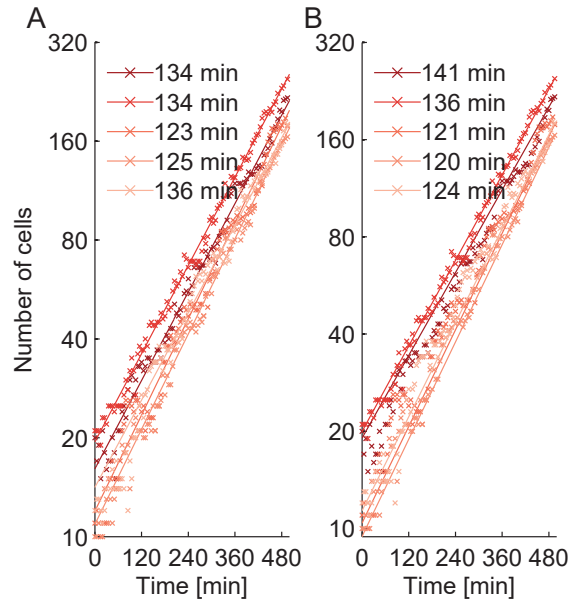**Figure S2: Growth rate of *S. pombe* in microfluidic device**

Reliable measurement of the growth rate in long-term time-lapse imaging can be obtained by counting the number of cells at the beginning and end of the observation period. *S. pombe* cells were loaded in the microfluidic device and grown in EMM+glucose in the absence of light stress. Brightfield images were captured in a five minute interval. Cells were counted in each frame and plotted against the experiment time in a semi-logarithmic plot. A: An exponential function $(a * x^b)$ was fitted to all data points and the growth rate calculated from the fit parameter b. The fitted growth function is indicated by red/orange lines. The doubling time was 130 ± 6 min (mean $\pm$ standard deviation). B: The growth rate was calculated from the number of cells in the first and last frame only. The calculated growth rate is indicated by red/orange lines. The doubling time was 128 ± 10 min (mean $\pm$ standard deviation).