

Supplementary Figure Legends:

Figure 1A and B: USP1 consumption decreased PS2 expression in MCF-7 and T47D cells. MCF-7 cells were transfected with siControl or siUSP1. After 48 hours, total RNA was extracted for gene expression analysis. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$ for target gene expression comparison.

Figure 1C: Clone formation assay of T47D cells transfected with indicated 50nM USP1 siRNA (mix of #1 and #2) or 50nM control siRNA. Quantification of clone formation is shown at the indicated time points. Data are presented as \pm SD. **, $P < 0.01$, ***, $P < 0.001$ (student's t-test).

Figure 1D: USP1 depletion inhibited the number of EdU positive breast cancer cells. T47D cells were transfected with siControl or siUSP1. After 24 hours, EdU was added into the medium for 2 hours incubation. The absolute cell number was counted to indicate cell proliferation activity.

Figure 1E: Wound-healing assay of T47D cells were transfected with siControl or siUSP1. Quantification of wound closure at the indicated time points. Data are presented as \pm SD. **, $P < 0.01$, ***, $P < 0.001$.

Supplementary Figure 1

