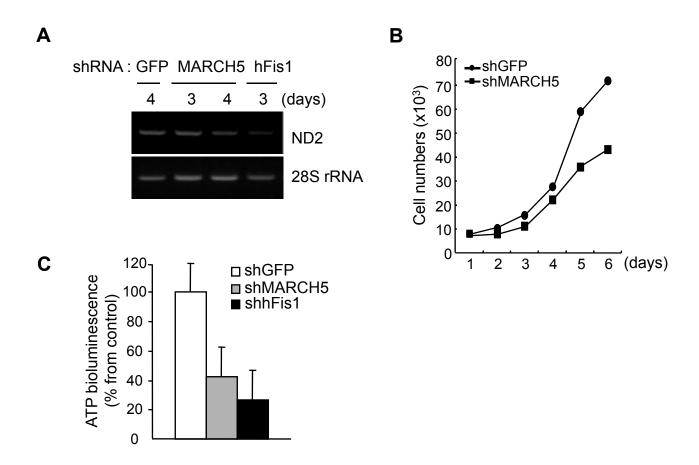
## Supplementary Fig. 2



## MARCH5 lacking cells shows cellular senescence associated changes.

The HeLa cells were transfected with indicated shRNA. The transfected cells were selected and maintained with hygromycin B. (A) Intracellular mitochondrial DNA level was analyzed by PCR in isolated total genomic DNA with 2 primer sets, ND2 for motochondrial DNA and 28S rRNA as a control of nuclear DNA. ND2, 5'-AGGTTACCCAAGGCACCCCT-3' and 5'-AGTAGATTAGGCGTAGGTAG-3'; 28S rRNA 5'-TAGCAGCCGACTTAGAACTGG-3' and 5'-CTCCCACTTATTCTACACCTC-3'. (B) Cells were plated in a density of 1  $\times$  10<sup>4</sup> cells/well in a 12-well plate in the presence of 30  $\mu$ g/ml hygromycin B. Each indicated day, cell numbers were counted using hemocytometer after trypan blue staining. (C) On day 4, cells were harvested and the lysates (5  $\mu$ g) were assayed for total intracellular ATP level (Molecular Probe) with a luminometer.