

Supplementary Table 1. Mass Spectral characterization of HMCES SRAP domain interaction with abasic site containing DNA

Sample	Theoretical Mass (Da)*	Measured Mass (Da)	comments
SRAPd alone	31632.6	31633.1	N-terminal Met and C-terminal His-tag cleaved
SRAPd + AP9 DNA	35143.3	35143.6	SRAPd-DNA thiazolidine crosslink

*Theoretical Masses were calculated using ExPASy ProtParam.

Supplementary Table 2. DNA sequences used in FP DNA-binding assays

	DNA sequences	
ssDNA_12	6FAM-5'-CTGACGCGTATC-3'	6FAM: 6-carboxyfluorescein
ssDNA_32	6FAM-5'-TCTTCTGGTCCGGATGGTAGTTAAGTGTTGAG-3'	6FAM: 6-carboxyfluorescein
dsDNA_32	6FAM-5'-TCTTCTGGTCCGGATGGTAGTTAAGTGTTGAG-3' 5'-CTCAACTTAACTACCATCCGGACCAGAAGA-3'	6FAM: 6-carboxyfluorescein
3-nt gap DNA	5'-TCTTCTGGTCCGGATGGTAGTTAAGTGTTGAC-3'-6FAM 5'-GGACCAGAAGA-3' 5'-GTCAACTTAACTACCA-3'	6FAM: 6-carboxyfluorescein