

ORIGINAL RESEARCH ARTICLE

Vitamin D/Vitamin D receptor signaling suppresses gastric cancer metastasis through autophagy-related protein 13/Beclin1-mediated autophagy

Raw Image File

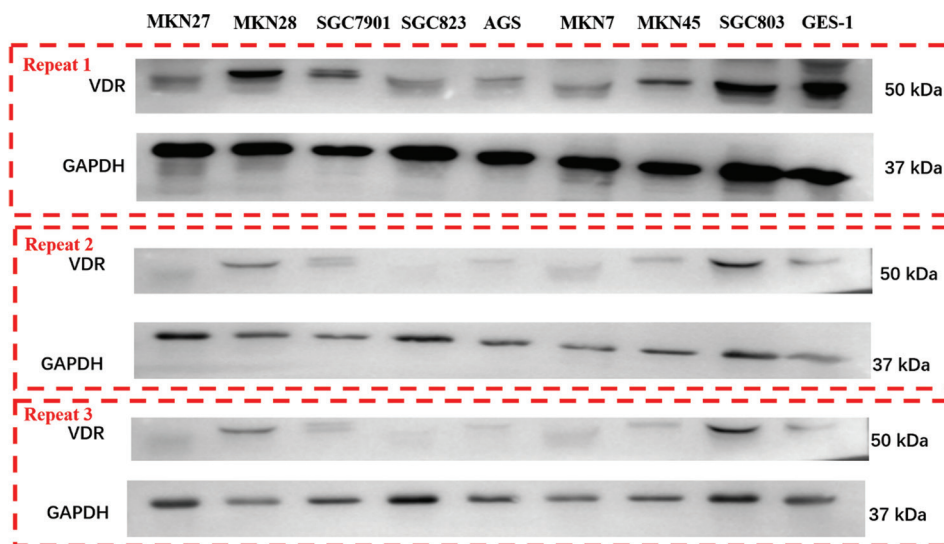


Figure R1. Original images for the western blot of Vitamin D receptor (VDR) expression in normal gastric epithelial cells and gastric cancer cell lines in Figure 1K. Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) was used as an internal control. The results displayed in Figure 1K of the main manuscript were derived from Repeat 1 for all proteins (VDR and GAPDH).

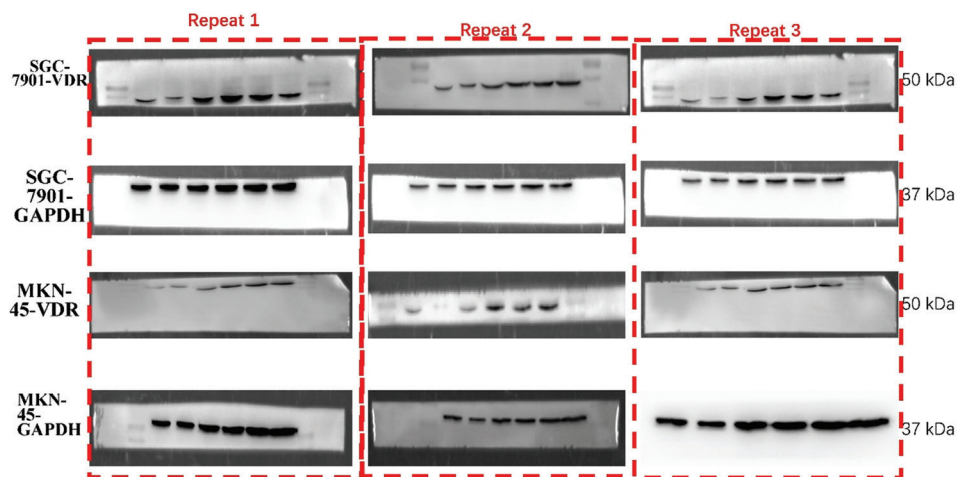


Figure R2. Original images for western blot analysis revealing time-dependent upregulation of Vitamin D receptor protein expression in SGC7901 and MKN45 cells treated with 1,25-dihydroxyvitamin D₃ (1 μM) for 0 – 5 days in Figure 2F. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control. The results displayed in Figure 2F of the main manuscript were derived from Repeat 1 for all proteins.

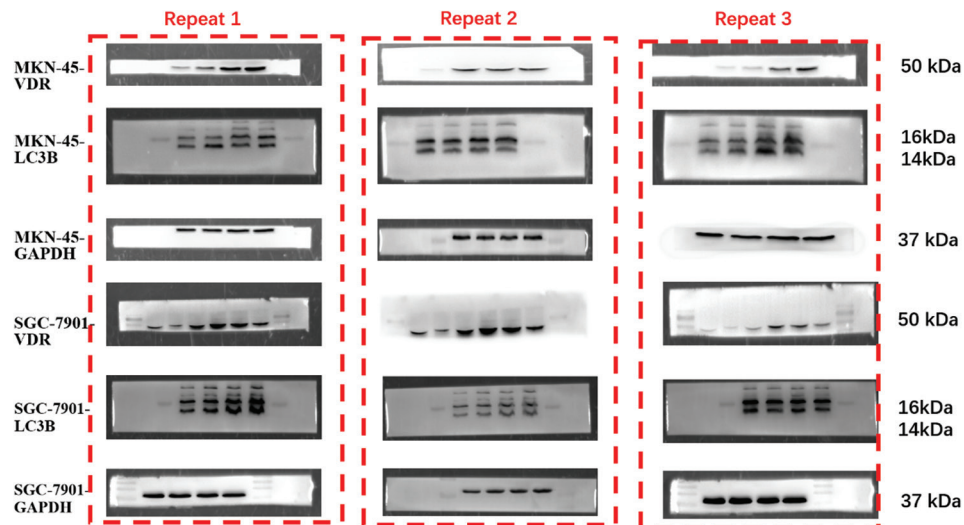


Figure R3. Original images for western blot of Vitamin D receptor and microtubule-associated protein 1 light chain 3B-I/II expression in cells treated with 1,25-dihydroxyvitamin D3 (100 nM) for 0 – 3 days in Figure 3E. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control. The results displayed in Figure 3E of the main manuscript were derived from Repeat 1 for all proteins.

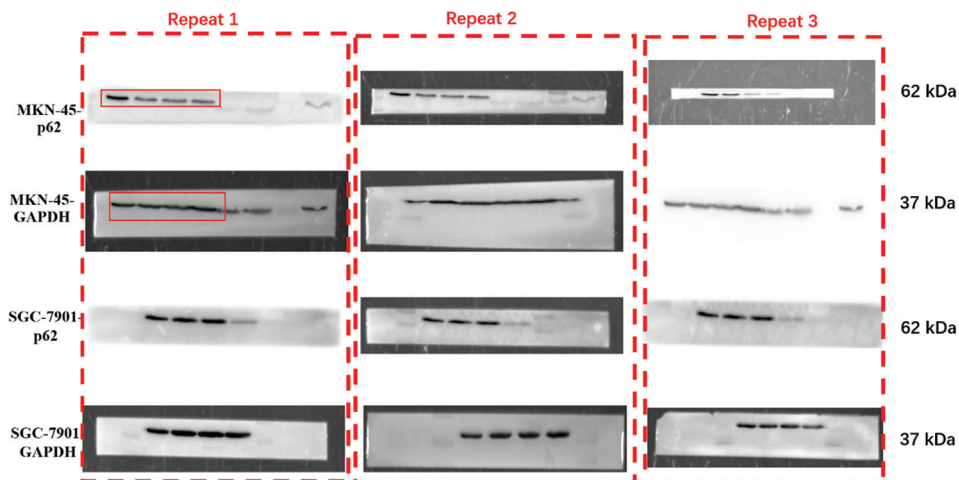


Figure R4. Original images for western blot of p62 expression in cells treated with 1,25-dihydroxyvitamin D3 over time in Figure 3F. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control. The results displayed in Figure 3F of the main manuscript were derived from Repeat 1 for all proteins.

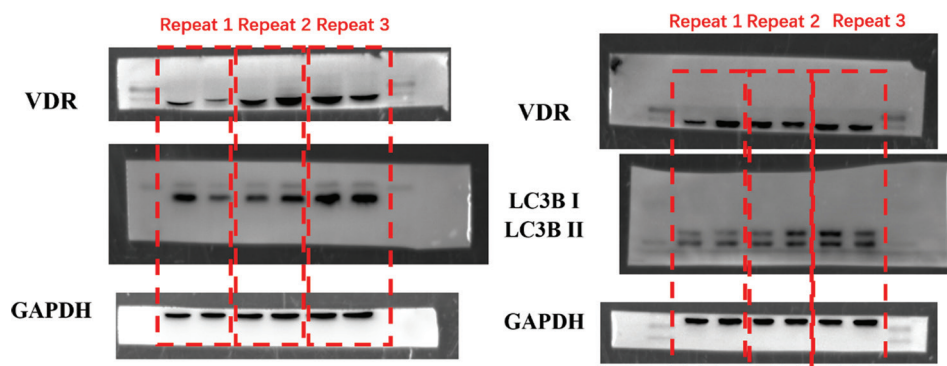


Figure R5. Original western blot images for light chain 3B (LC3B)-II/I ratio analysis in control and Vitamin D receptor (VDR)-knockdown cells as shown in Figure 3G of the main manuscript. The blots show three independent experimental repeats for VDR, LC3B I/LC3B II, and glyceraldehyde-3-phosphate dehydrogenase (GAPDH) proteins. GAPDH was used as an internal loading control to normalize protein expression levels. The results displayed in Figure 3G of the main manuscript were derived from Repeat 3 for all proteins.

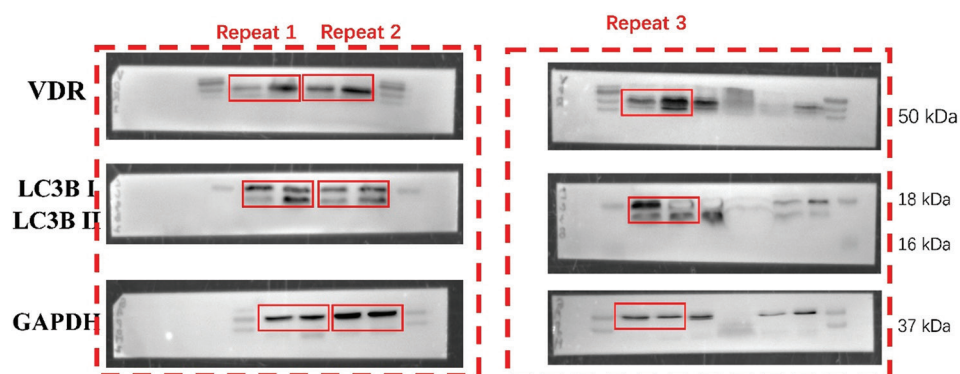


Figure R6. Original images for western blot showing increased Vitamin D receptor (VDR) and microtubule-associated protein 1 light chain 3B-I/II expression in gastric tissues from 1,25-dihydroxyvitamin D₃-treated mice compared to controls in Figure 4F. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control. The results displayed in Figure 4F of the main manuscript were derived from Repeat 1 for all proteins.

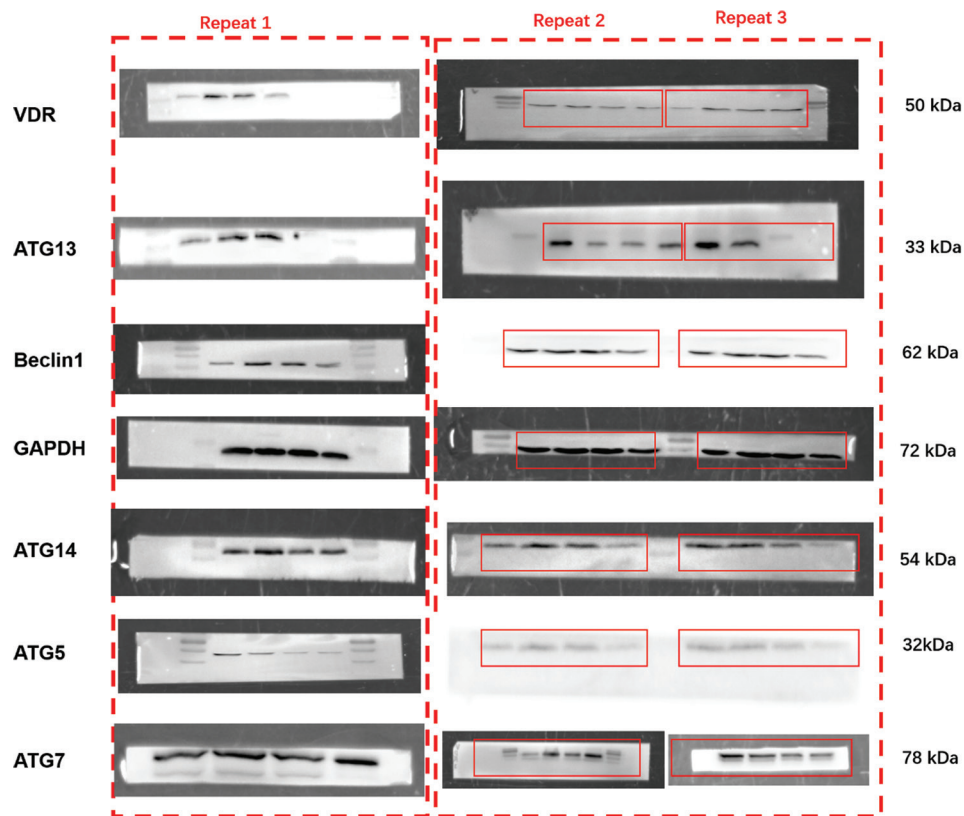


Figure R7. Original images for western blot showing increased protein levels of Vitamin D receptor (VDR) and autophagy-related proteins after 1,25-dihydroxyvitamin D3 treatment, confirming that VDR knockdown reduced the expression of autophagy-related proteins in Figure 5J and K. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control. The results displayed in Figure 5J and K of the main manuscript were derived from Repeat 1 for all proteins.

Abbreviation: ATG13: Autophagy-related protein 13.

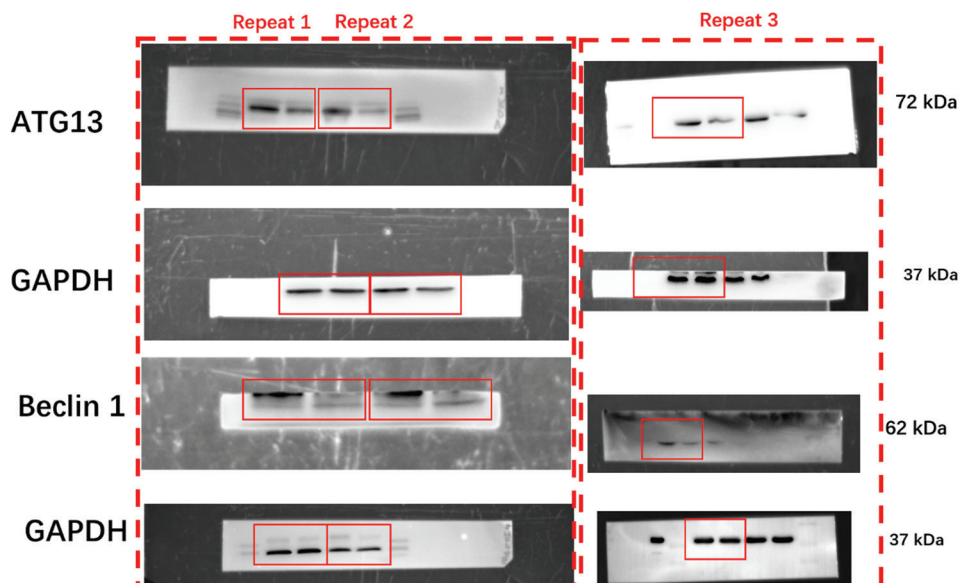


Figure R8. Original images for western blot confirmation of successful autophagy-related protein 13 and Beclin1 protein knockdown. Glyceraldehyde-3-phosphate dehydrogenase was used as an internal control for all Western blot analyses in Figure 5P-S. The results displayed in Figure 5P-S of the main manuscript were derived from Repeat 1 for all proteins.