Supporting Information

for

A Short DNA Sequence Confers Strong Bleomycin Binding to Hairpin DNAs

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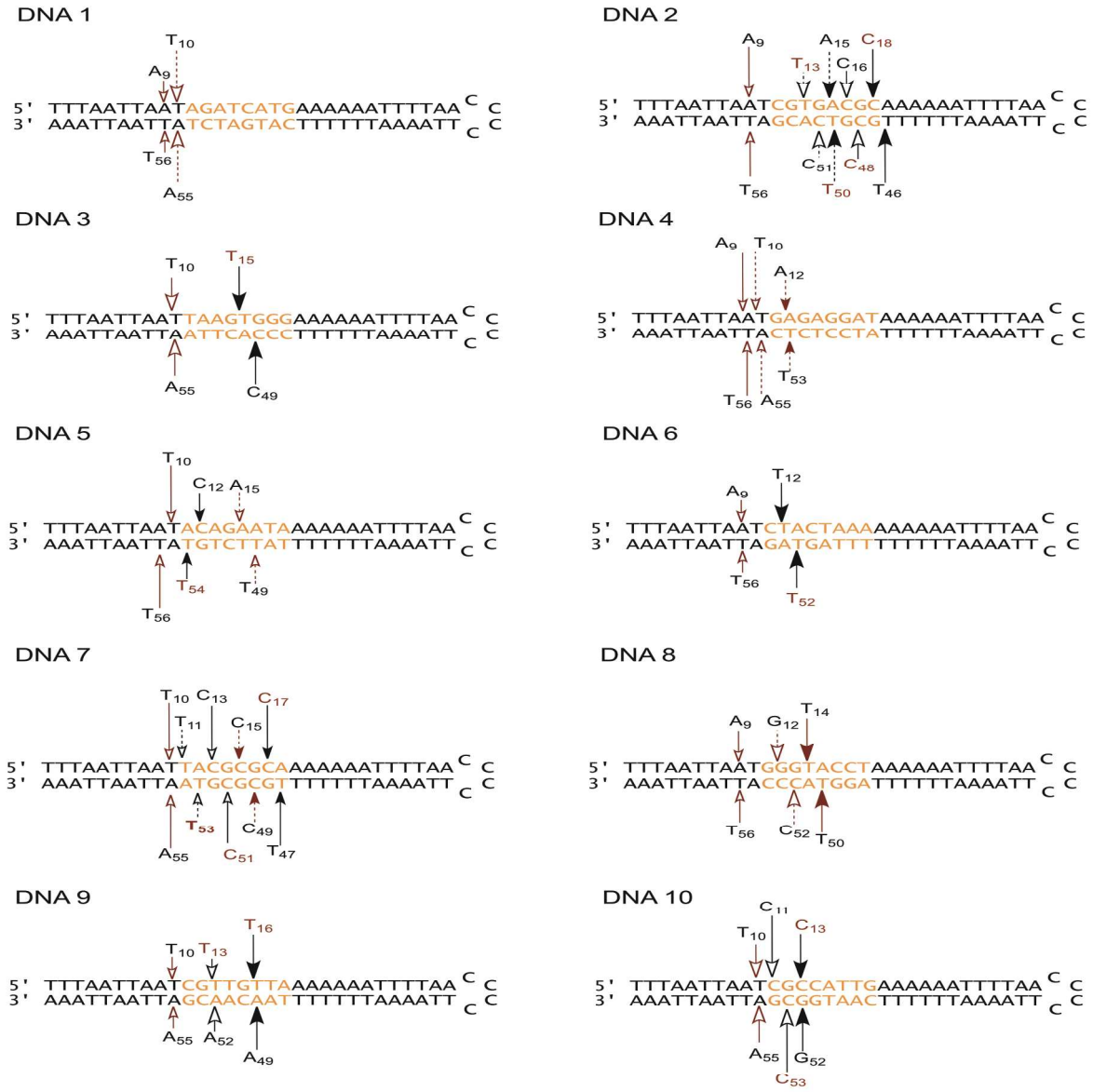

Figure S1. Summary of sites of Fe•BLM induced cleavage of hairpin DNAs **1** – **10**.[9] Orange bases indicate randomized region of the original hairpin DNA library. Arrows of the same shape and color indicate paired cleavages. Black arrows correspond to coupled double-strand cleavage events, whereas red arrows correspond to non-coupled DNA cleavage events, which result from two independent single-strand cleavages on opposite strands. Nucleotides colored in red indicate primary sites of coupled double-strand cleavage events.

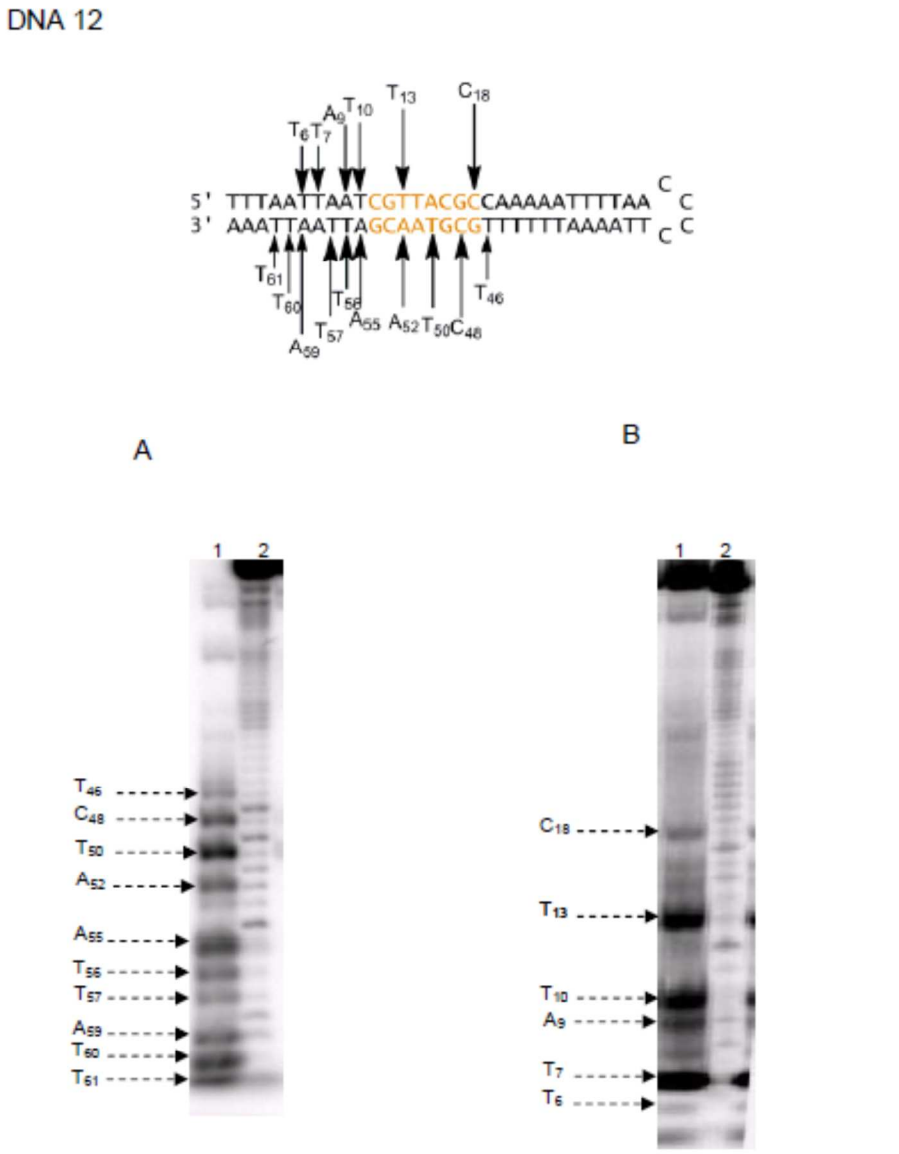

Figure S2. (A) Sequence-selective cleavage of 3′-^{32}P end-labeled 64-nt hairpin DNA **12** by BLM A_5: lane 1, 1.5 μM Fe(II)•BLM A_5; lane 2, G+A lane. (B) Sequence-selective cleavage of 5′-^{32}P end-labeled 64-nt hairpin DNA **12** by BLM A_5: lane 1, 1.5 μM Fe(II)•BLM A_5; lane 2, G+A lane.

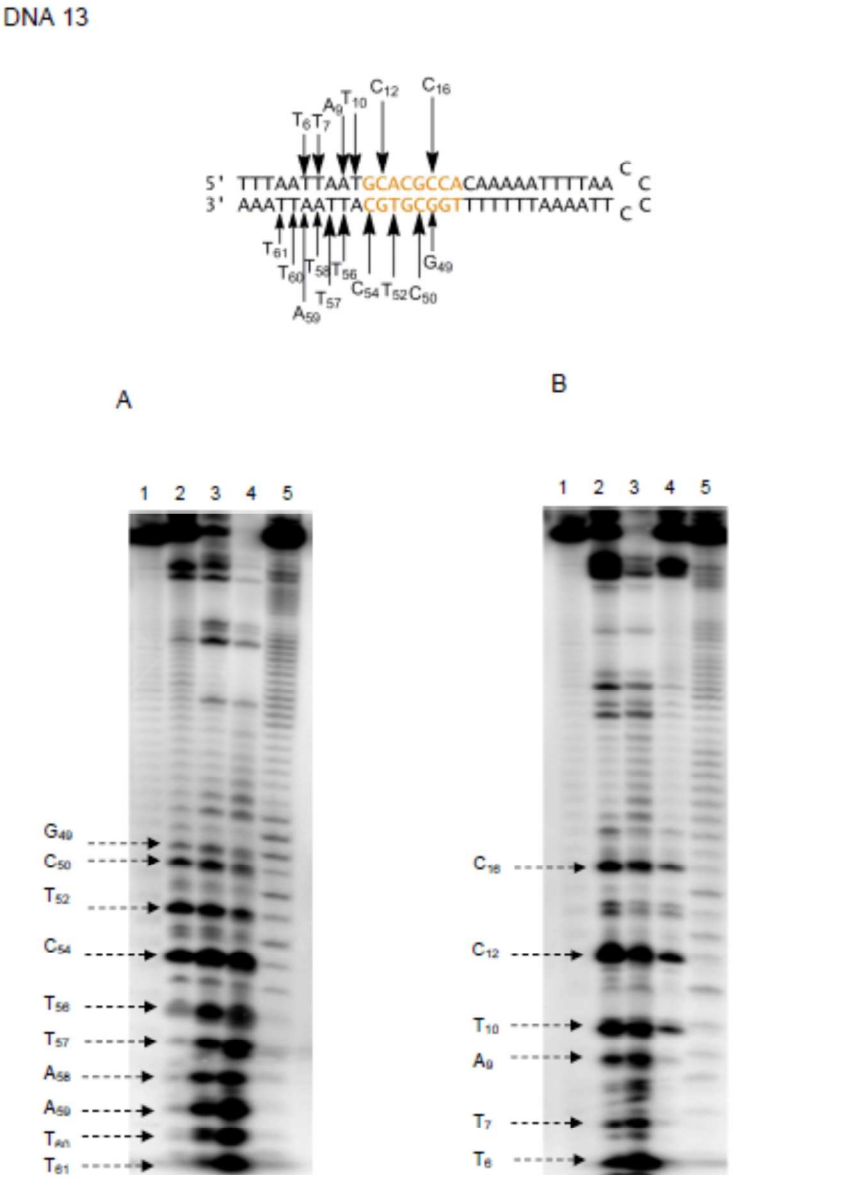

Figure S3. (A) Sequence-selective cleavage of 3′-^{32}P end-labeled 64-nt hairpin DNA **13** by BLM A_5: lane 1, radiolabeled DNA **13** alone; lane 2, 0.5 μM Fe(II)•BLM A_5; lane 3, 1 μM Fe(II)•BLM A_5; lane 4, 2 μM Fe(II)•BLM A_5; lane 5, G+A lane. (B) Sequence-selective cleavage of 5′-^{32}P end-labeled 64-nt hairpin DNA **13** by BLM A_5: lane 1, radiolabeled DNA **13** alone; lane 2, 1 μM Fe(II)•BLM A_5; lane 3, 2 μM Fe(II)•BLM A_5; lane 4, 0.5 μM Fe(II)•BLM A_5; lane 5, G+A lane.