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C. elegans bleaching solution preparation V.3

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Protocol status: Working

We use this protocol and it's working

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Abstract

The *C. elegans* bleaching solution is used for several purposes:

- destroying and removing bacterial or fungal cells from a contaminated *C. elegans* population. This is possible because *C. elegans* eggs are resistant to the bleaching used in this protocol but most fungi and bacteria are not.
- synchronising a *C. elegans* population consisting of worms at different developmental stages. This is possible because eggs are resistant to the bleaching used in this protocol but hatched worms (larvae and adults) are not.

Guidelines

The bleaching solution can be kept at room temperature for one month.

Materials

MATERIALS

✂ Disposable gloves, nitrile

✂ DEPC water

✂ Sodium hypochlorite solution **Honeywell Fluka Catalog #239305-500ML**

✂ 50 ml Falcon tube

✂ Sodium Hydroxide Certified AR for Analysis Pellets meets analytical specification of Ph.Eur. BP Fisher Chemical **Fisher Scientific Catalog # S/4920/60**

Make sure to use this exact sodium hypochlorite solution or one with the same sodium hypochlorite concentration.

Safety warnings

- ! Sodium hypochlorite and sodium hydroxide are highly toxic and should be handled with care, wearing a lab coat and goggles. Read relevant information.

Before start

Prepare the bleaching solution.

Get a plate of gravid (= pregnant) worms or a plate with lots of unhatched eggs if you want to carry out an egg prep.



- 1 Add 42 ml DEPC water to a 50 ml Falcon tube. 3m
- 2 Add 3 ml 10 M NaOH 3m
- 3 Add 5 ml sodium hypochlorite solution 3m
- 4 See relevant protocol for details but 6 ml of bleaching solution for 5 minutes on a vortex in 14 ml tubes should be sufficient to dissolve worms and spare eggs.
- 5 The bleaching solution can be kept at room temperature for one month.