## Kanglaite sensitizes colorectal cancer cells to Taxol via NF-κB inhibition and connexin 43 upregulation

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## Supplementary materials

В	white	FITC	DAPI	merge	enlarged-FITC
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Fig.S1. Fluorescent micrographs of four colorectal cancer cell lines immunostained with  $\alpha$ -tubulin antibody followed by FITC-conjugated antibody. Six different drug treatment groups are listed in the left column. These combinations are defined in "Kanglaite and Taxol treatment". The scale bars represent 20  $\mu$ m. (A) HCT106; (B) HCT116; (C) LoVo; and (D) CT26.

A1	white	FITC	DAPI	merge
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Taxol				
KLT				_
Taxol + KLT				
Taxol&KLT				
KLT+Taxol				_



B1	white	FITC	DAPI	merge
HCT116				
control				
Taxol		- Q		
KLT				
Taxol+KLT				
Taxol&KLT				
KLT+Taxol				





C2	white	FITC	DAPI	merge
LoVo	6-20		18,00 8	18 8 8
control	-			
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KLT	in the second second			
Taxol+KLT				
Taxol&KLT				
KLT+Taxol	1			

D1	white	FITC	DAPI	merge
CT26			100 100 100 100 100 100 100 100 100 100	
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Taxol		В		
KLT			<u> </u>	
Taxol+KLT				
Taxol&KLT				
KLT+Taxol				



Fig.S2. Fluorescent micrographs of four colorectal cancer cell lines immunostained with NF- $\kappa$ B antibody followed by FITC-conjugated antibody. The drug treatment groups are listed in the left column and are described in "Kanglaite and Taxol treatment". Activated NF- $\kappa$ B is highly expressed in the nuclei by single Taxol treatment, but the combinations containing KLT treatment have almost no activated NF- $\kappa$ B expression in the nuclei. The scale bars represent 20  $\mu$ m. All images in red box are enlarged in order to determine whether NF- $\kappa$ B is translocated to nuclear. Red arrows indicate that NF- $\kappa$ B has high expression level in nuclear by comparison of FITC and DAPI stain. (A1) HCT106; (A2) Enlarged images of red box in A1; (B1) HCT116; (B2) Enlarged images of red box in B1; (C1) LoVo; (C2) Enlarged images of red box in C1; (D1) CT26; (D2) Enlarged images of red box in D1.



Fig.S3. Full length blots of Fig.2: Western blotting analysis of α-tubulin polymerization in four colorectal cancer cell lines. The number above images represents: 1: control-S; 2: control-P; 3: Taxol-S; 4: Taxol-P; 5: KLT-S; 6: KLT-P; 7: T+K-S; 8: T+K-P; 9: T&K-S; 10: T&K-P; 11: K+T-S; 12:K+T-P. Where "S" represents soluble tubulin and "P" represents polymerized tubulin.



Fig.S4: Full length blots of Fig.3, which include western blotting analysis of NF- $\kappa$ B, IKK $\alpha$  and I $\kappa$ B $\alpha$  expression in four colorectal cancer cell lines, HCT106, HCT116, LoVo, and CT26. The numbers represent different treatment groups: 1: control; 2: Taxol; 3: KLT; 4: Taxol+KLT; 5: Taxol&KLT; and 6: KLT+Taxol.



Fig.S5: Full length blots of Fig.4, which include western blotting analysis of cyclin B1, survivin, Cx43, caspase-3, PARP and caspase-8 expression in four colorectal cancer cell lines, HCT106, HCT116, LoVo, and CT26. The numbers represent different treatment groups: 1: control; 2: Taxol; 3: KLT; 4: Taxol+KLT; 5: Taxol&KLT; and 6: KLT+Taxol.