



OCT 16, 2023

Plasmid construction

Minghao Chen¹, Xuefeng Ren¹

¹Department of Molecular and Cell Biology, University of California, Berkeley, Berkeley, CA 94720, USA.

ASAP Collaborative Research Network

Hurley



Minghao Chen

ABSTRACT

plasmid construction

OPEN  ACCESS



DOI:

dx.doi.org/10.17504/protocols.io.bp2l6x3b5lqe/v1

Protocol Citation: Minghao Chen, Xuefeng Ren 2023. Plasmid construction.

protocols.io

<https://dx.doi.org/10.17504/protocols.io.bp2l6x3b5lqe/v1>

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

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

Created: Oct 16, 2023

Last Modified: Oct 16, 2023

PROTOCOL integer ID:
89372

Keywords: ASAPCRN

Funders

Acknowledgement:

ASAP

Grant ID: ASAP-000350

- 1 Amplify the insert gene fragment by PCR with primers including 21 nt of overlapping sequence with the target gene.
- 2 Linearize the backbone with restriction enzymes (NEB).
- 3 Treat linearized backbone with quick CIP (NEB).
- 4 Run PCR products and linearized backbone in an agarose gel to confirm the size.
- 5 Purify the DNA from gel using a Gel extraction kit (Bio Basic).
- 6 Ligate the linearized backbone and the insert with the T4 ligase (NEB).
- 7 Transform the ligation products into home made competent cells.

- 8 Perform colony PCR to screen for colons that with inserted gene.
- 9 Sequence to verify that the inserted gene is correct.