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## Collecting supernatant from C. elegans culture and lyophilizing supernatant

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We use this protocol and it's working

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## Abstract

This protocol describes day 5 of our workflow to grow worms in liquid culture to induce the production of natural products (in this case, 1-HP derivatives). In this protocol, we get an approximate count for the number of life-stage synchronized worms exposed to the toxin, and we collect the supernatant, which contains 1-HP and its derived metabolites. After collecting the supernatant, we freeze and lyophilize it to prepare for extraction.



- 1 Remove the flasks from the shaker and estimate their population by aliquoting onto glass slides as before.
- 2 Centrifuge at 525 RCF for 1 minute and collect the supernatant in multiple 2 mL microcentrifuge tubes.
- 3 Save the worm pellet at -80°C if desired for future studies.
- 4 Centrifuge the microcentrifuge tubes at 20,800 RCF for 10 minutes. This will separate the bacteria from the rest of the supernatant (bacteria will settle to the bottom).
- 5 Combine all the supernatant remaining from the microcentrifuge tubes once the spin is completed in one 50 mL conical tube.
- 6 Freeze the supernatant with liquid nitrogen and lyophilize for 24-40 hrs until complete.