

Resource Summary Report

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Colony-sectoring assay

DOI:10.17504/protocols.io.jsecnbe

Type: Protocol

Proper Citation

Isaac Núñez, Tamara Matute 2017. Colony-sectoring assay. protocols.io
[dx.doi.org/10.17504/protocols.io.jsecnbe](https://doi.org/10.17504/protocols.io.jsecnbe)

Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.jsecnbe>

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Group: Laboratorio de Tecnologías Libres

Summary: This protocol describes the procedure to obtain single bacterial colonies composed of multiple sectors of different strains. Each sector is originated from different founder cells (situated in close proximity to each other at the moment of plating). This protocol is based on Hallatschek et al. 2007 (Hallatschek O, Hersen P, Ramanathan S, Nelson DR. Genetic drift at expanding frontiers promotes gene segregation. Proc Natl Acad Sci U S A. 2007 Dec 11;104(50):19926-30). This assay has been used for low cost and open source fluorescence imaging (please see <https://osf.io/dy6p2/> for further information & data, <https://github.com/SynBioUC/FluoPi> for code and <http://docubricks.com/viewer.jsp?> for hardware assembly)

Associated Publications: Nuñez I, Matute T, Herrera R, Keymer J, Marzullo T, Rudge T, Federici F (2017) Low cost and open source multi-fluorescence imaging system for teaching and research in biology and bioengineering. PLoS ONE 12(11): e0187163. doi: [10.1371/journal.pone.0187163](https://doi.org/10.1371/journal.pone.0187163)

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