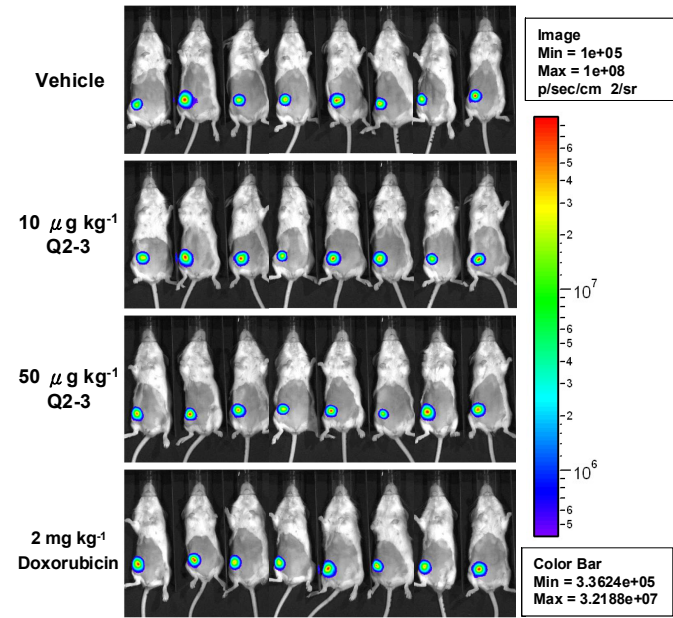


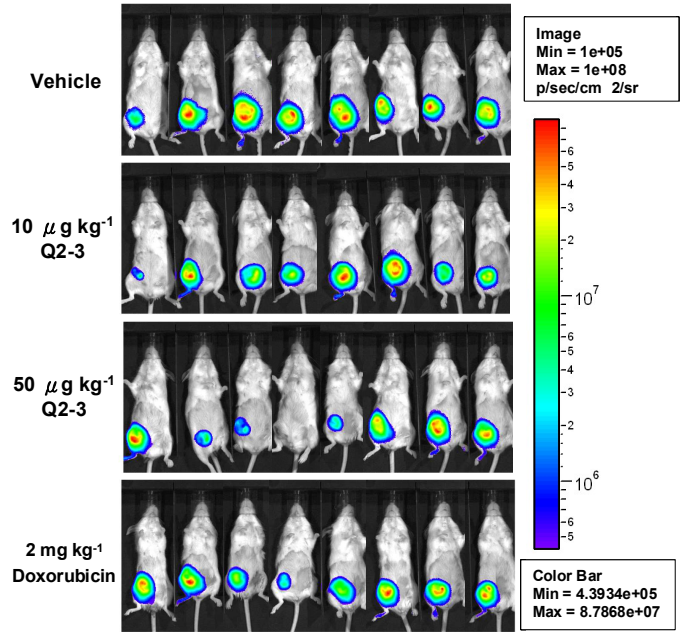
Supplementary Figure 1:

a

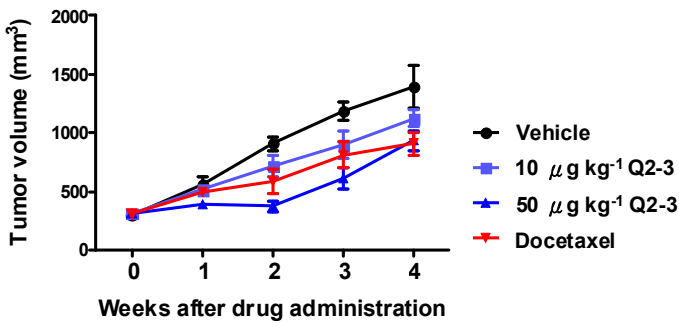
0 week after drug administration



3 weeks after drug administration

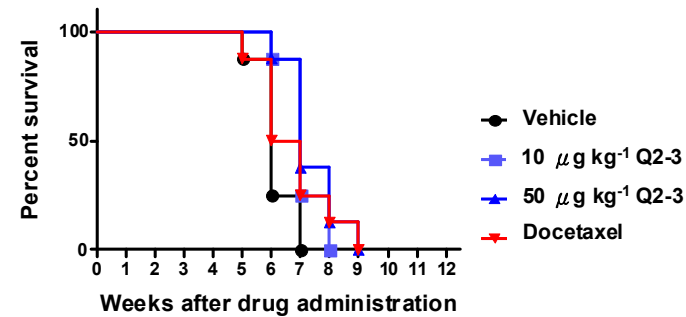


b



“Vehicle” v.s “10 µg kg⁻¹ Q2-3” $P > 0.05$, n.s
 “Vehicle” v.s “50 µg kg⁻¹ Q2-3” $P < 0.05$, *

c



“Vehicle” v.s “10 µg kg⁻¹ Q2-3” $P > 0.05$, n.s
 “Vehicle” v.s “50 µg kg⁻¹ Q2-3” $P < 0.05$, *

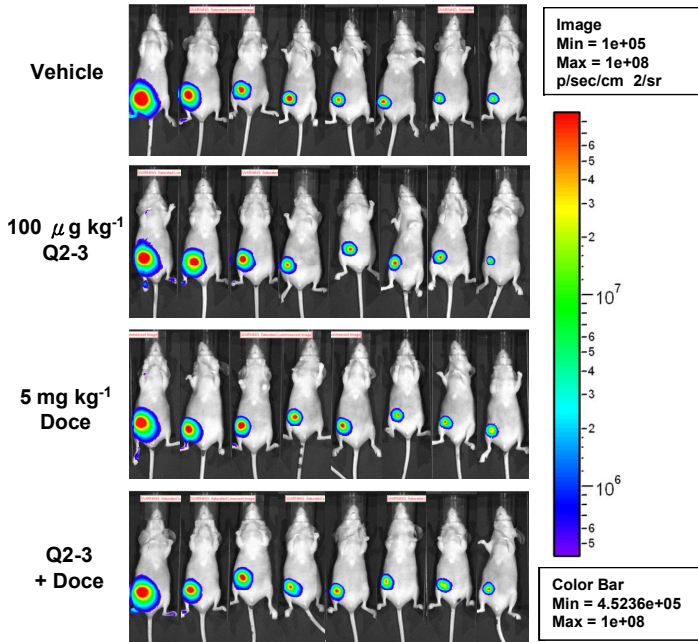
Supplementary Figure 1. In vivo treatment of Q2-3 suppresses the growth of mouse (4T1) mammary tumor *in situ*.

(a) Representative bioluminescent images of mice (n = 8 per group) with 4T1 mammary carcinoma *in situ*, after in vivo treatment with PBS (Vehicle, 0.1% DMSO in saline), Q2-3 (10 or 50 µg kg⁻¹; 3 injections week⁻¹), docetaxel (2 mg kg⁻¹) for 0 and 3 weeks. (b) Quantification of tumor volume (mm²) in mice, as determined from the length (A) and width (B) of test tumors by the formula $V = A \times B^2/2$. (c) Survival of test mice after different treatments. n.s, no significant. *, significance of $P < 0.05$ (Kaplan–Meier results were analyzed by log-rank test), when compared with the mice in vehicle control group. Similar results were obtained from two independent experiments.

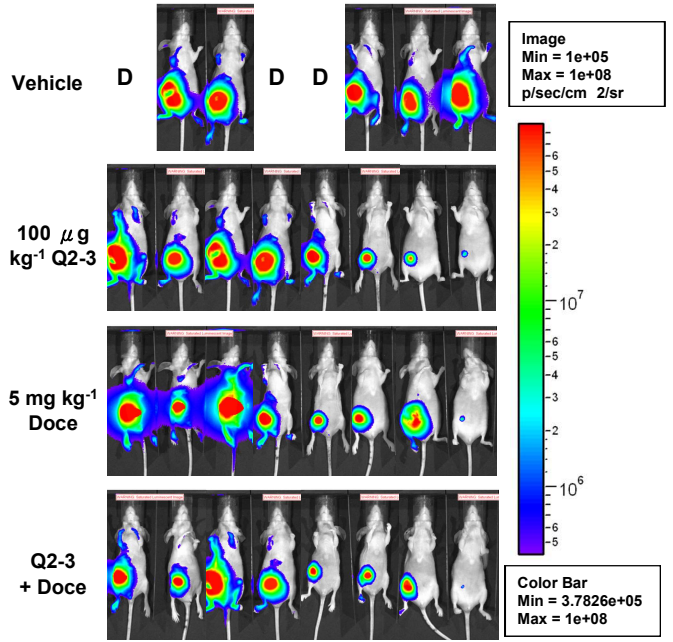
Supplementary Fig 2:

a

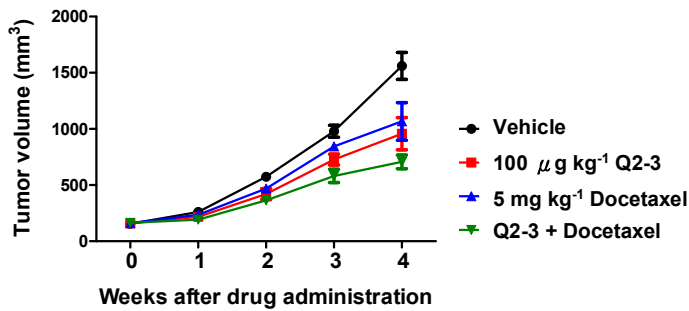
0 week after drug administration



3 weeks after drug administration

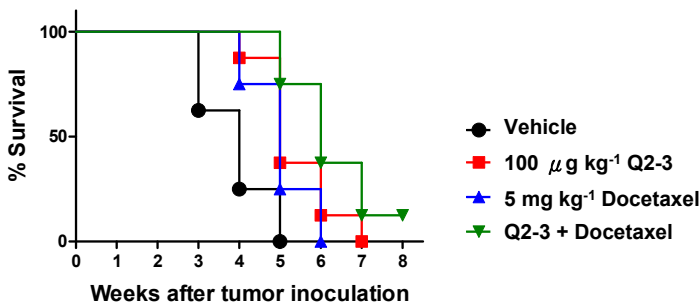


b



“Vehicle” v.s “100 µg kg⁻¹ Q2-3” $P < 0.05, *$
 “5 mg kg⁻¹ Docetaxel” v.s “Q2-3 + Docetaxel” $P < 0.05, *$

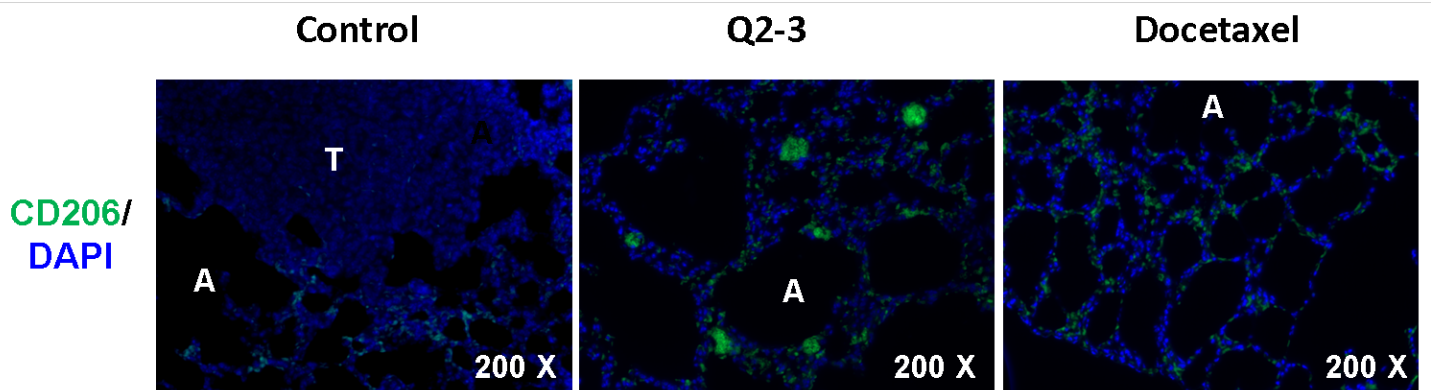
c



“Vehicle” v.s “100 µg kg⁻¹ Q2-3” $P < 0.05,$
 *5 mg kg⁻¹ Docetaxel” v.s “Q2-3 + Docetaxel” $P > 0.05, n.s$

Supplementary Figure 2. **In vivo treatment of Q2-3 suppresses the growth of human (MDA-MB-231) mammary tumor *in situ*.** (a) Representative bioluminescent images of mice ($n = 8$ per group) with MDA-MB-231 mammary carcinoma *in situ*, after in vivo treatment with PBS (Vehicle, 0.1% DMSO in saline), Q2-3 ($100 \mu\text{g kg}^{-1}$; 3 injections week⁻¹), docetaxel (5 mg kg^{-1}) or co-treatment with docetaxel and Q2-3 for 0 and 3 weeks. Labelling with “D” in photograph denotes the mice were died before image taken. (b) Quantification of tumor volume (mm^2) in mice, as determined from the length (A) and width (B) of test tumors by the formula $V = A \times B^2/2$. (c) Survival of test mice after different treatments. n.s, no significant. *, significance of $P < 0.05$, as indicated comparisons. Similar results were obtained from two independent experiments.

Supplementary Fig 3:



Supplementary Figure 3. Q2-3 treatment significantly induces the expansion of pulmonary macrophages in lung tissues of Q2-3-treated mice. The presence of CD206⁺ cells (green) indicates the clustering of macrophages in lung tissue of Q2-3-treated mice, rather than in control or docetaxel-treated mice.

Supplementary Fig 4

Figure 3d

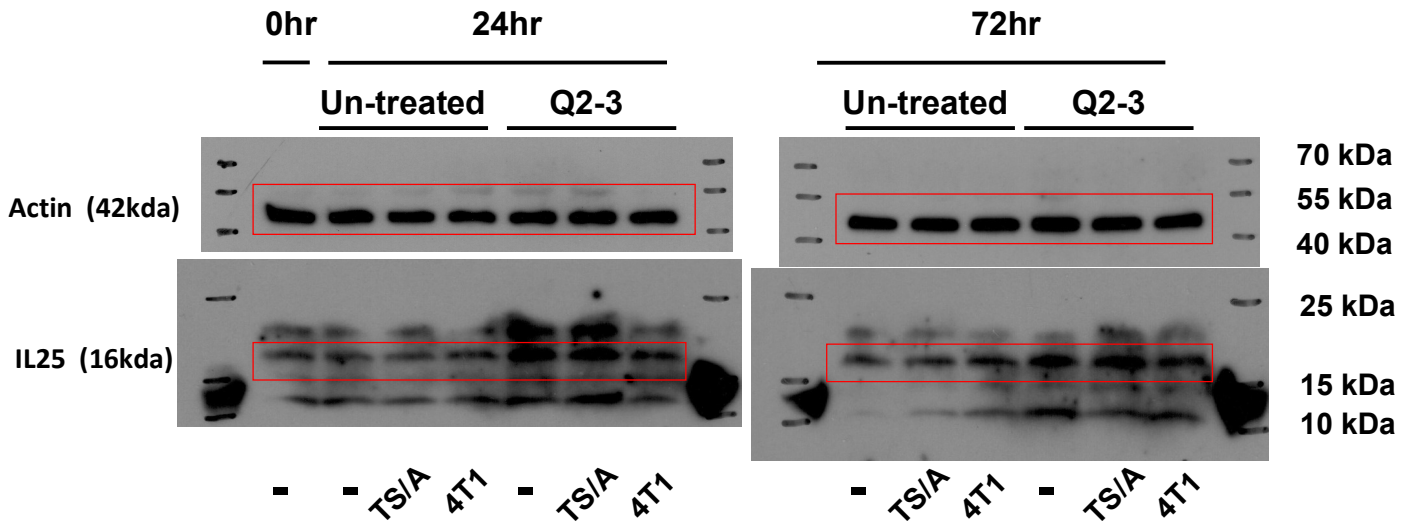
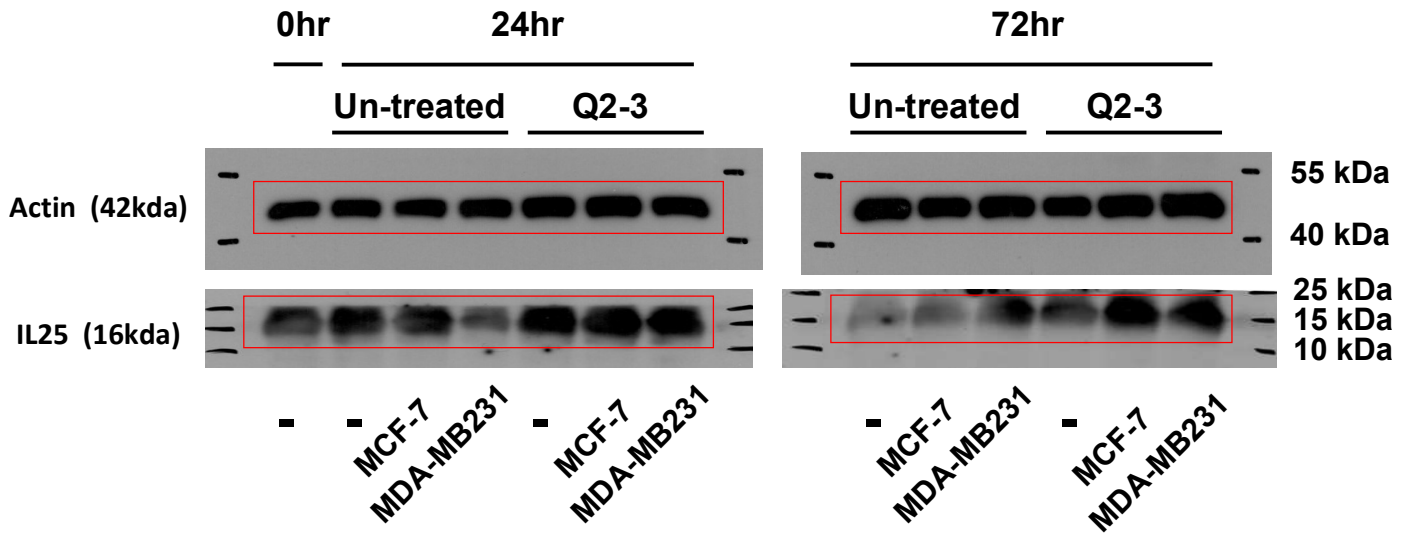


Figure 3e



Supplementary Figure 4. Uncropped scans of four key western blot analyses on IL-25 expression from Q2-3-treated fibroblasts. Areas shown in Figure 3d and 3e are enclosed in red boxes and the molecular weight markers are shown on the right panel.