

Resource Summary Report

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Calibration Protocol - Plate Reader Abs600 (OD) Calibration with Microsphere Particles

DOI:10.17504/protocols.io.549g8z6

Type: Protocol

Proper Citation

Jacob Beal, Traci Haddock-Angelli, Markus Gershater, Vishal Sanchania, Russell Buckley-Taylor, Geoff Baldwin, Natalie Farny, Richard Tennant, Paul Rutten 2019. Calibration Protocol - Plate Reader Abs600 (OD) Calibration with Microsphere Particles. protocols.io dx.doi.org/10.17504/protocols.io.549g8z6

Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.549g8z6>

Authors: Jacob Beal, Traci Haddock-Angelli, Markus Gershater, Vishal Sanchania, Russell Buckley-Taylor, Geoff Baldwin, Natalie Farny, Richard Tennant, Paul Rutten

Group: iGEM Measurement

Summary: You will prepare a dilution series of monodisperse silica microspheres and measure the Abs₆₀₀ in your plate reader. The size and optical characteristics of these microspheres are similar to cells, and there is a known amount of particles per volume. This measurement will allow you to construct a standard curve of particle concentration which can be used to convert 600 nm absorbance measurements into an estimated equivalent number of cells.

Associated Publications: Fedorec AJ, Robinson CM, Wen KY, Barnes CP, FlopR: An Open Source Software Package for Calibration and Normalization of Plate Reader and Flow Cytometry Data. ACS Synthetic Biology 9(9). doi: [10.1021/acssynbio.0c00296](https://doi.org/10.1021/acssynbio.0c00296)

Affiliations: iGEM Measurement Committee, iGEM, Synthace, Synthace, iGEM Measurement Committee, Imperial College London, iGEM Measurement Committee, iGEM Measurement Committee, iGEM Measurement Committee

External URL: <https://2019.igem.org/Measurement>

Version: 2

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