Supplemental material

Figure Legends

Figure S1. Histological evaluation of oxidative stress in the kidneys. (A, B) Hematoxylin-eosin staining and 8-oxoG immunostaining (N45.1) of the renal cortex of the untreated mouse. (C, D) Hematoxylin-eosin staining and 8-oxoG immunostaining (N45.1) of the renal cortex of the mouse 3 hours after Fe-NTA injection. The bars = 100 μ m. For color version of this figure, the reader is referred to the online version.

Figure S2. Juxtaposition of the distribution profiles of 8-oxoG frequency, mRNA expression activity and Lamin B1 interactions along each murine chromosome. (A) The distribution profiles for chromosome 1–4. (B) For chromosome 5–8. (C) For chromosome 9–12. (D) For chromosome 13–16. (E) For chromosome 13–16. For color version of this figure, the reader is referred to the online version.

Figure S3. Association between genomic distributions of 8-oxoG and those of histone modifications. (A) Visual comparison between distributions of relative 8-oxoG frequency and histone modifications along the whole range of murine chromosome 15. The distributions of relative 8-oxoG frequency in the murine kidneys under untreated or Fe-NTA treated conditions are plotted respectively in the single plot area (blue curve: untreated, red curve: Fe-NTA treated). The distributions of four types of histone modification are plotted separately. (B, C) Scatter plots showing correlations between genomic distributions of four types of histone modification and relative 8-oxoG frequency in murine kidneys in untreated states (B) or after Fe-NTA administration (C). The value of Pearson's correlation coefficient, r, is indicated inside each plot area. The P-values of the tests for no correlation are all less than 1.0×10^{-15} . For color version of this figure, the reader is referred to the online version.



Figure S1



Figure S2 (A)



Figure S2 (B)



Figure S2 (C)



Figure S2 (D)



Figure S2 (E)



Figure S3