

Symmetrical Dimethylation of H4R3: A Bridge Linking DNA Damage and Repair Upon Oxidative Stress

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Supplementary Information

The following file contains supplementary material for the paper “Symmetrical Dimethylation of H4R3: A Bridge Linking DNA Damage and Repair Upon Oxidative Stress”.

This file is composed of:

- Supplementary table
- Supplementary figure and relative supplementary figure legend

Supplementary Table 1. Sequences and applications in this study

Name	Sequence	Application
FEN1-F	5'-gcaggaaagcgagggtatccF aca aaagtcagcgtaccata-3' 5'-tatggtacgctggactttgtggataccctcgcttcctgc-3'	LP-BER with cell lysates
FEN1-F-FAM	5'-FAM-gcaggaaagcgagggtatccF aca aaagtcagcgtaccata-3' 5'-tatggtacgctggactttgtggataccctcgcttcctgc-3'	LP-BER with purified proteins
FEN1-FEN-FAM	5'-gcaggaaagcgagggtatcc-3' 5'-FAM-taggtt gttac acaagtcagcgtaccata3' 5'-tatggtacgctggactttgtggataccctcgcttcctgc-3'	FEN activity assay
FEN1-EXO-FAM	5'-gcaggaaagcgagggtatcc-3' 5'-FAM-cacaagtcagcgtaccata-3' 5'-tatggtacgctggactttgtggataccctcgcttcctgc-3'	EXO activity assay
H4R3me2s peptide	Ac-SG-Arg(me)2s-GKGGKGLGKGGAKRHRKVGG-Lys (Biotin)	Pulldown
H4R3 peptide	Ac-SGRGKGGKGLGKGGAKRHRKVGG-Lys (Biotin)	Pulldown

Supplementary Figure

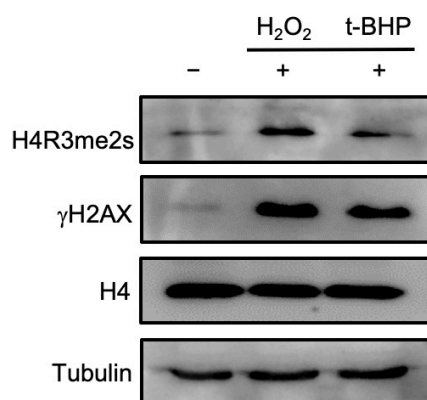


Figure S1. tert-Butyl hydroperoxide treatment induced H4R3me2s modification.

HeLa cells were treated with 500 μ M H₂O₂ or 500 μ M tert-Butyl hydroperoxide (t-BHP) for 30 min, and the medium was then changed to fresh medium, followed by continued culture for 4 h. Whole-cell extracts were analyzed by Western blotting with the indicated antibodies. Tubulin was served as an internal control.