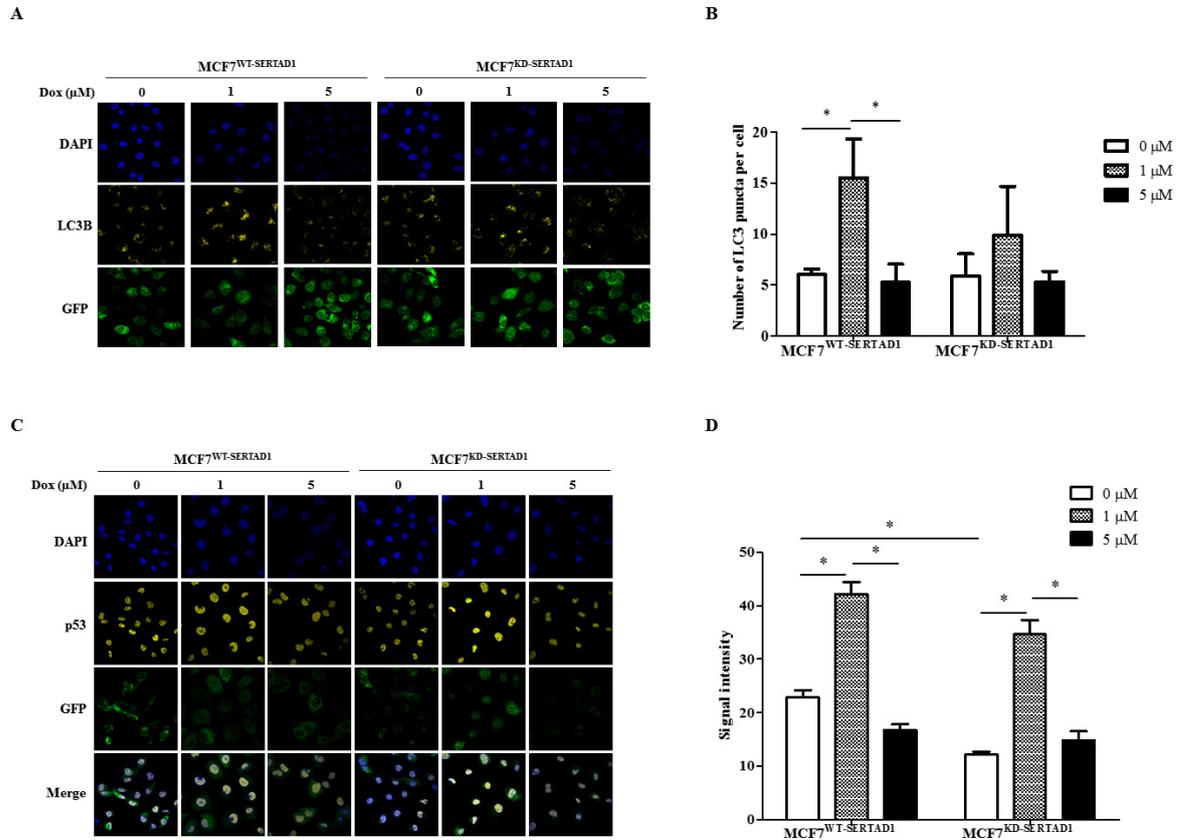


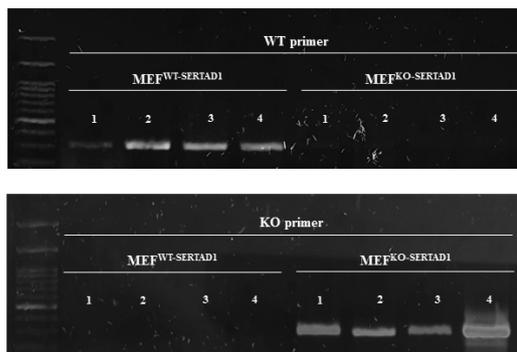
Supplementary-Figure S1



**Figure S1.** Effect of SERTAD1 on the expression of LC3B and p53 in the presence of Dox. **A-B**, immunofluorescence images of LC3B in response to indicated concentrations of Dox in SERTAD1-deficient and wild-type cell lines. **C-D**, immunofluorescence staining of p53 using confocal microscope. Signal intensity was analyzed using ImageJ. \* $P < 0.05$ .

Supplementary-Figure S2

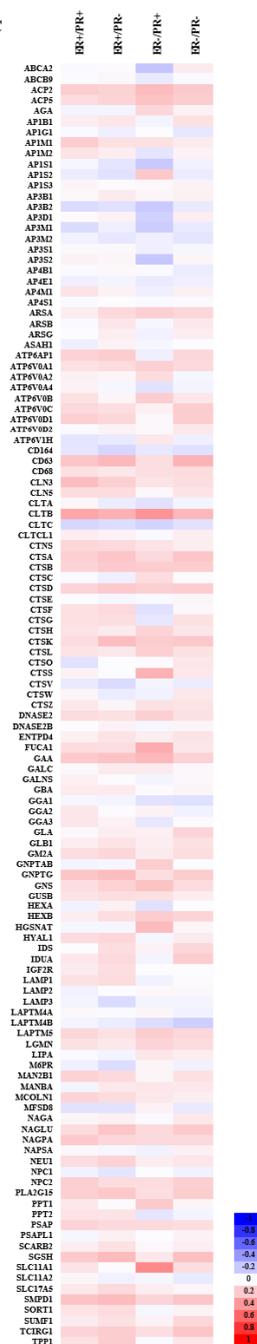
A



B



C



**Figure S2.** Effect of SERTAD1 on mitochondrial and lysosomal activity. **A**, genotyping of SERTAD1 wild-type (WT) and SERTAD1 knockout (KO) C57BL/6 mice. Four representative MEF samples from WT- and KO-SERTAD1 mice were collected and subjected to agarose gel electrophoresis. **B-C**, Heat map of DNA microarray data in breast cancer patients by bc-GenExMiner v4.5 program to show the correlation between SERTAD1

and REACTOME\_MITOCHONDRIAL\_BIOGENESIS gene set **(B)** and LYSOSOME gene set (GO:0005764) **(C)**.