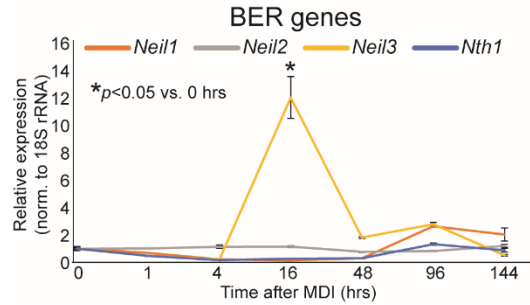
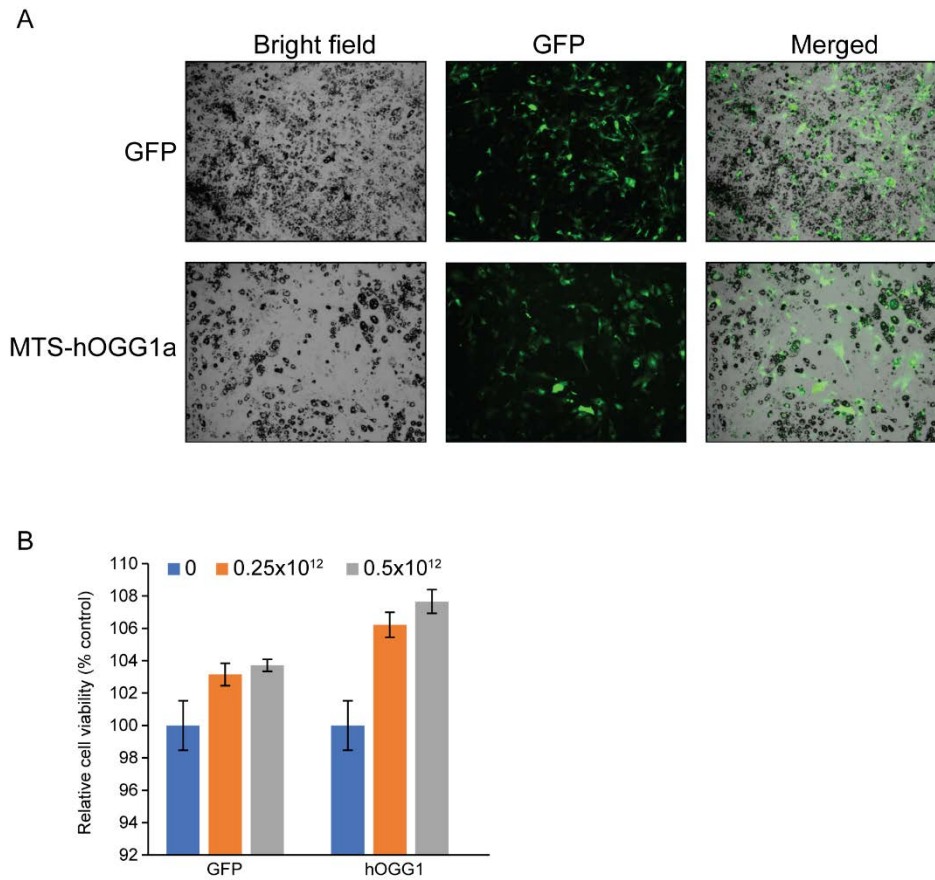


## Supplementary Information

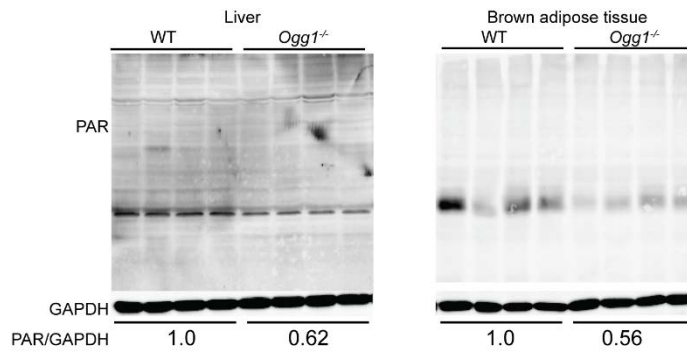


**Fig. S1. Expression of BER genes during adipogenic differentiation.** 3T3-L1 cells were differentiated using MDI. Cells were harvested and RNA and proteins were isolated at indicated time points. Gene expression of BER genes was measured by qRT-PCR using 18S rRNA as a control. Data are expressed as average  $\pm$  SEM and represent at least 3 independent replicates per time point. \*p < 0.05 vs 0 hr.



**Fig. S2. Assessment of transduction efficiency and impact on cell viability.** (A) 3T3-L1 CAR $\Delta$  cells were transduced with 0.5x10<sup>12</sup> VPC GFP or MTS-hOGG1a adenoviral particles, and transduction efficiency was assessed using phase contrast and fluorescence microscopy. (B) Cells were transduced with increasing concentrations of GFP or MTS-hOGG1a adenovirus particles and differentiated using MDI. Cell viability was assessed 8 days after transduction,

using the Cell Titer-Blue Cell Viability Assay. Data are expressed as average  $\pm$  SEM and represent at least 3 independent replicates per time point.



**Fig. S3. Cellular PARylation in tissues from WT and *Ogg1*<sup>-/-</sup> mice.** Cellular PARylation was assessed in protein extracts from liver and brown adipose tissue from WT vs. *Ogg1*<sup>-/-</sup> mice. Data are representative of 4 age- and sex-matched animals per genotype for tissue extracts. \* $p < 0.05$  vs 0 hr.