Replication Bypass of the *trans*-4-Hydroxynonenal-Derived (6*S*,8*R*,11*S*)-1,N^2-Deoxyguanosine DNA Adduct by the *Sulfolobus solfataricus* DNA polymerase IV

Supporting Information

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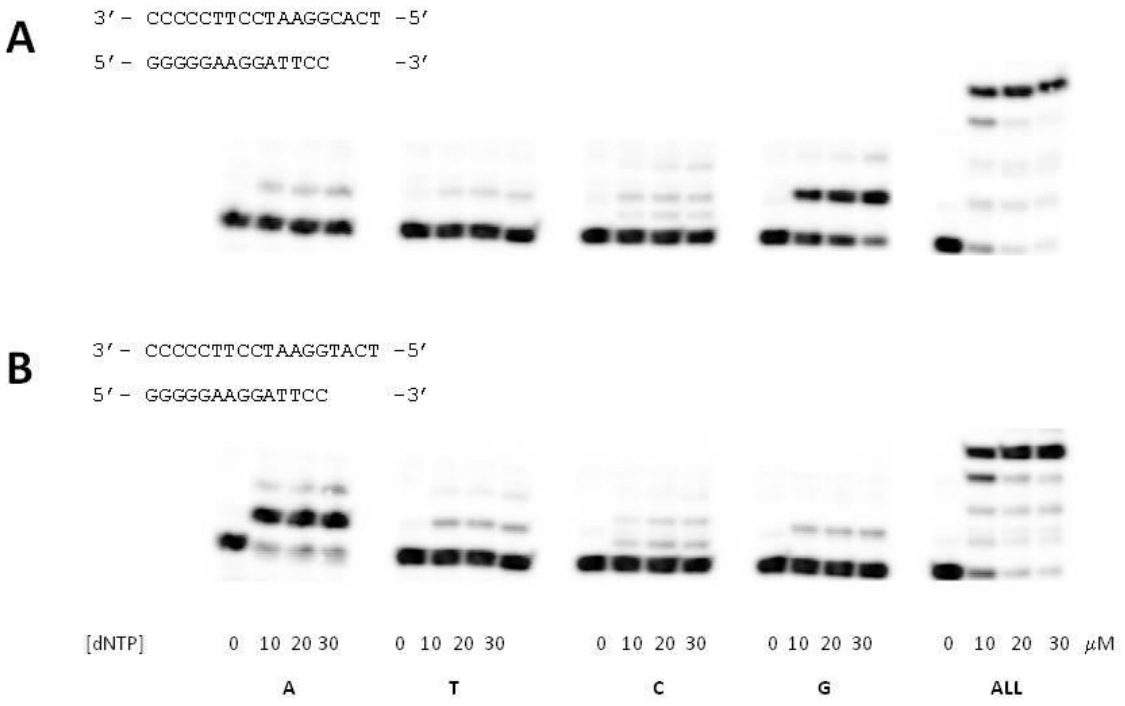

Figure S1. Extension past the unmodified template-primer complexes III and IV with *S. solfataricus* P2 DNA polymerase Dpo4. The template-primers III and IV are displayed with the gels. The concentrations of the dNTPs are provided below the gels. The designations A, T, C, G represent single nucleotide insertion experiments; the designation ALL represents the full-length extension assay incorporating all four dNTPs. Each assay was incubated for 15 mins for single-nucleotide incorporations and 2 hours for extensions at 37 ºC.

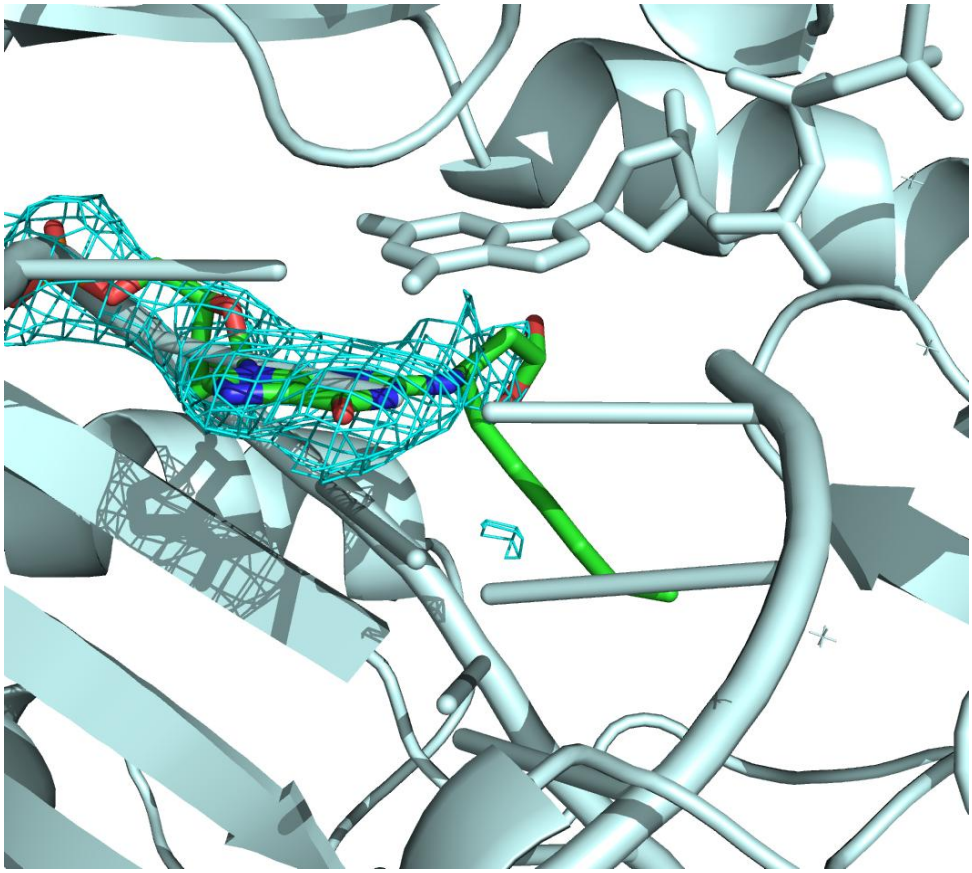

Figure S2. Structure of the ternary HNE-dGuo modified template-primer III complex with the *S. solfataricus* P2 DNA polymerase Dpo4 and incoming dGTP. Electron density at the adduct site is calculated using omit map (*Fo-Fc*) contoured at 2σ.

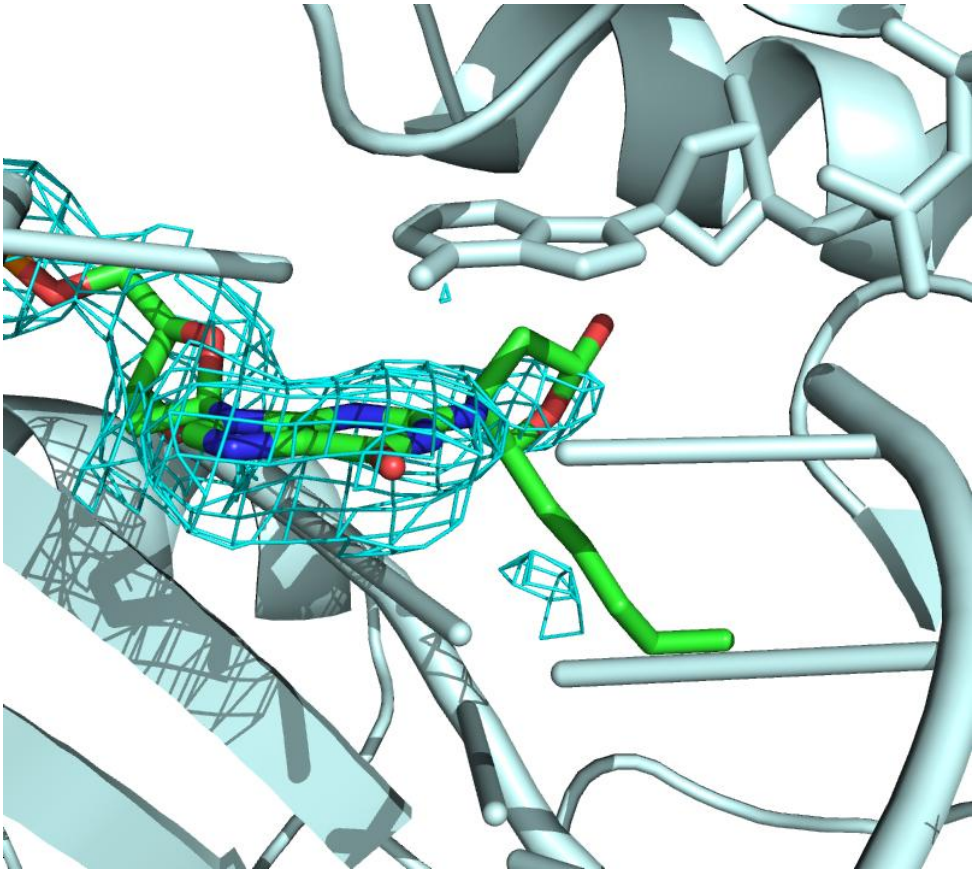

Figure S3. Structure of the ternary HNE-dGuo modified template-primer IV complex with the *S. solfataricus* P2 DNA polymerase Dpo4 and incoming dATP. Electron density at the adduct site is calculated using omit map (*Fo-Fc*) contoured at 2σ.