Transient light-activated gene expression in Chinese hamster ovary cells

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Supplementary Information

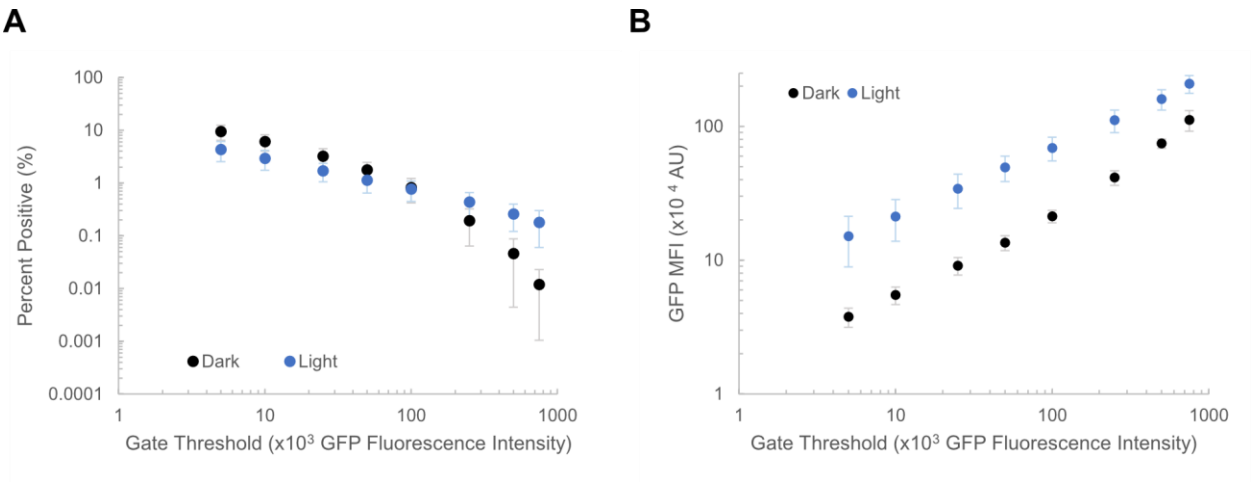

Figure S1. Percent positive cells and MFI plotted against gate threshold. (A) Number of cells crossing the eGFP-positive gate with increasing gate threshold. At high gate thresholds, the number of eGFP-positive cells are higher for the activated LACE system. At lower gate thresholds, the number of eGFP-positive cells are higher for the nonactivated LACE system. **(B)** GFP MFI of LACE cells plotted against gate thresholds. eGFP-positive cells are higher for the LACE system in the light for all gate thresholds.

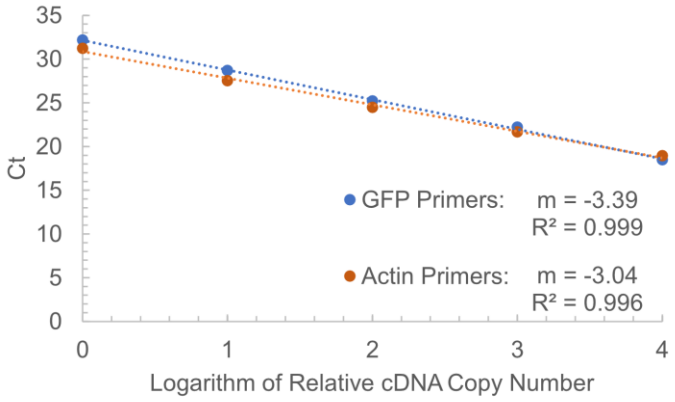

Figure S2. qRT-PCR primer efficiencies. Primer efficiencies for eGFP and Actin. eGFP and Actin primer efficiencies calculated from the slopes (m) of the log(cDNA) plots are 97.2% and 113%, respectively. Data are averaged from duplicate dilutions.

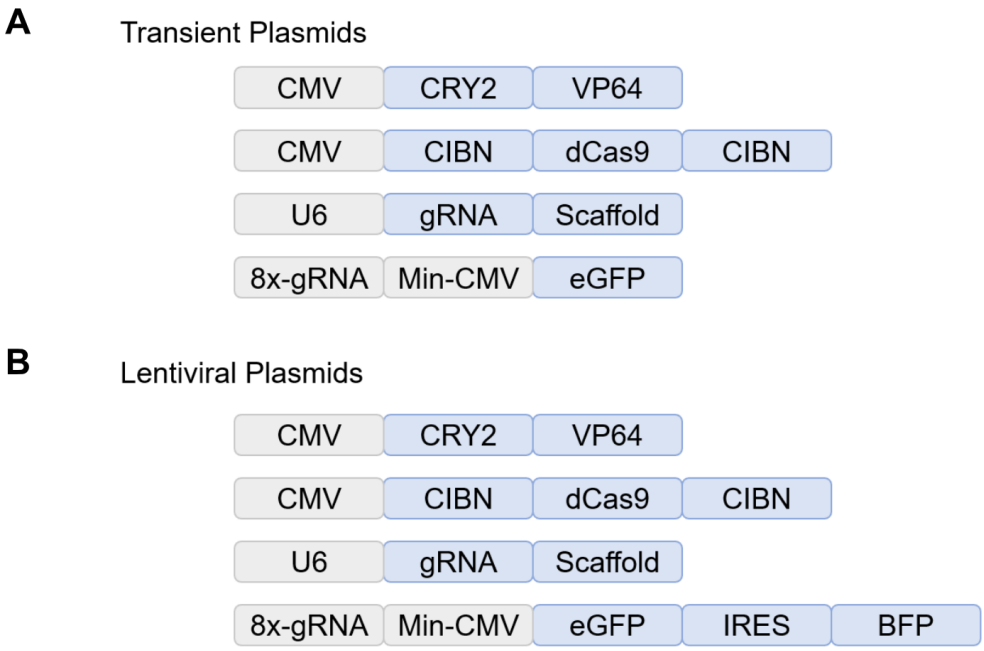

Figure S3. Transient and lentiviral expression constructs. (A) Transient plasmid expression constructs. CRY2 and CIBN are expressed by CMV promoters, gRNA is expressed by a U6 promoter, and GFP is expressed by a minimal CMV promoter, whose expression is activated by VP64. **(B)** Lentiviral expression constructs. All constructs except the minimal CMV construct are identical to the transient plasmids (**A**), except in a lentiviral backbone. The minimal CMV construct was modified to contain an additional IRES sequence and BFP to identify light-activated cells once the GFP is removed.