# Yeast Organic Extraction for LC-MS

**GNPN**


## Abstract

### Method Overview

This protocol outlines a quick and simple procedure for extracting all organic compounds from a yeast culture for subsequent analysis via Liquid chromatography–mass spectrometry (LC-MS). It is suitable for quickly assessing the presence of products from small sample preps.

### Materials:

Organic solvents: Ethyl Acetate, Acetone, Acetic Acid and Methanol


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## Protocol

### Step 1.

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### Materials:

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**Step 2.**
Grow yeast in selective medium overnight.

**Step 3.**
Inoculate a 30mL YPD culture to a final OD600 of 0.2.

**Step 4.**
Grow at 30°C, shaking at 200 rpm.

**Step 5.**
At day 3 and/or 4, harvest 2mL of culture in 15 mL Falcon tubes. Spin down.

**Step 6.**
Move the supernatant to a new tube and add 2mL of ethyl acetate. Mix by vortexing and incubate at RT overnight.

**Step 7.**

For the pellet, add 1mL of acetone and 1mL of ethyl acetate. Mix by vortexing and incubate at RT overnight.

**Step 8.**
For unknown compounds, consider adding vol/vol 1% of acetic acid.

**Step 9.**
Take 0.5 mL from each extraction, avoiding pellet or particulate matter. Speed vacuum at RT until completely dry.

**Step 10.**
Redissolve in 200µL of methanol. Load 5-8µL on LC-MS.