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Microplate Reader Workflow V.2

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Works for me

[dx.doi.org/10.17504/protocols.io.8bqhsmw](https://doi.org/10.17504/protocols.io.8bqhsmw)**NUS iGEM**
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- 1 Refresh overnight cell culture in LB media at **37 °C**

Preparation of LB Media
by **NUS iGEM,**
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PREVIEW

RUN

- 1.1 Weigh **25 g** of Luria Broth Base powder.



Luria Broth Base (Miller's LB Broth Base)™, powder
by Thermo Fisher
Catalog #: 12795027

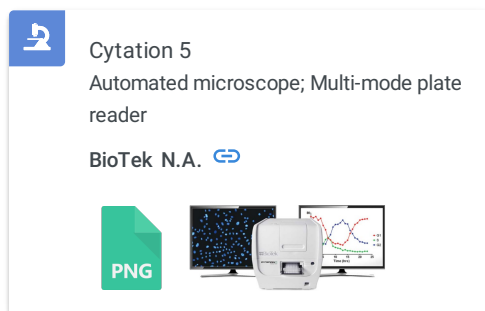
- 1.2 Add the powder into **1 L** of water.

Water refers to sterilized deionized water

- 1.3 Autoclave entire bottle of LB media.

- 2 Measure OD₆₀₀ of cell culture for desired OD value

- 3 Load  200 μ l of cell samples into three wells of a 96-well plate (triplicates)
- 4 Induce appropriate volumes of chemical inducers (not exceeding  6 μ l) in each well
- 5 Include LB media as blanks
- 6 Load the plate (with lid) into microplate reader



7 Start protocol to run continuous measurement overnight



OD₆₀₀ (absorbance) protocol:

Wavelength: 600nm

Measurement interval time: 8min

Run time: 18h

GFP (fluorescence) protocol:

Excitation: 485 +/- 10

Emission: 528 +/- 10

Gain: Extended

RFP (fluorescence) protocol:

Excitation: 535 +/- 20

Emission: 600 +/- 20

Gain: Extended

Luminescence protocol:

Gain: 118

Integration time: 1s

OD₆₀₀ + GFP protocol script:

Measurement interval time: 8min

Run time: 18h

OD₆₀₀ + luminescence protocol script:

Measurement interval time: 20min

Run time: 20h



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