

Title: Supplementary Data 1.

Description: Sequences of plasmids and backbones used in this study.

Title: Supplementary Movie 1.

Description: Differentiation behaviour and cell growth of cells carrying the original differentiation system under the microscope in a microfluidic plate. Induction started at $t=0$ with 800ms pulses. Cyan represents mCerulean fluorescence acquired in the CFP channel and yellow represents mNeonGreen fluorescence acquired in the YFP channel (Table S2). The video shows a merge of brightfield, CFP, and YFP channels.

Title: Supplementary Movie 2.

Description: Differentiation behaviour and growth arrest of GAuDi02 cells under the microscope in a microfluidic plate. Induction started at $t=0$ with 800ms pulses. Cyan represents mCerulean fluorescence acquired in the CFP channel, yellow represents mNeonGreen fluorescence acquired in the YFP channel, and magenta represents mScarlet-I fluorescence acquired in the Rhodamine channel (Table S2). The video shows a merge of brightfield, CFP, YFP, and RHOD channels. Images were cropped to increase resolution while retaining all the cells in the field of view.