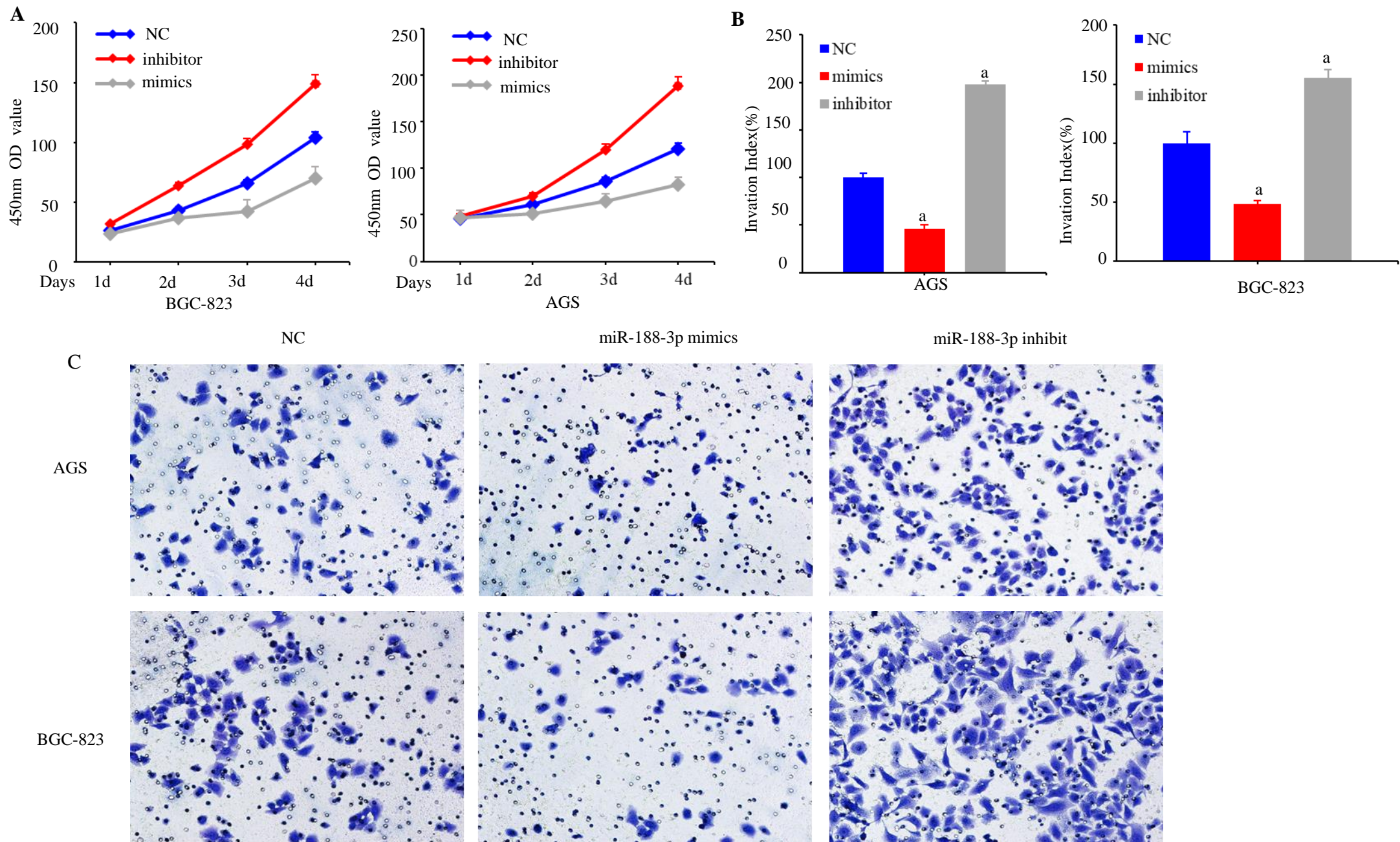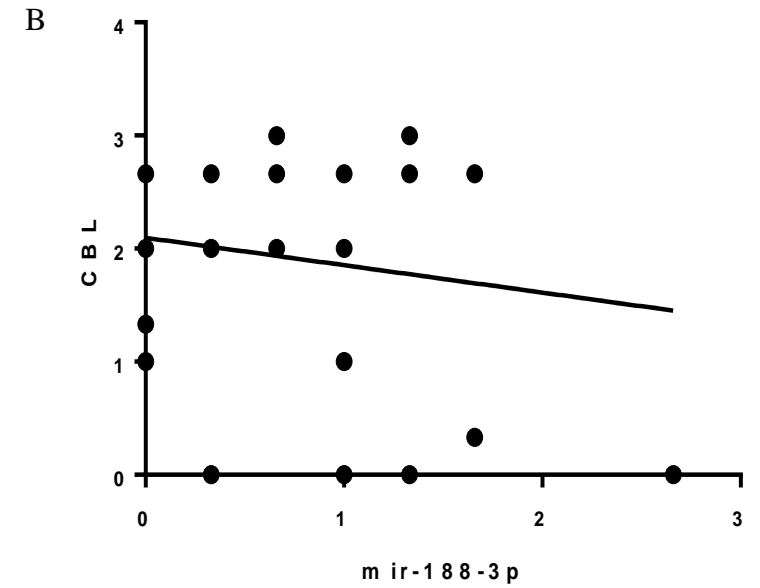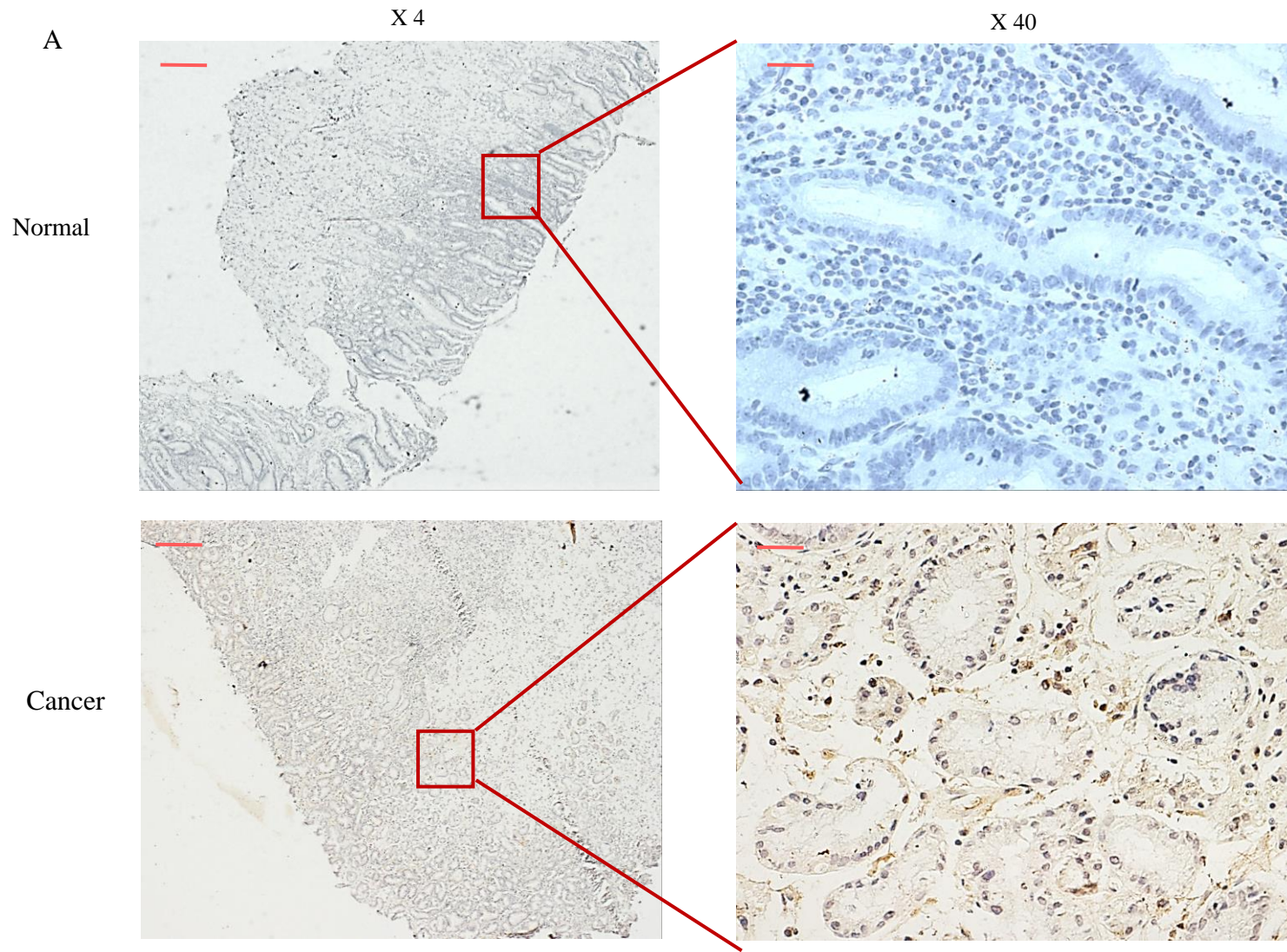**Supplementary Table 1 Correlation between miR-188-3p expression and the clinicopathological parameters of gastric carcinoma, *n* (%)**

Features	Total number (*n* = 50)	miR-188-3p expression Low	High	*P* value
Age (yr)				0.702
< 60	28	28 (87.5)	4 (12.5)	
≥ 60	22	18 (81.8)	4 (18.2)	
Gender				1.000
Male	36	28 (82.4)	6 (17.6)	
Female	14	12 (85.7)	2 (14.3)	
Differentiation				0.002
Well	7	2 (33.3)	4 (66.7)	
Moderate	14	12 (80.0)	3 (20.0)	
Poor	29	28 (96.6)	1 (3.4)	
Lymph node metastasis				0.03
No	13	8 (61.5)	5 (38.5)	
Yes	37	34 (91.9)	3 (8.1)	
Tumor size (cm)				0.706
< 5	29	25 (86.2)	4 (13.8)	
≥ 5	21	17 (81.0)	4 (19.0)	
AJCC T stage				0.703
T1, T2	10	8 (80)	2 (20)	
T3, T4	40	34 (85.0)	6 (15.0)	
AJCC TNM stage				0.009
I, II	17	11 (64.7)	6 (35.3)	
III, IV	32	30 (93.8)	2 (6.2)	

Supplementary Figure 1 miR-188-3p inhibition of gastric cancer cell invasion. A: Cell viability CCK-8 assay. AGS and BGC-823 cells were transfected with miR-188-3p mimics, inhibitor, or their NC and then subjected to CCK-8 assay; B and C: Transwell assay. AGS and BGC-823 cells were seeded for transfection with miR-188-3p mimics, inhibitor, or their NC and assessed for tumor cell invasion capacity using the Transwell assay. [a]$P < 0.01$. Scale bars, 100 μm.

Supplementary Figure 2 CBL protein was high in gastric cancer tissues. A: IHC. Gastric cancer and adjacent normal tissue samples were stained with the CBL antibody to visualize CBL in tumor cells. CBL protein was high in gastric cancer tissues; B: The association between miR-188-3p and CBL expression.
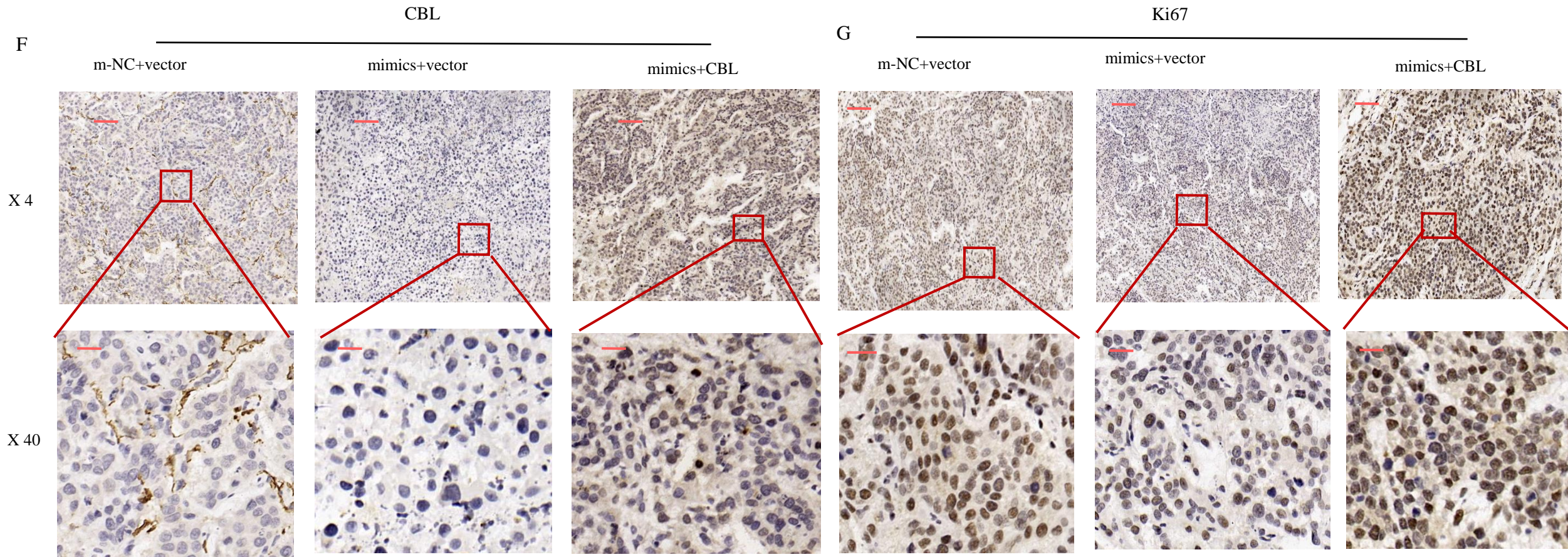
Supplementary Figure 3 miR-188-3p expression on regulation of gastric cancer cell proliferation *via* the CBL downregulation. A: Immunohistochemistry (IHC). Tumor cell xenografts were resected and processed for IHC staining; B: Immunohistochemistry. The Ki67 antibody was used as the primary antibody for IHC.