

# Phenol extraction of Chlorella cells

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## Abstract

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## Protocol

### Step 1.

Pellet cells (1/2 daily culture).

### Step 2.

Suspend in 15 ml of liquid phenol.

### Step 3.

Add about 0.2ml 5% cetylpyridium chloride (cationic detergent) to facilitate chlorophyll extraction.

### Step 4.

Shake suspension until green has been extracted from cells.

### Step 5.

Add 10 ml toluene (to reduce density).

### Step 6.

Mix.

### Step 7.

Centrifuge and wash pellet with aqueous buffer.

#### NOTES

**Irina Agarkova** 21 Apr 2016

Pellet will be difficult to resuspend.

### Step 8.

Wash pellet about 5x.

#### NOTES

**Irina Agarkova** 21 Apr 2016

Pellet will become easier to resuspend after the first wash.

### Step 9.

Use your nose as a guide to removal of phenol. If need be a UV spectrum of the final wash supernatant can be used to assure absence of phenol.