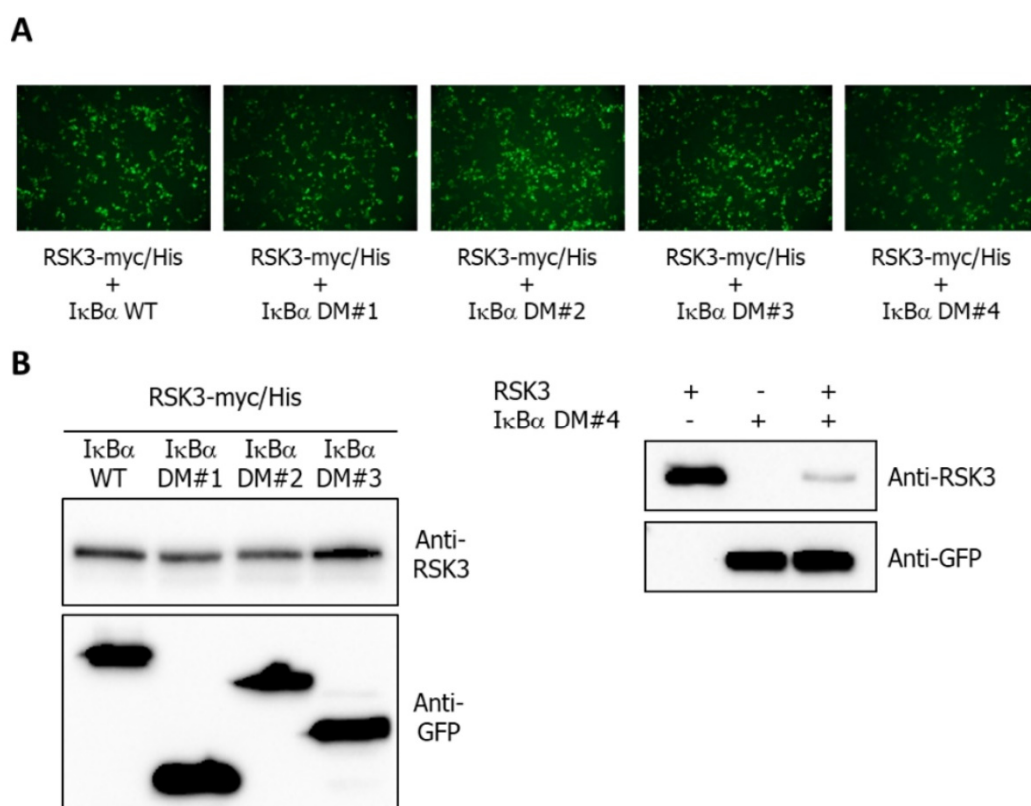


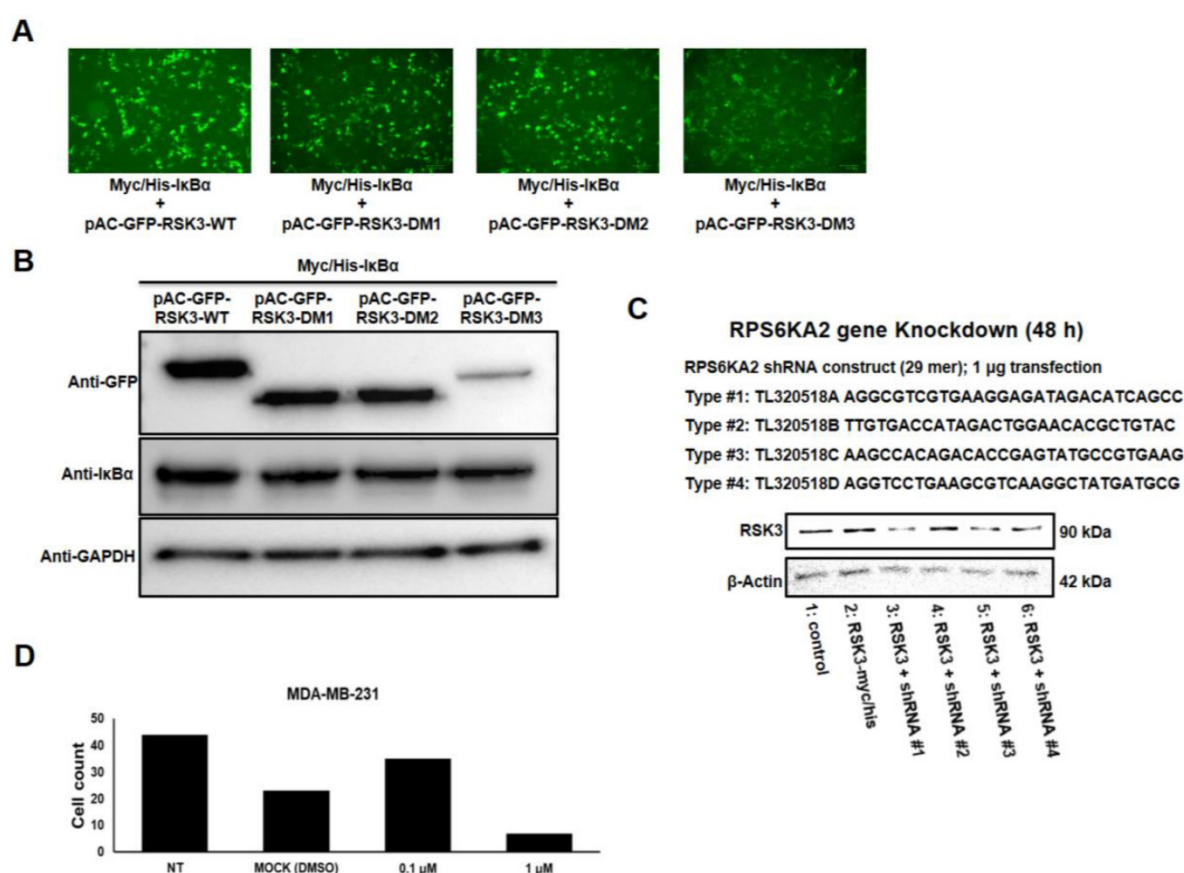
Supplementary Material

# A Novel Protein–Protein Interaction between RSK3 and I $\kappa$ B $\alpha$ and a New Binding Inhibitor That Suppresses Breast Cancer Tumorigenesis

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**Figure S1.** Expression of RSK3 and I $\kappa$ B $\alpha$  deletion mutant GFP fluorescence using ZOE Fluorescent Cell Imager and western blot. **(A)** Co-transfected with RSK3-Myc/His and GFP tagged I $\kappa$ B $\alpha$  WT or deletion mutant into HEK293 cell lines, and GFP expression was confirmed via ZOE Fluorescent Cell Imager. **(B)** Protein expression of RSK3-Myc/His and GFP tagged I $\kappa$ B $\alpha$  WT or deletion mutant was confirmed the using anti-GFP and anti-RSK3 antibody by Western blotting.



**Figure S2.** Expression of IκBα and RSK3 deletion mutant via ZOE Fluorescent Cell Imager and western blot, shRNA sequence of RSK3 and Foci assay cell count. **(A)** Co-transfection of Myc/His-IκBα with GFP tagged RSK3 WT and deletion mutant into HEK293 cells, and expression of GFP was confirmed via ZOE Fluorescent Cell Imager. **(B)** The western blot was performed that transfected and overexpressed of the Myc/His-IκBα and GFP tagged RSK3 WT and deletion mutant using anti-GFP and anti-IκBα antibody by Western blotting. **(C)** shRNA of RSK3 sequence and expression was confirmed the western blot using anti-RSK3 and anti-β-actin antibody. **(D)** Foci assay cell count grape. Cell was counted using ImageJ program.

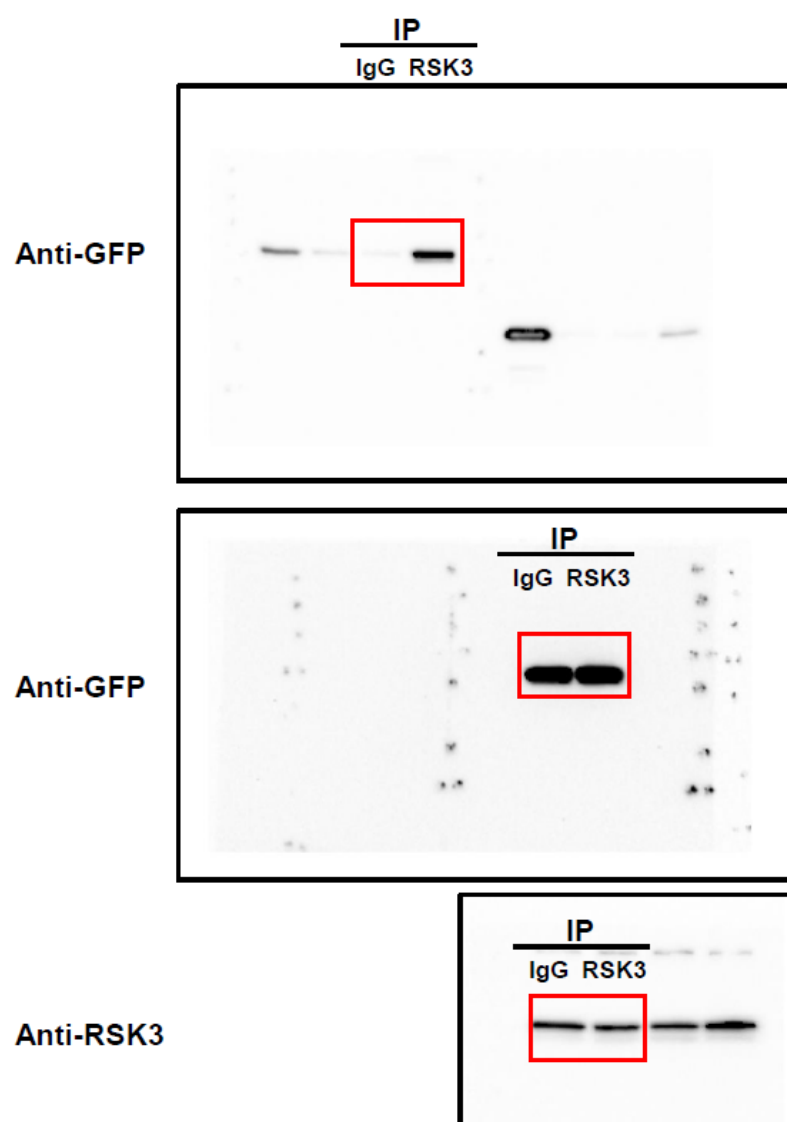
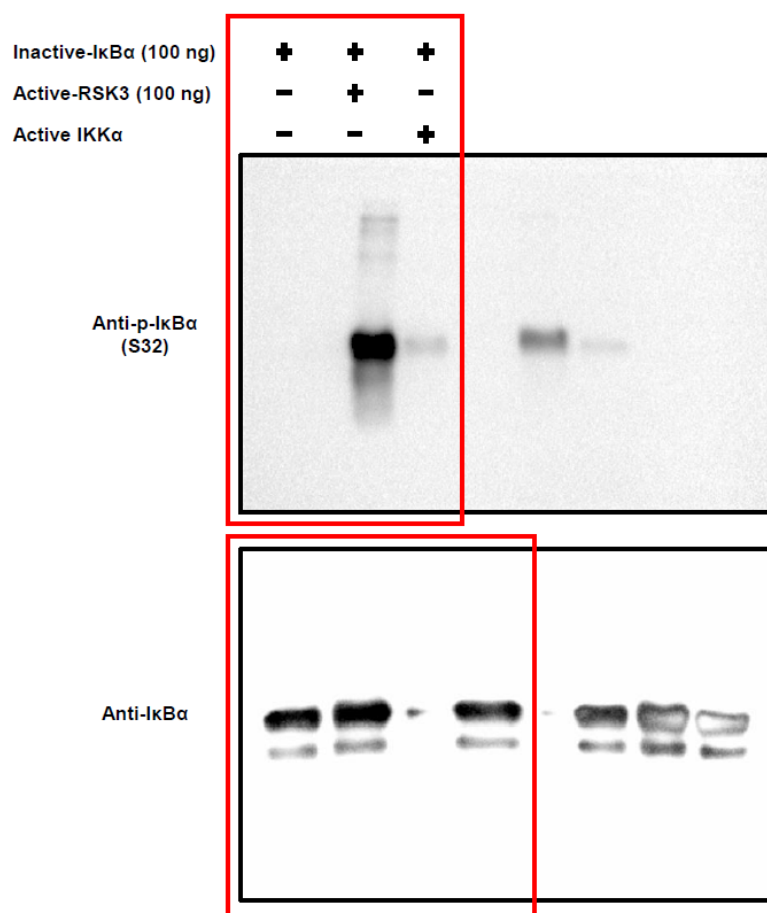


Figure S3. Uncropped Figure 1B.

**Figure S4.** Uncropped Figure 1D.

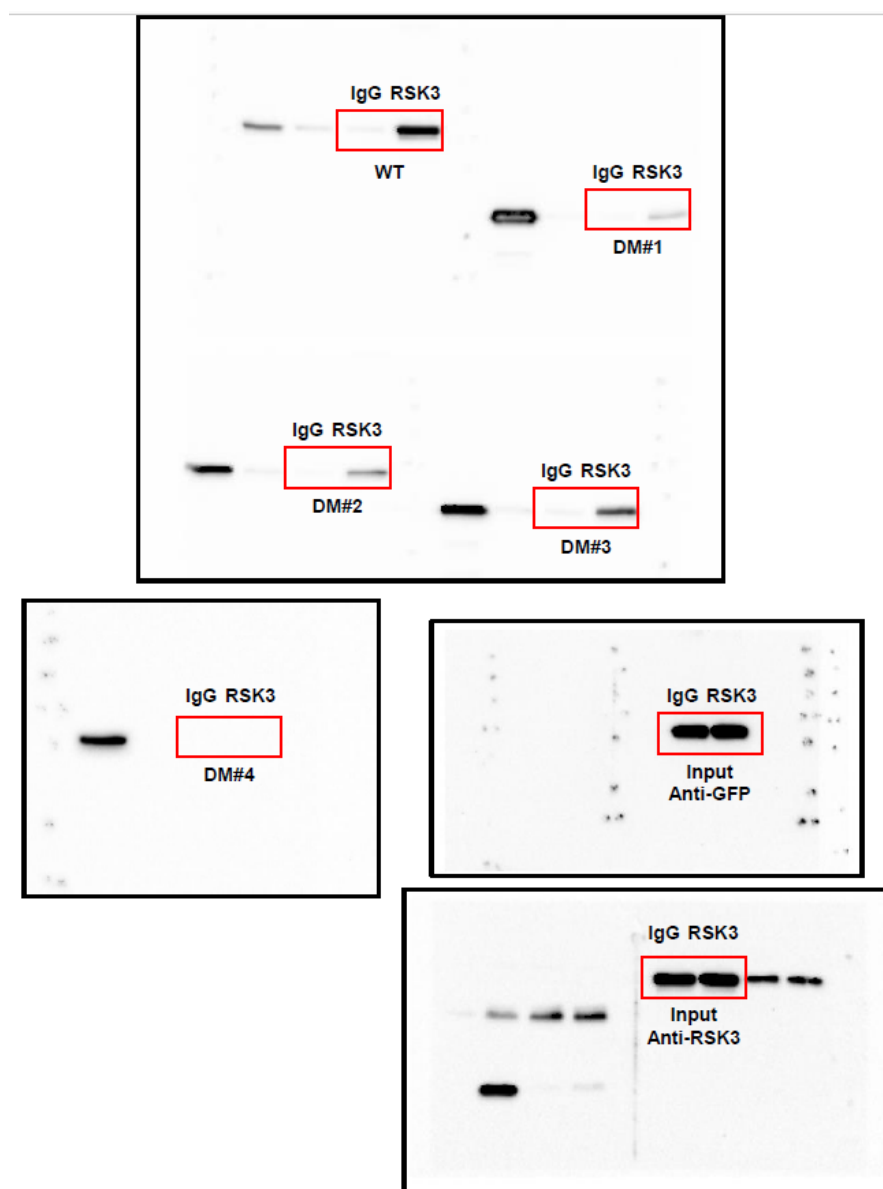


Figure S5. Uncropped Figure 2B.

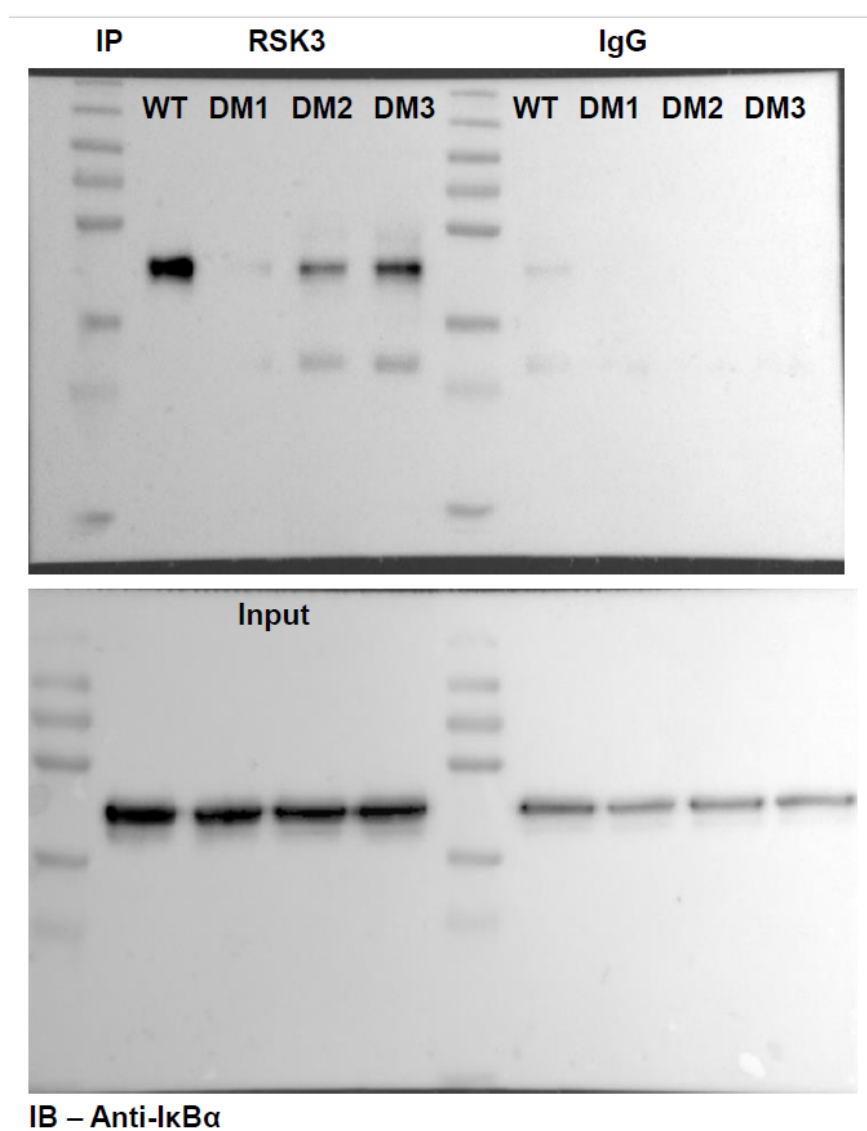


Figure S6. Uncropped Figure 2D.

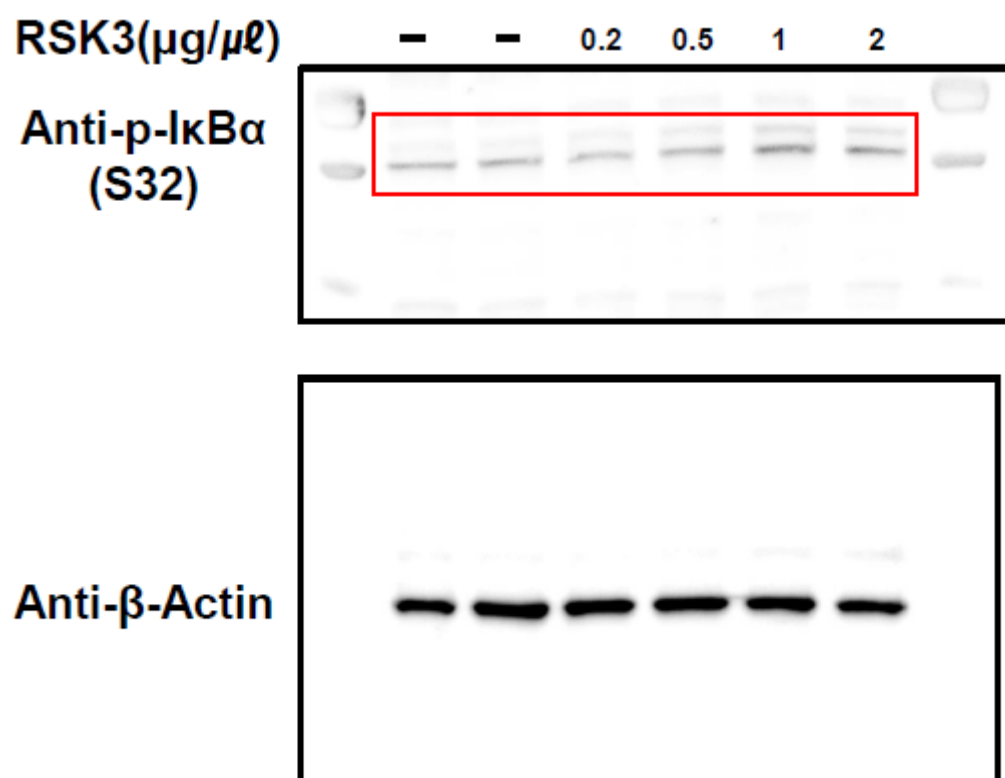
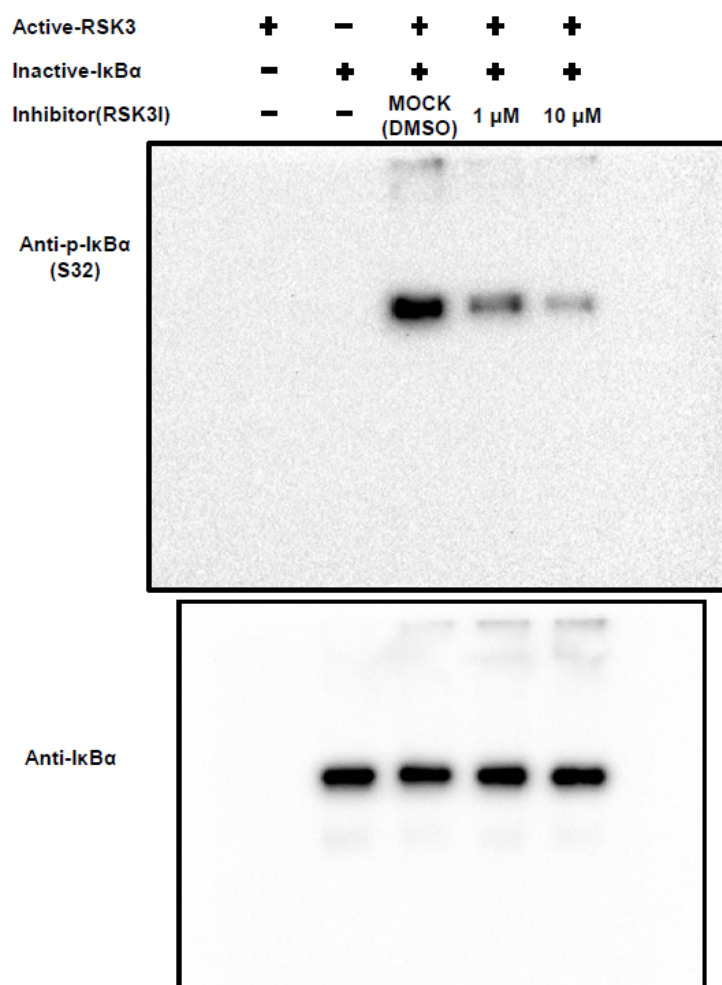


Figure S7. Uncropped Figure 3A.



**Figure S8.** Uncropped Figure 4D.



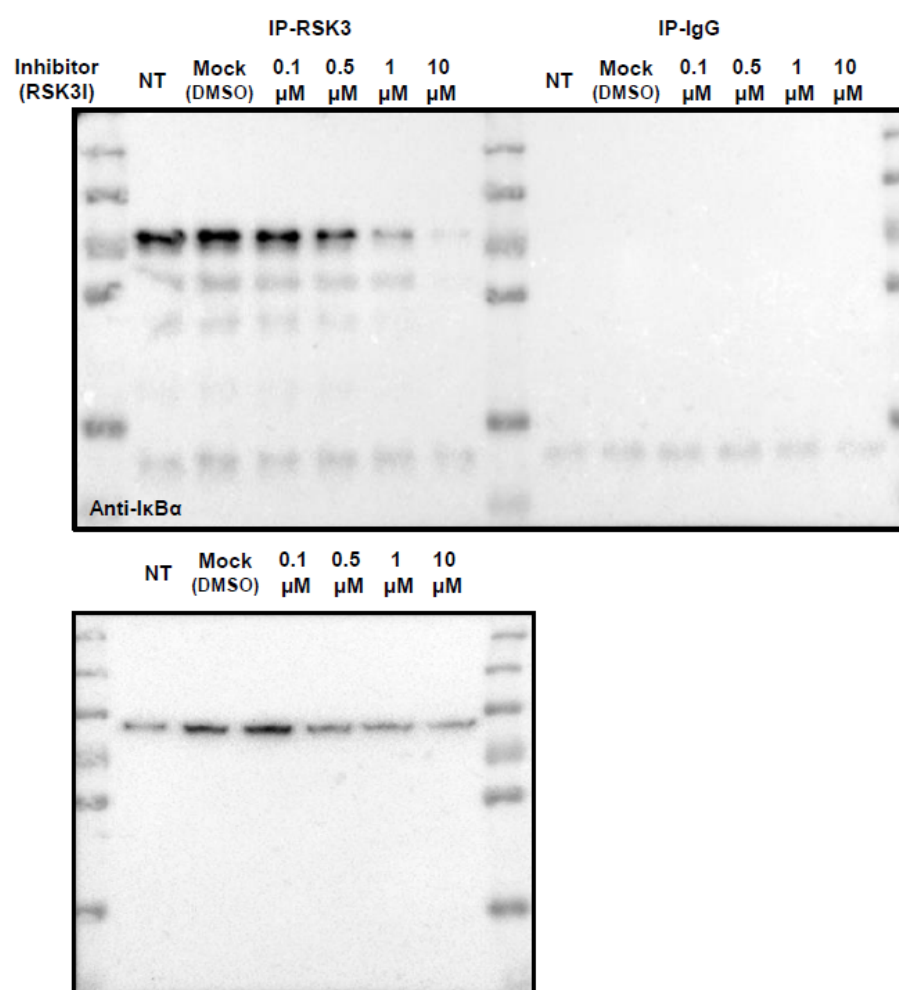


Figure S9. Uncropped Figure 4E.

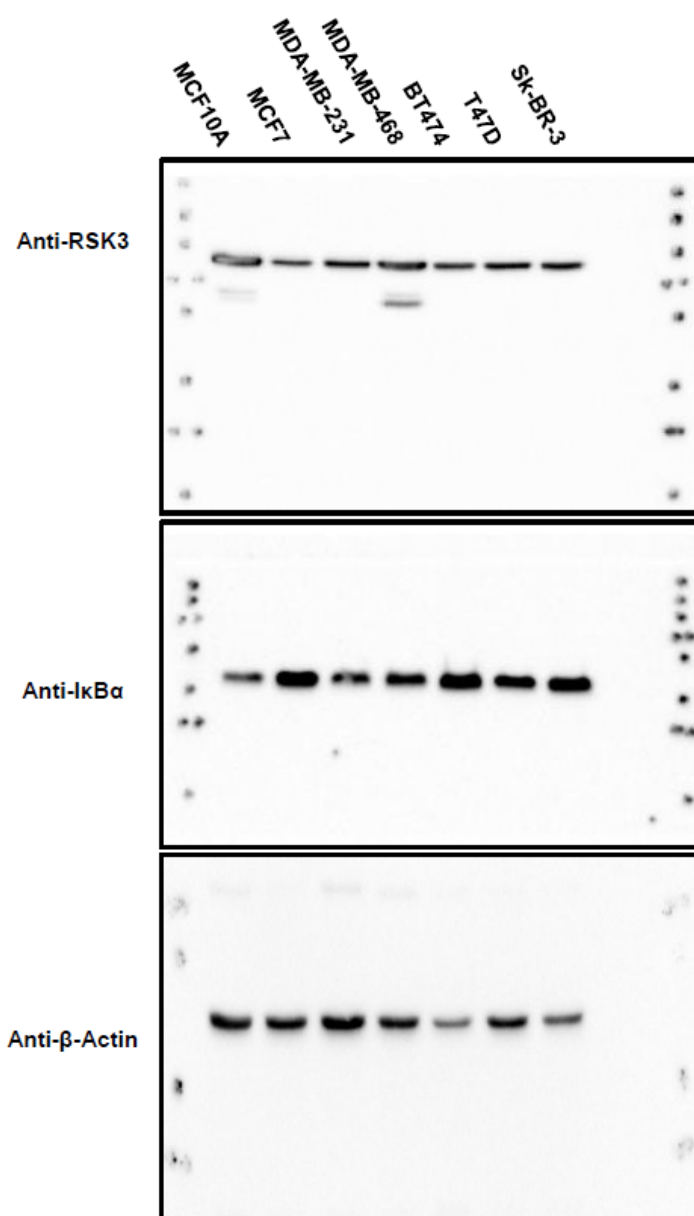
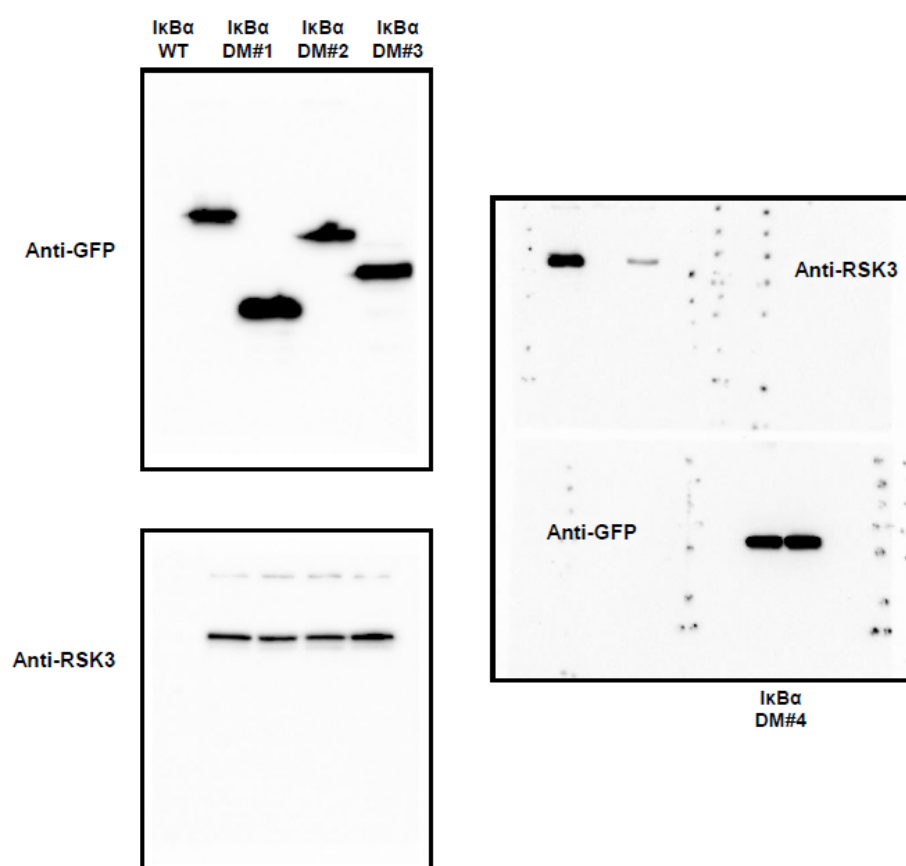
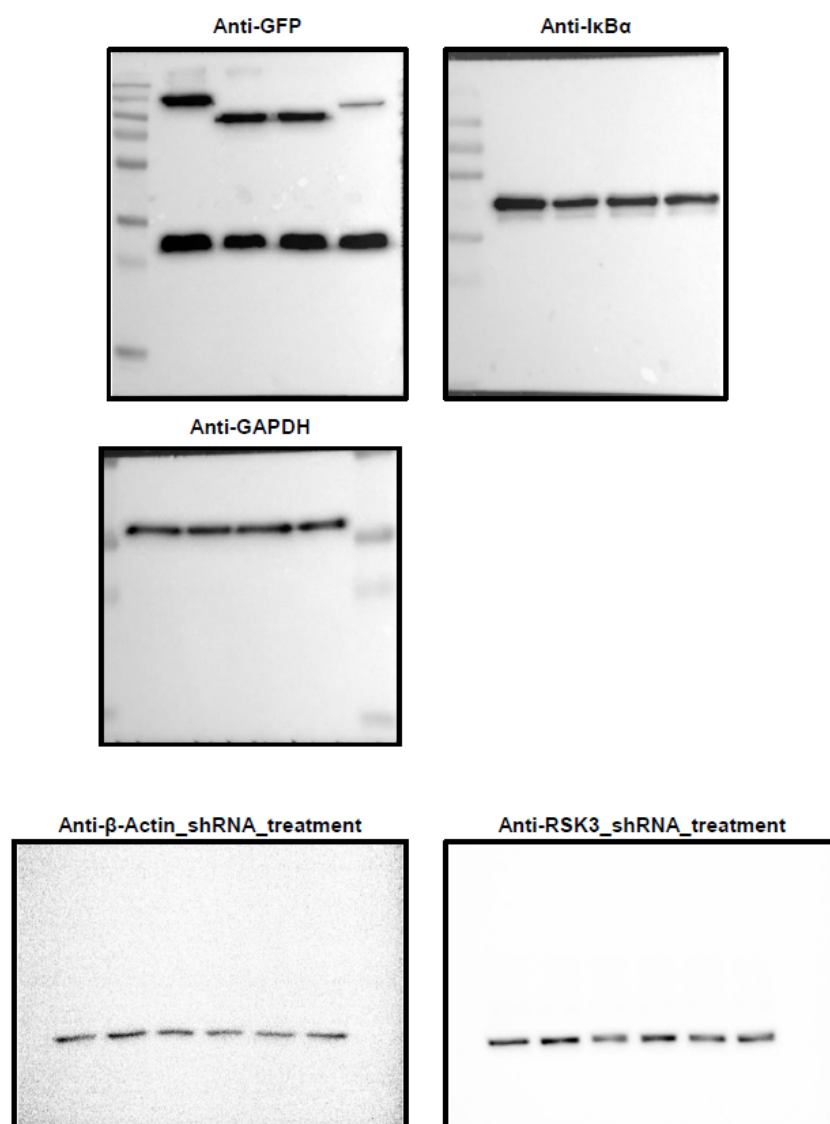


Figure S10. Uncropped Figure 5A.



**Figure S11.** Uncropped Figure S1B.



**Figure S12.** Uncropped Figure S2B.