



Supplementary Figure S6 | Measurement of cell cycle dependent oaHDR activity in dividing cells. **a** Cell cycle analysis by propidium iodide (PI) staining after treatment with/without 20 μ M Lovastatin, cell cycle inhibitor at G1 phase, for 2 days in GFP correction HeLa line. Efficiency of each cell cycle phase is indicated in graph (%). **b** oaHDR- and HDR-mediated gene knock-in percentages in GFP correction HeLa line with Lovastatin treatment. * $P < 0.05$. Data from three independent experiments in Unpaired Student's *t*-test. Data are represented as mean \pm s.e.m. **c** Structure of wild type Cas9 (Cas9), G1-phase specific Cas9 (Cas9-Cdt1) and S-M phase specific Cas9 (Cas9-Geminin). **d, e** oaHDR- and HDR-mediated gene knock-in% in GFP correction HEK293 (**d**) and HeLa (**e**) line with different Cas9 treatment. Actual efficiency (%) is indicated at above. Data are represented as mean \pm s.e.m. N.S. Not significant in Unpaired Student's *t*-test.