

Supplementary Information

α v β 3 integrin induces partial EMT independent of TGF- β signaling

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[#]Equal contribution

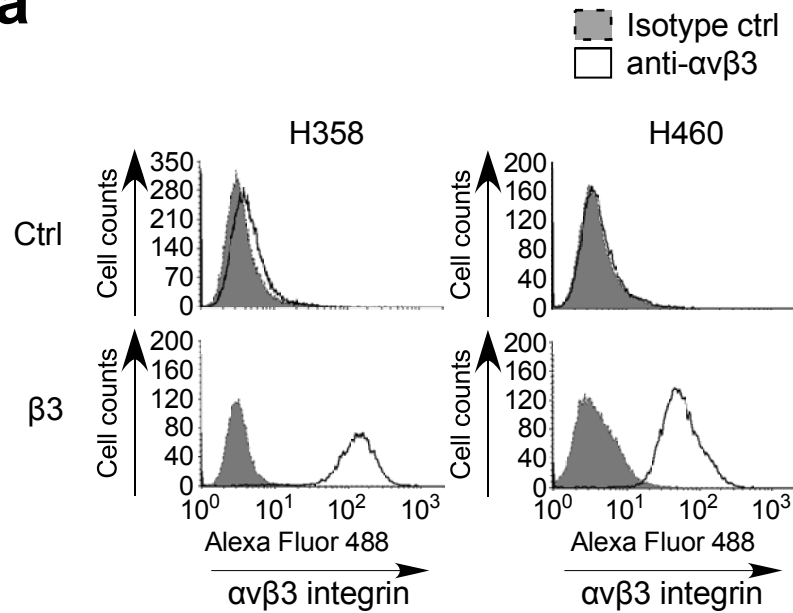
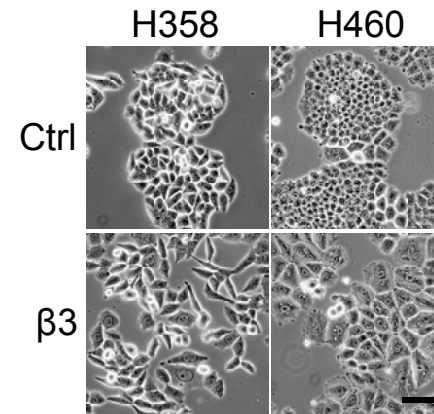
***Corresponding Author:**

Yoshinobu Kariya, Ph.D.

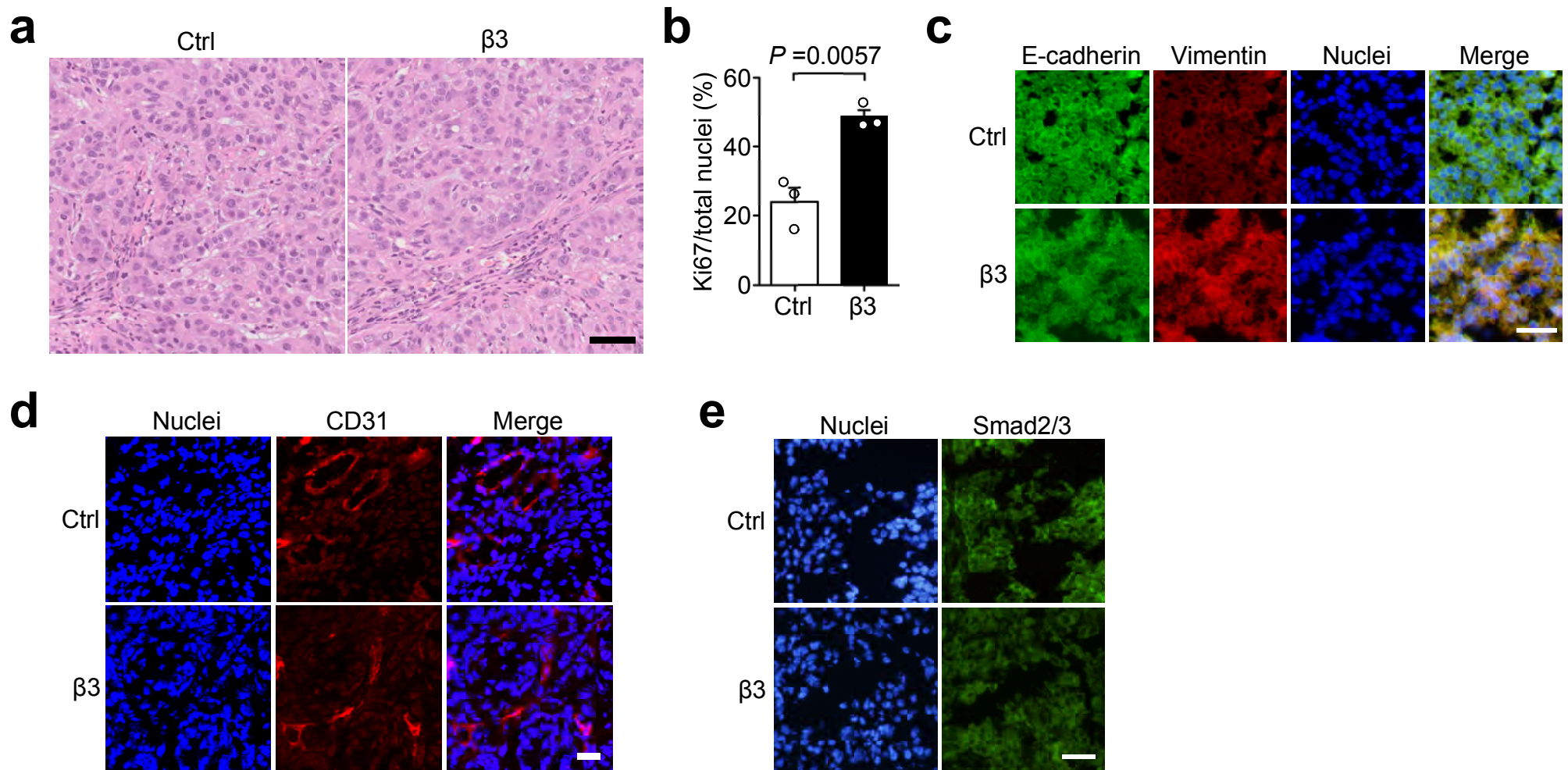
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a**b**

Supplementary Figure 1. Cell morphological changes of H358 and H460 cells by α v β 3 integrin expression. **a** FACS analysis of the cell surface expression of α v β 3 integrin in control or β 3 integrin expressing H358 and H460 cells. **b** Cell morphology of control or β 3 integrin expressing H358 and H460 cells. Scale bar, 100 μ m.



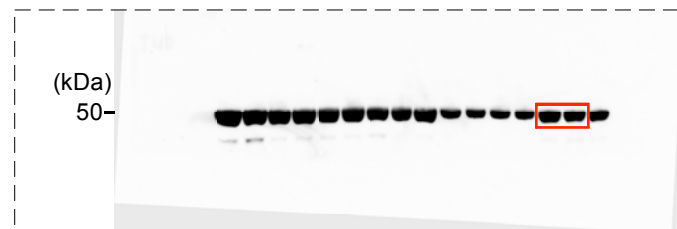
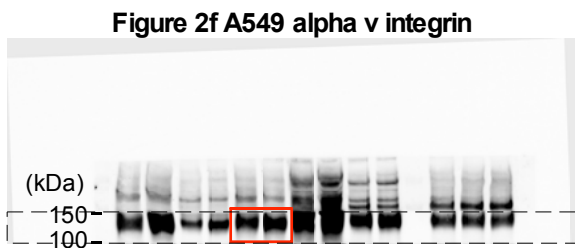
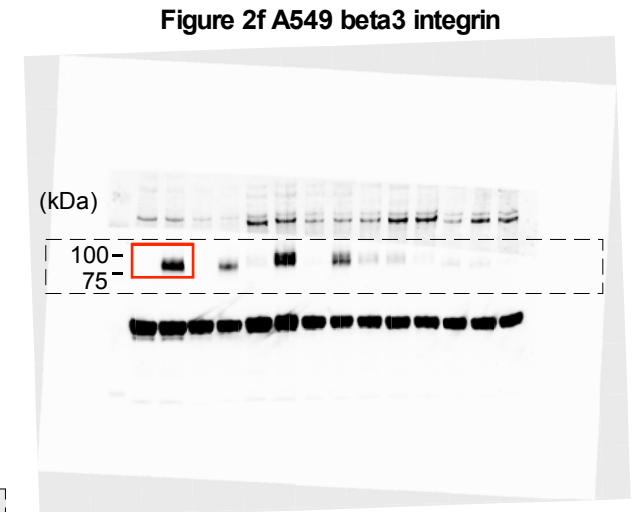
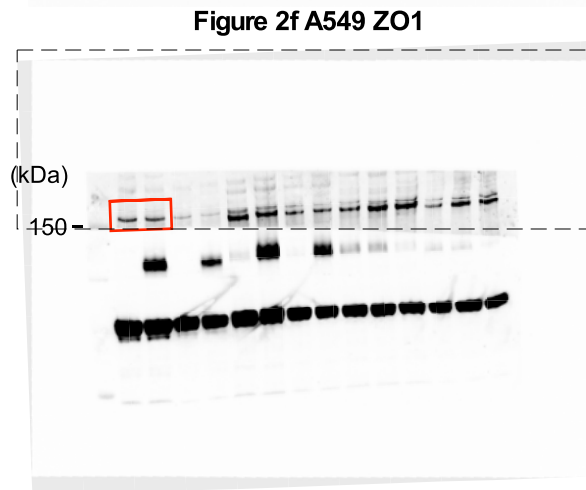
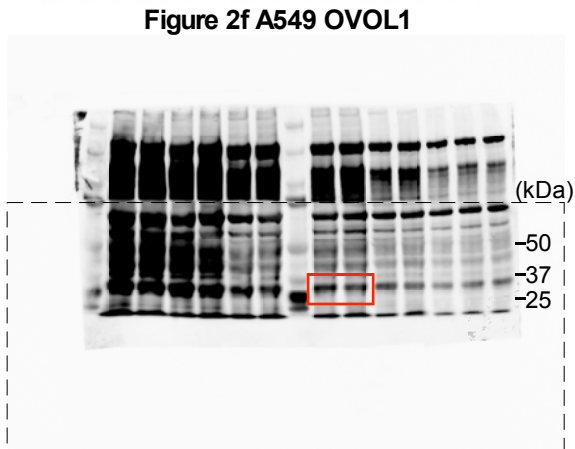
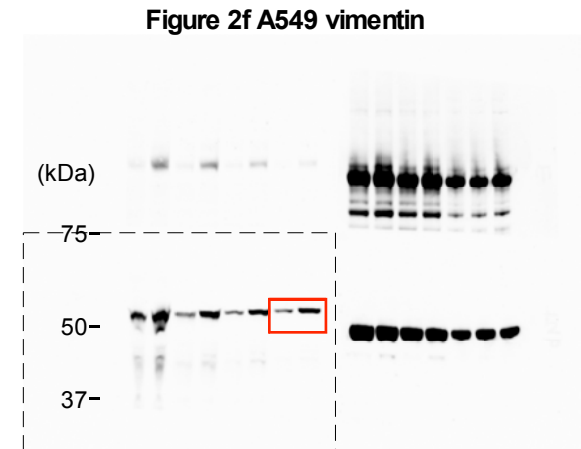
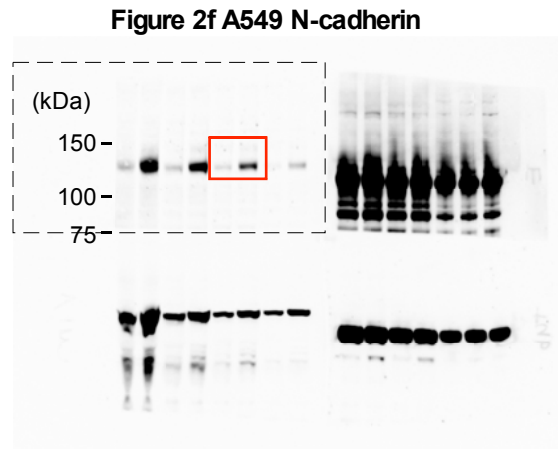
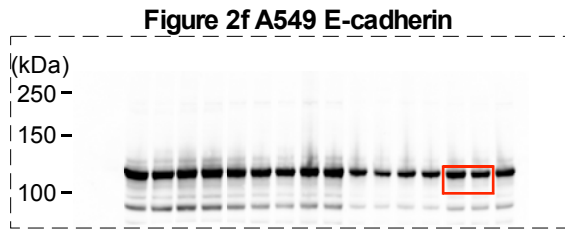
Supplementary Figure 2. Histological characterization of tumors arising from grafting of $\beta 3$ -A549 cells.

a Representative pictures from H&E-stained tumors arising from control and $\beta 3$ -A549 cells. Scale bar, 50 μm .

b *In vivo* cell proliferation assay in tumors arising from control and $\beta 3$ -A549 cells. Two-tailed unpaired Student's

t-test, mean \pm s.e.m., $n = 3$ per group. **c** Immunofluorescence-based single cell analysis using anti-E-cadherin (green) and vimentin (red) antibodies in tumors arising from control and $\beta 3$ -A549 cells. $n = 3$ per group. Scale bar, 50 μm .

d, e CD31 (**d**, red) and Smad2/3 (**e**, green) immunofluorescence staining in tumors arising from control and $\beta 3$ -A549 cells. $n = 3$ per group. Scale bars, 50 μm . Nuclear staining was used to detect nuclei (blue). Source data for **b** are available in Supplementary Data 1.



Supplementary Figure 3. Unprocessed blot images in Fig. 2f. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.

Figure 2f H358 E-cadherin

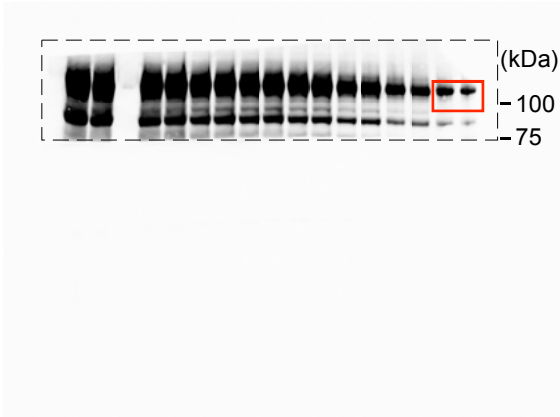


Figure 2f H358 N-cadherin

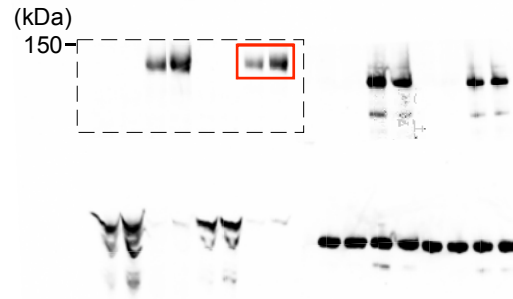


Figure 2f H358 vimentin

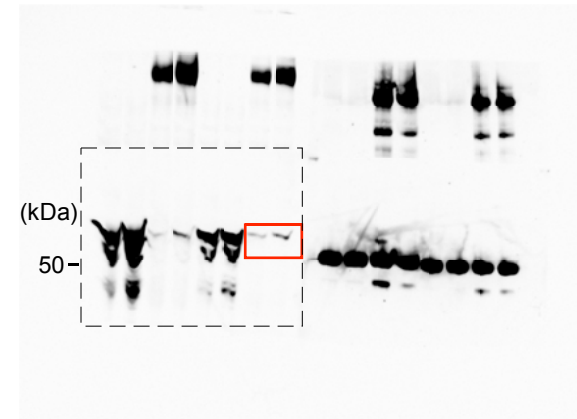


Figure 2f H358 OVOL1

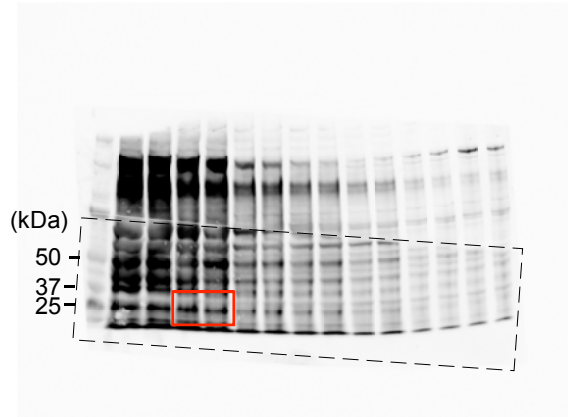


Figure 2f H358 ZO1 & beta3 integrin

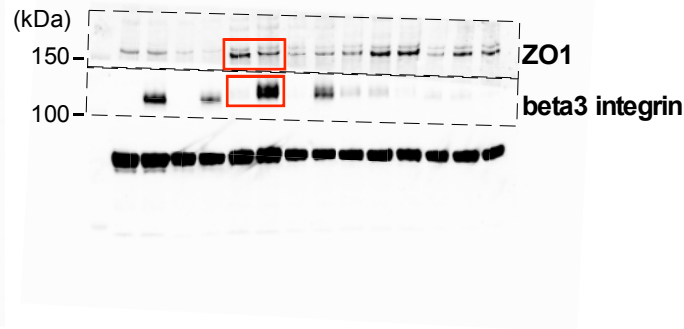


Figure 2f H358 alpha v integrin

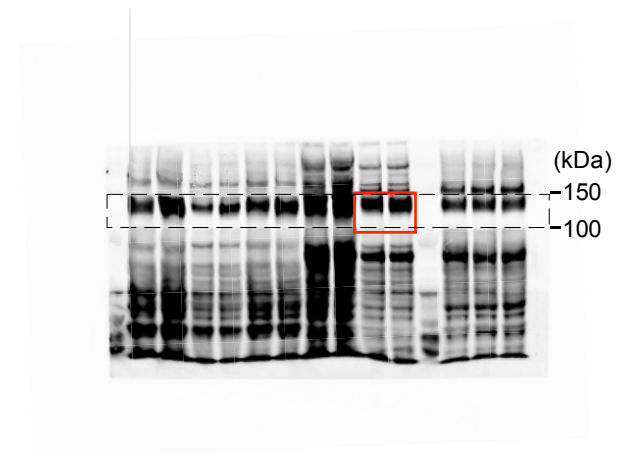
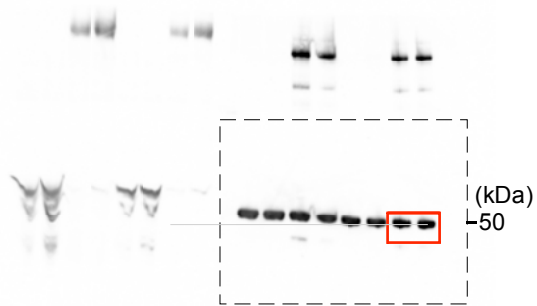


Figure 2f H358 alpha-tubulin



Supplementary Figure 4. Unprocessed blot images in Fig. 2f. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.

Figure 2h E-cadherin

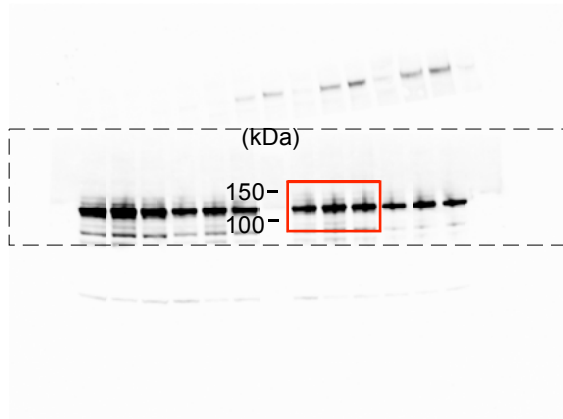


Figure 2h vimentin

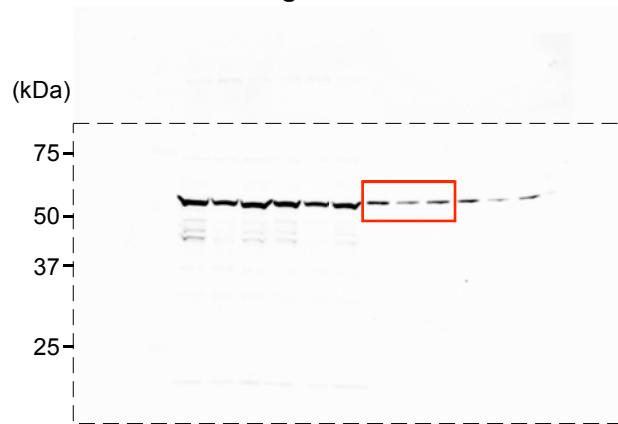


Figure 2h ZEB1

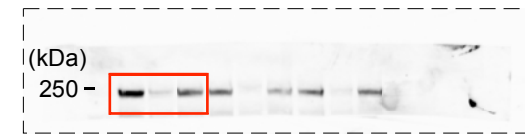


Figure 2h beta3 integrin

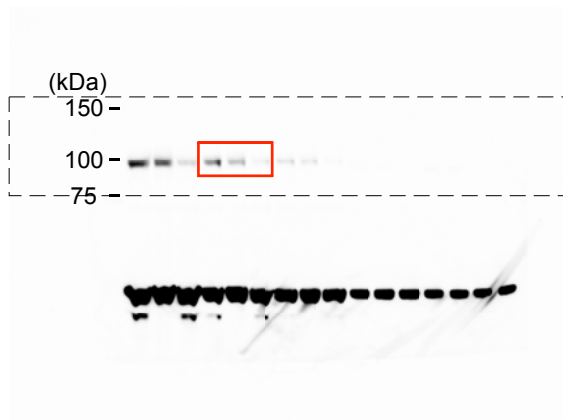


Figure 2h alpha-tubulin

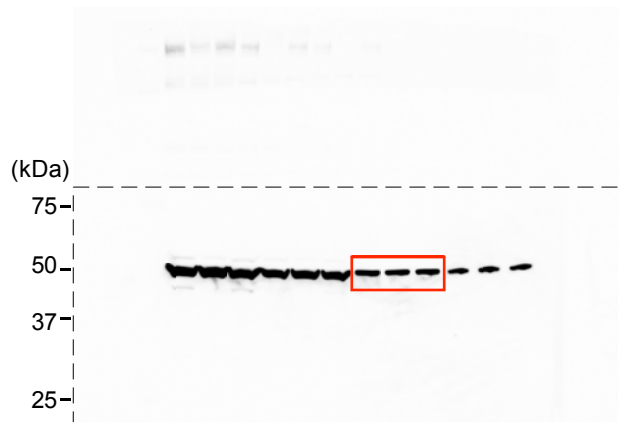
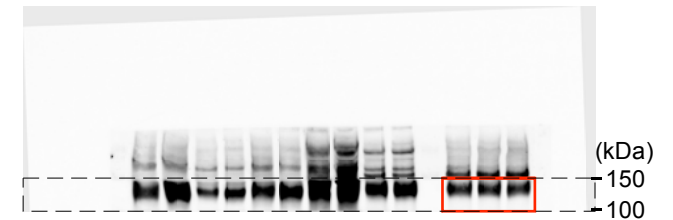
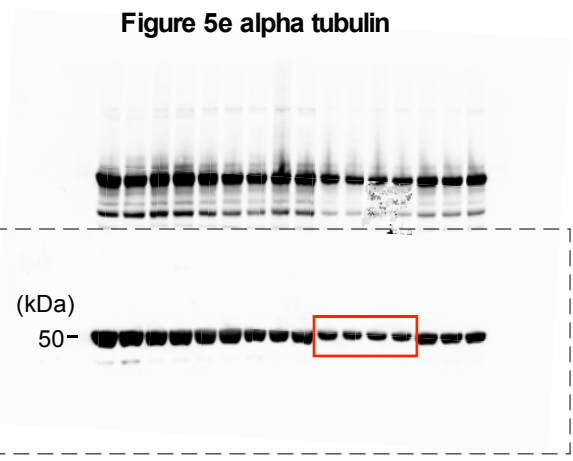
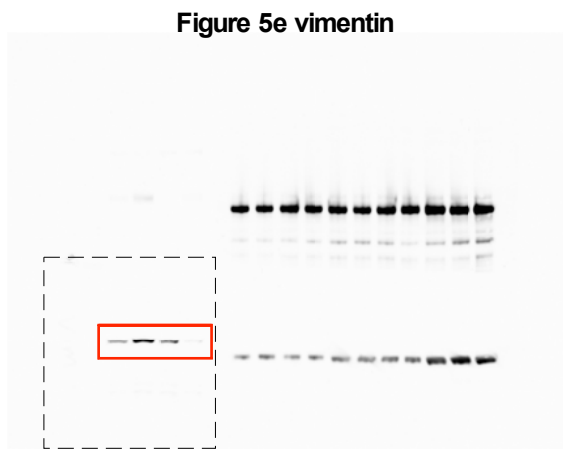
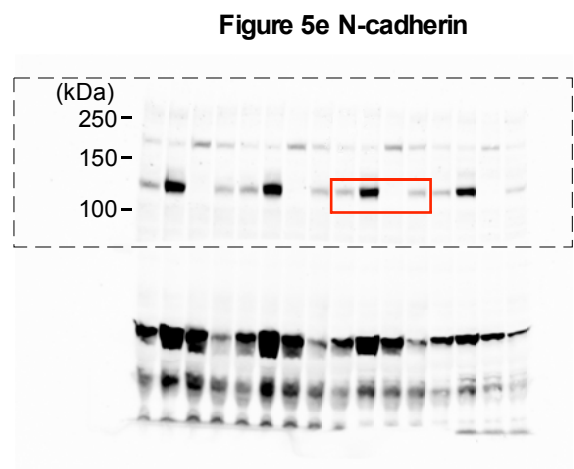
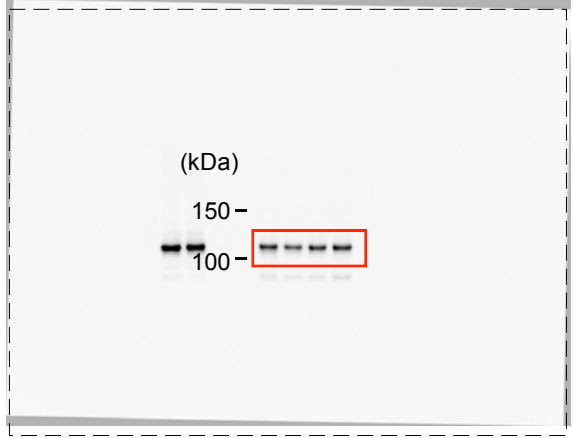
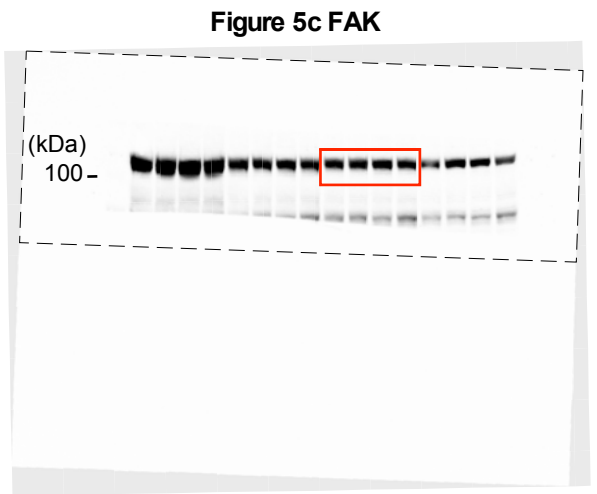
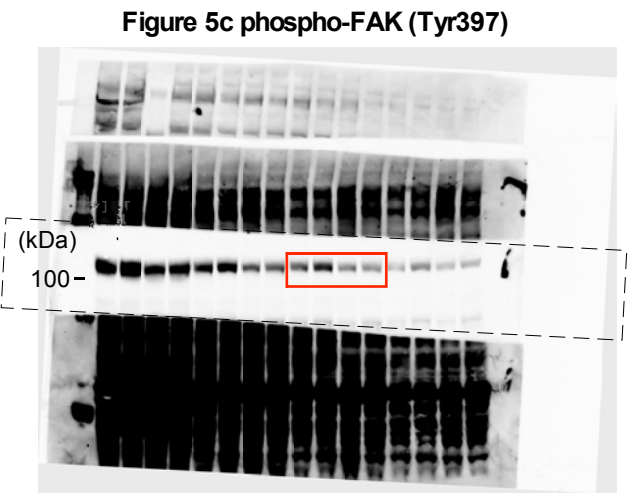
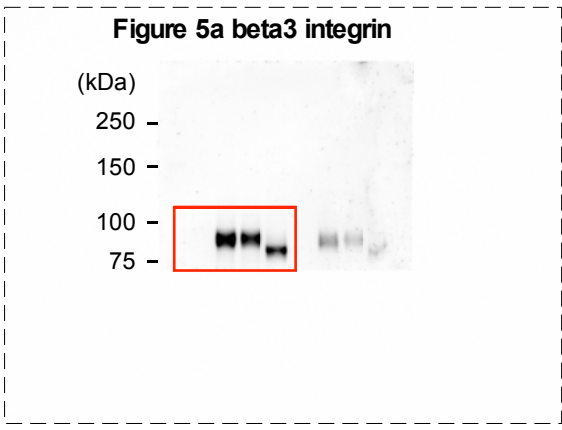


Figure 2h alpha v integrin



Supplementary Figure 5. Unprocessed blot images in Fig. 2h. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.



Supplementary Figure 6. Unprocessed blot images in Figs. 5a, c, e. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.

Figure 6b E-cadherin

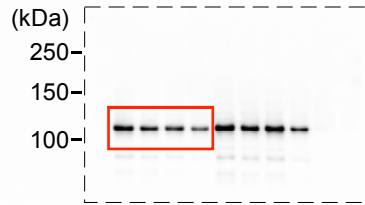


Figure 6b N-cadherin

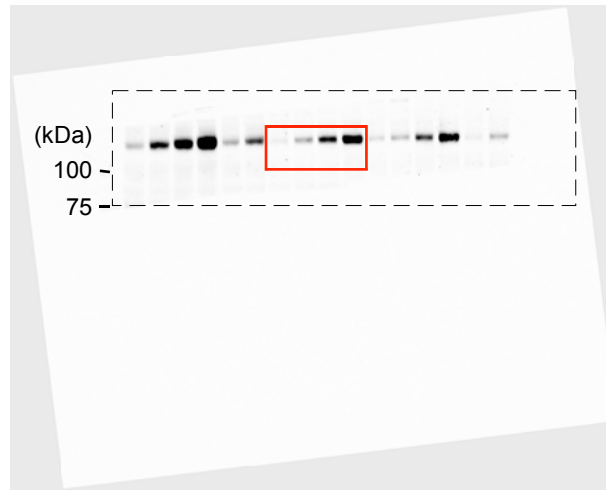


Figure 6b vimentin

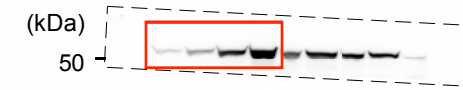


Figure 6b ZEB1

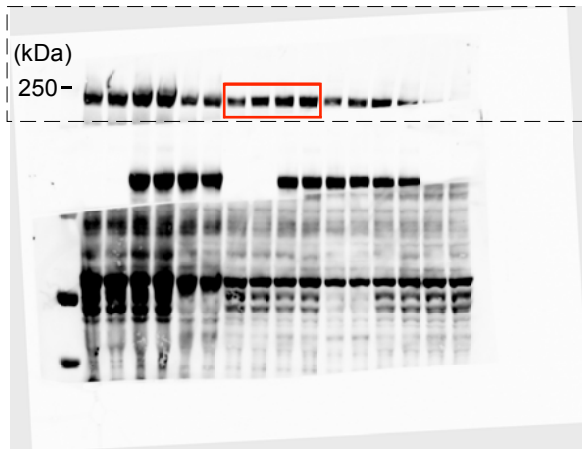


Figure 6b beta3 integrin

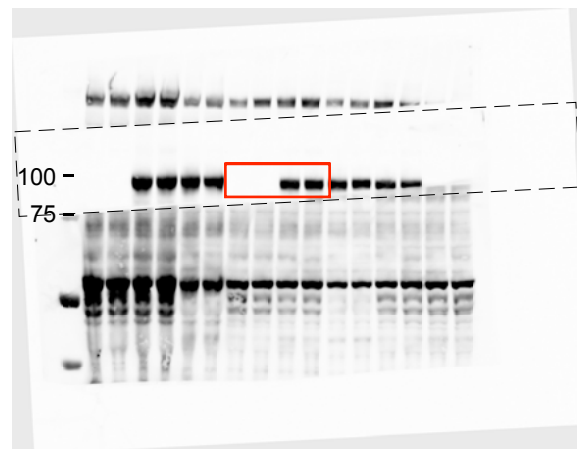
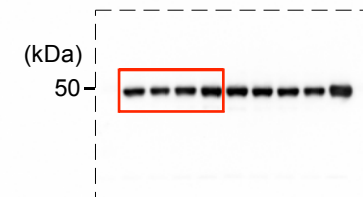


Figure 6b alpha-tubulin



Supplementary Figure 7. Unprocessed blot images in Fig. 6b. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.

Figure 6c E-cadherin

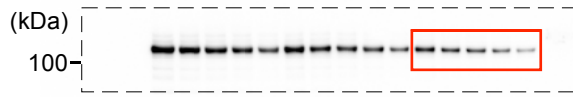


Figure 6c N-cadherin

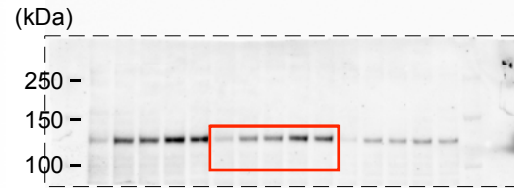


Figure 6c vimentin

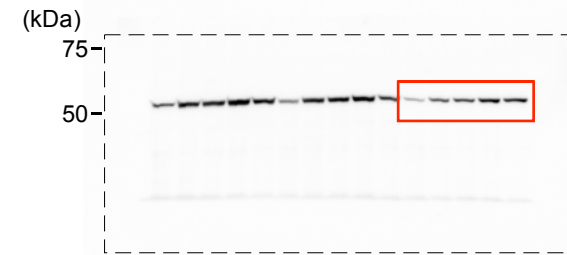


Figure 6c beta3 integrin

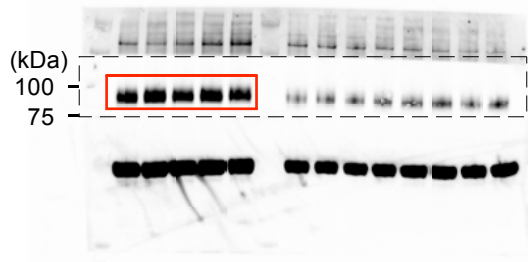


Figure 6c ZEB1

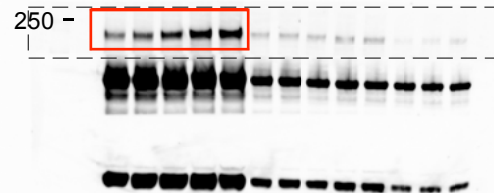


Figure 6c alpha v integrin

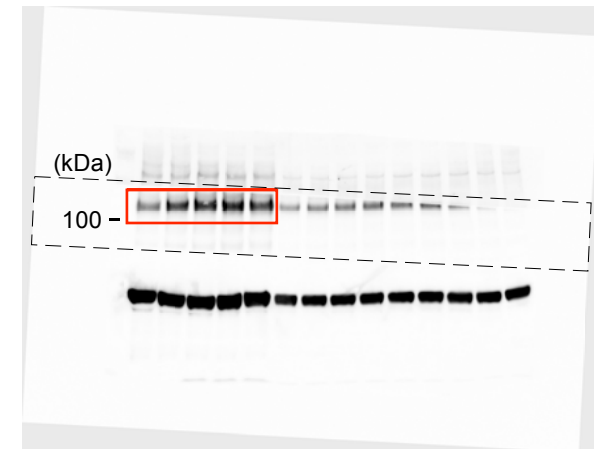
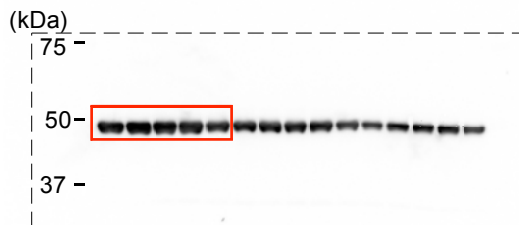
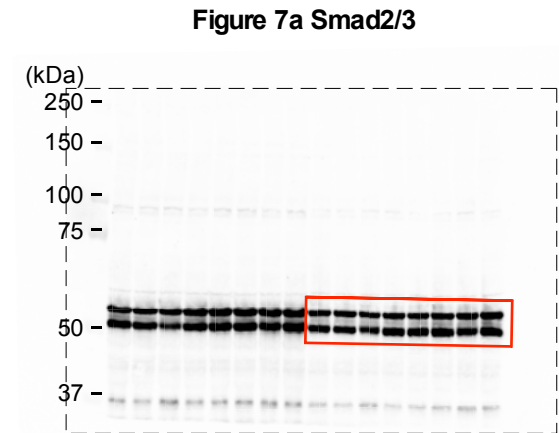
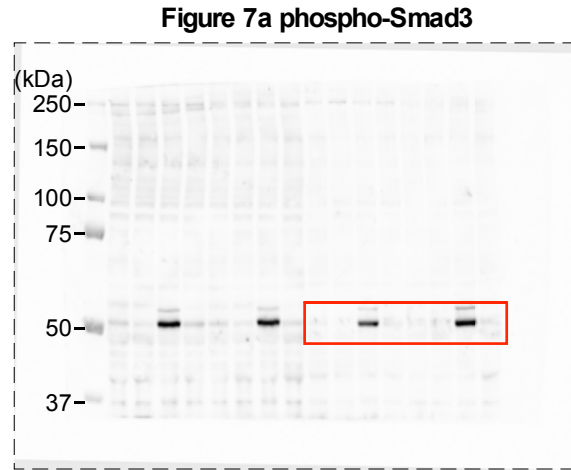
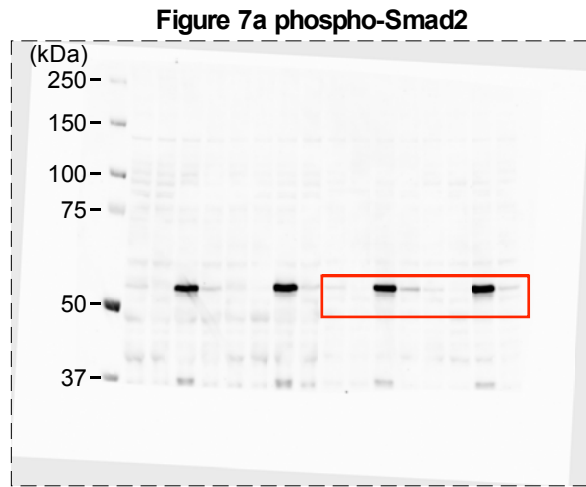


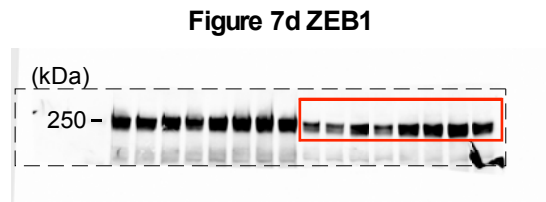
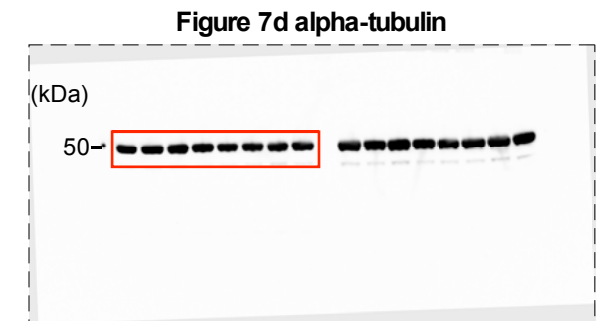
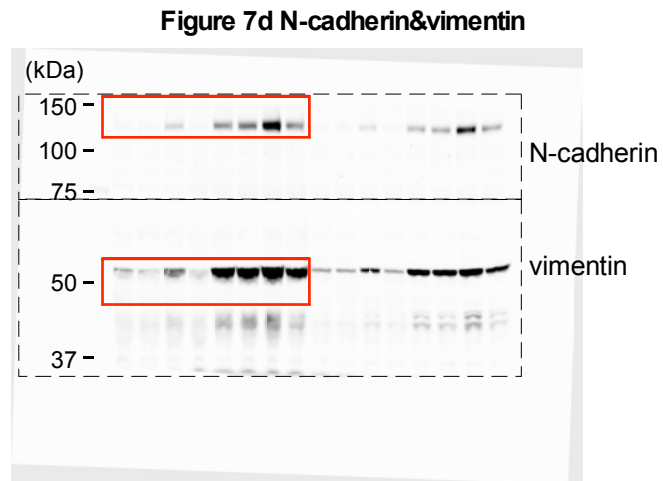
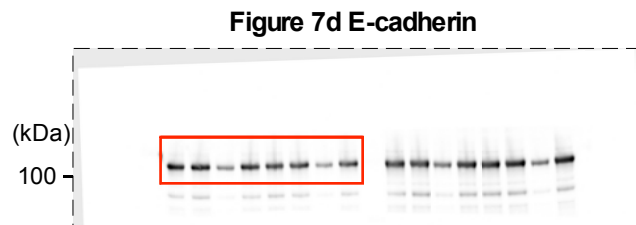
Figure 6c alpha-tubulin



Supplementary Figure 8. Unprocessed blot images in Fig. 6c. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.



(kDa)



Supplementary Figure 9. Unprocessed blot images in Figs. 7a, d. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.

Figure 8c E-cadherin

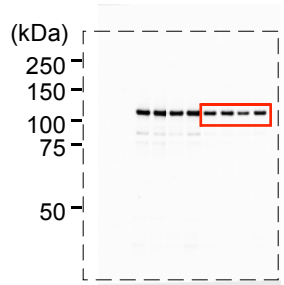


Figure 8c N-cadherin

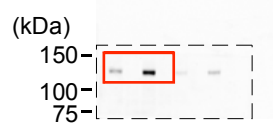


Figure 8c vimentin

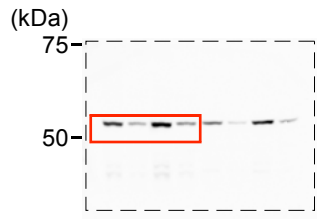


Figure 8c ZEB1



Figure 8c alpha-tubulin

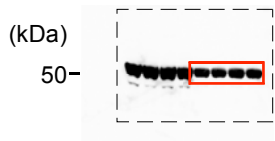


Figure 8c phospho-Smad2

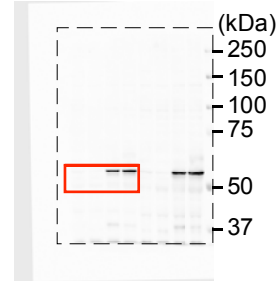


Figure 8c phospho-Smad3

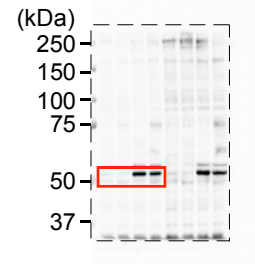


Figure 8c Smad2/3

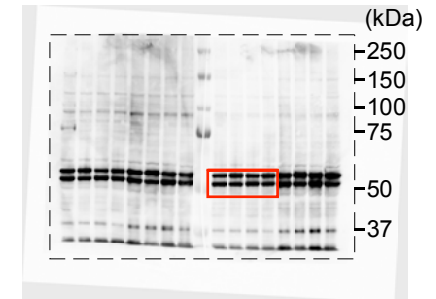


Figure 8e alpha v

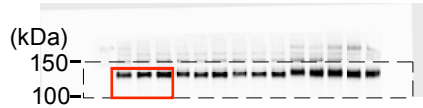


Figure 8e beta3 integrin

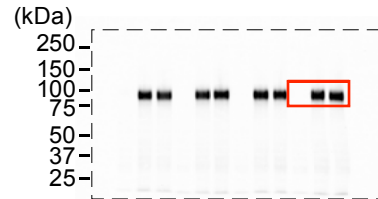
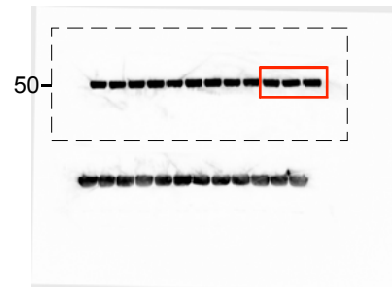


Figure 8e alpha-tubulin



Supplementary Figure 10. Unprocessed blot images in Figs. 8c, e. Dotted squares indicate blotting membranes. Red squares indicate cropped sections.