## **Supporting Information**

Surface Plasmon Resonance Detection of UV Irradiation-Induced DNA Damage and Photoenzymatic Repair Processes through Specific Interaction between Consensus Double-Stranded DNA and p53 Protein

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Table S1. Sequences of DNAs

DNAs	Sequences (from 5' to 3')
probe for consensus dsDNA	NH <sub>2</sub> -(CH <sub>2</sub> ) <sub>6</sub> -GAACATGCTTAGACATGCTT
target for consensus dsDNA	AAGCATGTCTAAGCATGTTC
probe for non-consensus dsDNA	NH2-(CH2)6-GTCGGCCGAGGTCGGCCGAG
target for non-consensus dsDNA	CTCGGCCGACCTCGGCCGAC



Figure S1. (A) UV-vis absorption spectra of (a) normal target DNA, (b) damaged target DNA, and (c) photoenzymatically repaired target DNA. (B) Gel electrophoresis assay of normal consensus dsDNA (lane 1), dsDNA between probe DNA and damaged target DNA (lane 2) and dsDNA between probe DNA and photoenzymatically repaired target DNA (lane 3).