

Supplement 1. Cell viability of shikonin on HCT-116 cells

Concentration (μM)	Shikonin treatment (Mean \pm SD)			
	3 h	6 h	12 h	24 h
Control	100.13 \pm 3.30	93.88 \pm 1.74	93.92 \pm 1.84	92.24 \pm 1.43
0.25	99.9 \pm 6.07	77.39 \pm 2.85***	79.00 \pm 2.33***	82.24 \pm 6.64 ***
0.5	81.28 \pm 8.27***	65.74 \pm 3.22***	49.29 \pm 5.80***	28.32 \pm 3.75***
1	63.15 \pm 2.91***	47.33 \pm 2.68***	36.66 \pm 1.22***	25.73 \pm 0.95***
1.5	54.34 \pm 2.29***	42.22 \pm 2.75***	32.17 \pm 3.05***	20.68 \pm 2.26***
2	40.51 \pm 2.02***	16.11 \pm 1.51***	8.26 \pm 0.88***	4.01 \pm 0.43***
2.5	37.7 \pm 1.87***	8.73 \pm 0.51***	5.95 \pm 0.39***	4.26 \pm 0.20***
3	37.01 \pm 2.90***	6.97 \pm 0.50***	7.06 \pm 0.61***	6.16 \pm 0.31***

Supplement 2. Cell viability of shikonin on HCT-15 cells

Concentration (μM)	Shikonin treatment (Mean \pm SD)			
	3 h	6 h	12 h	24 h
Control	101.49 \pm 3.31	94.04 \pm 2.10	97.87 \pm 2.52	94.57 \pm 2.68
0.25	95.82 \pm 1.69*	83.20 \pm 3.57***	82.67 \pm 3.12***	77.56 \pm 3.24***
0.5	93.20 \pm 4.77***	76.72 \pm 3.76***	69.93 \pm 3.88***	37.90 \pm 2.83***
1	51.94 \pm 4.63***	48.96 \pm 3.17***	45.09 \pm 4.05***	20.53 \pm 0.70***
1.5	11.72 \pm 1.13***	13.76 \pm 1.66***	11.71 \pm 2.01***	6.80 \pm 1.14***
2	3.90 \pm 0.57***	3.44 \pm 0.51***	3.21 \pm 0.16***	2.12 \pm 0.11***
2.5	3.21 \pm 0.18***	2.35 \pm 0.23***	2.46 \pm 0.13***	1.64 \pm 0.09***
3	3.23 \pm 0.13***	2.50 \pm 0.17***	2.64 \pm 0.09***	1.68 \pm 0.10***

Supplement 3. *In vivo* efficacy studies of shikonin in colorectal cancer xenograft models. HCT-116 and HCT-15 cells were implanted subcutaneously in BALB/c nude mice. The tumor-bearing mice were oral administered with shikonin (20 mg/kg) or vehicle for two or three weeks. **(a)** The tumor growth curve and the body weight change in HCT-116 xenograft model. **(b)** The tumor growth curve and the body weight change in HCT-15 xenograft model.

