



Oct 18, 2020

one-step growth curve

Jiaxin Li¹¹South China University of Technology

1

Works for me

dx.doi.org/10.17504/protocols.io.bnjamcie

Jiaxin Li

DOI

dx.doi.org/10.17504/protocols.io.bnjamcie

PROTOCOL CITATION

Jiaxin Li 2020. one-step growth curve. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.bnjamcie>



LICENSE

This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

CREATED

Oct 18, 2020

LAST MODIFIED

Oct 18, 2020

PROTOCOL INTEGER ID

43330

- 1 Subculture host bacterium in medium of choice plus 2 mM CaCl₂ and grow to mid-log phase (ca. 0.5 OD_{650nm}).
- 2 Pipette 9.9 mL of the log phase culture into the empty flask and place at the appropriate incubation temperature for 5 min.
- 3 Add 0.1 mL of phage preparation to the 9.9 mL culture. (FLASK A)
- 4 Transfer 1.0 mL from FLASK A to 9.0 mL of prewarmed medium, mix well. (FLASK B)
- 5 Transfer 1.0 mL from FLASK B to 9.0 mL of prewarmed medium, mix well. (FLASK C)
- 6 Place FLASK (A, B or C) at 37°C, 180 rpm

- 7 Every 10 minutes remove 0.1 mL from the appropriate FLASK (A, B or C) add to the molten OVERLAY; add 0.1 mL of PLATING HOST; mix and pour on surface of UNDERLAY plates. Each experiment should perform in triplicate.
- 8 When the overlays have hardened (ca. 15 min) invert the plates and place them in an incubator.
- 9 After an appropriate incubation period (ON for *E. coli* or *Pseudomonas aeruginosa*) count the plaques on each of the plates.