# MBBM Stock Solutions Version 2

# Dr. Steven Wilhelm, Samantha Coy

# **Abstract**

Van Etten, J. (n.d.). Formulation of Modified Bold's Basal Medium (MBBM). Retrieved from http://ncv.unl.edu/vanettenlab/

Contact Dr. Steven Wilhelm (wilhelm@utk.edu) or Samantha Coy (srose16@vols.utk.edu) for additional information regarding this protocol.

Citation: Dr. Steven Wilhelm, Samantha Coy MBBM Stock Solutions. protocols.io

dx.doi.org/10.17504/protocols.io.hgtb3wn

Published: 29 Mar 2017

## **Protocol**

#### Stock Solution #1

Step 1.

Add 25.0 g NaNO<sub>3</sub> per liter d-H<sub>2</sub>O

#### Stock Solution #2

Step 2.

Add 2.5 g CaCl<sub>2</sub>\*2H<sub>2</sub>O per liter d-H<sub>2</sub>O

#### Stock Solution #3

Step 3.

Add 7.5 g MgSO<sub>4</sub>\*7H<sub>2</sub>O per liter d-H<sub>2</sub>O

## Stock Solution #4

Step 4.

Add 7.5 g K<sub>2</sub>HPO<sub>4</sub> per liter d-H<sub>2</sub>O

## Stock Solution #5

Step 5.

Add 17.5 g KH<sub>2</sub>PO<sub>4</sub> per liter d-H<sub>2</sub>O

## Stock Solution #6

Step 6.

## Stock Solution #7

## Step 7.

Add 50.0 g disodium EDTA and 31.0 g KOH per liter d-H<sub>2</sub>O

#### Stock Solution #8

## Step 8.

Add 4.98 g FeSO<sub>4</sub>\*7H<sub>2</sub>O per liter acidificed H<sub>2</sub>O

(Acidified  $H_2O$  is 999.0 mL  $d-H_2O + 1.0$  mL concentrated  $H_2SO_4$ )

## Stock Solution #9

# Step 9.

Add 11.42 g H<sub>3</sub>BO<sub>3</sub> per liter d-H<sub>2</sub>O

## Stock Solution #10

# **Step 10.**

Add per liter d-H<sub>2</sub>O

- 8.82 g ZnSO<sub>4</sub>\*7H<sub>2</sub>O
- 1.44 g MnCl<sub>2</sub>\*4H<sub>2</sub>O, 0.71 g MoO<sub>3</sub>
- 1.57 g CuSO<sub>4</sub>\*5H<sub>2</sub>O
- 0.49 g CoNO<sub>3</sub>\*6H<sub>2</sub>O

## Autoclave

## **Step 11.**

Autoclave all stock solutions at 121°C for 20 min except solution #8 and #10 (stir to dissolve)