



Nov 23, 2020

Cerulenin experiment

Elizabeth Fozo¹¹In-house protocol

1

Works for me

This protocol is published without a DOI.



Eadewunm

ABSTRACT

Rescue from Cerulenin Inhibition

Based on Saito, et al., 2018

PROTOCOL CITATION

Elizabeth Fozo 2020. Cerulenin experiment. **protocols.io**
<https://protocols.io/view/cerulenin-experiment-bpzump6w>



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

CREATED

Nov 23, 2020

LAST MODIFIED

Nov 23, 2020

PROTOCOL INTEGER ID

44820

DISCLAIMER:

DISCLAIMER: THIS IS A WORK IN PROGRESS. IT IS FOR INFORMATIONAL PURPOSES ONLY; USE AT YOUR OWN RISK

The protocol content here is for informational purposes only and does not constitute legal, medical, clinical, or safety advice, or otherwise; content added to protocols.io is not peer-reviewed and may not have undergone a formal approval of any kind. Information presented in this protocol should not substitute for independent professional judgment, advice, diagnosis, or treatment. Any action you take or refrain from taking using or relying upon the information presented here is strictly at your own risk. You agree that neither the Company nor any of the authors, contributors, administrators, or anyone else associated with protocols.io, can be held responsible for your use of the information contained in or linked to this protocol or any of our Sites/Apps and Services.

ABSTRACT

Rescue from Cerulenin Inhibition

Based on Saito, et al., 2018

BEFORE STARTING

What you can expect: cerulenin addition with solvent control should inhibit growth completely for *E. faecalis*. However, you will see a few rounds of division, and then the cells "level-off" at an OD₆₀₀ nm 0.1-0.3.

If the fatty acid can rescue from cerulenin, you should reach a similar OD₆₀₀ nm value at the 24-hour mark as the control tube (cells with no antibiotic). Note that in the case of the specific fatty acid or fatty acid combination, the cells may grow more slowly out of cerulenin inhibition (which is why the 24-hour recording is critical).

Note, as of August 2019, no evidence for suppressors arising from this assay.

Steps

- 1 Grow strain of interest overnight in 5 ml BHI
- 2 The next day, set up the following tubes:
Tube with no cerulenin
Tube with cerulenin + solvent control (for fatty acid)
Tube with cerulenin + fatty acid of interest

For current studies, use 5mg/ml of cerulenin (note, can dissolve stock in 10 mg/ml ethanol) and 5ug/ml of fatty acid interested in testing.
Perform in glass tubes with either 5 or 10 mL total volume
- 3 In am, dilute the strain to be an OD₆₀₀ nm of 0.01 into each of the above tubes. This is time "0"
- 4 Record the OD₆₀₀ nm at time 2, 4, 6, and 24 hours
- 5 Graph the results, making sure to add temporal separation in the graphs for the 24 hour time point.