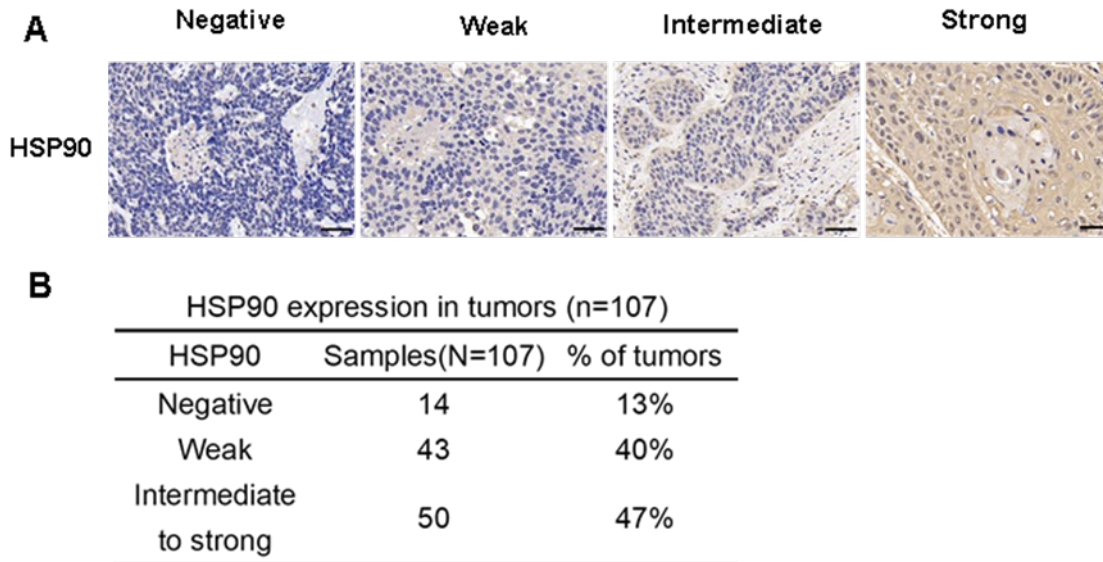
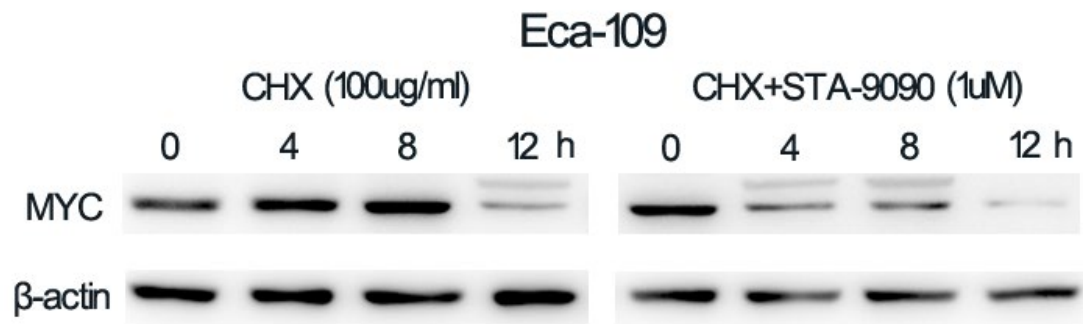


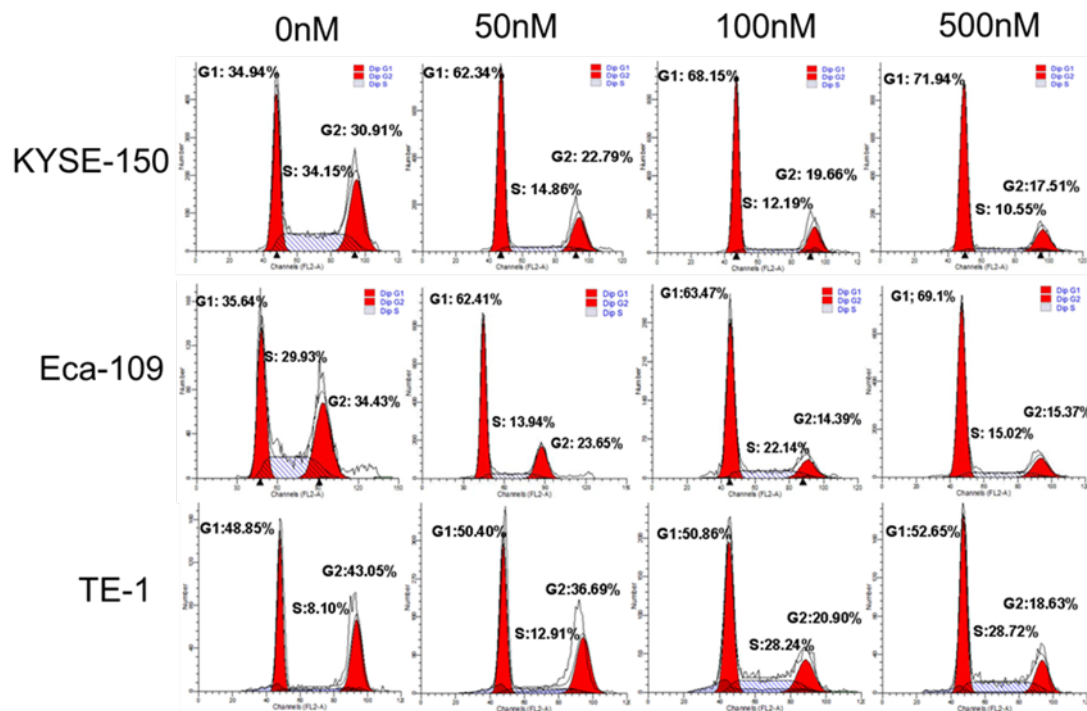
Supplementary data (4 Figures and 3 Tables)



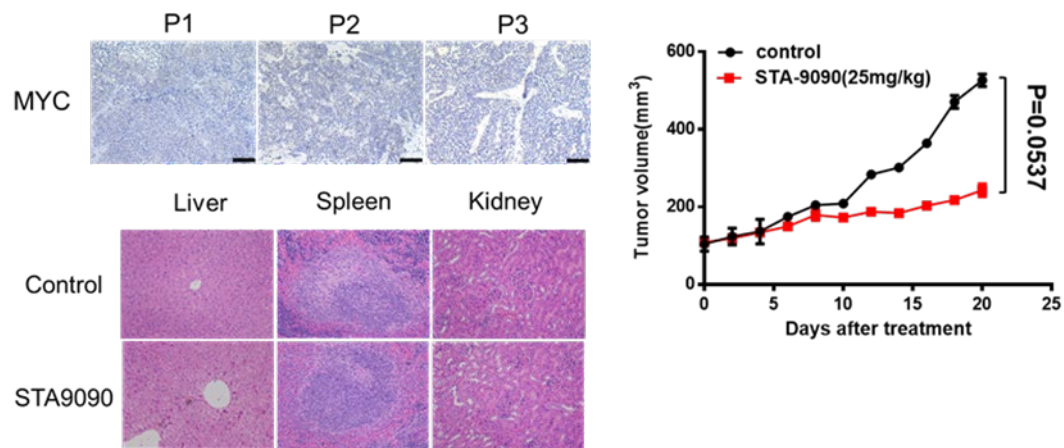
Supplementary Figure 1: HSP90 proteins in ESCC tissues. (A) and (B) The expression of HSP90 in ESCC. Representative images from the ESCC TMA immunostained for HSP90. Scale bars represent 50 μ m.



Supplement Figure 2: STA-9090 decreased the protein stability and half-life of MYC in Eca-109.



Supplementary Figure 3: Original results of cell cycle analyses by flow cytometry for STA-9090 treatment in KYSE-150, Eca-109 and TE-1 cell.



Supplementary Figure 4: STA-9090 treatment does not benefit mice with MYC-low expressing ESCC tumors. (A) ESCC-PDX tumors retain MYC-low expression during *in vivo* passaging. Tumor generations P1–P3. Scale bar 100um. (B) No effect of STA-9090 treatment on tumor growth in ESCC-PDX mice. (C) STA-9090 treatment does not affect the liver and spleen morphology in treated mice. Representative images from H&E staining of the livers.

Supplementary Table1: Baseline information of patients with ESCC

No.	Age	Gender	TNM staging	Differentiation
E1	58	Female	PT3N1M0 IIIa	Moderate-poor
E2	55	Male	PT3N0M0 IIa	High
E3	61	Male	CT3N3M0 IVa	Moderate-poor
E4	68	Male	PT3N0M0 IIb	Moderate
E5	66	Male	PT3N1M0 IIIa	Moderate
E6	68	Male	CT3N3M1 IV	Poor
E7	51	Male	PT3N0M0 IIa	High
E8	54	Female	PT3N1M0 IIb	Moderate
E9	66	Male	PT3N1M0 IIIa	Poor
E10	56	Male	PT3N2M0 IIIb	Poor
E11	56	Female	PT3N1M0 IIIa	High
E12	56	Male	PT3N0M0 IIa	High

Supplementary Table 2: qRT-PCR primers used

Gene	Forward	Reverse
GAPDH	AGCCTCAAGATCATCAGC	GAGTCCTTCCACGATACC
CDKN1A	CCTGTCACTGTCTTGTACC	AATCTGTCATGCTGGTCTG
CDKN2B	GAGGAGAACAAGGGCATG	GTTGACTCCGTTGGGATC

Supplementary Table3. IC₅₀ of STA-9090 in ESCC cell lines (72h)

Cell lines	Eca-109	KYSE-150	TE-13	EC-1	TE-1
IC ₅₀ (nM)	69.44	29.32	574.00	122.50	304.50