

Title: Supplementary Movie 1.

Description: Experimental characterisation of the non-cycling strain in methionine-depleted medium. Related to Fig. 2a-e.

Title: Supplementary Movie 2.

Description: Open-loop control of non-cycling cells with forcing period $T_u = 75$ min and pulse duration $D_{Met} = 30$ min. Related to Fig. 2k-o.

Title: Supplementary Movie 3.

Description: Open-loop control of non-cycling cells with forcing period $T_u = 150$ min and pulse duration $D_{Met} = 30$ min. Related to Fig. 2p-t.

Title: Supplementary Movie 4.

Description: Closed-loop control of non-cycling cells. Related to Fig. 3f-j.

Title: Supplementary Movie 5.

Description: Experimental characterisation of the cycling strain in methionine-supplemented medium. Related to Supplementary Fig. 7f-j.

Title: Supplementary Movie 6.

Description: Closed-loop control of cycling cells using the reference oscillator strategy. Related to Fig. 4f-j.

Title: Supplementary Data 1.

Description: Data used to estimate the nominal cell cycle period of the cycling strain.