

Supplementary Information

ZNF354C is a transcriptional repressor that inhibits endothelial angiogenic sprouting

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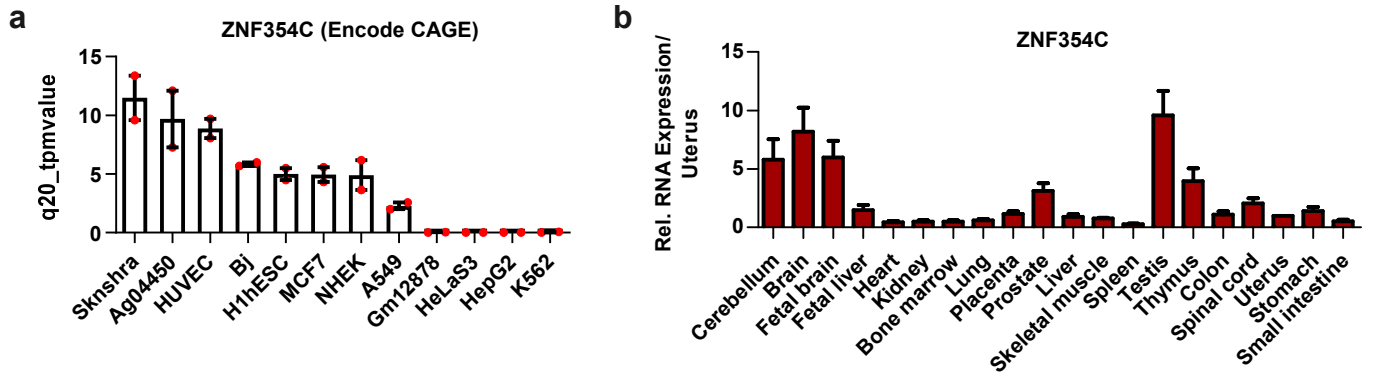
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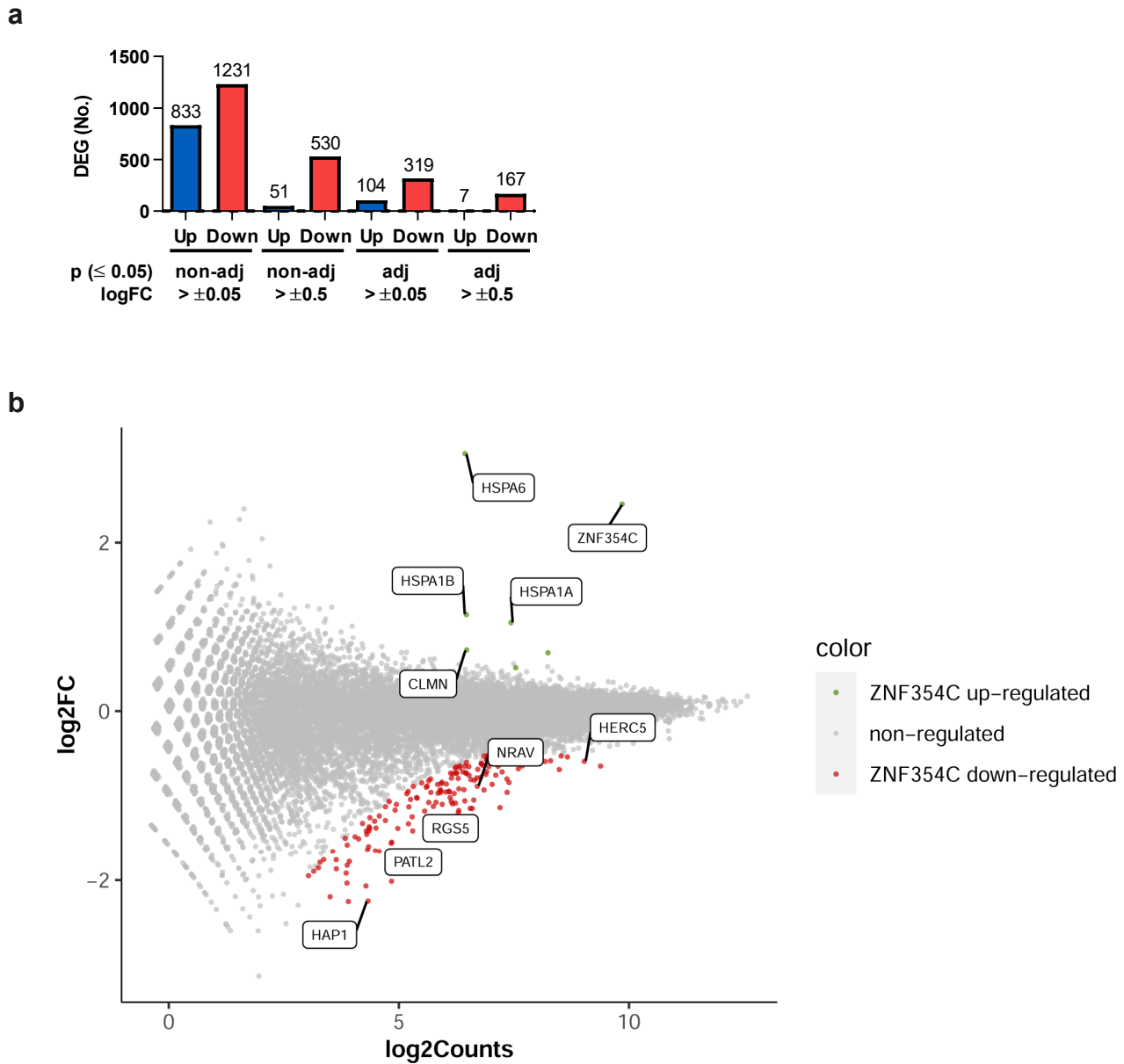
Email: Leisegang@vrc.uni-frankfurt.de

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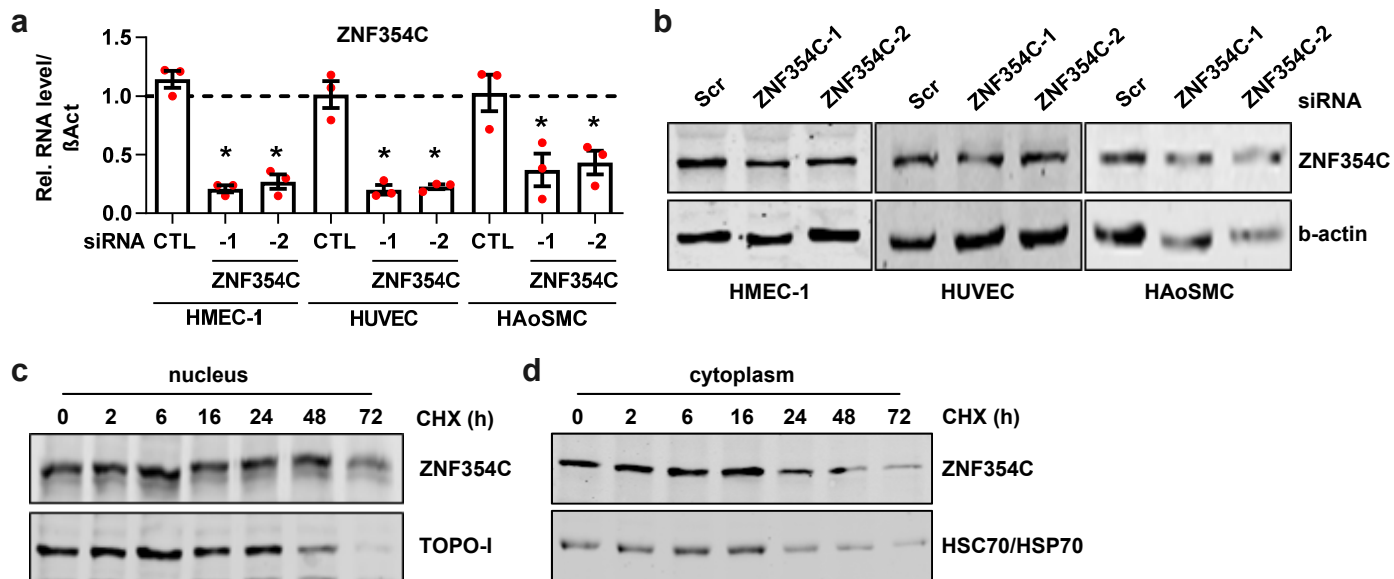
- Supplementary figure 1
- Supplementary figure 2
- Supplementary figure 3
- Uncropped western blots



Supplementary Figure 1: (a) Encode FANTOM5 Cap Analysis of Gene Expression data of ZNF354C in representative cell types (whole cell). Q20 transcripts per million is shown on the Y-axis. n=2. Data are mean \pm SEM. (b) Expression of ZNF354C in 20 different human tissues measured by RT-qPCR relative to Uterus expression, which was set to 1. n=3.



Supplementary Figure 2: (a) Number of differentially expressed genes (DEG) of the RNA-Seq of up- or downregulated genes after ZNF354C overexpression. Conditions are indicated (adjusted or non-adjusted p -value <0.05 ; $\log_2FC > \pm 0.05$ or $> \pm 0.5$). (b) MA plot of RNA-Seq after overexpression of pCMV6-ZNF354C (ZNF354C) or pCMV6-Entry (CTRL). Conditions are adjusted p -value <0.05 (FDR); Colored points indicate genes significantly differentially expressed ($\log_2FC > \pm 0.5$). Red, ZNF354C downregulated genes; green, ZNF354C upregulated genes; grey, non-regulated genes ($\log_2FC < \pm 0.5$).



Supplementary Figure 3: (a) RT-qPCR of ZNF354C after transfection of HMEC-1, HUVEC or HAoSMC with siRNAs targeting ZNF354C (-1, -2). Scrambled siRNA (CTL) served as negative control. n=3. Data are mean \pm SEM. Mann-Whitney t-test; *P<0.05. (b) Western blot after transfection of HMEC-1, HUVEC or HAoSMC with siRNAs targeting ZNF354C (-1, -2). Scrambled siRNA (CTL) served as negative control. ZNF354C and b-actin antibodies were used. (c&d) Western blot after fractionation of HUVEC into nucleus (c) and cytoplasm (d) and treatment with Cycloheximide (CHX) for the indicate time (h). ZNF354C, Topoisomerase I (Topo-I) and HSC70/HSP70 antibodies were used.

Fig. 1B

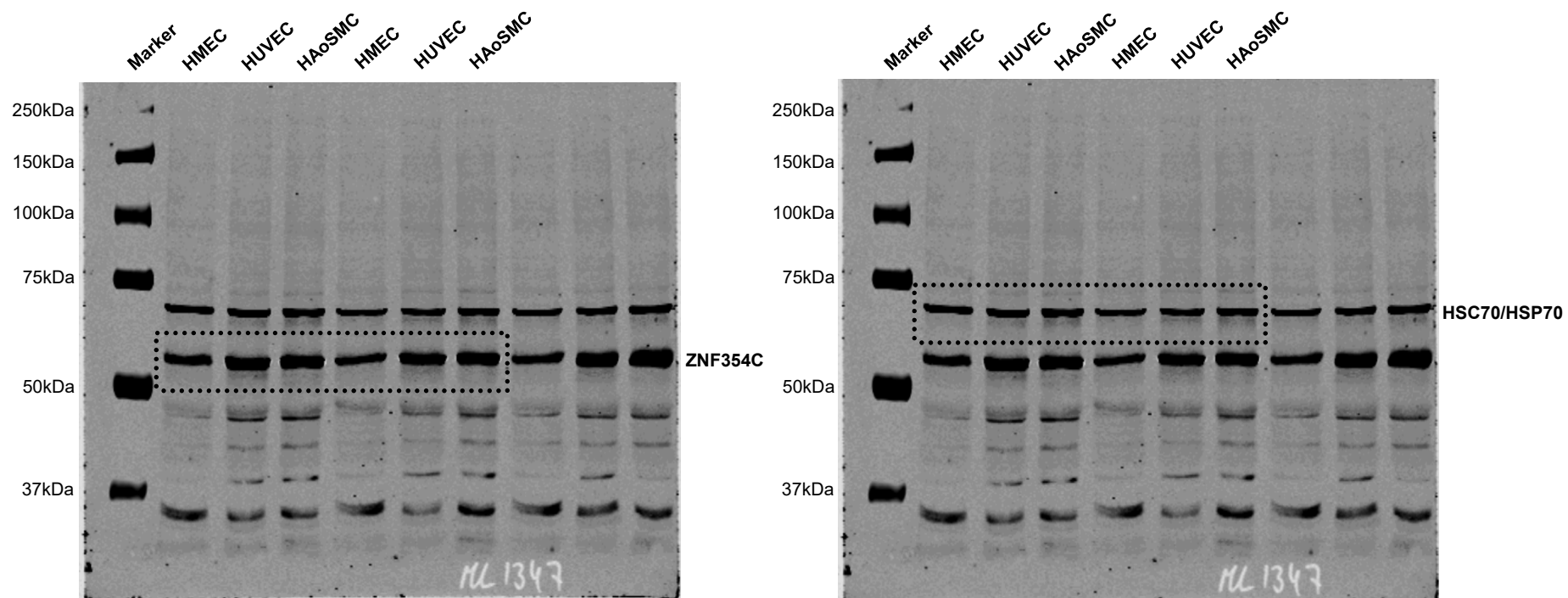


Fig. 1E (Left: HMECs)

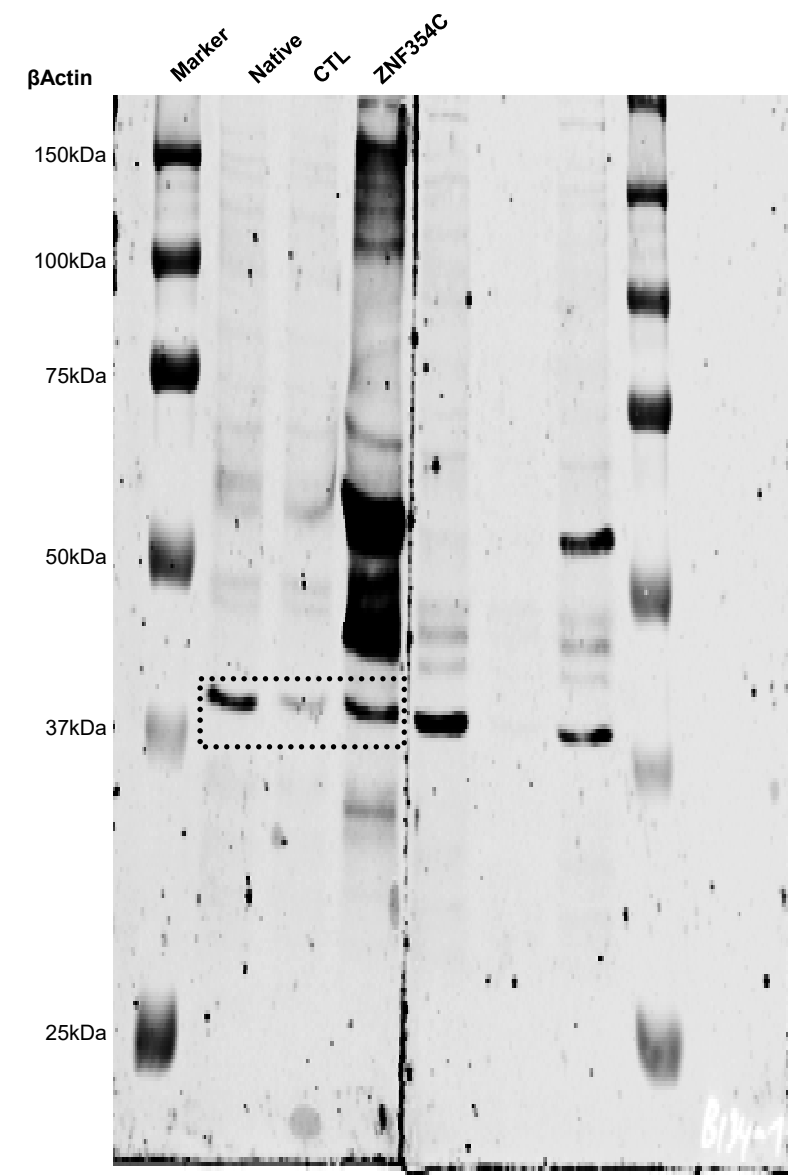
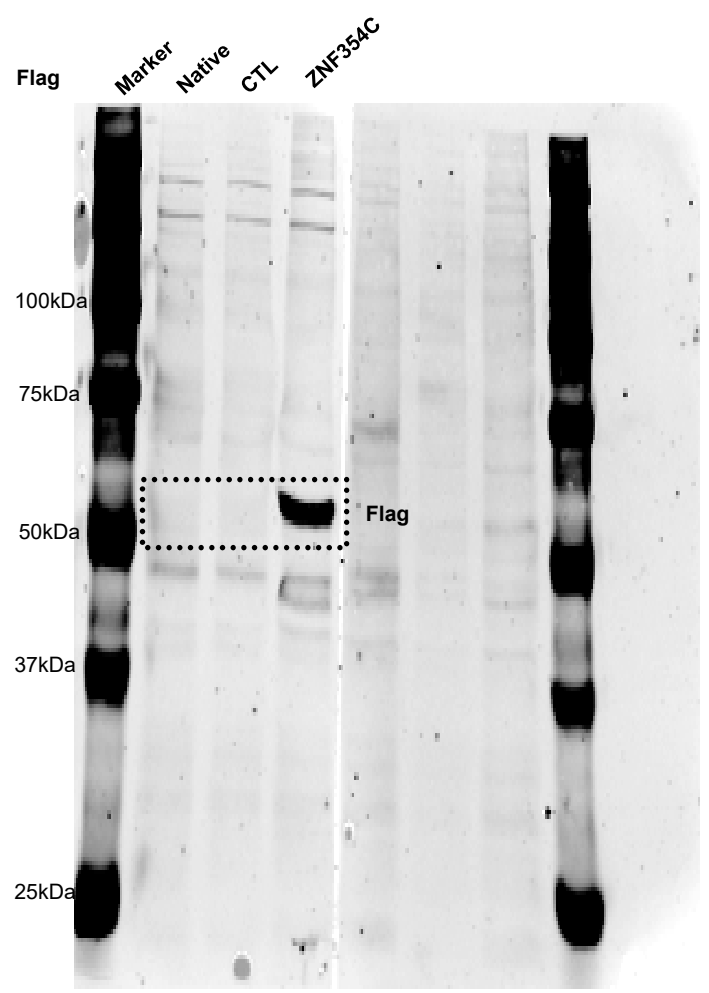
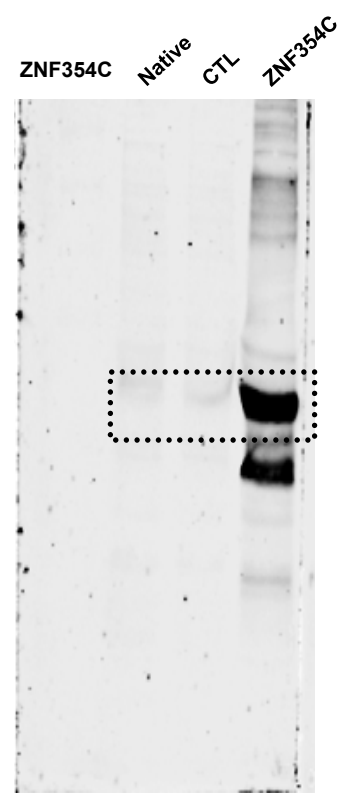


Fig. 1E (Middle: HUVECs)

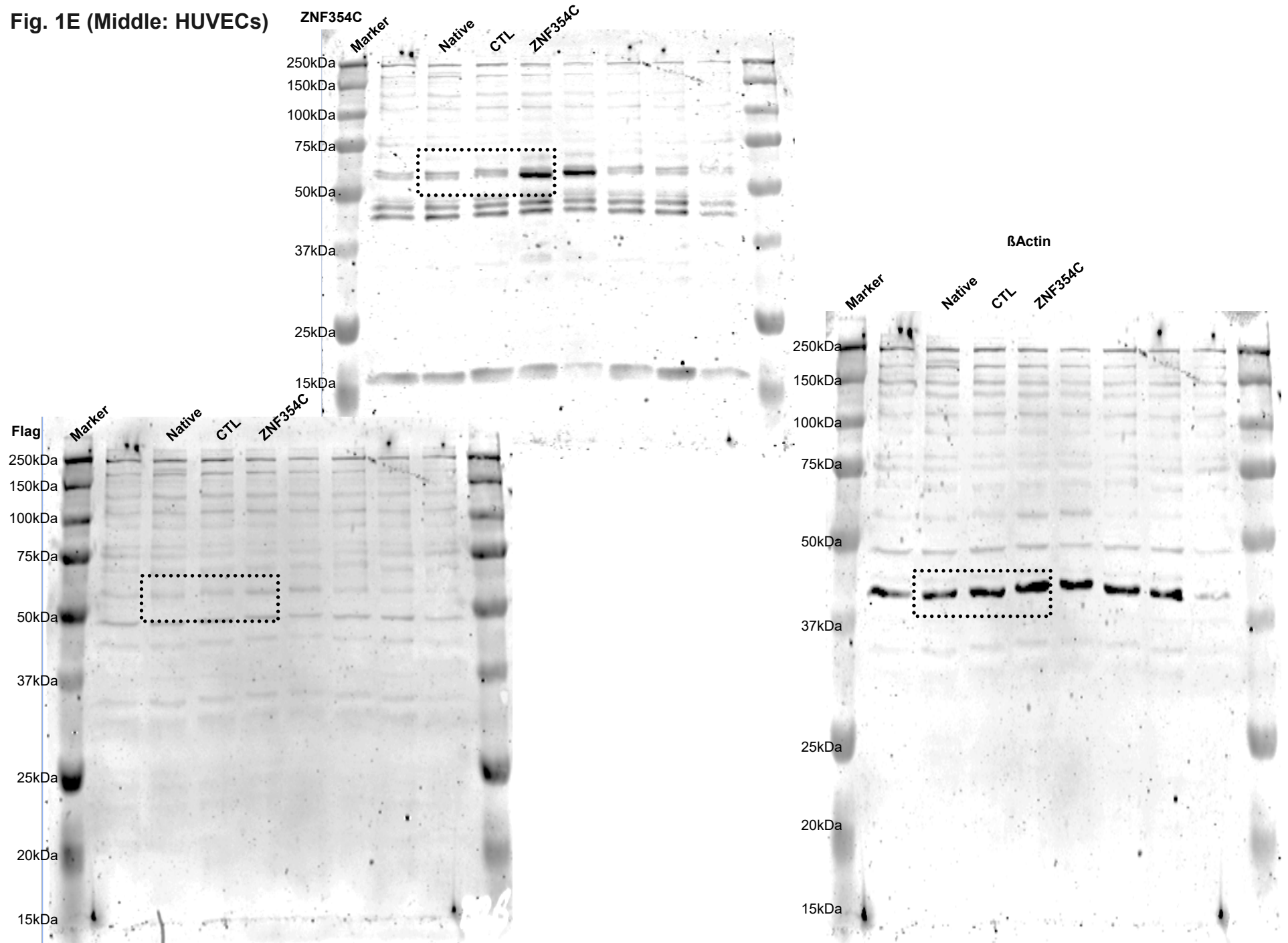


Fig. 1E (Right: HAoSMCs)

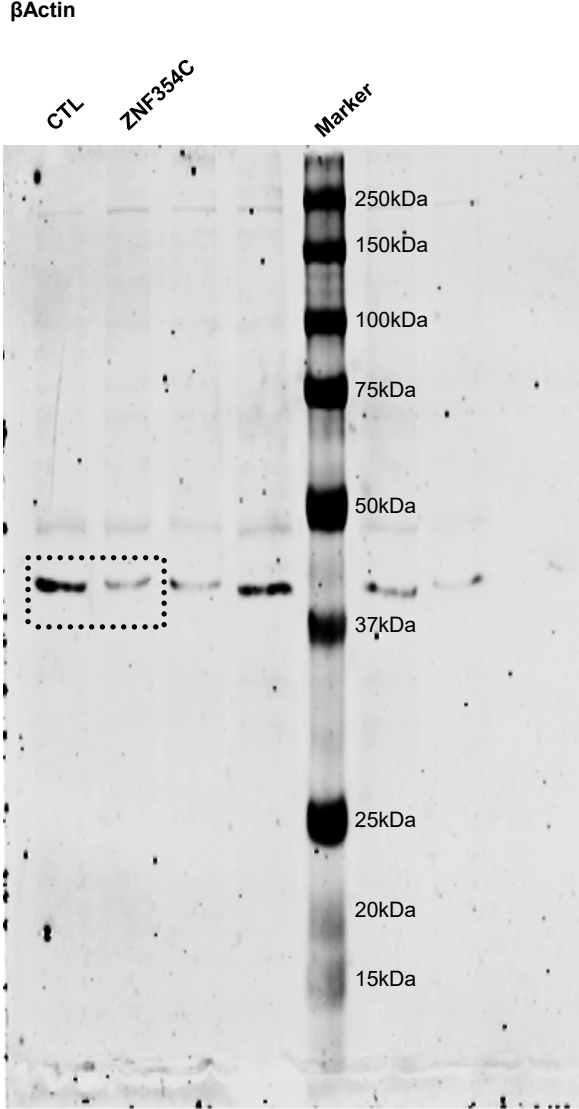
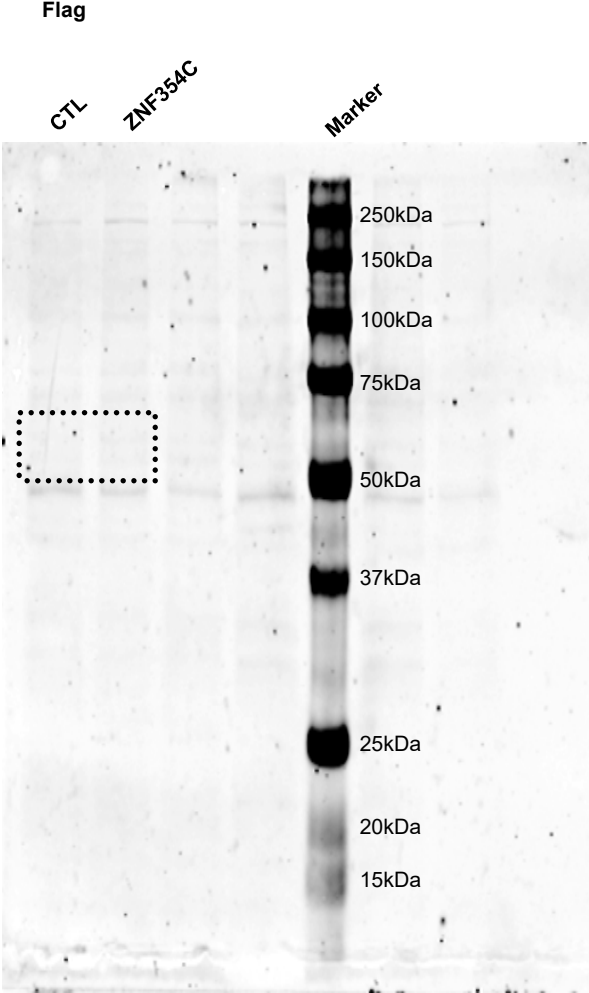
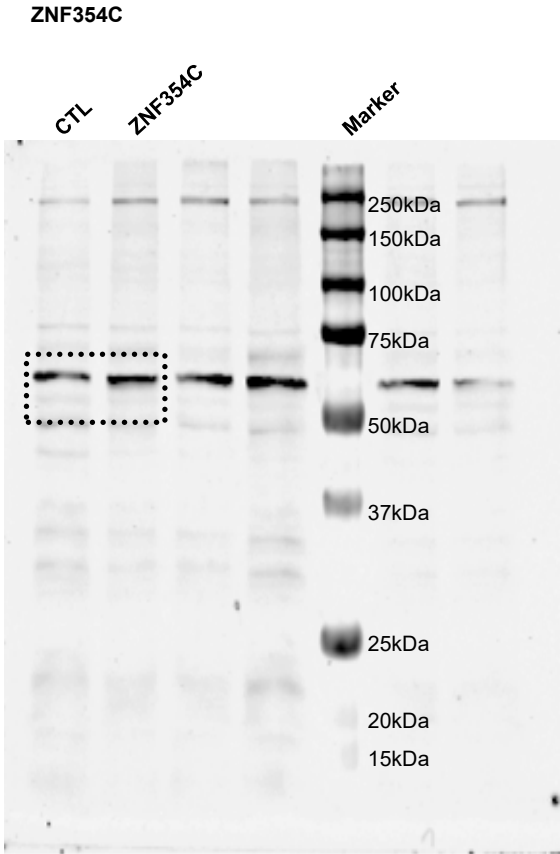


Fig. 3E

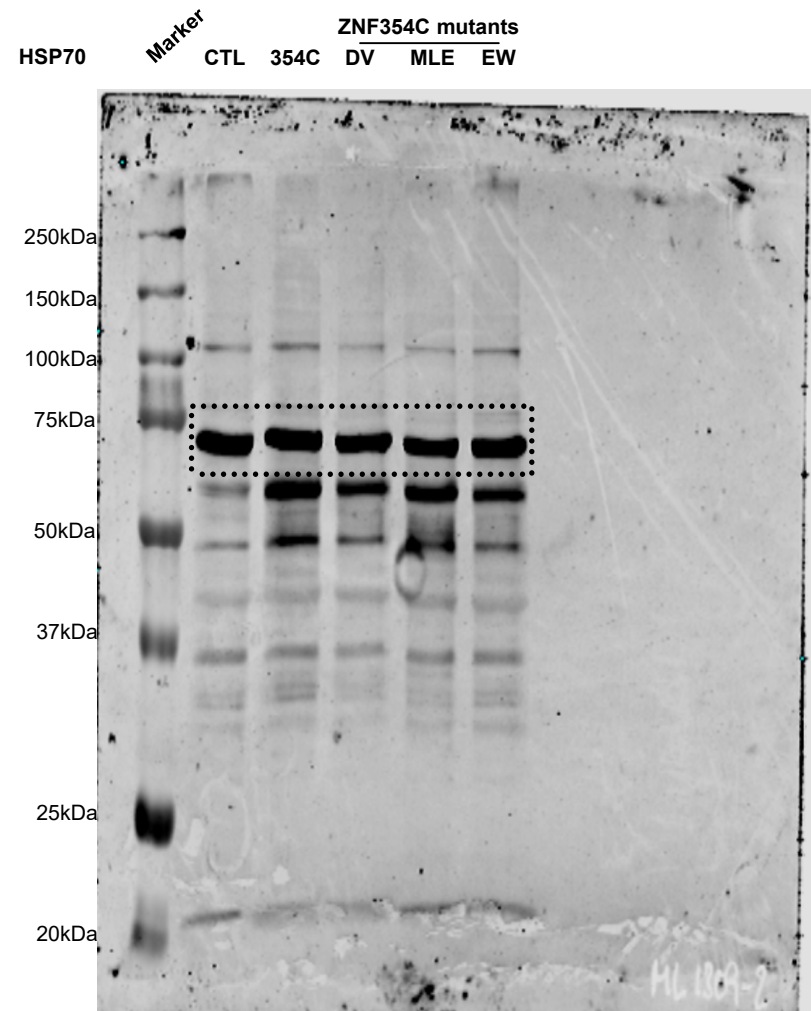
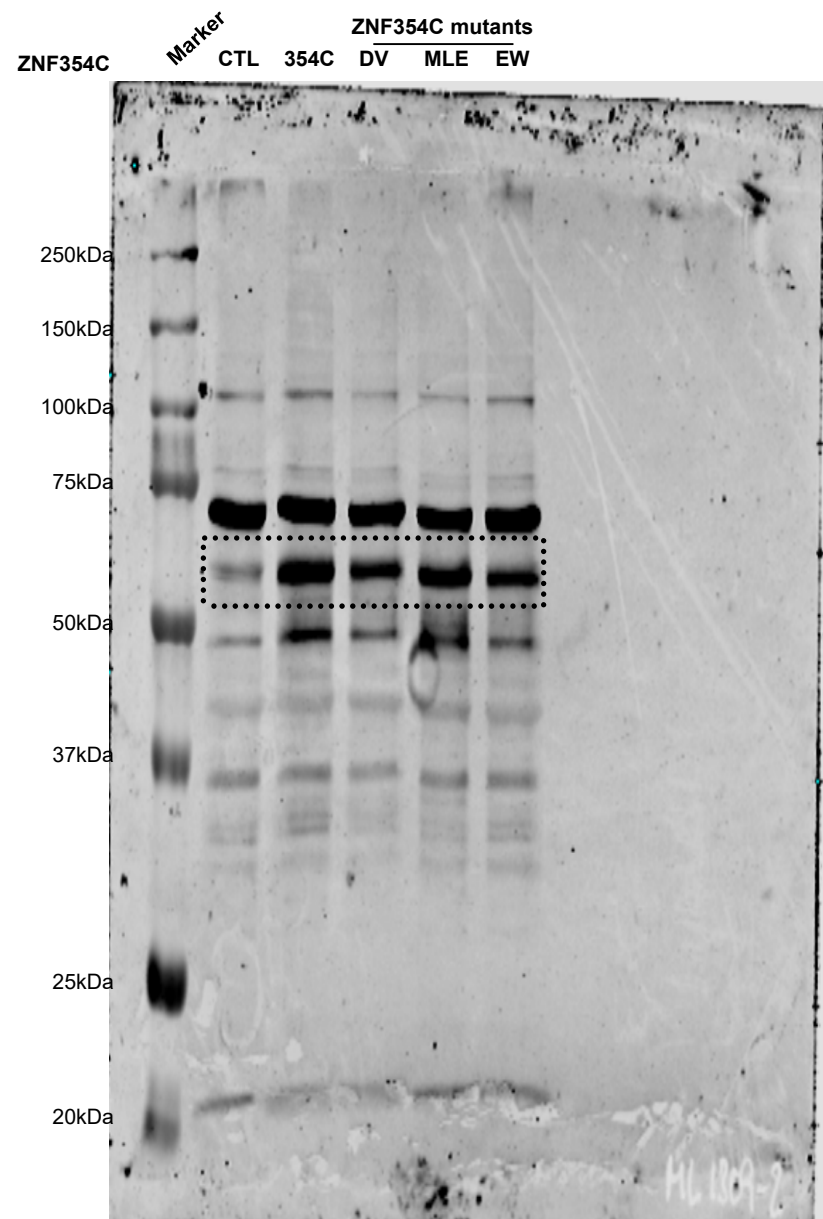
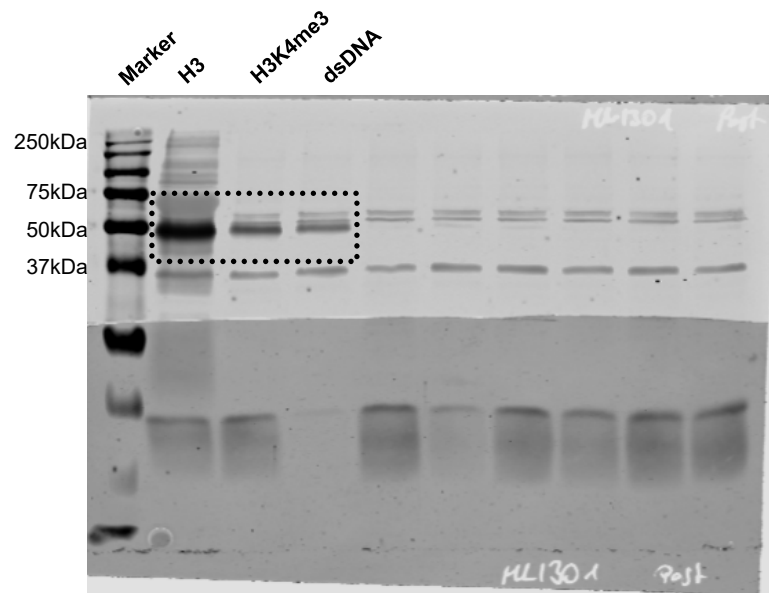
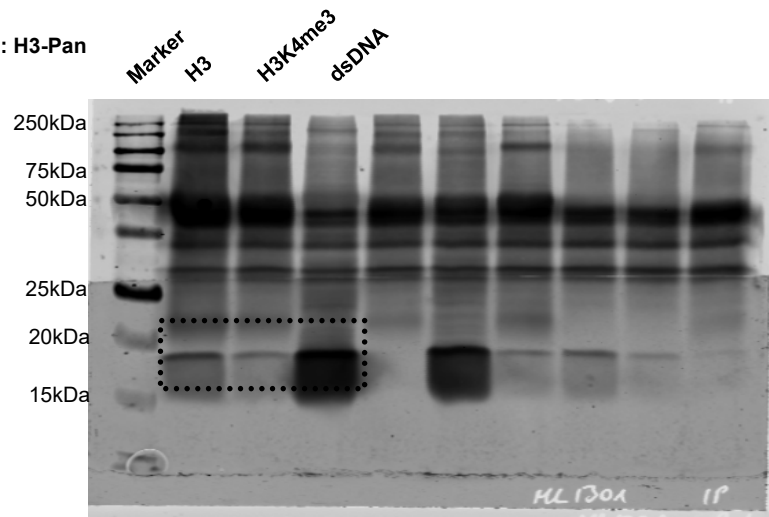


Fig. 4C

IB: ZNF354C



IB: H3-Pan



IB: Topo-I

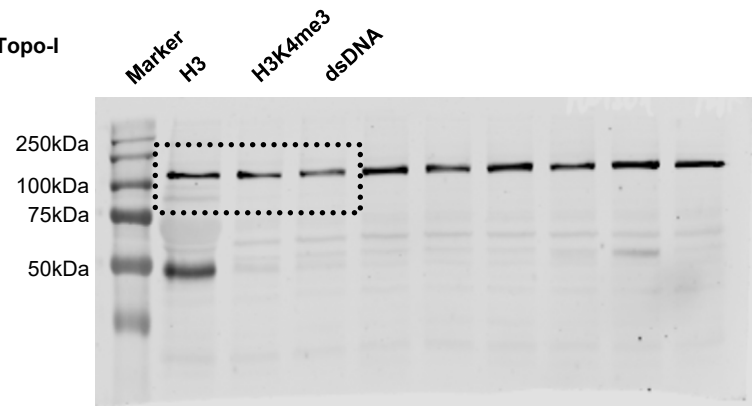


Fig. 5B

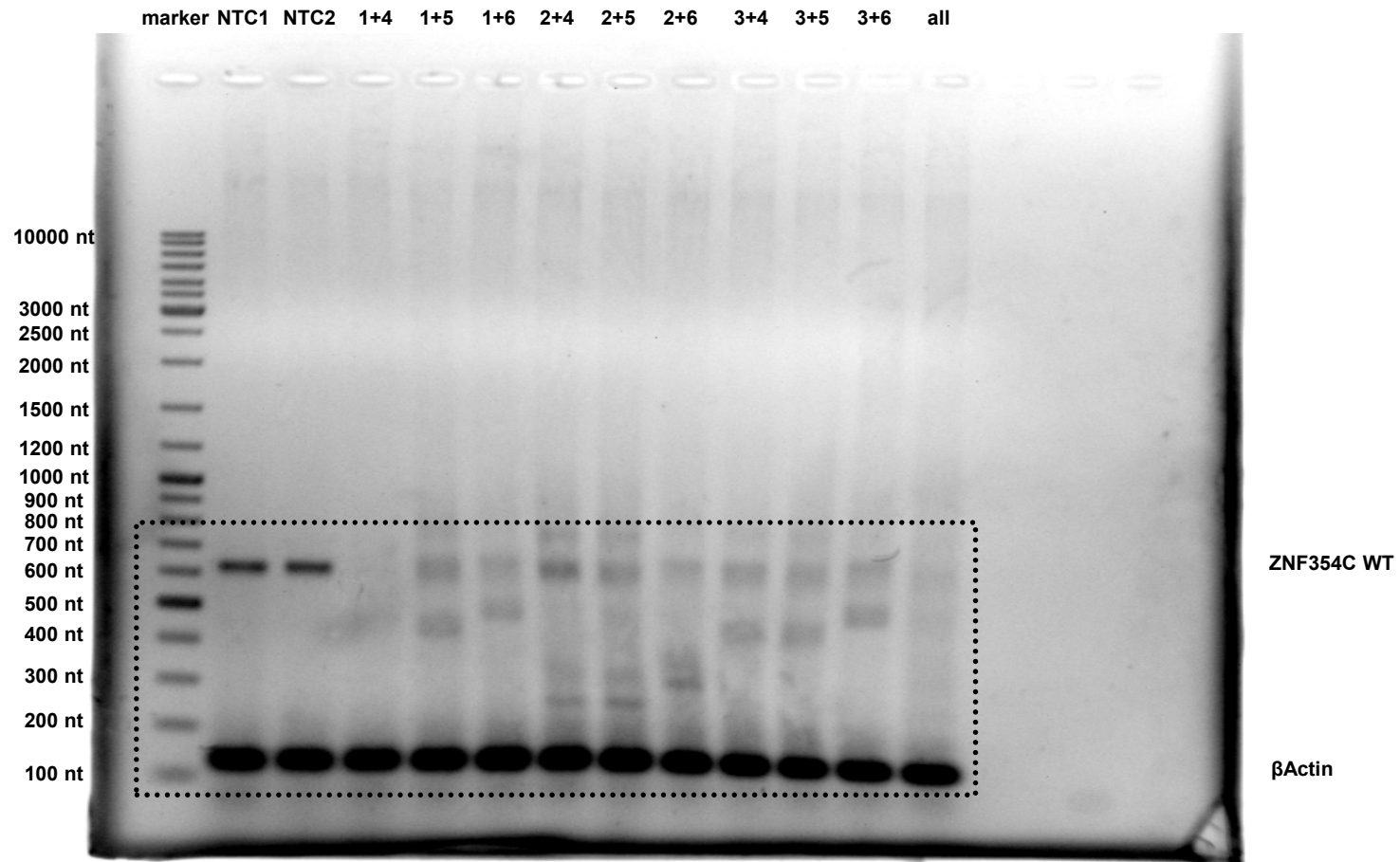
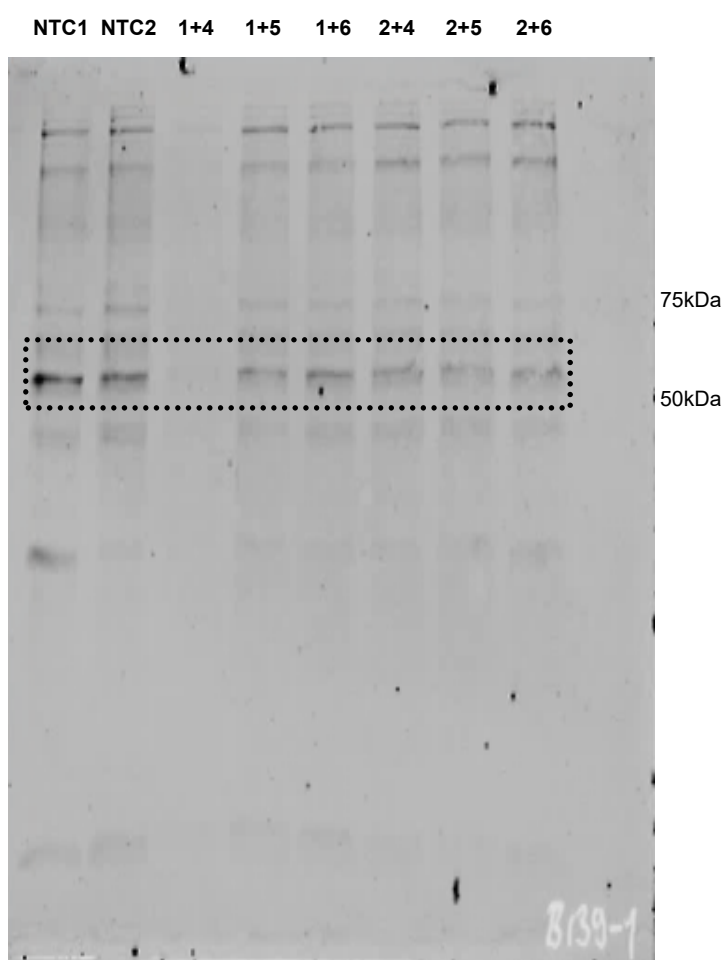


Fig. 5C (Left)

ZNF354C



β Actin

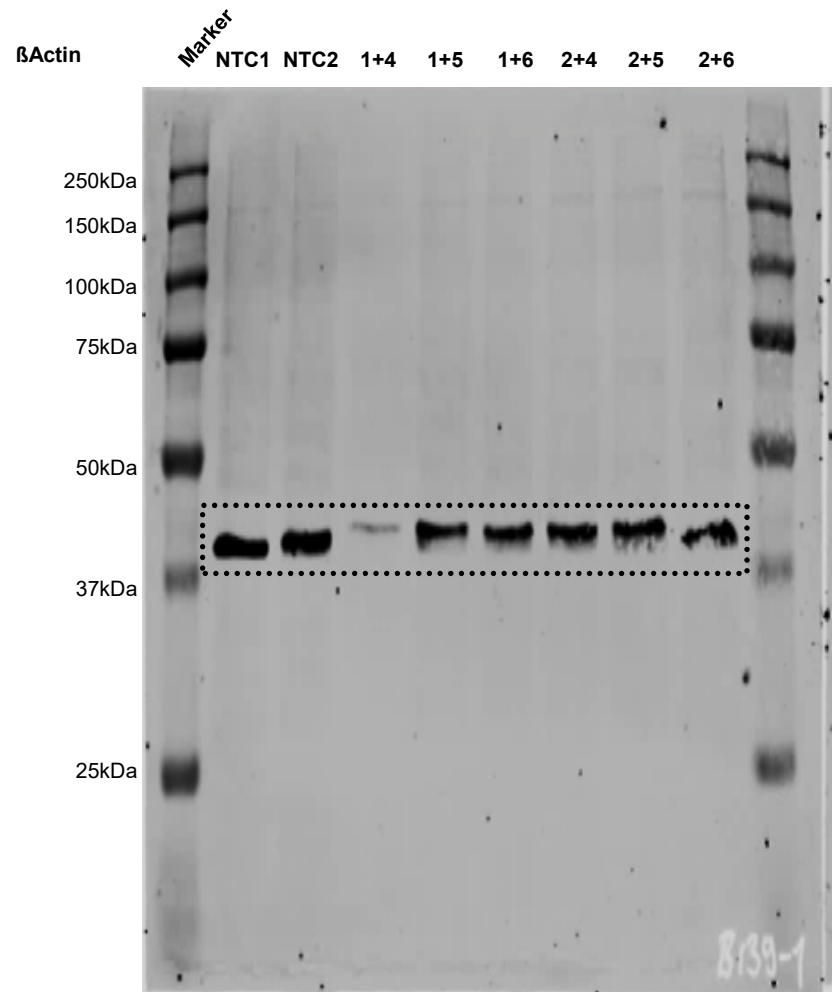


Fig. 5C (Right)

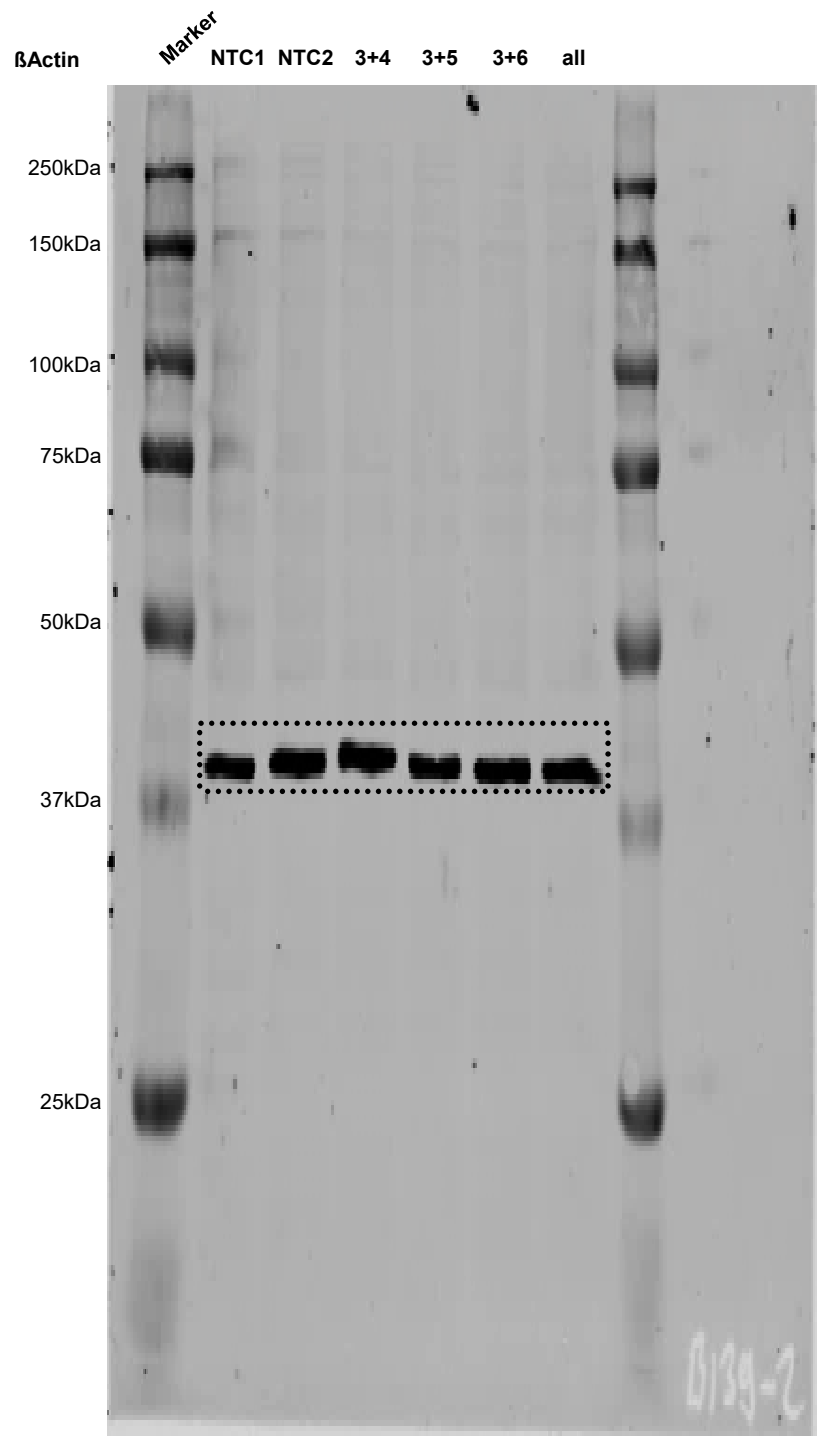
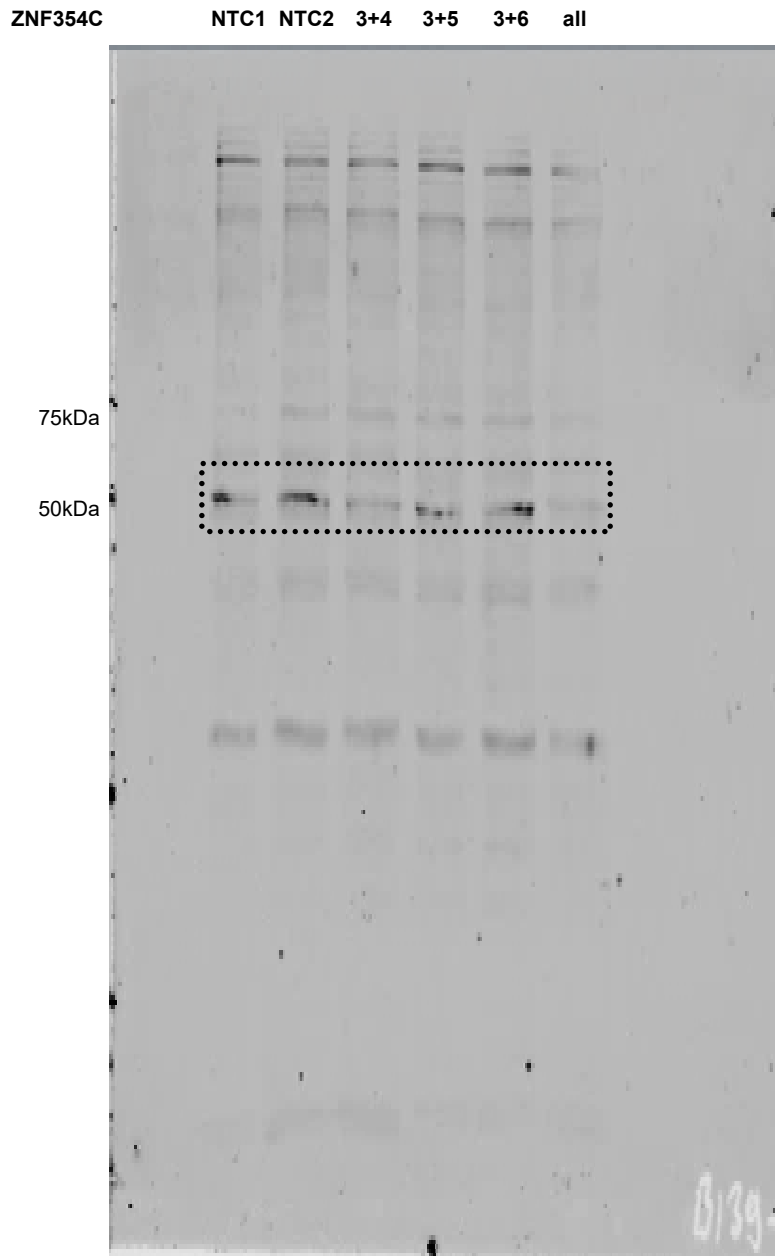
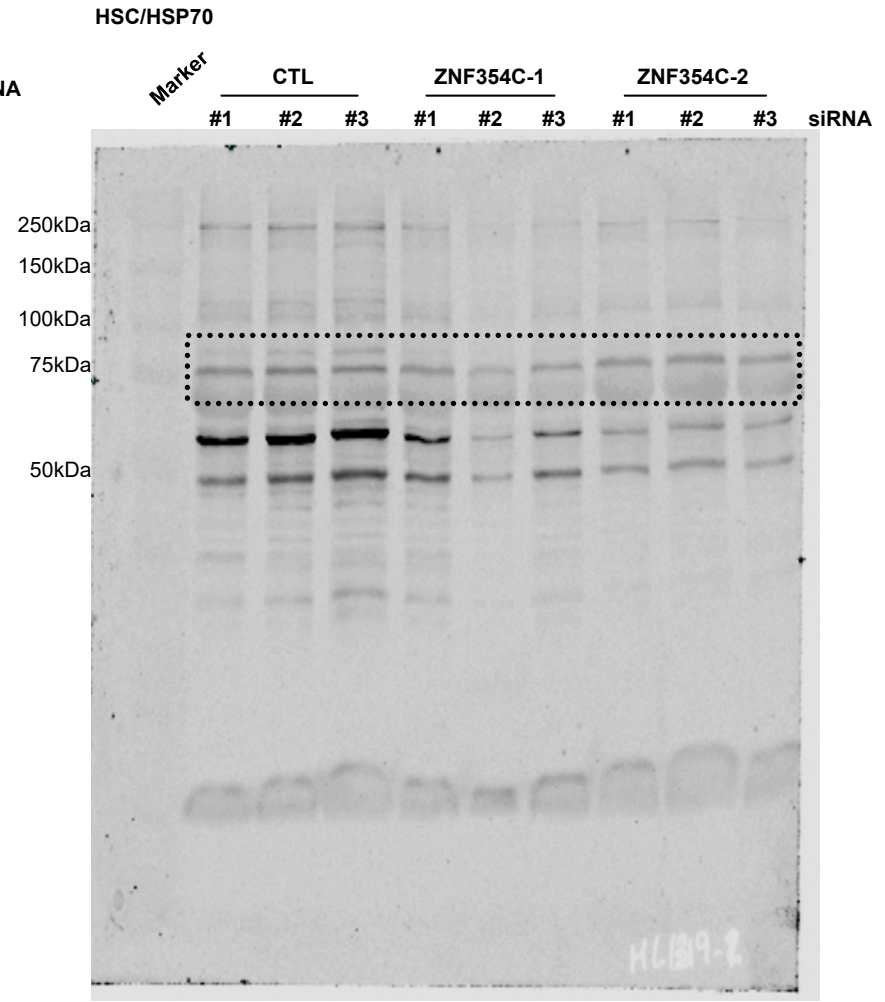
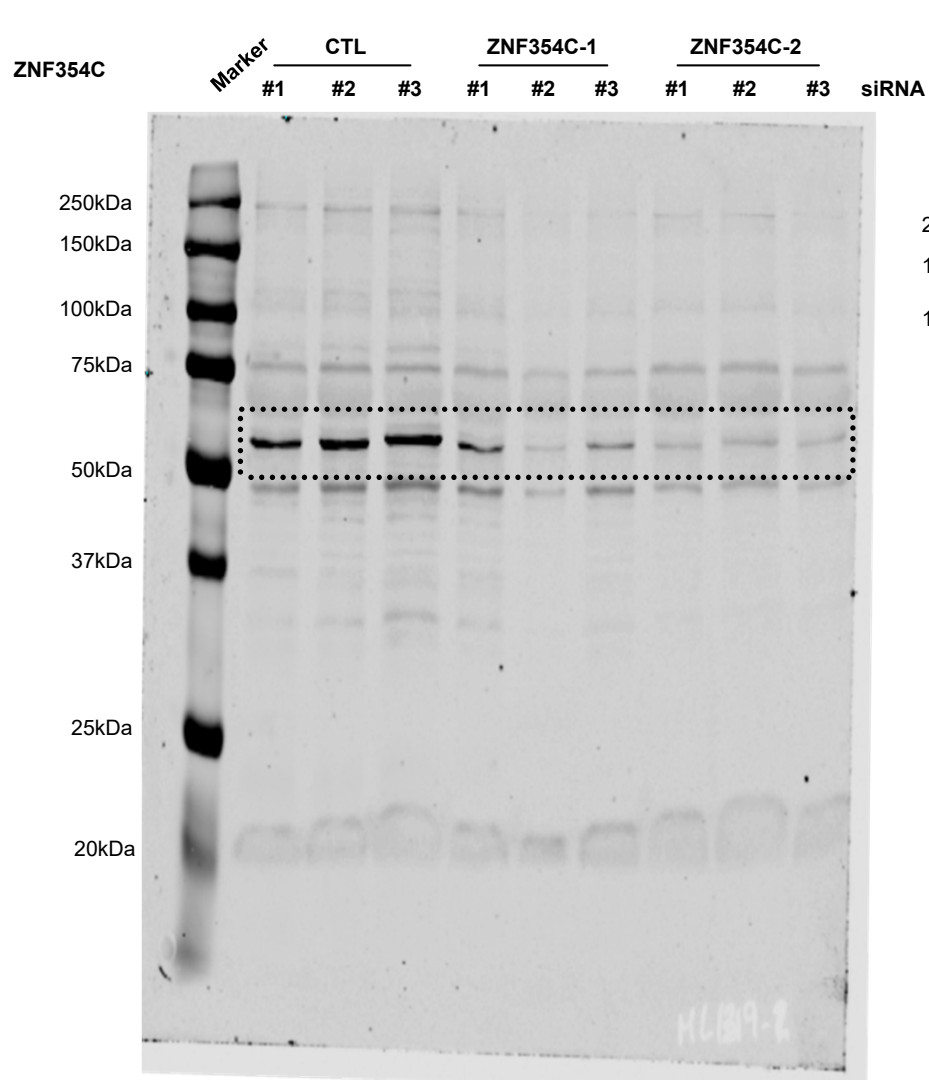
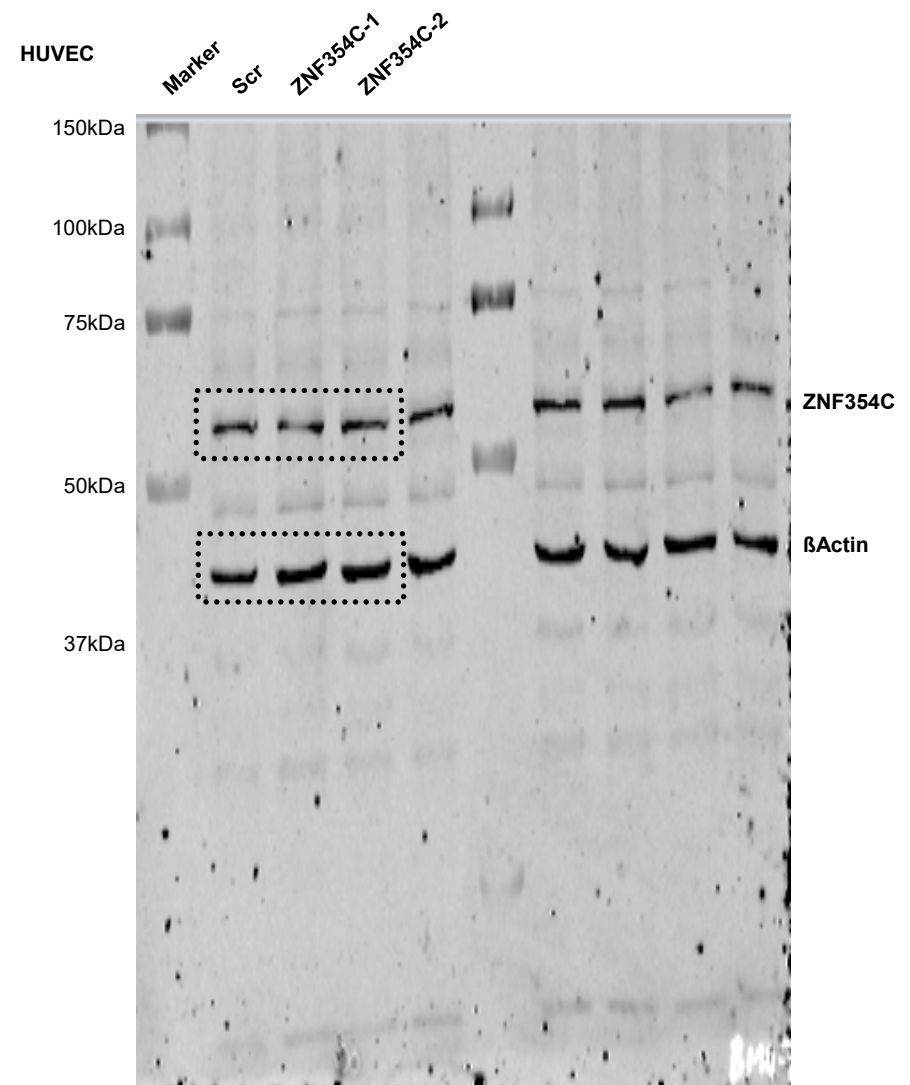
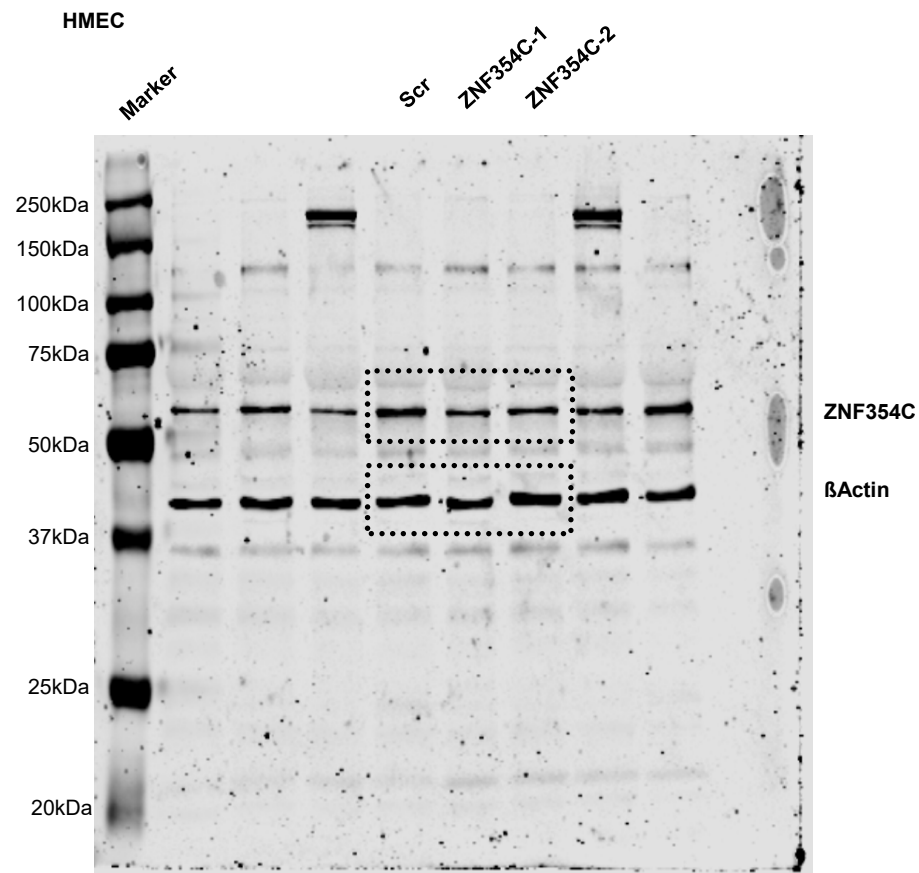


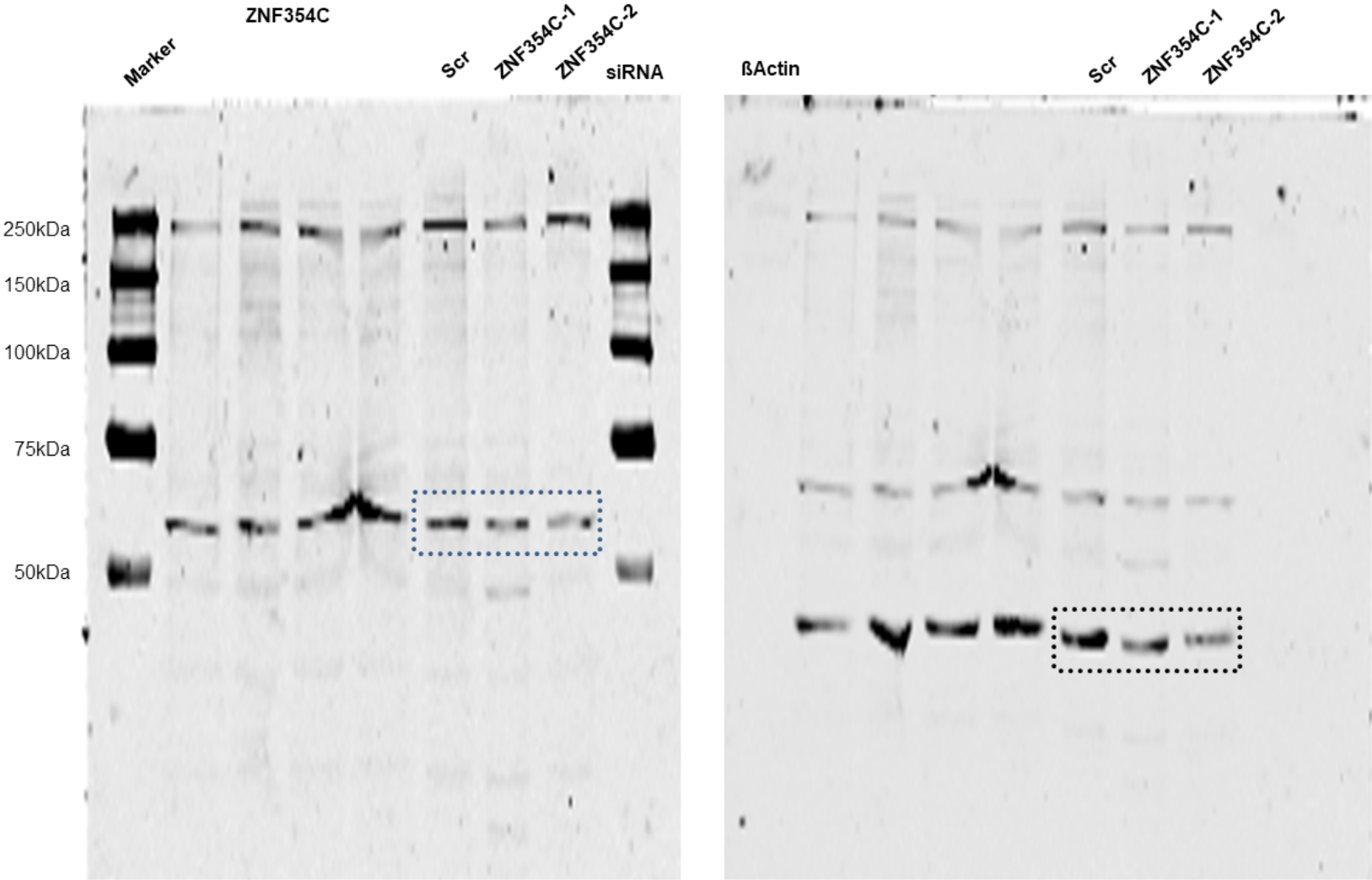
Fig. 5F



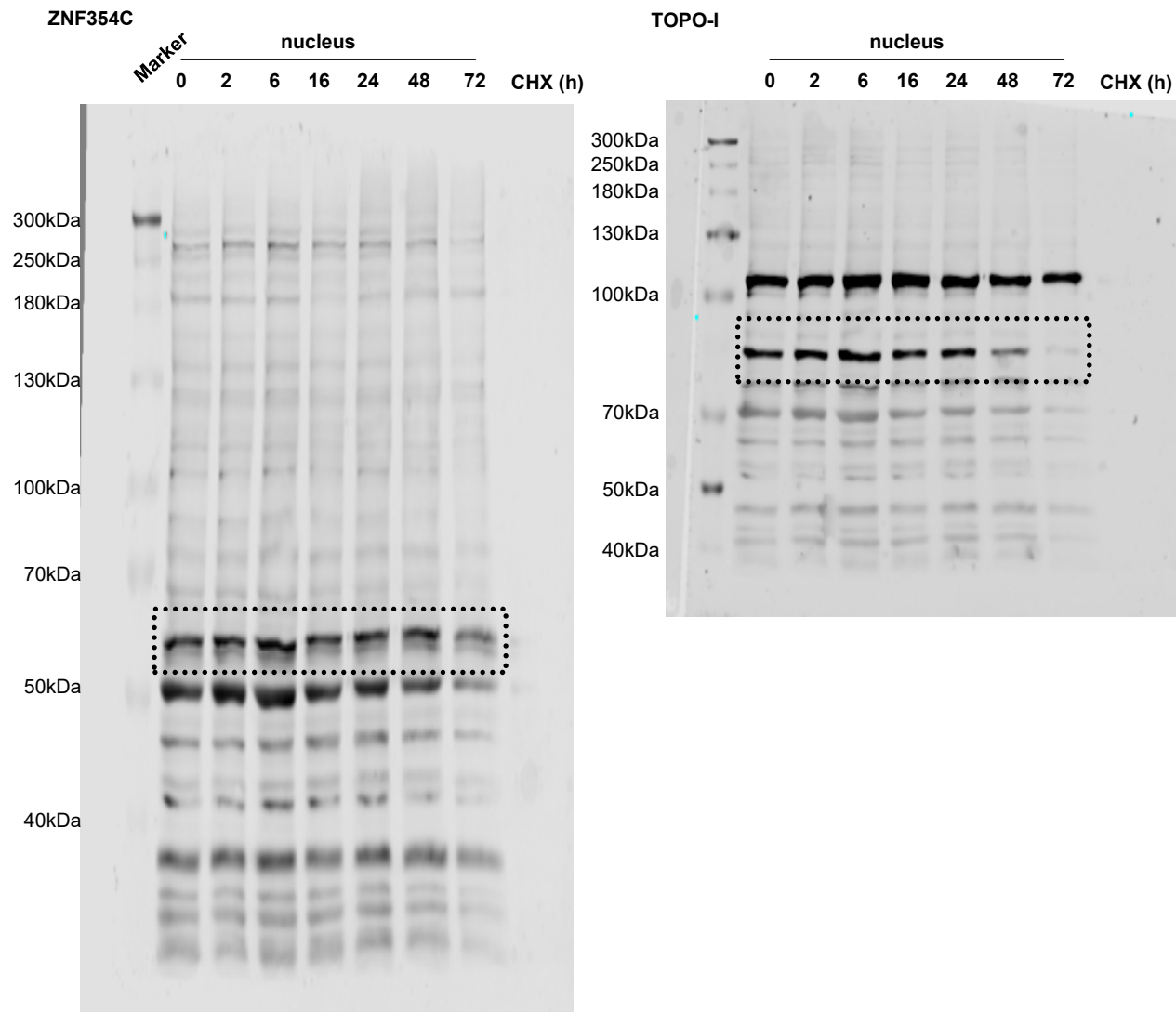
Sup. Fig. 3B



Sup. Fig. 3B: Right HAoSMC



Sup. Fig. 3C



Sup. Fig. 3D

