

## Supplementary Information

### Biochemical Basis of *E. coli* Topoisomerase I Relaxation Activity Reduction by Non-Enzymatic Lysine Acetylation

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**Table S1. List of Tryptic Peptides Identified by Mass Spectrometry.** (A) Acetylated topoisomerase I peptides; (B) Non-acetylated topoisomerase I peptides.

**Table S2. MaxQuant Raw Data Evidence Table.** (A) Acetylated topoisomerase I peptides. Table S2A shows the unmodified peptides and the corresponding acetylated peptides paired by color sets. Also included are the protein groups reported by MaxQuant showing the identification score and % sequence coverage. Topoisomerase I is highlighted in green for clarity purposes. Table S2A also shows peptides containing oxidized methionines. (B) Non-acetylated topoisomerase I peptides. Table S2B shows the unmodified peptides and no acetylated peptides. Also included are the protein groups reported by MaxQuant showing the identification score and % sequence coverage. Topoisomerase I is highlighted in green for clarity purposes. Table S2B also shows peptides containing oxidized methionines.