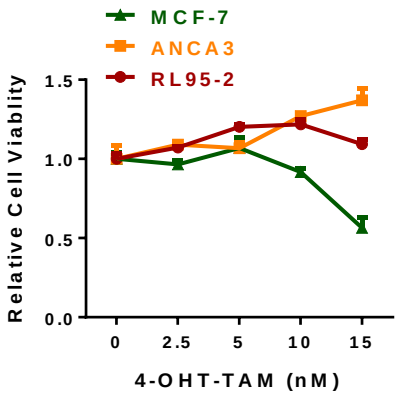
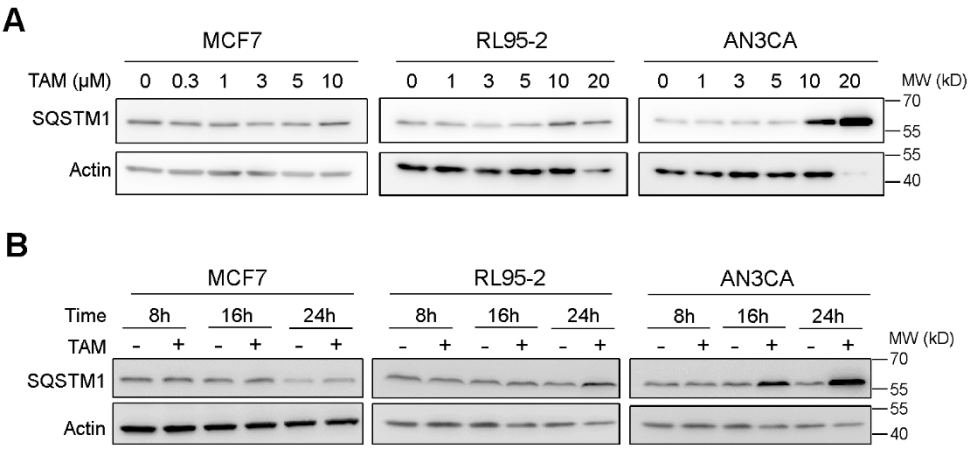
Supplementary Figure 1



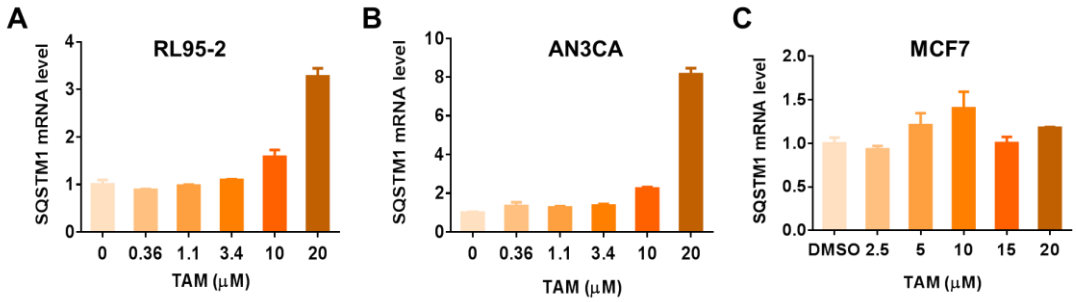
Supplementary Figure 1 Differential effects of 4-OH-TAM on the growth of endometrial cancer cells and breast cancer cells. MCF7, RL95-2 or AN3CA cells were incubated with 4-OH-TAM for 72h, MTS assay was performed to measure the cell growth. The experiments were performed in triplicate and repeated three times. Representative results from one triplicated experiment were shown as Mean±SD. Two-way ANOVA test was used for analyze the statistical difference among three cell lines ($p<0.01$).

Supplementary Figure 2



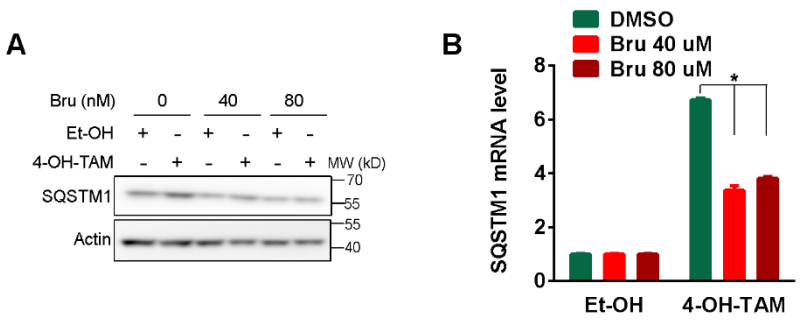
Supplementary Figure 2 TAM upregulated SQSTM1 expression in endometrial cancer cells. A, Western blot was performed to detect SQSTM1 expression in MCF7, RL95-2 or AN3CA cells incubated with different concentration of TAM, Actin was used as loading control. B, Western blot was performed to detect SQSTM1 expression in MCF7, RL95-2 or AN3CA cells incubated with TAM for 8, 16 or 24 hours, Actin was used as loading control.

Supplementary Figure 3



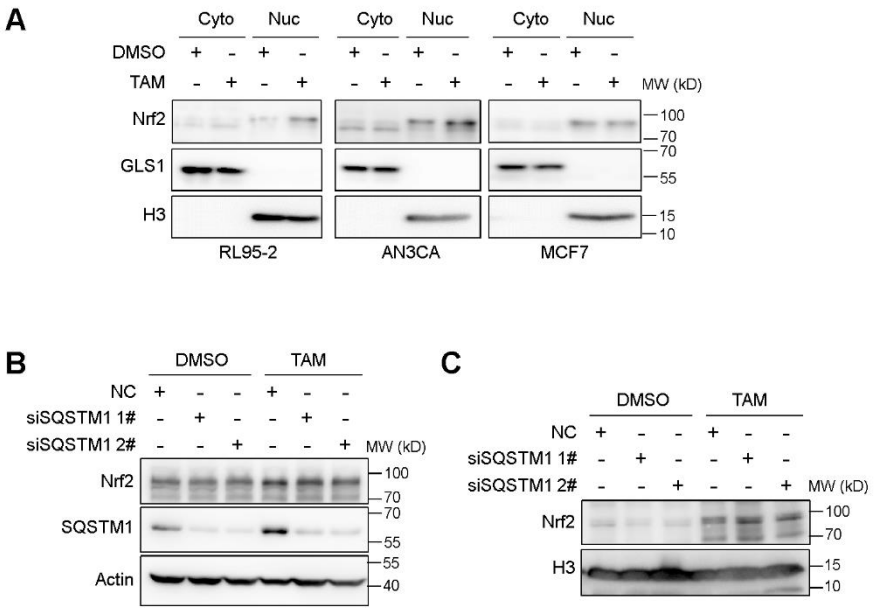
Supplementary Figure 3 TAM upregulated SQSTM1 mRNA level in endometrial cancer cells. SQSTM1 mRNA level in RL95-2 (A), AN3CA (B) or MCF7 (C) cells incubated with TAM were measured with qRT-PCR.

Supplementary Figure 4



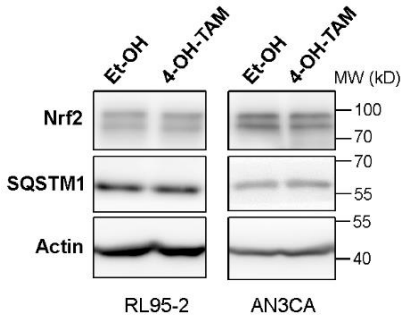
Supplementary Figure 4 Nrf2 inhibitor brusatol reversed 4-OH-TAM induced SQSTM1 expression. A, SQSTM1 expression in RL95-2 cells with brusatol (Bru) and 4-OH-TAM incubation was detected with western blot, Actin was used as loading control. B, SQSTM1 mRNA expression in RL95-2 cells with brusatol (Bru) and 4-OH-TAM incubation was measured with qRT-PCR. Representative results from one triplicated experiment were shown as Mean ± SD. Student's T test was used for the statistical analysis. Asterisks indicate statistical significance.

Supplementary Figure 5



Supplementary Figure 5 Effect of TAM on Nrf2 localization and expression. A, Nrf2 distribution in nuclear and cytoplasmic extracts of RL95-2, AN3CA or MCF7 cells incubated with TAM for 24 hours was detected by western blot, GLS was used as cytoplasmic protein marker, and H3 (Histone H3) was used as nuclear protein marker. B, Nrf2 expression in AN3CA with SQSTM1 knockdown and TAM incubation was detected by western blot, Actin was used as a loading control. C, Nuclear Nrf2 level in AN3CA with SQSTM1 knockdown and 4-OH-TAM incubation was detected by western blot, H3 (Histone H3) was used as nuclear protein marker.

Supplementary Figure 6



Supplementary Figure 6 Nrf2 and SQSTM1 expression inRL95-2 or AN3CA cells with 2 hours of 4-OH-TAM incubation was detected by western blot. Actin was used as a loading control.

Supplementary Tables

Supplementary Table 1: Primer list

Primers	
ID	**Sequences**
SQSTM1-F	AGAACGTTGGGGAGAGTGTG
SQSTM1-R	GCGATCTTCCTCATCTGCTC
Actin-F	CACCAACTGGGACGACAT
Actin-R	ACAGCCTGGATAGCAACG
ratSQSTM1-F	AGAAGTGGACCCATCCACAG
ratSQSTM1-R	AGAAACCCATGGACAGCATC
ratActin-F	CCTGGGTATGGAATCCTGTG
ratActin-R	CAGTGAGGCCAGGATAGAGC
SQSTM1-ChIP-F	TATGTTCCCAGAGCCACAGG
SQSTM1-ChIP-R	GTGGCCTACAGACAGGTGCT
SQSTM1-pro-F	ACTGCTAGCCTGGTCCATAGTGGGTCT
SQSTM1-pro-R	GCCAAGCTTAGAAGGTAGGCCTTCACG

Supplementary Table 2: siRNA list

siRNAs	
SQSTM-1	CCUGACAUUUAGUUGAUUATT
	UAAUCAACUAAAUGUCAGGTT
SQSTM-2	GUGACGAGGAAUUGACAAUTT
	AUUGUCAAUUCCUCGUCACTT
Nrf2-1	GCCCAUUGAUGUUUCUGAUTT
	AUCAGAAACAUCAAUGGGCTT
Nrf2-2	CCCGUUUGUAGAUGACAAUTT
	AUUGUCAUCUACAAACGGGTT
PKCD-1	CCAUGGUGAUGAUGAGGAUTT
	AUCCUCAUCAUCACCAUGGTT
PKCD-2	GCAGCAAGUGCAACAUCAATT
	UUGAUGUUGCACUUGCUGCTT