

Electronic Supplementary Information for:

Digital microfluidics for time-resolved cytotoxicity studies on single non-adherent yeast cells†

P.T. Kumar,^{a,§,†} K. Vriens,^{b,§} M. Cornaglia,^c M. Gijs,^c T. Kokalj,^{a,d} K. Thevissen,^b A. Geeraerd,^a B.P.A. Cammue,^{b,e,#} R. Puers,^f and J. Lammertyn^{a,#}

^a BIOSYST-MEBIOS, KU Leuven, Leuven, Belgium

^b Centre of Microbial and Plant Genetics, KU Leuven, Leuven, Belgium

^c Laboratory of Microsystems, Ecole Polytechnique Fédérale de Lausanne, CH-1015 Lausanne, Switzerland

^d Institute of Metals and Technology, Ljubljana, Slovenia

^e Department of Plant Systems Biology, VIB, Ghent, Belgium

^f MICAS-ESAT, KU Leuven, Leuven, Belgium

[§] Both authors contributed equally to this work

[#] Authors to whom correspondence should be addressed:

Mailing address: BIOSYST-MEBIOS, KU Leuven, Willem de Croylaan 42, Heverlee, Belgium.

Phone: +3216321459. Fax: +3216322955. E-mail: jeroen.lammertyn@biw.kuleuven.be

Mailing address: CMPG, Kasteelpark Arenberg 20, box 2460, 3001 Heverlee, Belgium. Phone:

+32-16329682. Fax: +32-16321966. E-Mail: bruno.cammue@biw.vib-kuleuven.be

† In loving memory of my brother Jairaj

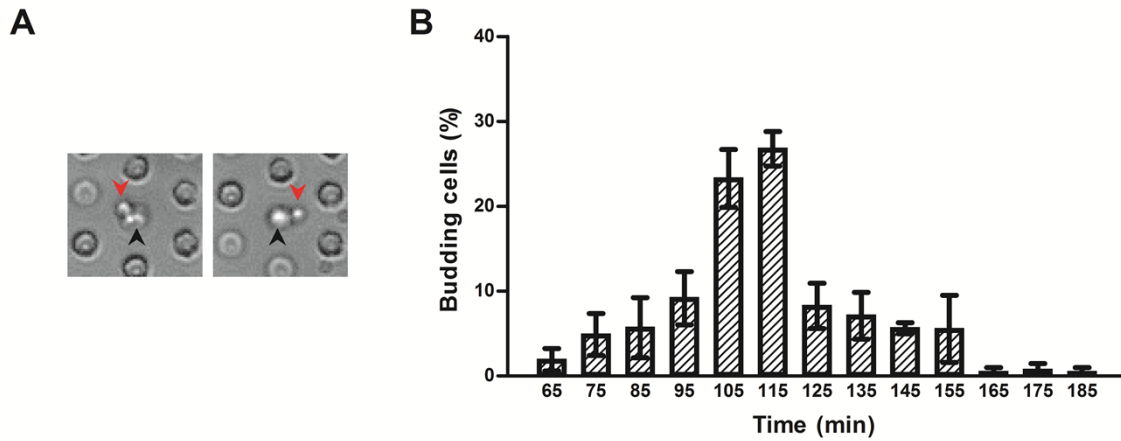


Figure S1 Analysis of the reproduction ability of trapped yeast cells. Yeast cells were monitored for budding events during 180 min with 10 min intervals using bright-field microscopy. (A) Images of budding yeast cells taken at 180 min of incubation in 1/5 YEPD at 40X magnification. Black arrows indicate mother cells trapped inside the microwells; red arrows indicate daughter cells on top of the trapped mother cells; (B) Representation of the number of budding cells, monitored during 180 min. Means and SEMs are plotted (n=4 independent biological repetitions; in each repetition, at least 30 cells were monitored).