VERSION 2

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Microplate Reader Workflow V.2

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Protocol status: Working
We use this protocol and it's
working

Created: Oct 16, 2019

Last Modified: Oct 16, 2019

PROTOCOL integer ID:
28752

1 Refresh overnight cell culture in LB media at 37 °C

Protocol

NAME

Preparation of LB Media

CREATED BY

Nus Igem

PREVIEW

1.1 Weigh 25 g of Luria Broth Base powder.

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

1.2 Add the powder into 1 L of water.

Water refers to sterilized deionized water Contributed by users

1.3 Autoclave entire bottle of LB media.

2 Measure OD₆₀₀ of cell culture for desired OD value

3 Load 200 µL of cell samples into three wells of a 96-well plate (triplicates)

4 Induce appropriate volumes of chemical inducers (not exceeding 6 µL) in each well

5 Include LB media as blanks

6 Load the plate (with lid) into microplate reader

Equipment	
Cytation 5	NAME
Automated microscope; Multi-mode plate reader	TYPE
BioTek	BRAND
N.A.	SKU
https://www.biotek.com/products/cytation.html	LINK

7 Start protocol to run continuous measurement overnight

Note

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