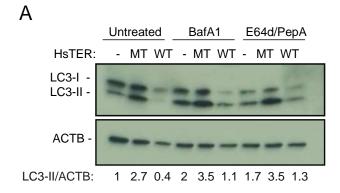


Figure S1. Punctate GFP-LC3B during HMEC agonescence. (A) Representative

- 3 images and growth curve of HMEC or HMEC-TERT cultures at the indicated passages
- 4 during extended culture. (B) GFP-LC3B puncta in HMEC and HMEC-TERT cells at the
- 5 indicated passages.

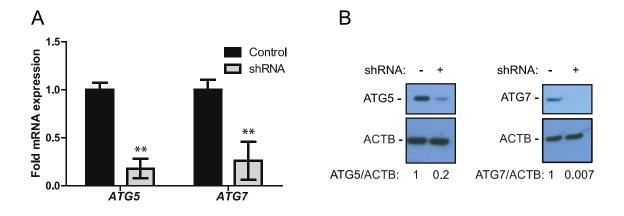
1

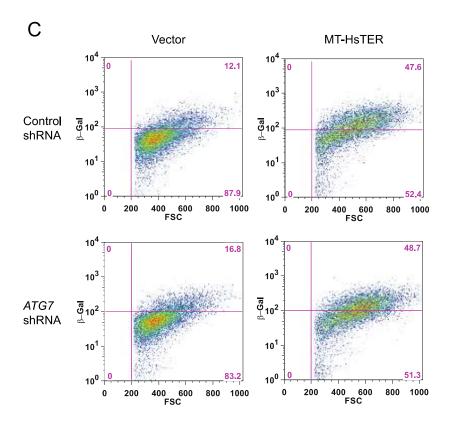


7 Figure S2. Autophagic flux is induced in response to MT-HsTER compared to vector or

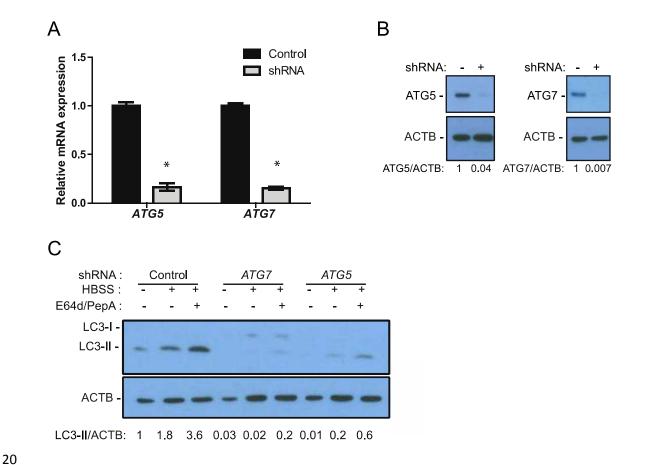
- 8 WT-HsTER. Immunoblot for LC3 in cells treated with WT or MT-HsTER either in the
- 9 presence or absence of the lysosomal inhibitors bafilomycin A<sub>1</sub>, or E64d and pepstatin
- 10 A.

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**Figure S3.** Autophagy inhibition does not affect MT-HsTER-induced senescence in WI-38 fibroblasts. (**A**) Levels of *ATG5* and *ATG7* mRNA knockdown relative to control shRNA. (**B**) Immunoblot for ATG5 and ATG7 upon shRNA knockdown. (**C**) SA-β-Gal staining in autophagy proficient (control shRNA) or autophagy deficient (*ATG7* shRNA) WI-38 fibroblasts assayed by flow cytometry. Numbers indicate percent of cells occupying the indicated quadrant. SA-β-Gal-positive cells are located in the top right quadrant. \*\*indicates significance at *P*<0.01. Error bars indicate standard deviation.



**Figure S4.** shRNA-mediated *ATG* silencing in BJ fibroblasts. (**A**) Levels of *ATG5* and *ATG7* mRNA knockdown relative to control shRNA. (**B**) Immunoblot for ATG5 and ATG7 upon shRNA knockdown. (**C**) Immunoblot for LC3 in autophagy-proficient (Control shRNA) or autophagy-deficient (*ATG5* or *ATG7* shRNA) BJ fibroblasts upon nutrient starvation in the presence or absence of the lysosomal inhibitors E64d and pepstatin A. \*indicates significance at *P*<0.05. Error bars indicate standard deviation.