

2016-07-14

## L Medium

Pers. comm. Dietrich Lorch  
Modified by MZCH

### Composition of L Medium.

|                                                       | stock solutions<br>(1 L) |       | volume of stock for<br>1 L nutrient solution | final concentration |
|-------------------------------------------------------|--------------------------|-------|----------------------------------------------|---------------------|
|                                                       | [mmol/L]                 | [g/L] |                                              |                     |
| <b>Ca(NO<sub>3</sub>)<sub>2</sub>·4H<sub>2</sub>O</b> | 423.46                   | 100   | 0.5                                          | 0.212               |
| <b>MgSO<sub>4</sub>·7H<sub>2</sub>O</b>               | 405.72                   | 100   | 0.5                                          | 0.203               |
| <b>K<sub>2</sub>HPO<sub>4</sub></b>                   | 34.45                    | 6     | 0.5                                          | 0.017               |
| <b>micronutrient<br/>solution<sup>1</sup></b>         |                          |       | 0.25                                         |                     |
| <b>vitamin solution<sup>2</sup></b>                   |                          |       | 1                                            |                     |
| <b>NP-H<sub>2</sub>O<sup>3</sup></b>                  |                          |       | 997.25                                       |                     |

Adjust pH to 6.

<sup>1</sup>micronutrient solution stock (4000x, 1 L):

|                                                            | stock [mmol/L] | stock [g/L] |
|------------------------------------------------------------|----------------|-------------|
| <b>Na<sub>2</sub>EDTA·2H<sub>2</sub>O (Titriplex® III)</b> | 13.43          | 5           |
| <b>H<sub>3</sub>BO<sub>3</sub></b>                         | 16.17          | 1           |
| <b>MnCl<sub>2</sub>·4H<sub>2</sub>O</b>                    | 2.53           | 0.5         |
| <b>FeSO<sub>4</sub>·7H<sub>2</sub>O</b>                    | 1.8            | 0.5         |
| <b>ddH<sub>2</sub>O<sup>4</sup>, ad 1 L</b>                |                |             |

Adjust micronutrient solution to pH 7 with KOH (1 M)

<sup>2</sup>vitamin solution stock (1000x, 1 L; ):

|                                             | stock [mmol/L] | stock [g/L] |
|---------------------------------------------|----------------|-------------|
| <b>thiamine HCl (B1)</b>                    | 0.296          | 0.1         |
| <b>biotin (H)</b>                           | 0.0041         | 0.001       |
| <b>cyanocobalamin (B12)</b>                 | 0.00015        | 0.0002      |
| <b>nicotinamide</b>                         | 0.0008         | 0.0001      |
| <b>ddH<sub>2</sub>O<sup>4</sup>, ad 1 L</b> |                |             |

Add vitamin solution to the autoclaved and cooled-down medium via sterile filtration.

<sup>3</sup>NP-H<sub>2</sub>O nanopure water, Purelab Pulse (Elga Lab water, Celle, Germany)

<sup>4</sup>ddH<sub>2</sub>O double distilled water

## **Reference**

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