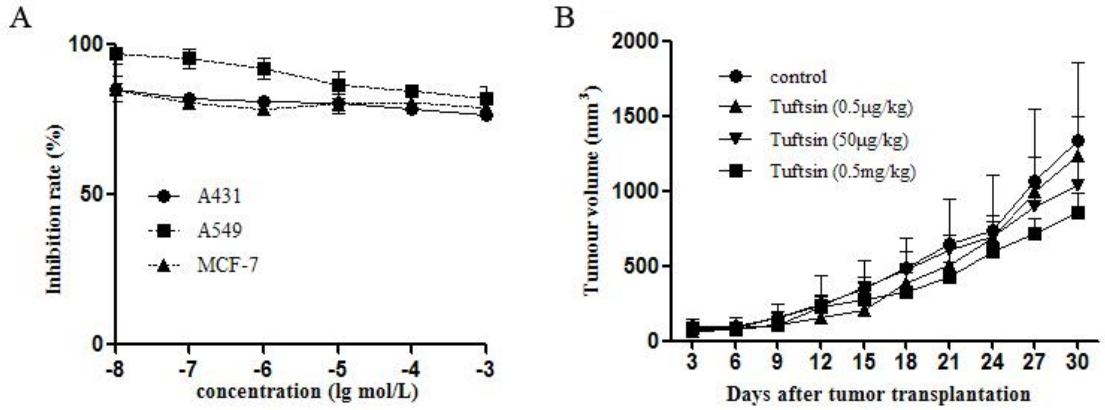
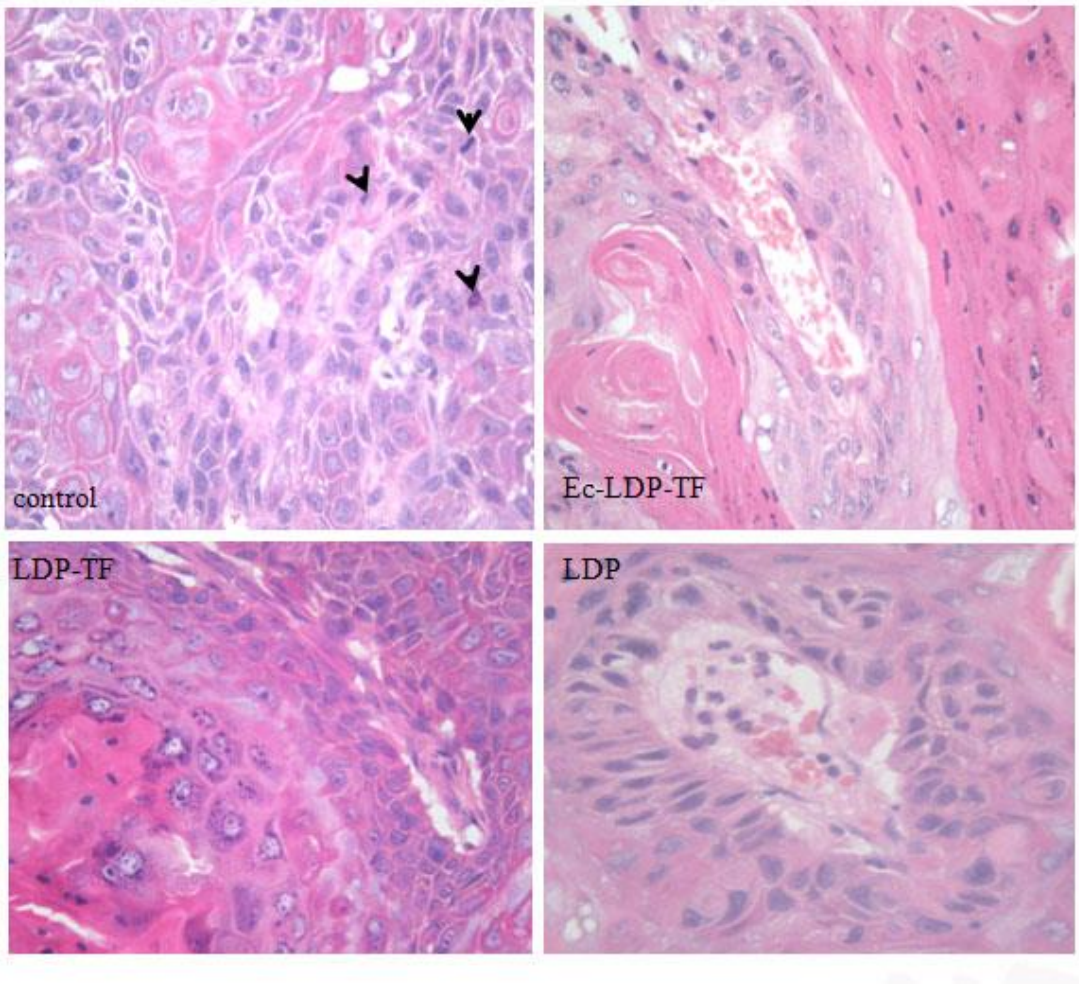
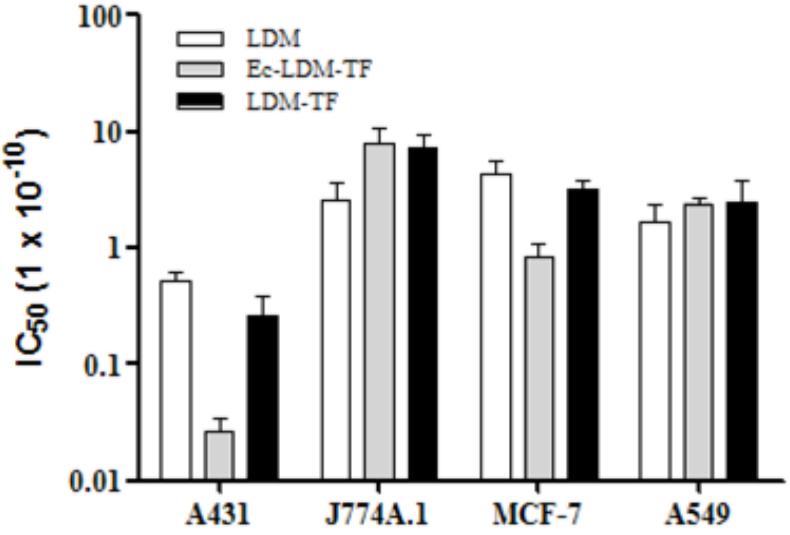


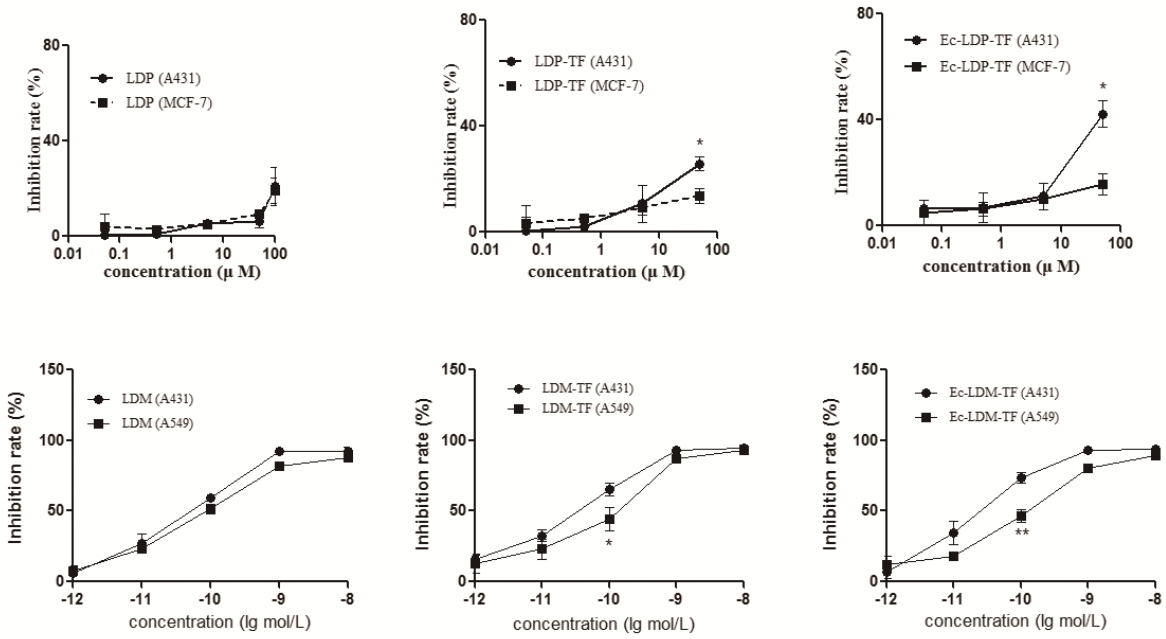
Supplementary figure 1. In vivo and vitro efficacy of tuftsin protein. (A), The growth inhibition ratio of A431, A549 and MCF-7 cells were indicated by the absorbance of experimental groups compared with that of control group. Data represent mean±SD of three repeats. (B), A431 cells (1×10^7) were subcutaneously injected into 20g weight nude mice. When tumors had reached a mean tumor volume of 100 mm^3 , the mice were randomly allocated into four groups (n = 6) and treated with sterile PBS or tuftsin in sterile PBS. Injections were administered intraperitoneally two times per week for 2 weeks. Data are represented as mean ± SD, n = 6.



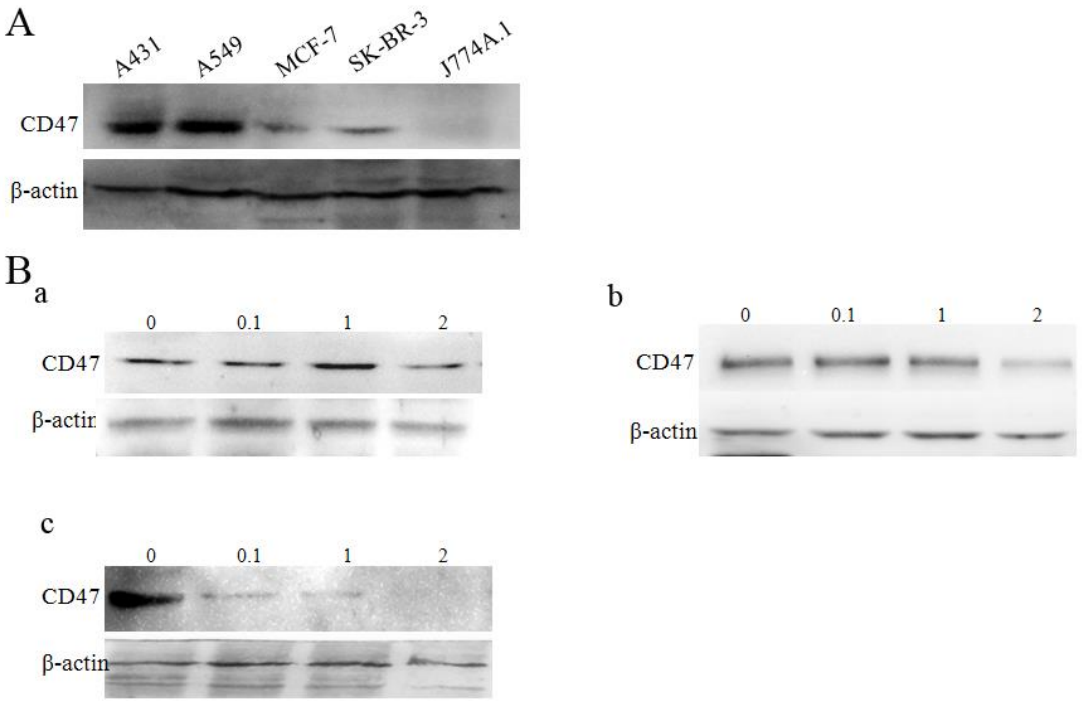
Supplementary figure 2. Histological examination of tumor from A431 xenograft-bearing nude mice (×400). Black arrows, dividing tumor cells.



Supplementary figure 3. The IC 50 values of Ec-LDM-TF, LDM-TF, and lidamycin (LDM) against a variety of carcinoma cells were measured by MTT assay. Error bars represent average values ± standard deviations from the means of three independent experiments performed in duplicate.



Supplementary figure 4. The growth inhibition of A431 and MCF-7 cells were indicated by CCK-8 and MTT assay with fusion proteins and energized proteins. *P < 0.05, **P<0.01.



Supplementary figure 5. (A), Western blot analysis of tumor cell lysates. Antibodies specifically recognizing CD47 was used. β-actin was used as an internal control. (B), CD47 expression level of A431 cells after LDM (a), LDM-TF (b), and Ec-LDM-TF (c) treatment were analyzed by western blot. Each protein was given at three different doses: 0.1, 1, and 2 nmol/L.

Supplementary Table 1. The binding affinity of Ec-LDP-TF, LDP-TF, and LDP protein with A431 and J774A.1 cells.

Cell lines		Ec-LDP-TF	LDP-TF	LDP
A431	K_d(μmol/L)	2.001	2.213	28.53
	B_{max}	4.428	1.312	3.301
J774A.1	K_d(μmol/L)	5.041	6.387	~2.566e+014
	B_{max}	2.075	2.069	~2.070e+013

Supplementary Table 2. The growth inhibition of human squamous carcinoma A431 xenograft in athymic mice

Groups	Dosage (μmol/kg)	No. of mouse (begin/end)	Body weight change[a]	Tumor weight[a] (mean ± SD, g)	%TGI[b]
Control	-	6/6	-0.64	0.62±0.17	-
Ec-LDP-TF	1	6/6	-1.6	0.10±0.06	84.2[c,d]
LDP-TF	1	6/6	-0.36	0.15±0.06	76.3[c]
LDP	1	6/6	-1.0	0.26±0.11	57.9[c]

[a] Body weight was monitored as a systemic toxicity indicator of the drug administered, the body weight of mice was all increased until the end of experiment and the dramatic increasing of the body weight of the control group was due to the fast growing of tumor.

[b] The %TGI was calculated using the final mean excised tumor weight for each treatment group rather than the final tumor weights estimated by dimensional measurement.

[c] $P < 0.05$ compared to control.

[d] $P < 0.05$ compared to LDP group.