

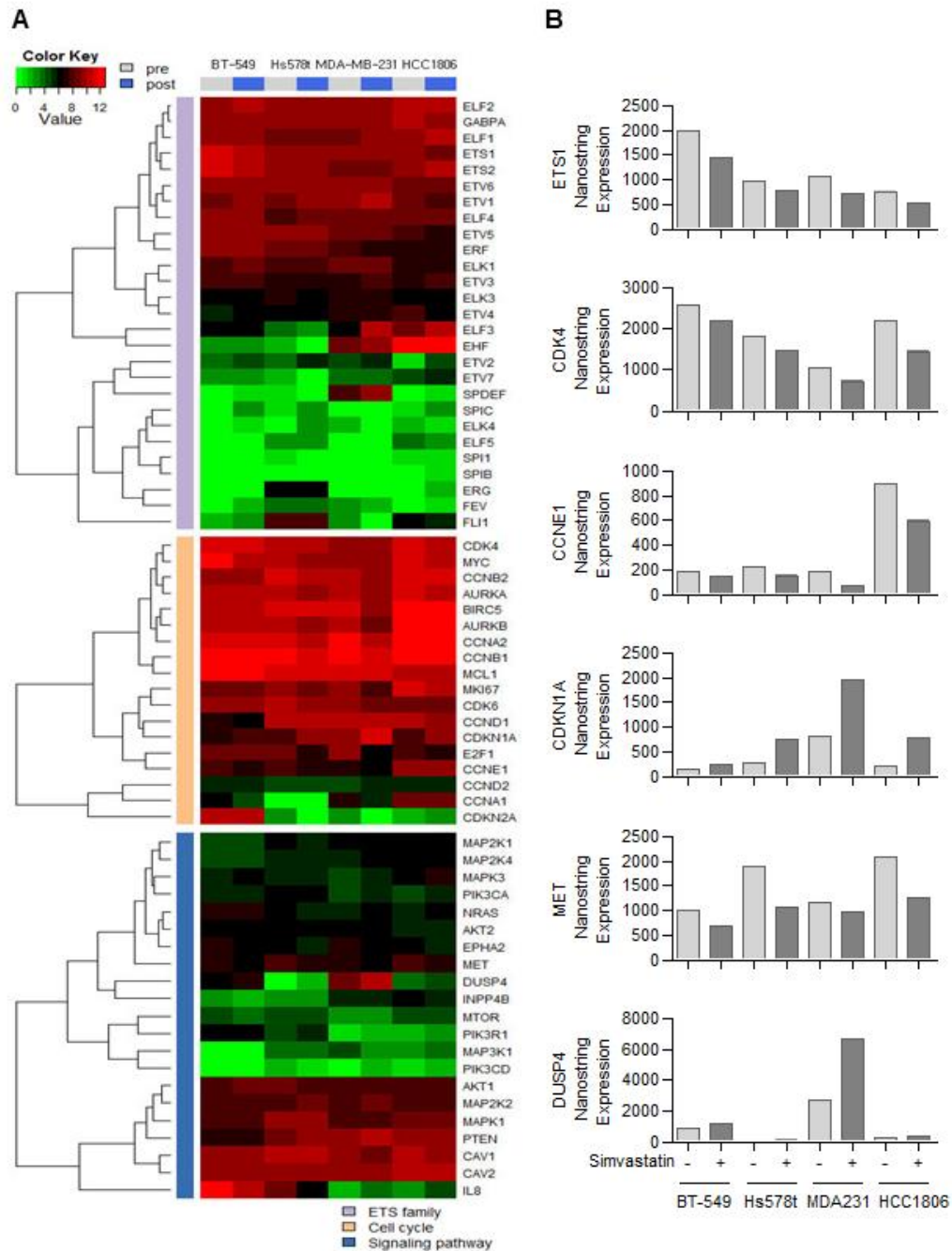
**Supplementary Data Information**

**Statins affect *ETS-1*-overexpressing triple-negative breast cancer cells by restoring *DUSP4* deficiency**

Hae Hyun Jung<sup>1,4,†</sup>, Soohyeon Lee<sup>2,†</sup>, Ji-Yeon Kim<sup>2</sup>, Jin Seok Ahn<sup>2</sup>, Yeon Hee Park<sup>1,2,4,\*</sup> & Young-Hyuck Im<sup>1,2,\*</sup>

## Supplementary Figure 1. Effects of simvastatin treatment on level of gene expression

(A) nCounter expression assay of four TNBC cell lines (BT-549, Hs578t, MDA-MB-231 and HCC1806) before and after simvastatin treatment. (B) ETS1, CDK4, CCNE1, CDKN1A, MET, and ETS1 expression changes in BT-549, Hs578t, MDA-MB-231 and HCC1806 cell lines after simvastatin treatment. The simvastatin dose was 10  $\mu$ mol.



**Supplementary Figure 2. Effects of simvastatin treatment on signaling and transduction pathways.** (A) Effects of simvastatin on ERK and AKT signaling pathways in TNBC cells. Cell (BT549, Hs578t, MDA-MB-231, and HCC1806) were treated with simvastatin at 0, 1, 5, or 10  $\mu\text{M}$  for 24 h. Cell lysates were prepared and analyzed using immunoblotting with anti-phospho ERK1/2 and Akt antibodies as well as anti-total ERK and Akt antibodies;  $\beta$ -actin was used as a loading control. (B) The effects of MAPK/AKT pathway inhibitors combined to simvastatin on ets-1 expression. TNBC cell lines (BT549, Hs578t, MDA-MB-231, and HCC1806) were treated with U0126 or LY294002 for 24 h. Cell lysates were prepared and analyzed using immunoblotting with anti-phospho ERK1/2 and Akt antibodies as well as anti-total ERK and Akt antibodies;  $\beta$ -actin was used as a loading control. (C) The effects of LY294002 combined to simvastatin on BT-549, Hs578t, MDA-MB-231, HCC1806 cell lines.

