



**Supplemental Fig. 1. Base excision activity of distally cross-linked hOGG1 complexes.** *A*, Schematic of the cleavage assay on the dDXL complex. The lesion-containing strand is 5'-end radiolabeled and added to the purified single-stranded dDXL complex to initiate the base excision reaction. The abasic DNA is cleaved by piperidine to yield the 8nt DNA product. *B*, Denaturing polyacrylamide gels showing the activity of hOGG1 S292C on uncrosslinked lesion-containing duplex DNA (lanes 1-10), dDXL lesion-containing DNA (lanes 11-20) and dDXL non-lesion-containing DNA (lanes 21-31) are compared. *C*, The bands in the gels were quantified to determine percentage of cleaved DNA (intensity of lower bands/total band intensity \*100). Error bars are standard deviations derived from three experiments.