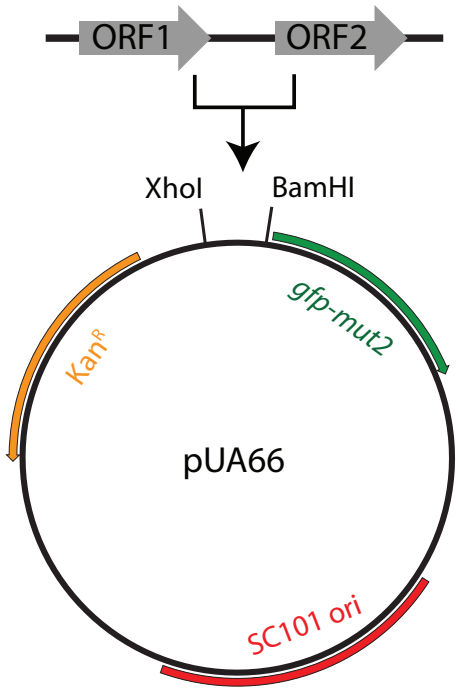
Figure S1

A



B

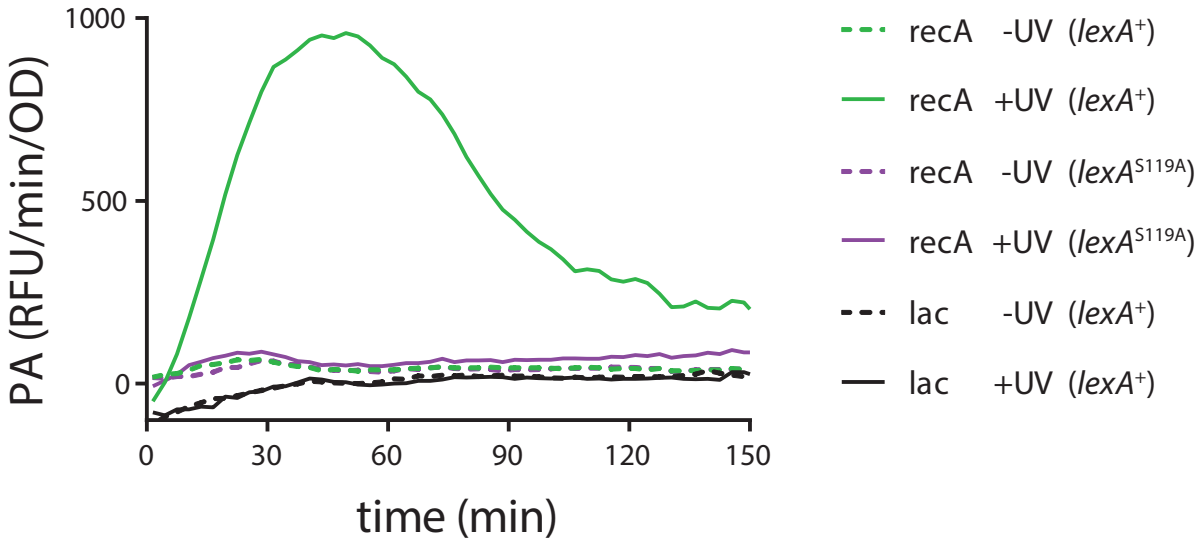


Figure S1. Reporter plasmids and control experiments. A. GFP reporter plasmids containing the cloned promoter regions were developed by Zaslaver, et al. at the Weizmann Institute of Science [22] and were obtained from the commercially available "*E. coli* promoter collection" (Dharmacon). The cloned promoter region for each plasmid contains the entire intergenic region between the open reading frame of the gene of interest (ORF2) and the open reading frame of the upstream gene (ORF1) plus about 50-150 bp into each flanking coding region.
The DNA sequence of the cloning vector pUA66 can be found at the following URL:
http://www.weizmann.ac.il/mcb/UriAlon/zaslaver-et-al-2006-nature-methods-2006.
The complete list and chromosome location of cloned regions can be found at the following URL:
http://dharmacon.gelifesciences.com/cdnas-and-orfs/non-mammalian-cdnas-and-orfs/e-coli/e-coli-promoter-collection/.
B. Promoter activity (PA) after UV exposure requires LexA cleavage and is specific for SOS promoters. Activity from the GFP-reporter plasmid containing the SOS *recA* promoter transformed into cells expressing functional LexA (*lexA*$^{+}$) (green) is dependent on UV exposure. Dashed lines indicate no UV exposure and solid lines indicate a UV dose of 10 J/m^2. No activity is observed in a bacterial strain which encodes a LexA-variant incapable of self-cleavage (*lexA*^{S119A}) (purple). No activity is observed for the non-SOS *lac* promoter (black).