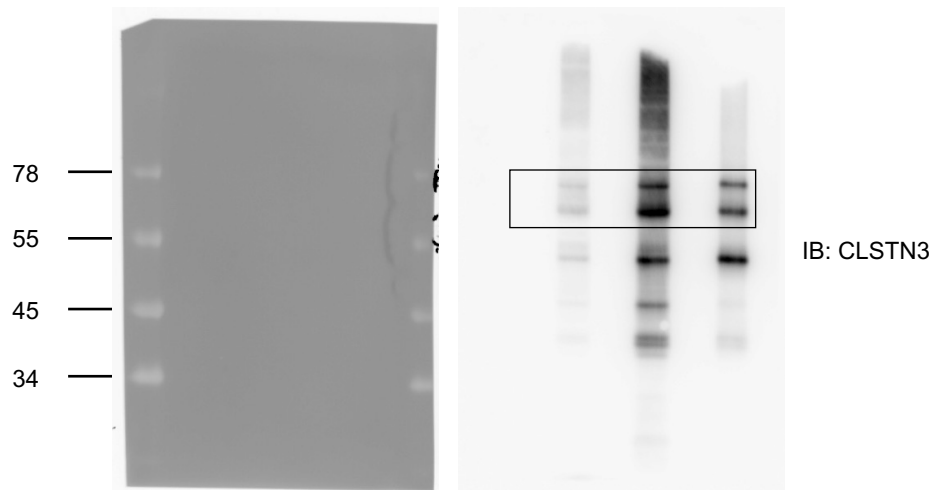
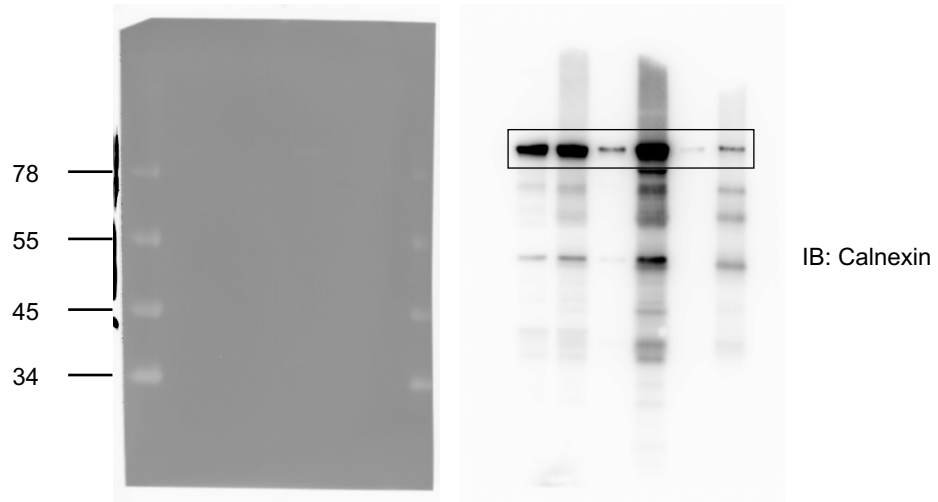
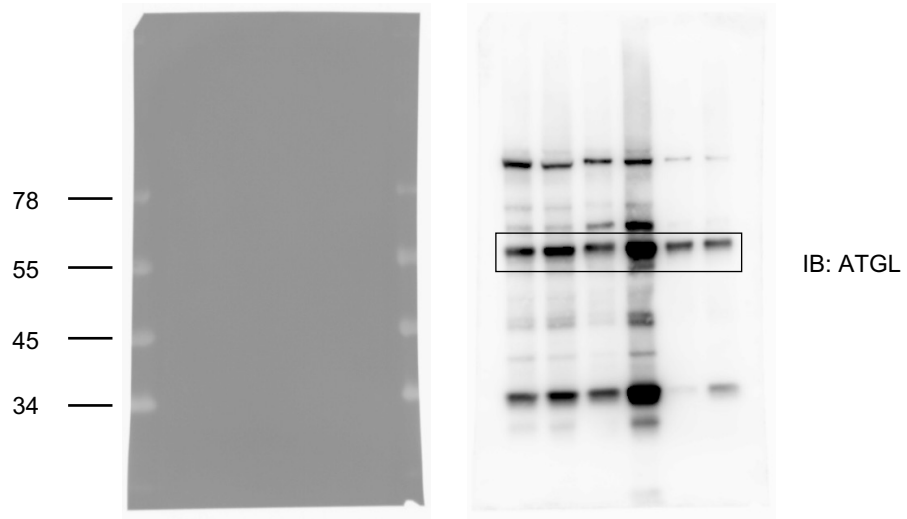


Fig. 5b

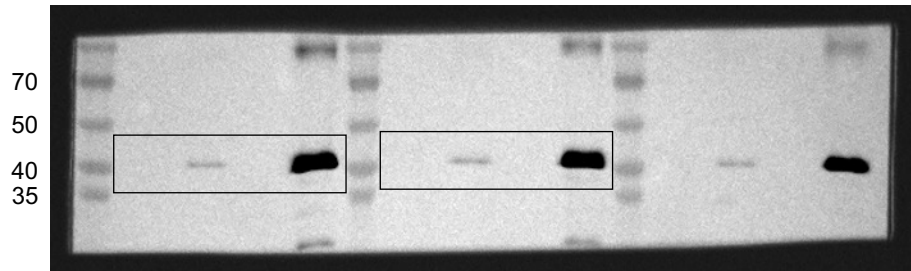


IB: Flag



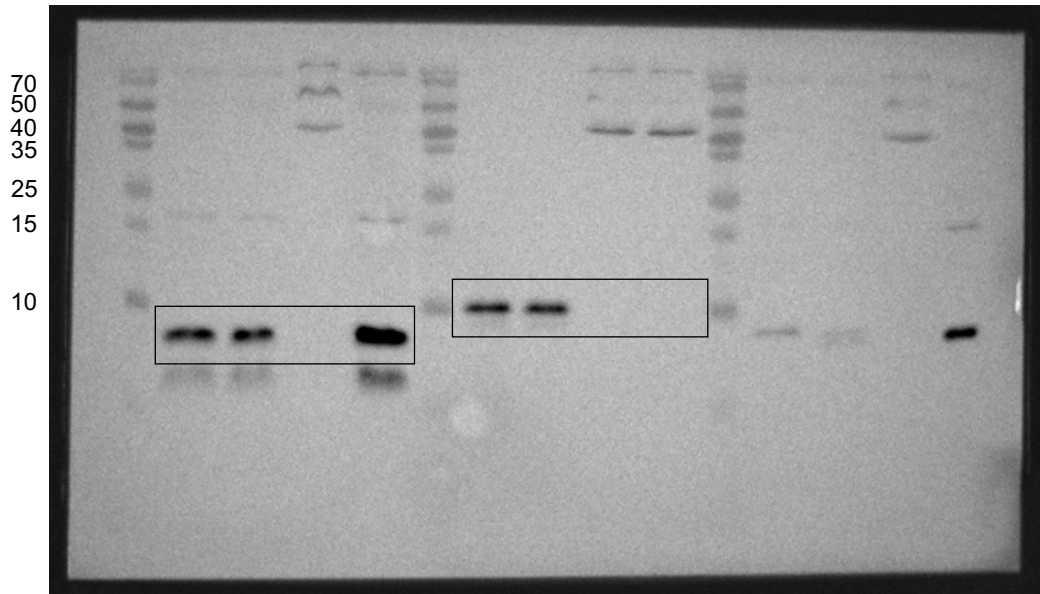
IB: HA

Fig. 5c



CIDEA-C – IB: Flag

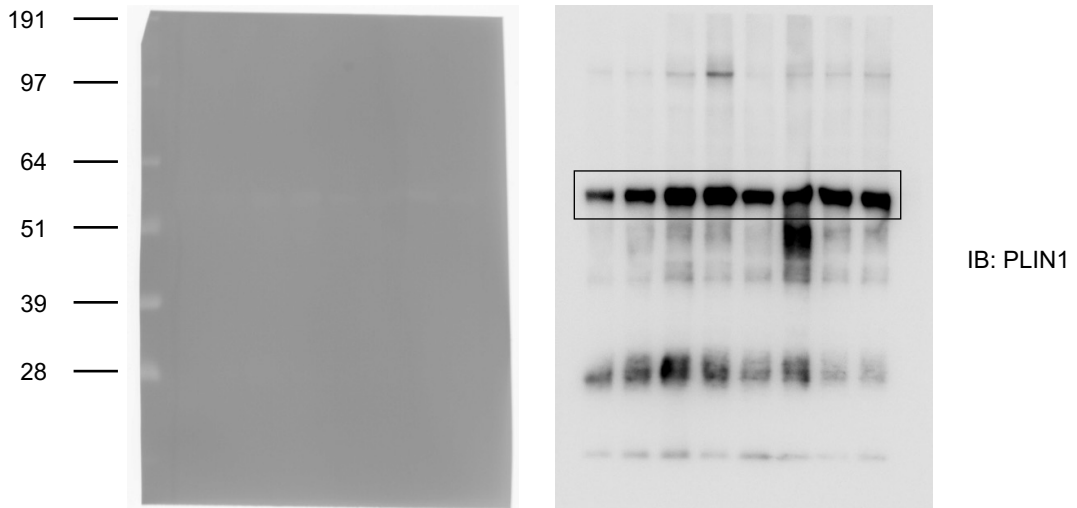
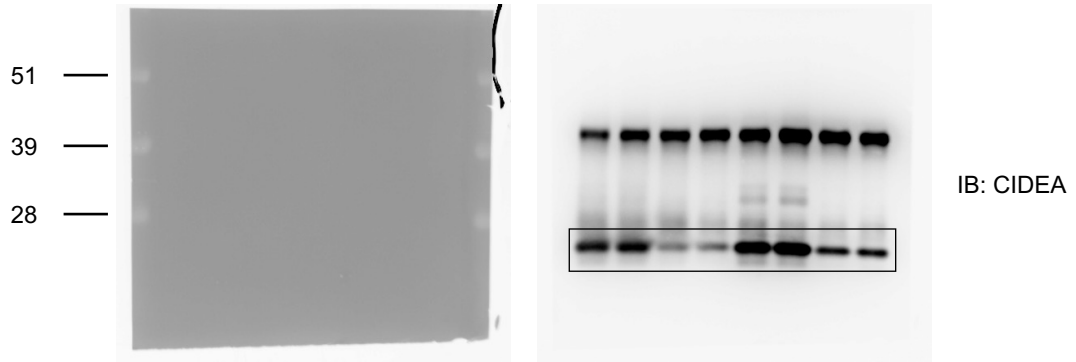
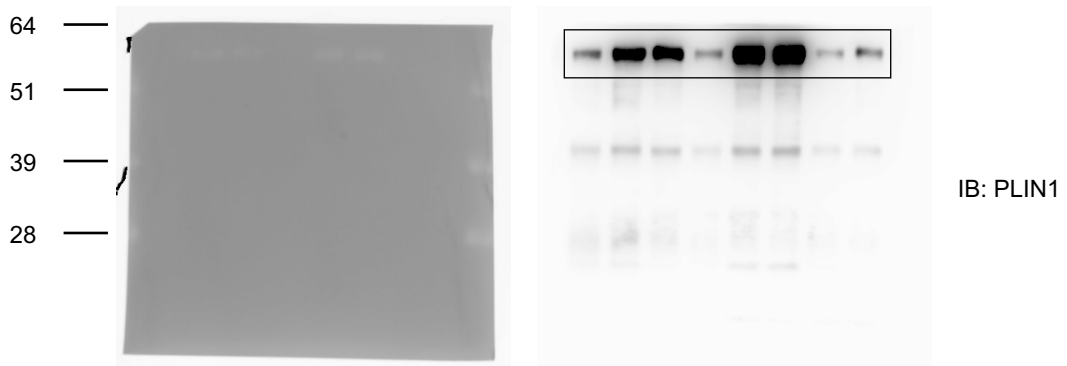
CIDEA-N – IB: Flag



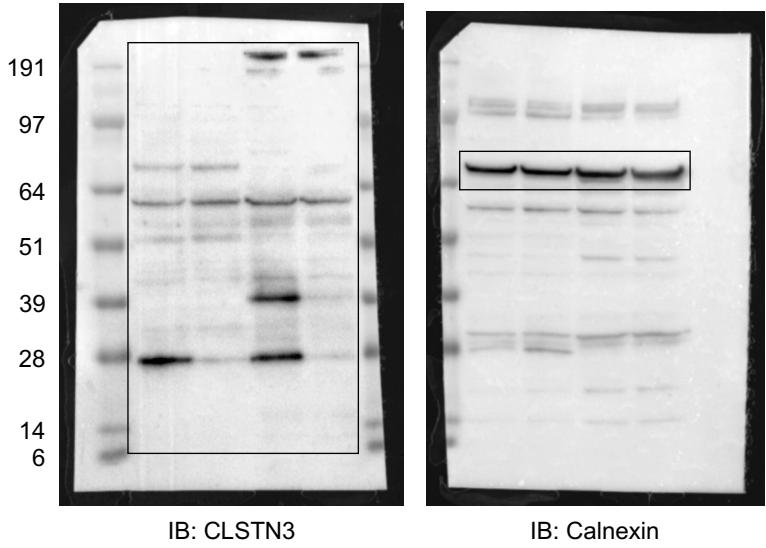
CIDEA-C – IB: HA

CIDEA-N – IB: HA

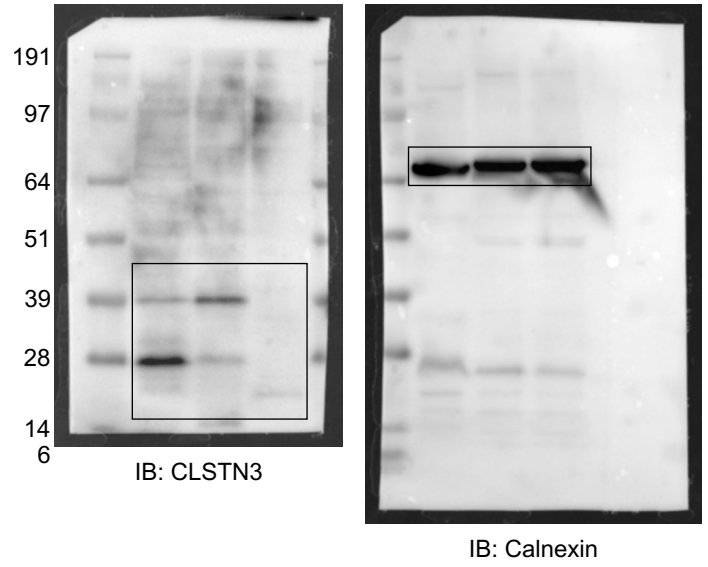
Fig. 5i



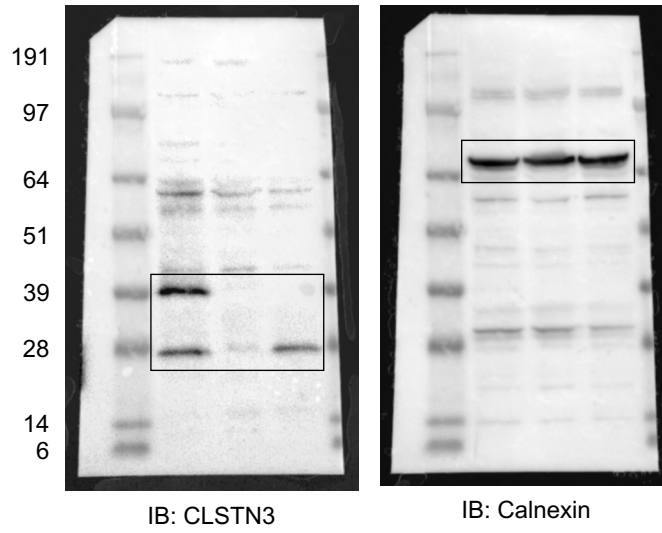
Extended Data Fig. 2a



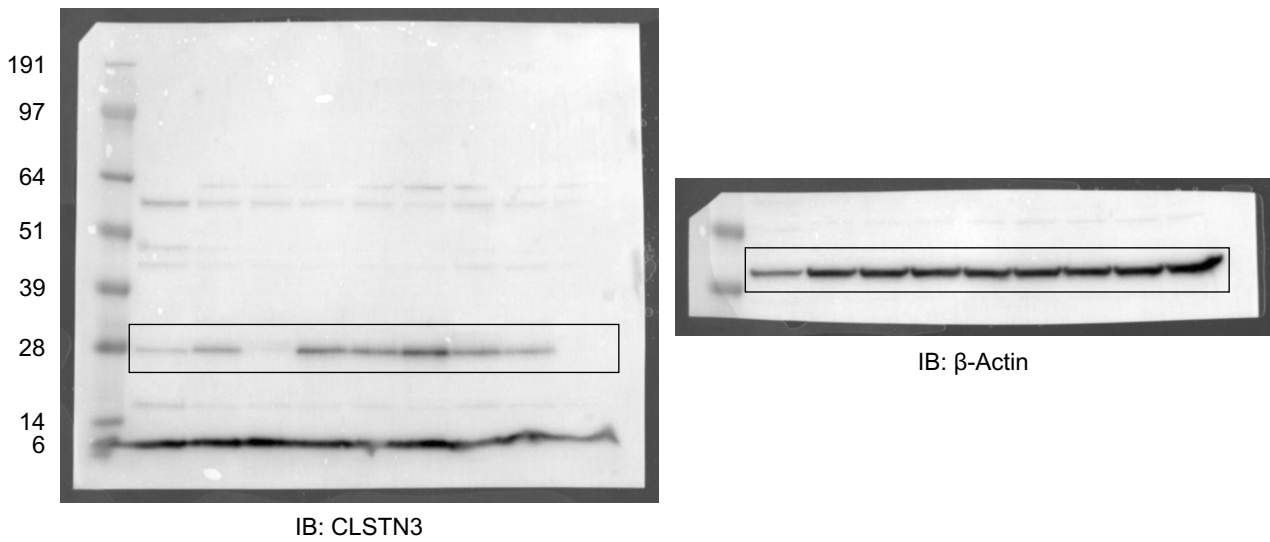
Extended Data Fig. 2b



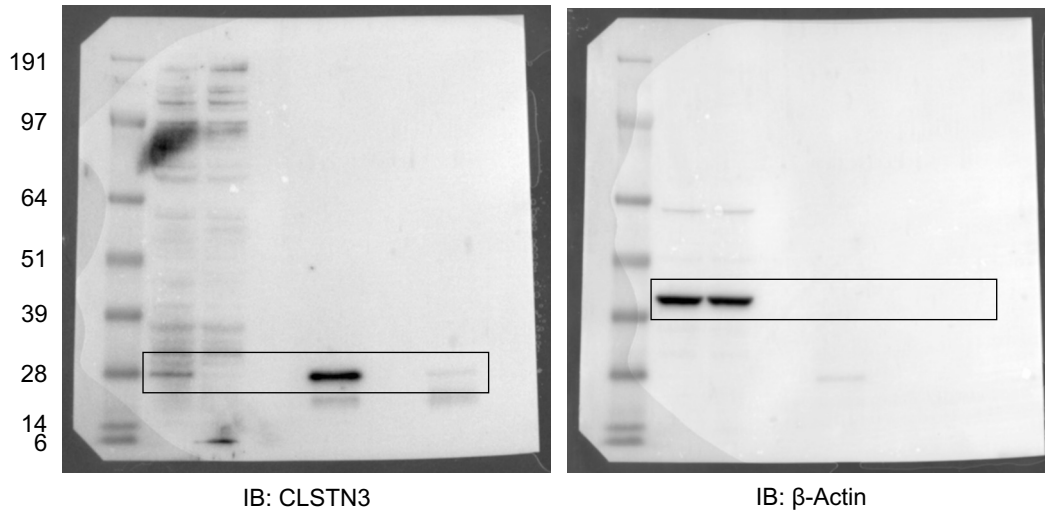
Extended Data Fig. 2c



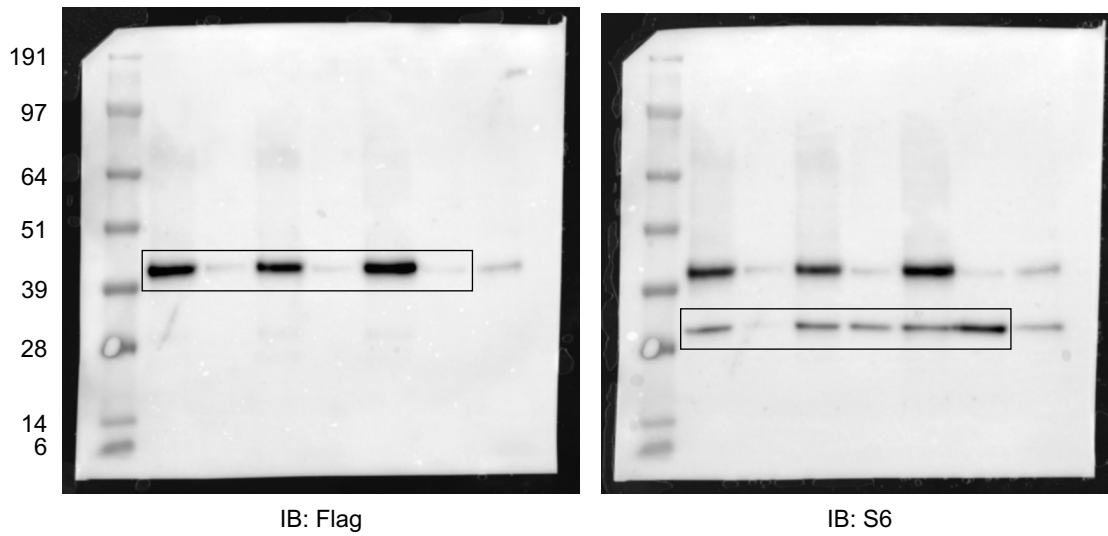
Extended Data Fig. 2d



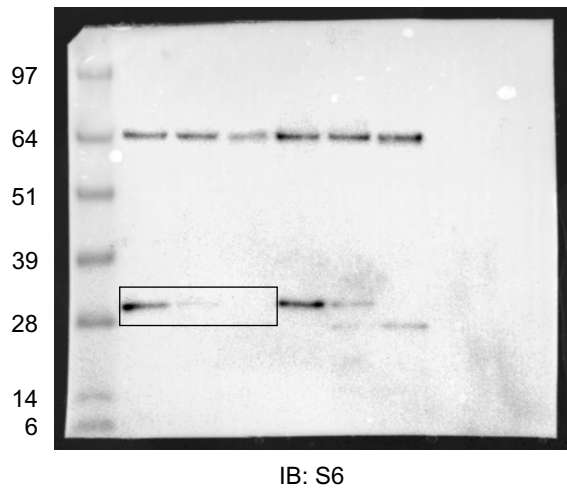
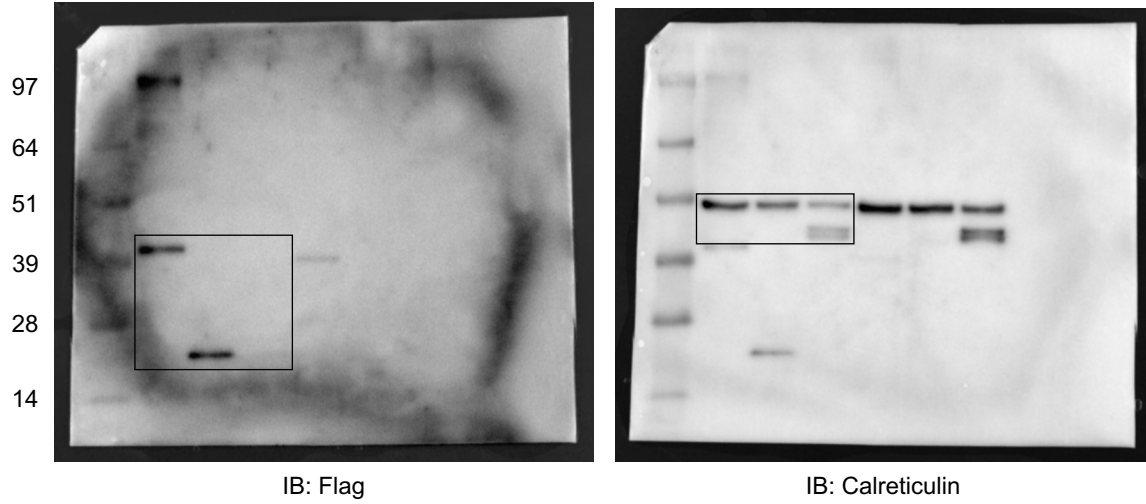
Extended Data Fig. 2e



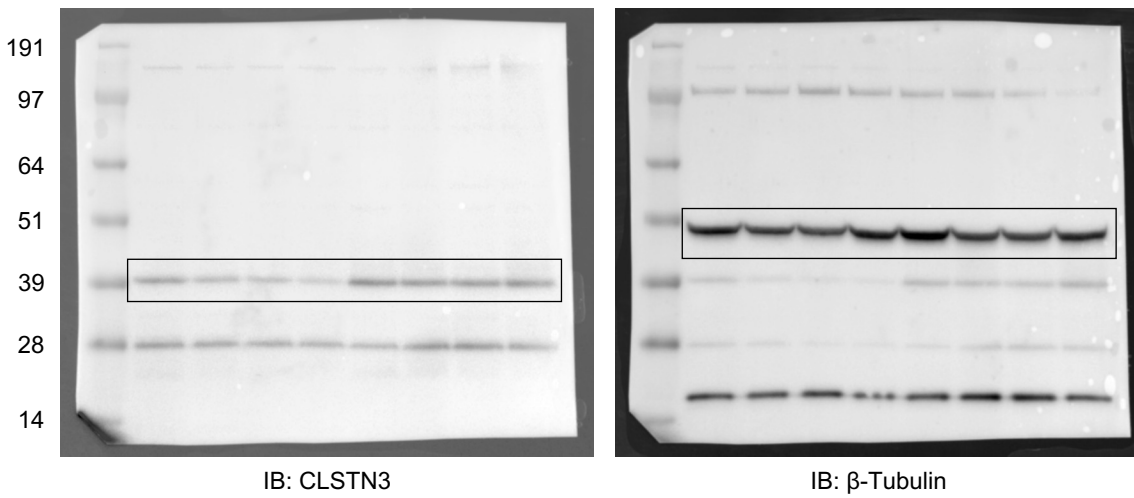
Extended Data Fig. 3b



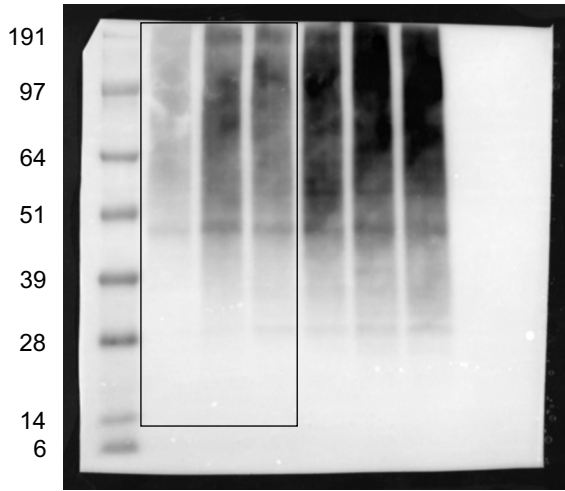
Extended Data Fig. 3c



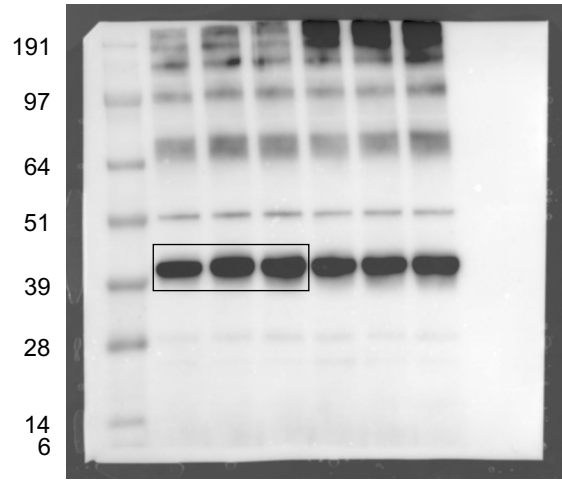
Extended Data Fig. 4c



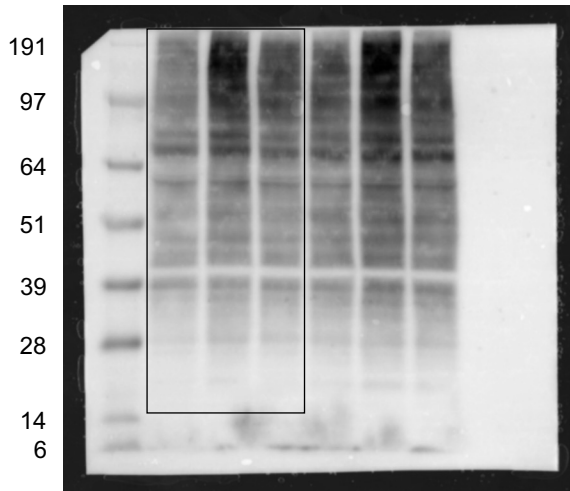
Extended Data Fig. 4e



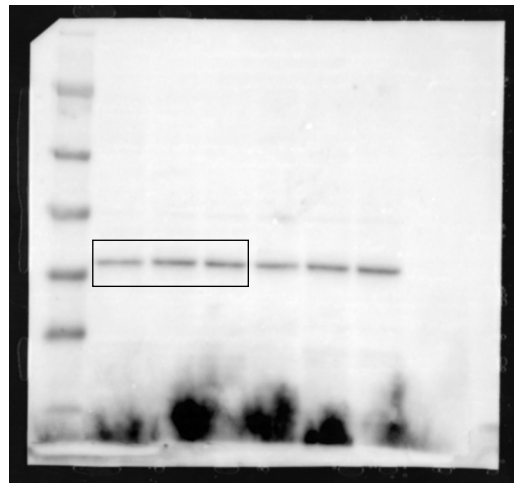
IP – IB: HA-Ub



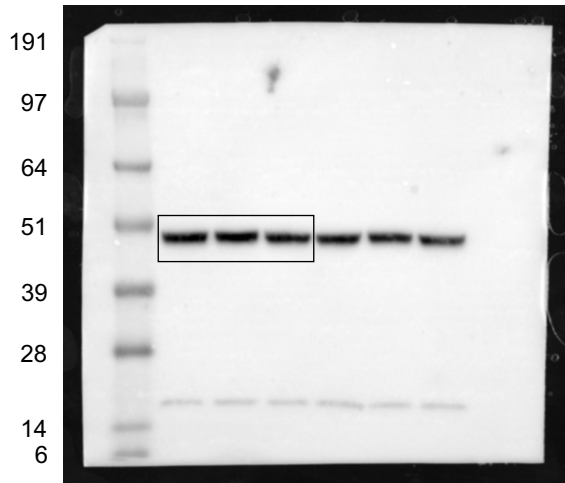
IP – IB: Flag



Input – IB: HA-Ub

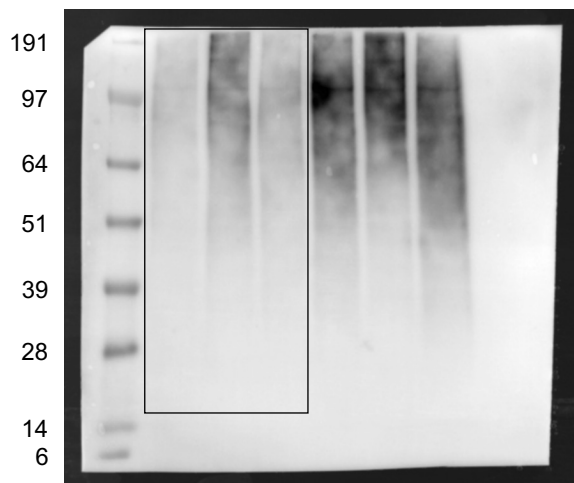


Input – IB: Flag

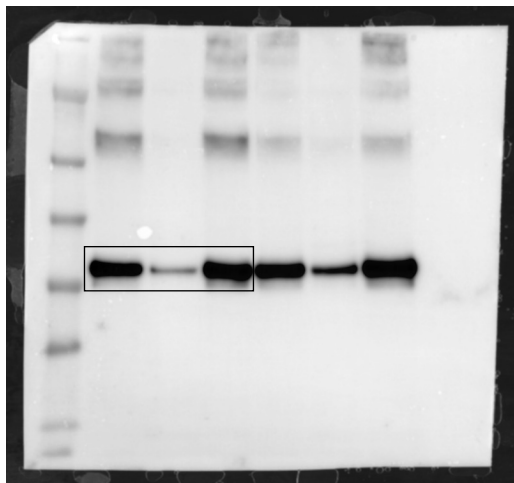


Input – IB: β -Tubulin

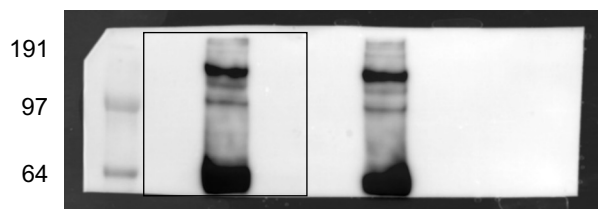
Extended Data Fig. 4f



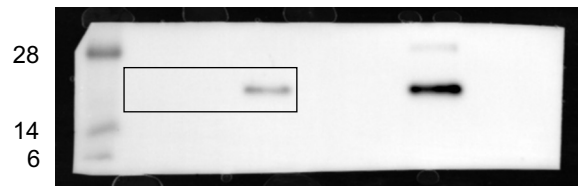
IP – IB: Ub



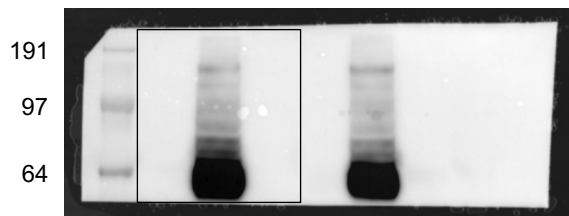
IP – IB: Flag



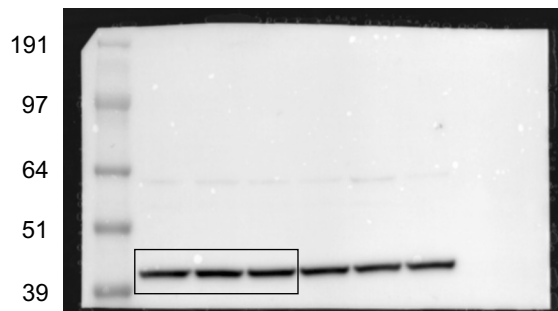
IP – IB: HA



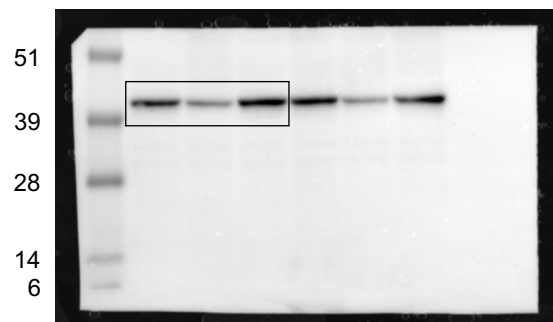
IP – IB: myc



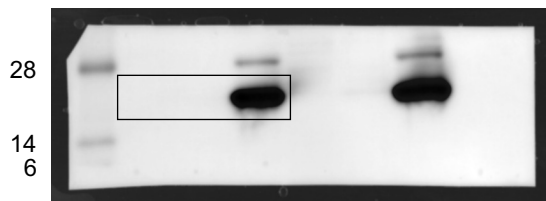
Input – IB: HA



Input – IB: β -Actin

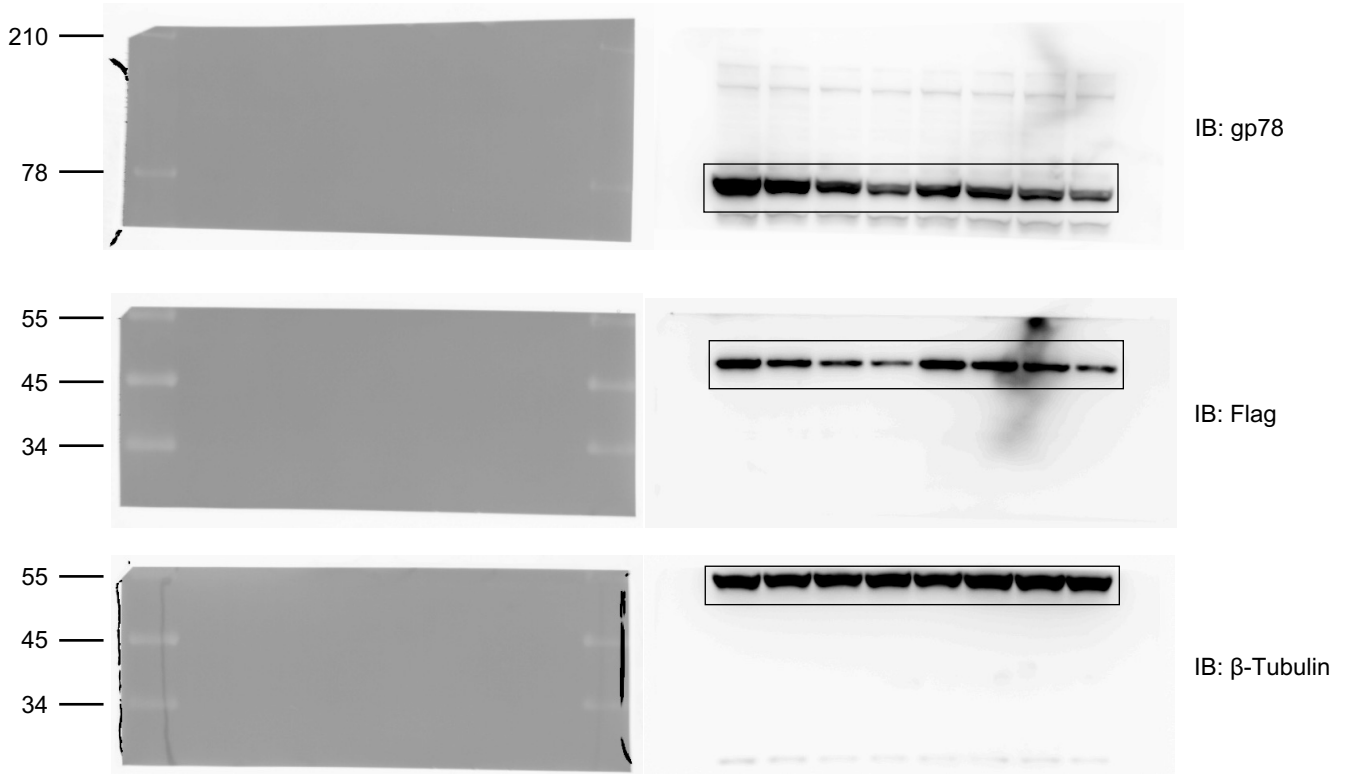


Input – IB: Flag

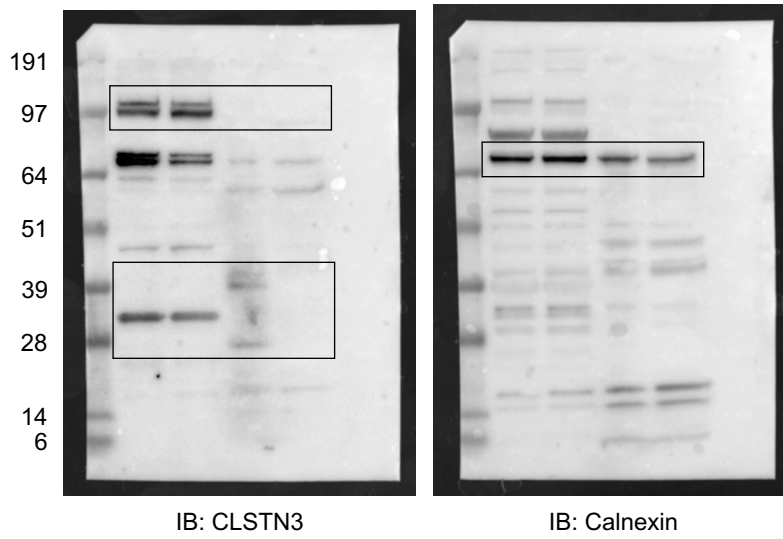


Input – IB: myc

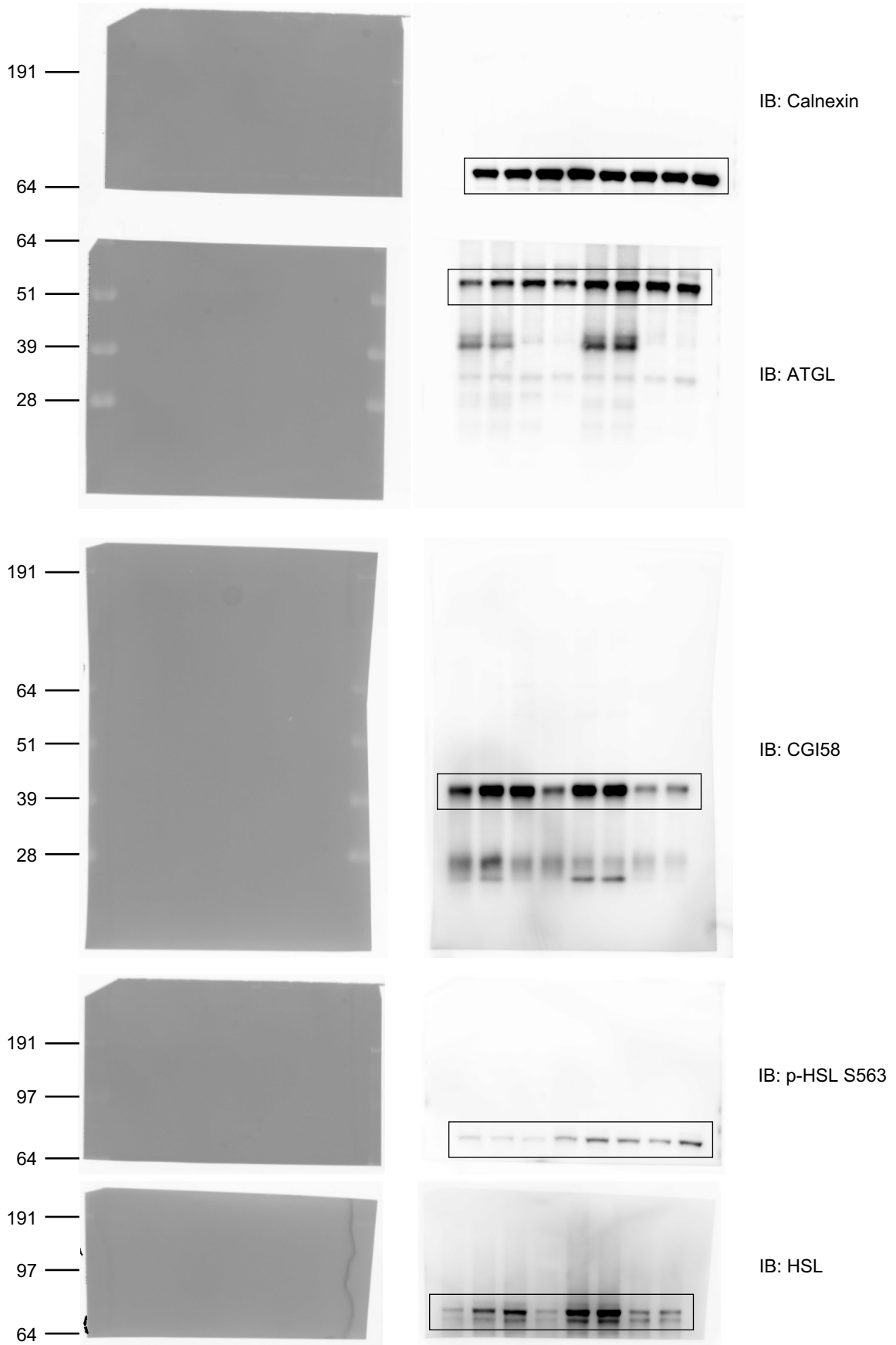
Extended Data Fig. 4g



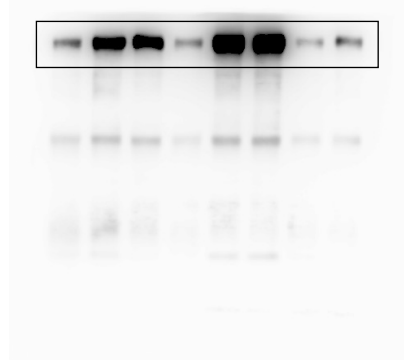
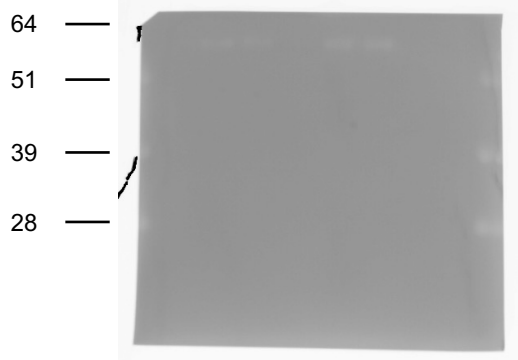
Extended Data Fig. 5b



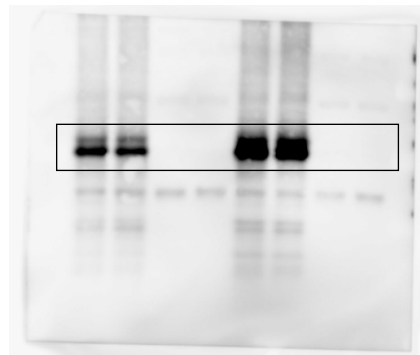
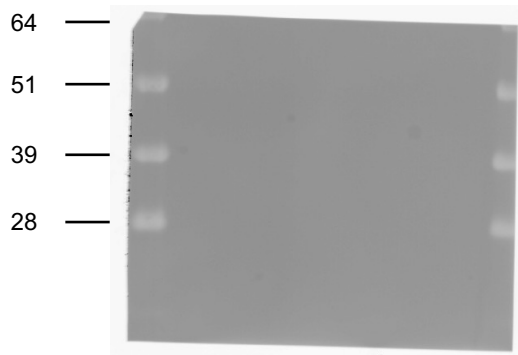
Extended Data Fig. 6a



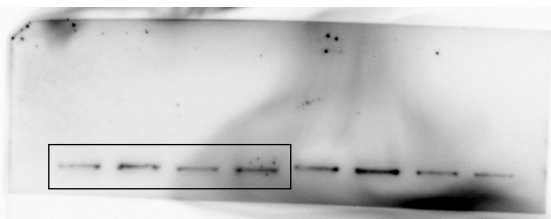
Extended Data Fig. 6a, cont.



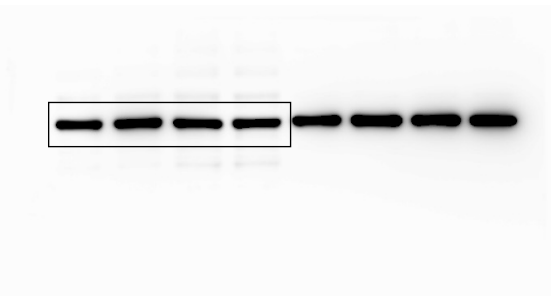
IB: PLIN1*
*Same as Fig. 5i



IB: CLSTN3

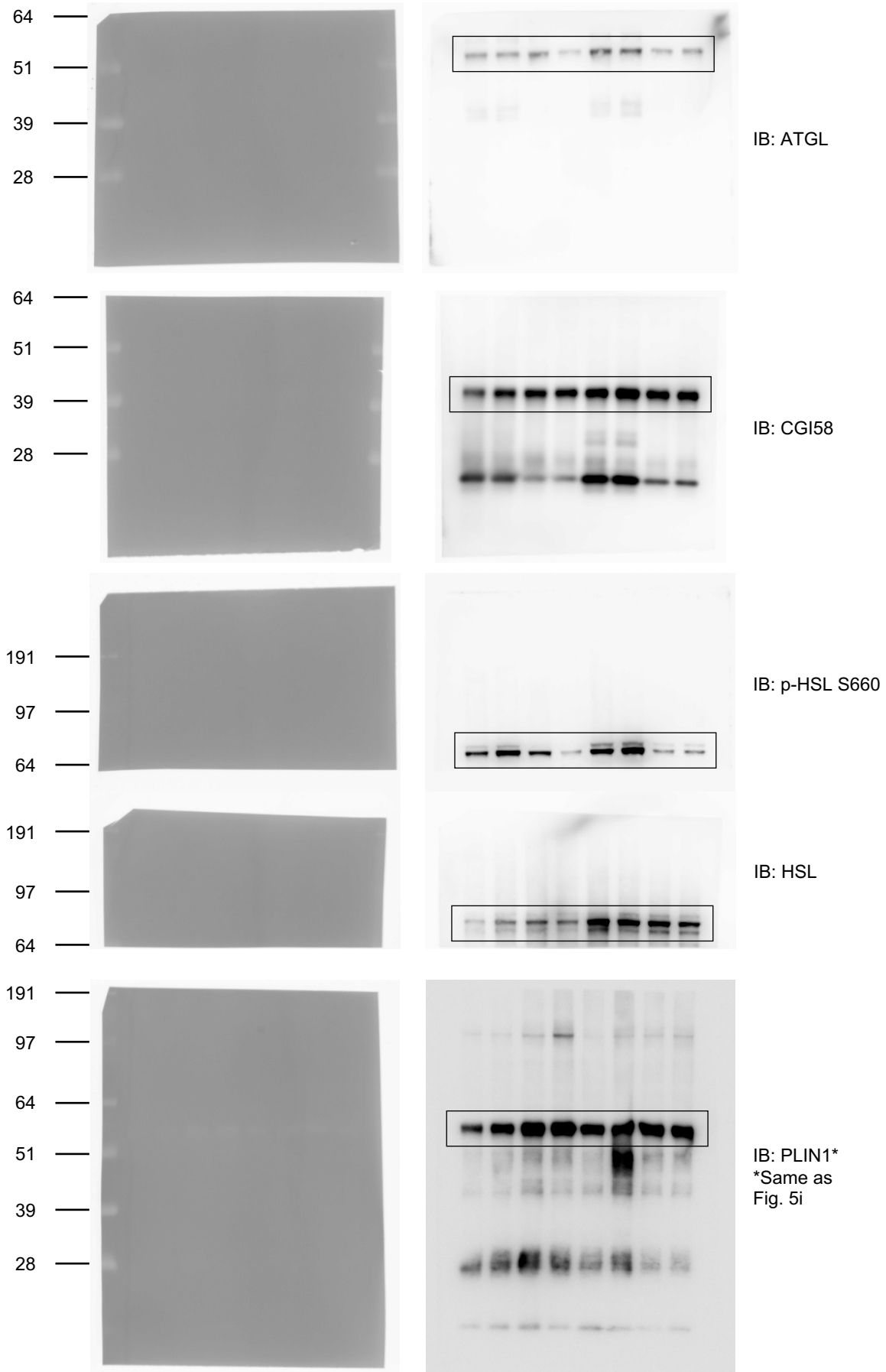


IB: p-HSL S563

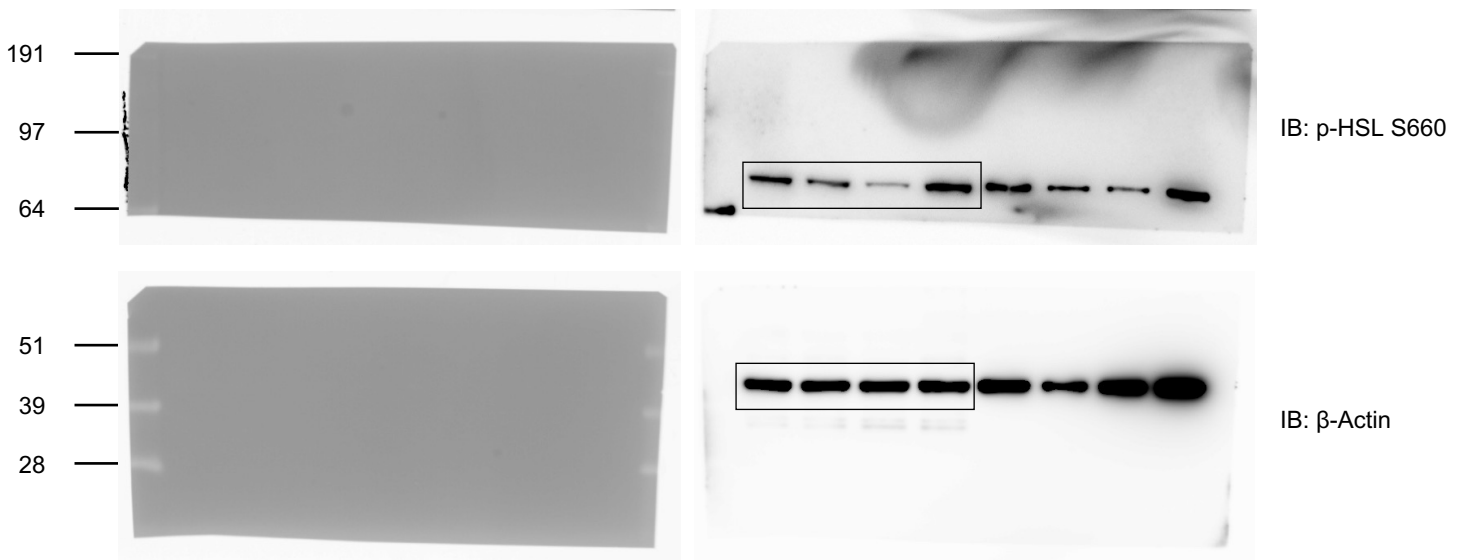
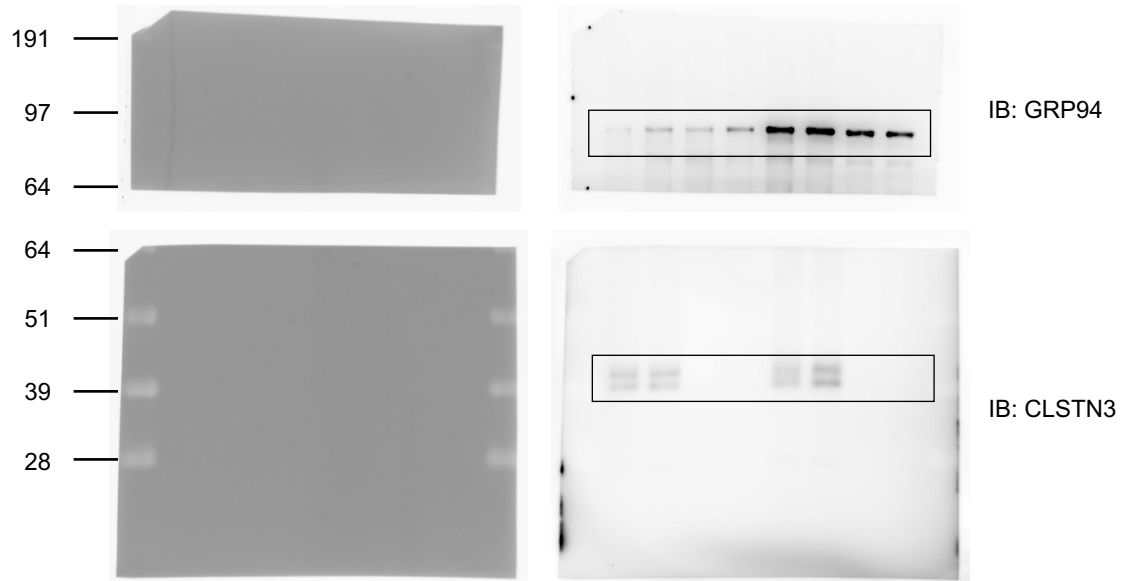


IB: β -Actin

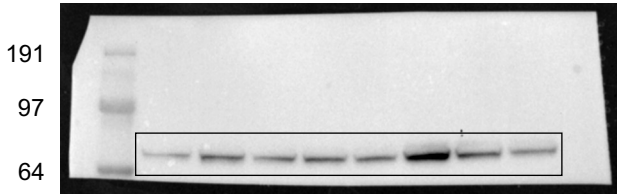
Extended Data Fig. 6b



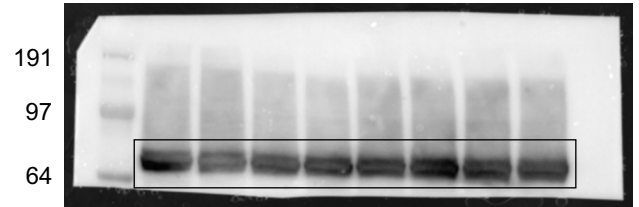
Extended Data Fig. 6b, cont.



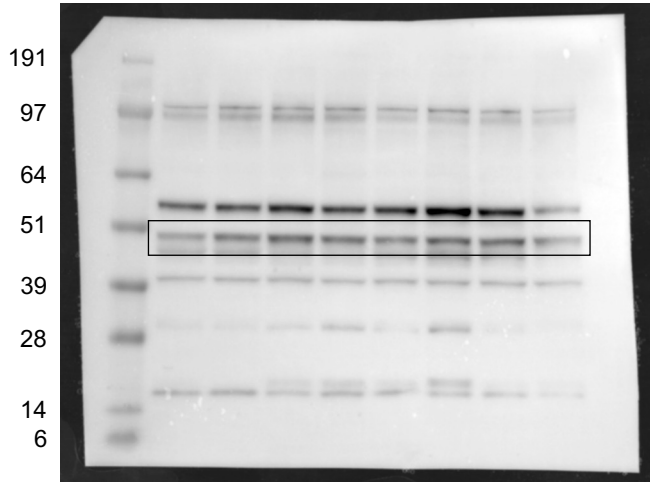
Extended Data Fig. 8e



IB: p-HSL S660



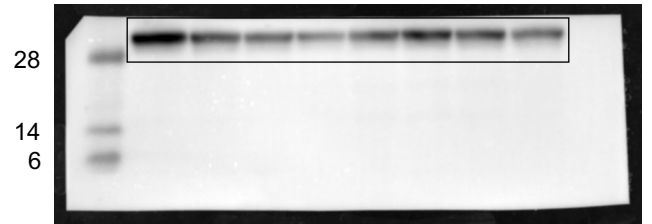
IB: HSL



IB: β -Tubulin

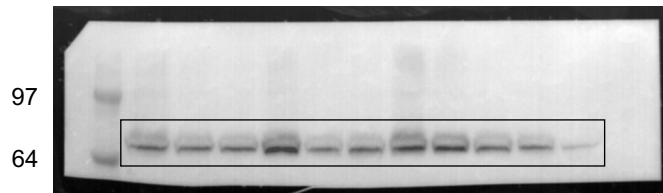


IB: TH

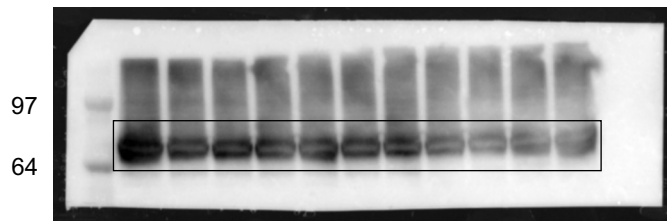


IB: UCP1

Extended Data Fig. 8f



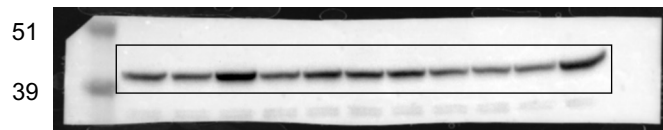
IB: p-HSL S660



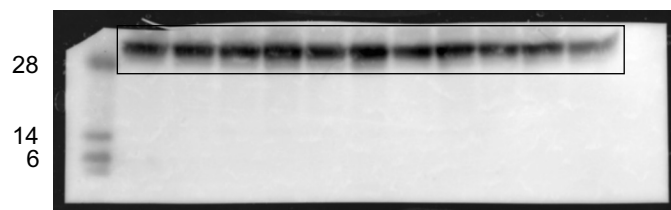
IB: HSL



IB: TH

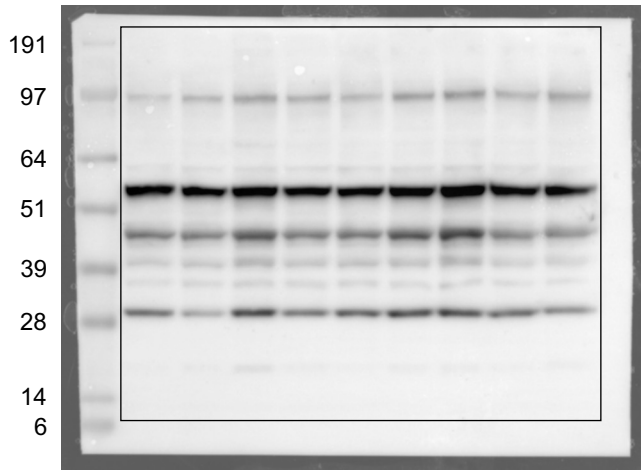


IB: β -Actin

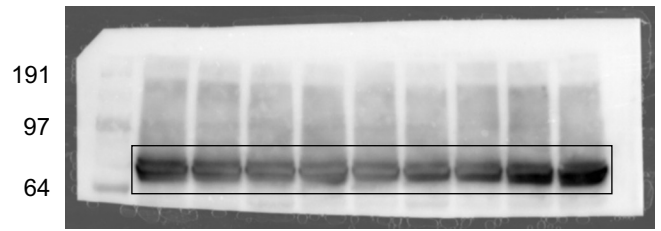


IB: UCP1

Extended Data Fig. 8g



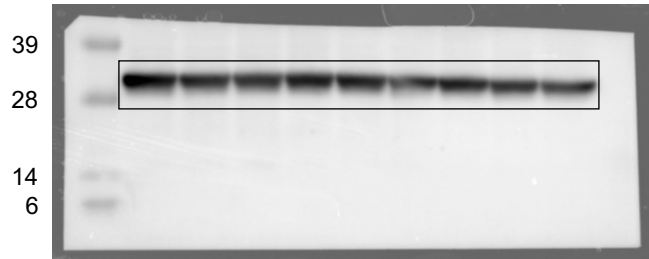
IB: p-PKA substrate



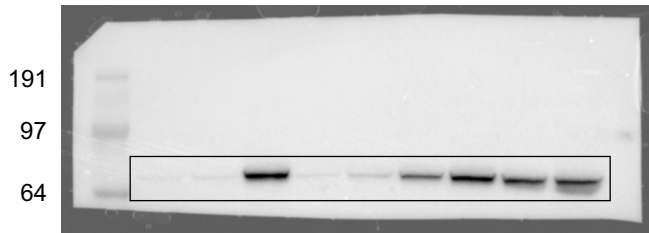
IB: HSL



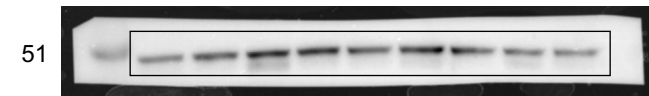
IB: TH



IB: UCP1

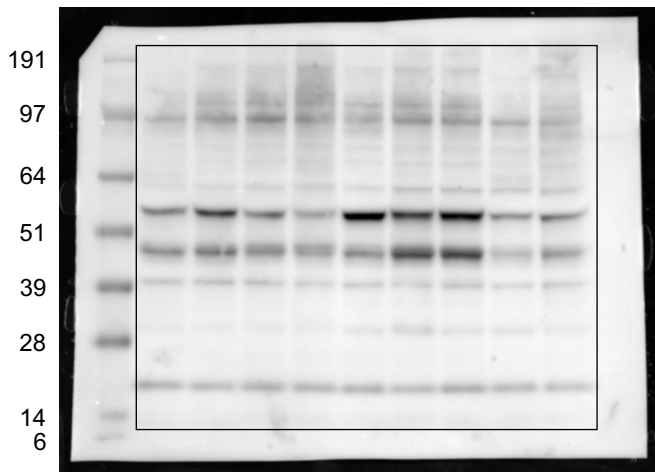


IB: p-HSL S660

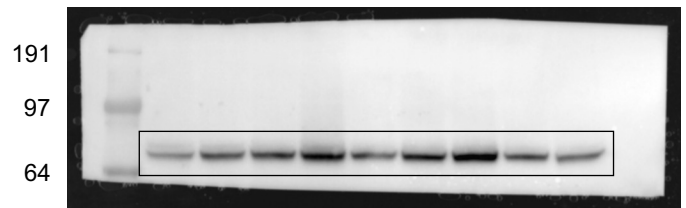


IB: beta-Tubulin

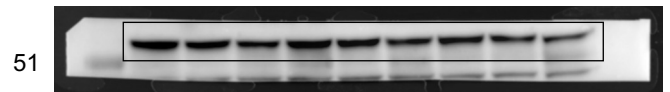
Extended Data Fig. 8h



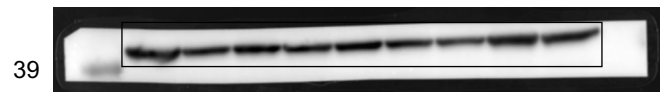
IB: p-PKA substrate



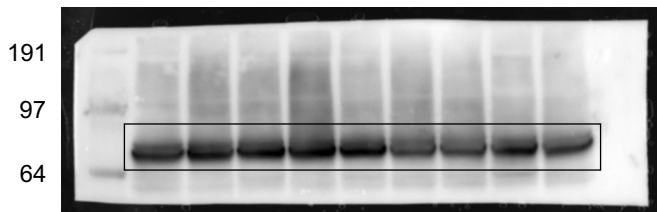
IB: p-HSL S660



IB: TH



IB: beta-Actin

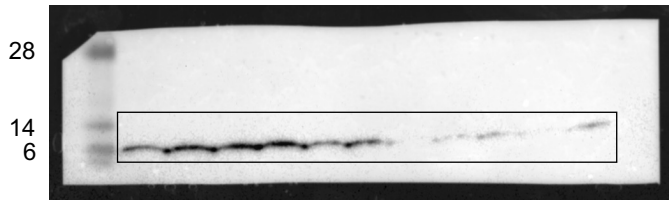


IB: HSL



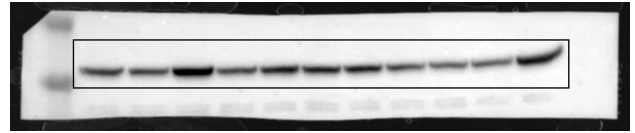
IB: UCP1

Extended Data Fig. 8i



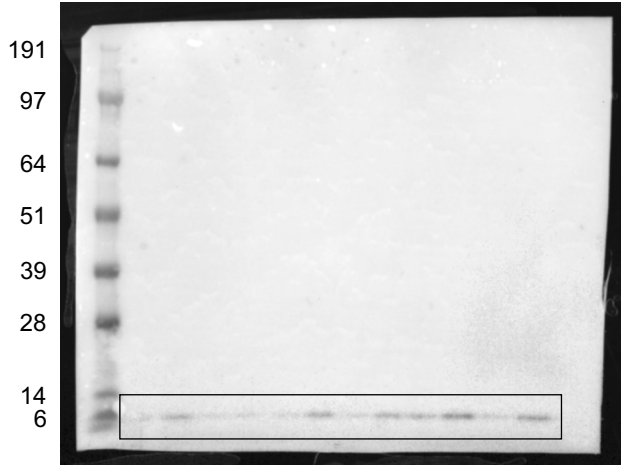
IB: S100B

51
39

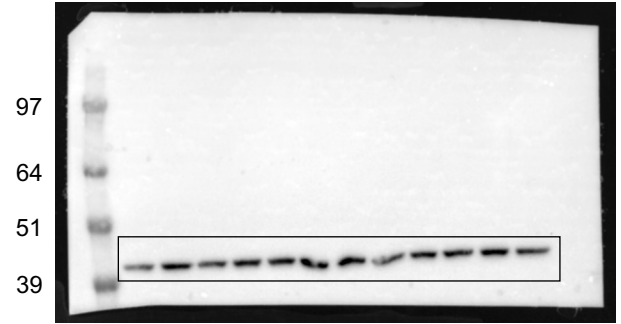


IB: β -Actin*
*Same as Extended Data Fig. 8f

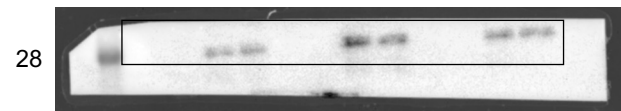
Extended Data Fig. 8j



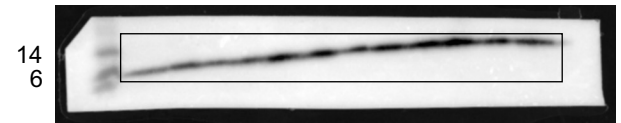
CM – IB: S100B



WCL – IB: β -Actin

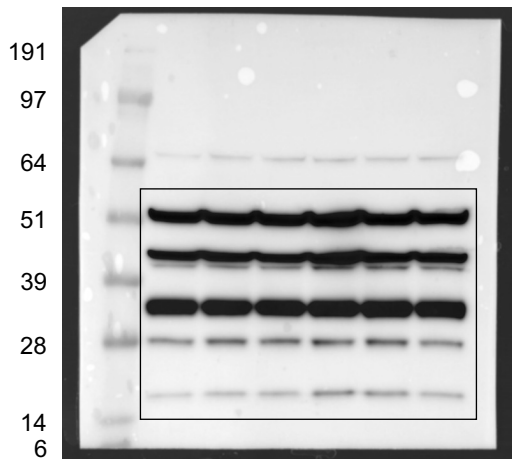


WCL – IB: CLSTN3

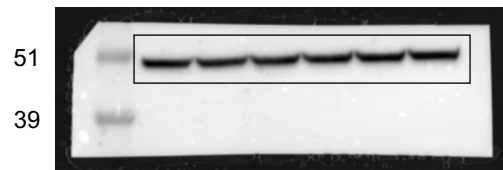


WCL – IB: S100B

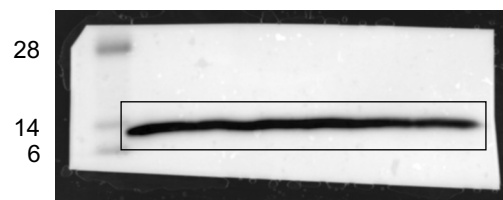
Extended Data Fig. 9d



IB: OXPHOS

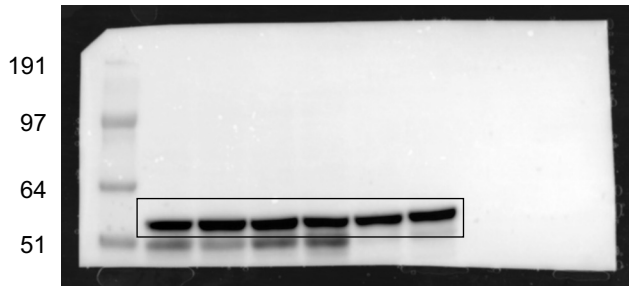


IB: β -Tubulin

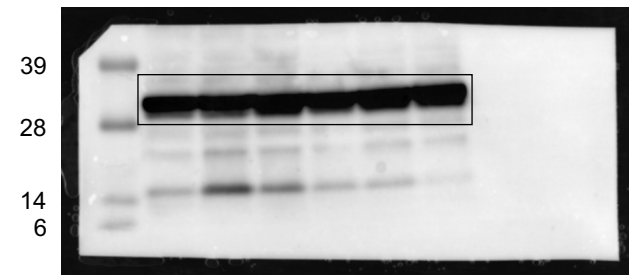


IB: FABP4

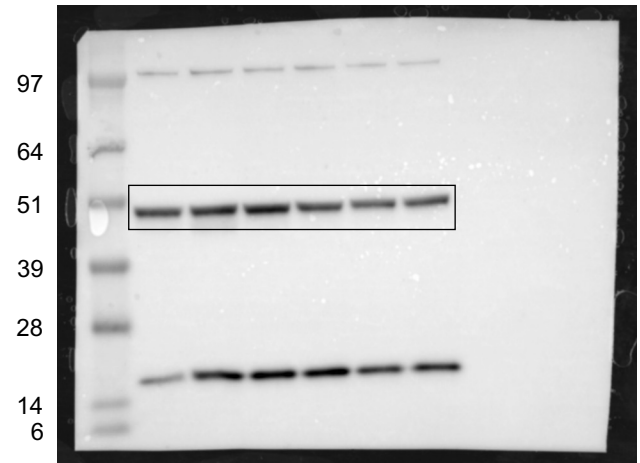
Extended Data Fig. 9f



IB: TH

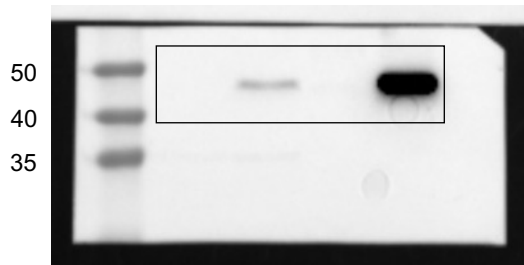


IB: UCP1

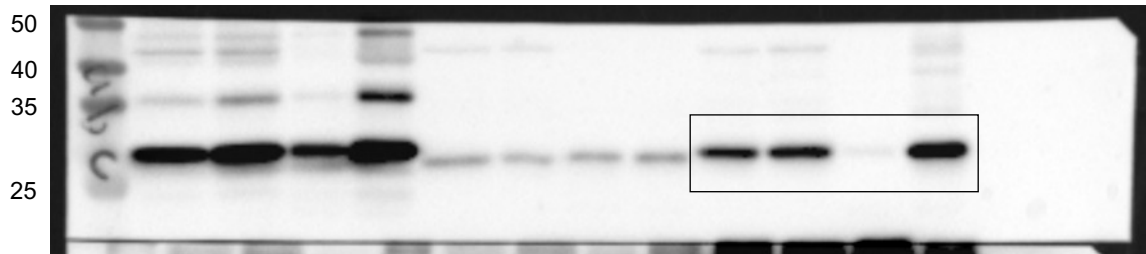


IB: β -Tubulin

Extended Data Fig. 11a

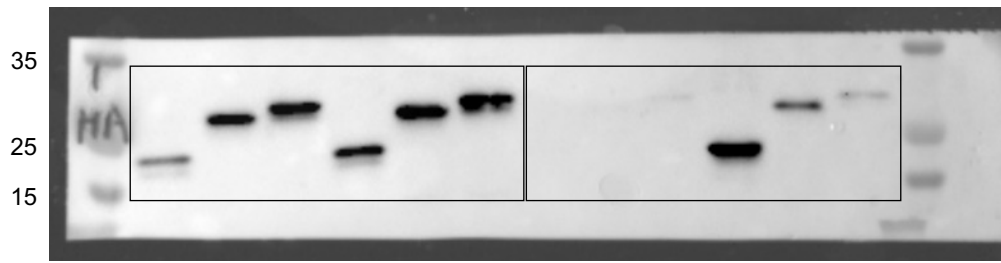


IB: Flag



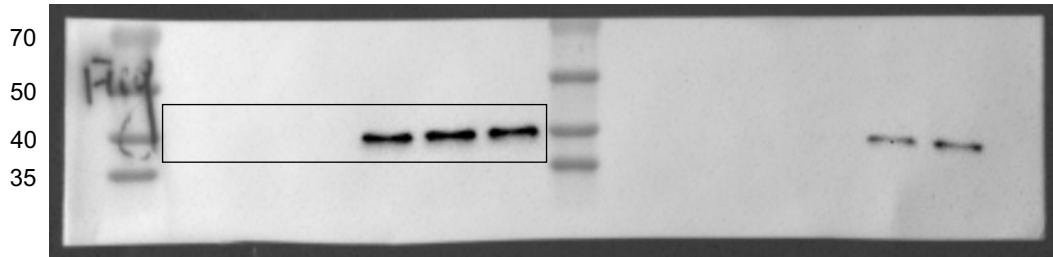
IB: HA

Extended Data Fig. 11b

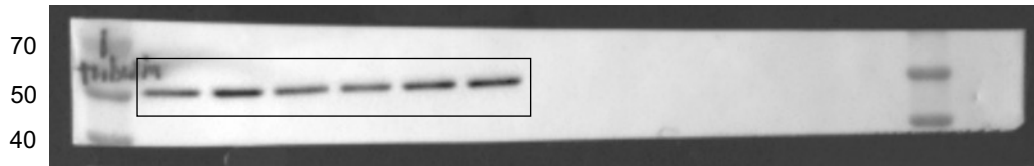


Input - IB: HA

IP - IB: HA

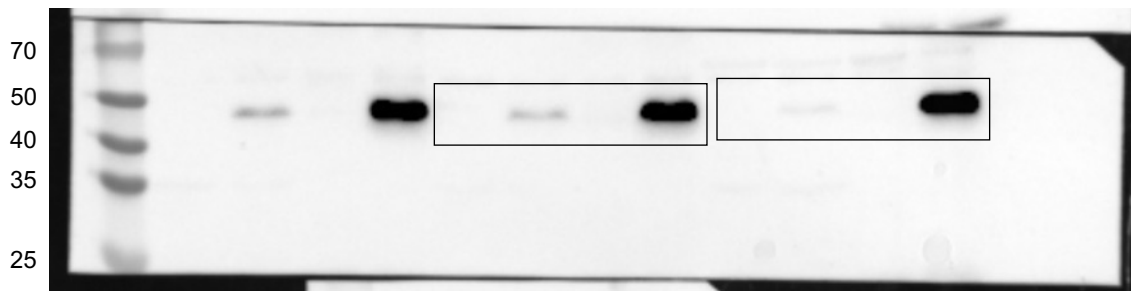


IP - IB: Flag



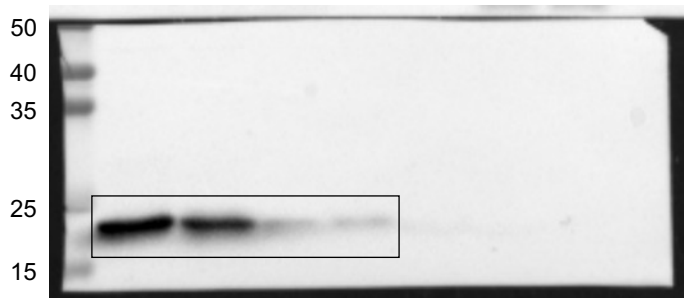
Input - IB: Tubulin

Extended Data Fig. 11c



CGI58 - IB: Flag

RAB18 - IB: Flag

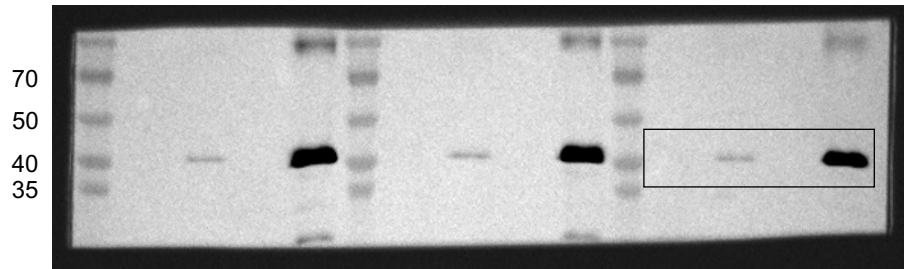


RAB18 - IB: HA

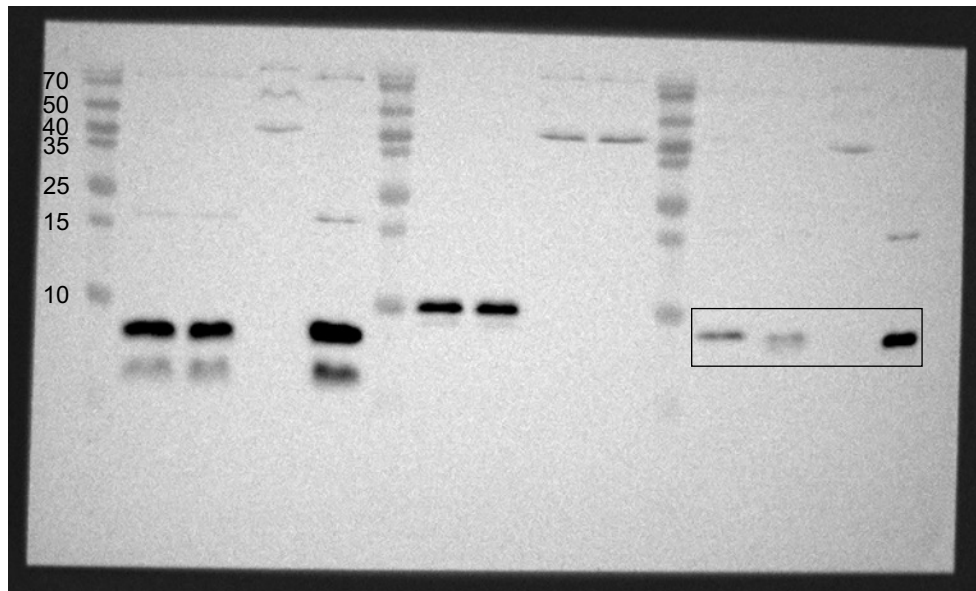


CGI58 - IB: HA

Extended Data Fig. 11d

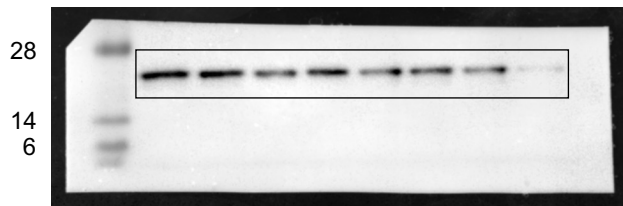


IB: Flag

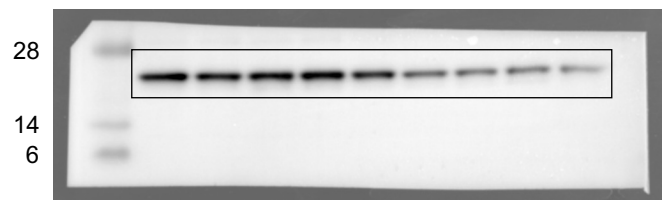


IB: HA

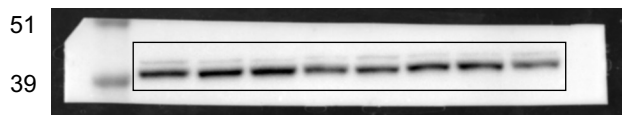
Extended Data Fig. 12c



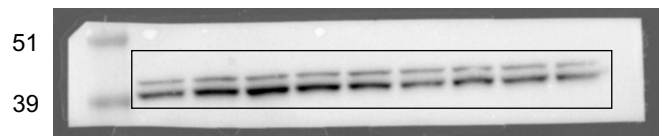
IB: CIDEA



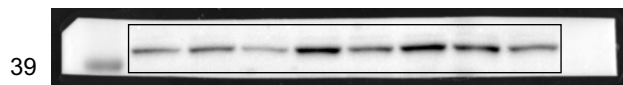
IB: CIDEA



IB: CGI58



IB: CGI58



IB: β -Actin



IB: β -Actin