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Edinburgh Minimal Medium

Forked from YES Rich Medium

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Ju Lab | Yeast Protocols, Tools, a...

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Abstract

Minimal growth medium for fission yeast. Very useful when performing transformations and needing to create dropout media. This protocol creates medium that yeast can grow on natively. To create dropout medium, simply omit whichever amino acid you are using as a marker.

Materials

MATERIALS

- Adenine **Catalog** #A8626
- Uracil **Catalog** #U0750
- L-Histidine monohydrochloride monohydrate **Catalog** #H8125
- L-Leucine **Catalog** #L8000
- L-Lysine **Catalog** #L5626
- L-Arginine **Catalog** #A5006
- Difco Bacto Agar **Carolina Catalog** #156783B
- Edinburgh minimal medium (EMM) **Catalog** #2005-250

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Mixing

1 Add 32.0 g EMM to a 1 Liter Erlenmeyer Flask.
32 µL
Edinburgh minimal medium (EMM) **Catalog #**2005-250

2 Add 0.25 g Adenine to the flask.
0 µL
Adenine **Catalog #**A8626

3 Add 0.25 g Uracil to the flask.
0 µL
Uracil **Catalog #**U0750

4 Add 0.25 g Histidine to the flask.
0 µL
L-Histidine monohydrochloride monohydrate **Catalog #**H8125

5 Add 0.25 Leucine to the flask.
0 µL
L-Leucine **Catalog #**L8000

6 Add 0.25 g Lysine to the flask.
0 µL
L-Lysine **Catalog #**L5626

7 Add 1 g Arginine to the flask.
1 µL
L-Arginine **Catalog #**A5006

8 Optional: For solid medium add 20 g Difco Bacto Agar to the flask.
20 µL
Difco Bacto Agar **Carolina Catalog #**156783B

9 Fill the flask with water up to the 1 Liter mark on the flask.
1 µL

Note

Make sure the water you use is of a fairly neutral pH. Water in labs is often at pH 5, so be careful to check and adjust to ensure the medium is a viable environment.

10 Place a magnetic stir bar into the flask and place the flask on a magnetic stirrer to dissolve the powder into the water.

00:10:00

11 Remove the stir bar with a magnetic rod.

Autoclaving

12 Place aluminum foil over the top of the flask and then autoclave on a liquid cycle for 20 minutes.

01:00:00

13 If solid medium, pour while still hot into plates and let them sit out to cool overnight on the lab bench.

If liquid medium, aliquot into smaller amounts and store at + 4 C.