

## Supplementary Material

**Supplementary Figure 1. N-1 and N-23 have no effect on ER $\alpha$  signaling.** (A) N-1 did not affect ER $\alpha$  pathway. MCF-7 cells were cultured in the absence or presence of E2 ( $10^{-8}$  M) or N-1 ( $10^{-6}$  M). The mRNA level of pS2 was quantified using real-time RT-PCR. (B) N-23 did not affect ER $\alpha$  pathway. MCF-7 cells were cultured in the absence or presence of E2 ( $10^{-8}$  M) or N-23 ( $10^{-6}$  M). The mRNA level of pS2 was quantified using real-time RT-PCR. \*\* indicates  $p < 0.01$  and n.s. indicates  $p > 0.05$ .

