

Author: Miriam Dreesbach

created: 06.04.2018 10:16

Entry 1/61: 100x BG-11 Media

updated: 06.04.2018 13:26

In Project: Solutions

With tags: BG-11, Media, Synechococcus, Cyanobacteria

1 L 100x BG-11 stock solution contains:

- $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ ($3.6 \text{ g} \cdot \text{L}^{-1}$)
 - We do not have hydrated CaCl_2 . Therefore, we used 2.718 g CaCl_2 (powder) for 1L of the stock.
- Citric acid ($0.6 \text{ g} \cdot \text{L}^{-1}$)
- NaNO_3 ($149.58 \text{ g} \cdot \text{L}^{-1}$)
- $\text{MgSO}_4 \cdot 7 \text{ H}_2\text{O}$ ($7.49 \text{ g} \cdot \text{L}^{-1}$)
 - We do not have hydrated MgSO_4 . Therefore, we used 3.659 g MgSO_4 (powder) for 1L of the stock.
- 0.25 M $\text{Na}_2\text{-EDTA}$, pH 8.0 ($0.56 \text{ ml} \cdot \text{L}^{-1}$)
 - We did not have a 0.25 M $\text{Na}_2\text{-EDTA}$ stock. Therefore, we dissolved 2.32 g $\text{Na}_2\text{-EDTA}$ (powder) and filled the bottle up with MilliQ (nuclease-free) water up to 25 mL. Afterwards, the pH was adjusted with diluted NaOH to pH = 8.0.

The bottle was filled with MilliQ (nuclease-free) water up to 1L and mixed a big stir bar until the powder was completely dissolved and the solution was clear.

Afterwards, the stir bar was removed and the media was directly autoclaved at 120 °C for 30 Minutes.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen

created: 06.04.2018 14:13

Entry 2/61: Antibiotics

updated: 07.04.2018 09:17

In Project: Solutions

With tags: antibiotic, sterile filtration, cam, chloramphenicol, amp, ampicillin, kan, kanamycin

Chloramphenicol:

We have prepared Chloramphenicol stock solution with a concentration of 50 mg/mL. Chloramphenicol was solved in 100% EtOH. The solution was sterilized by sterile filtration and stored at -20°C.--> 10 mL with 500 mg Chloramphenicol

Ampicillin:

We have prepared Ampicillin stock solution with a concentration of 10 mg/mL. Ampicillin was solved in H₂O (MilliQ). The solution was sterilized by sterile filtration and stored at -20°C.--> 40 mL with 400 mg Ampicillin

Kanamycin:

We have prepared Kanamycin stock solution with a concentration of 10 mg/mL. Kanamycin was solved in H₂O (MilliQ). The solution was sterilized by sterile filtration and stored at -20°C.--> 20 mL with 200 mg Kanamycin

IMG_7418.JPG

Zusätze für E. coli					
	Stamm-Lsg.		Flüssigmedium	Festmedium	
	mg/ml	in	µg/ml	µg/ml	je 100 ml
Ampicillin	10 SK	H ₂ O	100	100	1 ml
Kanamycin	10 SK	H ₂ O	50	50	500 µl
Tetracyclin	2,5 SL,T	30% EtOH	25	25	1 ml
Gentamycin	10 SK	H ₂ O	50	50	500 µl
Rifampicin	10 RTL	EtOH			
X-Gal	2% LK (20 mg / ml)	DMSO/DMF			60µl auf eine Platte
IPTG	100mM LT	H ₂ O	10µM	10µM	10µl
Chloramphenicol	50SLK	100% EtOH	34	34	68 µl

S: sterilfiltrieren; L: lichtgeschützt aufbewahren; K: bei 4°C lagern; T: bei -20°C lagern; ?:keine Info

Bild_von_iOS_hochgeladen_(1).jpg

Antibiotika Konzentrationen

	E. coli	Cyanos	Stock
Amp /	100 μg ml	100 μg	100 $\mu\text{g}/\mu\text{l}$ in 50% EtOH
Cm /	35 μg ml	10 μg ml	10 $\mu\text{g}/\text{ml}$ in 50% EtOH
Km /	25 $\mu\text{g}/\text{ml}$.	25 $\mu\text{g}/\text{ml}$ in H ₂ O
Spec /	100 $\mu\text{g}/\text{ml}$	20 $\mu\text{g}/\text{ml}$	20 $\mu\text{g}/\text{ml}$ in H ₂ O
Gm *			

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen
Entry 3/61: CaCl₂ & Glycerin
In Project: Solutions
With tags: CaCl₂, glycerin

created: 06.04.2018 15:17
updated: 06.04.2018 15:28

Calciumchlorid (100mM;Volume 200ml):

110,99 g/mol -> 11,099 g für ein Liter -> 2,2g für 200ml

angesetzt für unseren Stock

Glycerin(99,5%):

aus Stock für unseren Stock aliquatiert

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Matthias Willmann

created: 06.04.2018 15:26

Entry 4/61: YPD Medium

updated: 06.04.2018 15:58

In Project: Solutions

No tags associated

0,5 l YPD Medium contains:

5 g yeast extract

10 g Peptone

10 g D-Glucose 180,16 g/mol

2 Liter were made (4x 500 ml flasks)

The bottles were filled with MilliQ water up to 0,5L and mixed with a big stir bar until the powder was completely dissolved and the solution was clear.

Afterwards, the stir bar was removed and the media was directly autoclaved at 120 °C for 30 Minutes.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Matthias Willmann

created: 06.04.2018 15:51

Entry 5/61: LB Medium

updated: 06.04.2018 15:58

In Project: Solutions

No tags associated

0,5 l LB medium contains

12,5 g LB-Medium

2,5 liter were made (5 x 500 ml).

The bottles were filled with MilliQ water up to 0,5L and mixed with a big stir bar until the powder was completely dissolved and the solution was clear.

Afterwards, the stir bar was removed and the media was directly autoclaved at 120 °C for 30 Minutes.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Jennifer Denter

created: 06.04.2018 20:09

Entry 6/61: Preparation of 0.5M EDTA Stock Solution;

updated: 16.05.2018 17:00

In Project: Solutions

With tags: 0.5M EDTA, EDTA Stock Solution, EDTA Stock

Preparation of 0.5M EDTA Stock Solution

93,05 g of EDTA Disodium Salt (372,24 g/mol)

400 ml MilliQ water

--> Mix and adjust pH to 8 pH (used 2M NaOH)

At pH 8 the solution becomes clear

Fill up to 500 ml and autoclave

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen
Entry 7/61: YPD Agar
In Project: Solutions
With tags: YPD, Agar, Medium

created: 08.04.2018 18:49
updated: 08.04.2018 18:51

0,5 l YPD Agar Medium contains:

25 g YPD medium

10 g Bacto Agar

0,5 L were made (1x 500 ml flasks)

The bottles was filled with MilliQ water up to 0,5L and mixed with a big stir bar until the powder was completely dissolved and the solution was clear.

Afterwards, the stir bar was removed and the media was directly autoclaved at 120 °C for 30 Minutes.

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Miriam Dreesbach

created: 12.04.2018 12:32

Entry 8/61: 1 M NaCl

updated: 12.04.2018 12:35

In Project: Solutions

With tags: nacl

1 M NaCl Solution:

- We weighed 58,4 g NaCl (powder).
- We put the powder into a 1 L flask.
- We filled up to 1 L with milliQ water (nuclease-free).
- Afterwards, we autoclaved the solution.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Miriam Dreesbach

created: 12.04.2018 12:35

Entry 9/61: 1 M Tris-HCl

updated: 12.04.2018 12:42

In Project: Solutions

With tags: Tris-HCl

1 M Tris-HCl:

- We weighed 12,1 g Tris-HCl (powder) with respiratory protection on.
- We put the powder into a flask.
- We solved the powder in 80 mL milliQ water (nuclease-free).
- We adjusted the pH of the solution to 8.0 with concentrated (37 %) HCl under the hood.
- Afterwards we autoclaved it.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Miriam Dreesbach

created: 12.04.2018 12:39

Entry 10/61: 1 M CaCl₂

updated: 12.04.2018 12:42

In Project: Solutions

With tags: CaCl₂1 M CaCl₂:

- We weighed 110,99 g CaCl₂ (powder) with gloves on
- We put the powder into a 1 L flask
- We filled the bottle up to 1 L with milliQ water (nuclease-free)
- Afterwards we autoclaved it.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Miriam Dreesbach

created: 12.04.2018 12:43

Entry 11/61: STE Buffer

updated: 12.04.2018 12:54

In Project: Solutions

With tags: STE buffer

STE Buffer:

The STE buffer should contain:

- 100 mM NaCl
- 10 mM Tris/HCl
- 1 mM EDTA
- pH = 8.0

We used the following stocks for preparing the buffer:

- 0.5 M EDTA
- 1 M Tris-HCl
- 1 M NaCl

We calculated the needed volumina with the following formula:

$$V(\text{needed}) * c(\text{needed}) = V(\text{stock}) * c(\text{stock})$$

We pipetted the following volumina:

- 2 mL 1 M NaCl
- 40 μ L 0.5 M EDTA
- 200 μ L 1 M Tris-HCl

Then we filled up the flask to 20 mL with milliQ water (nuclease-free).

Afterwards, we autoclaved it.

The pH needs to be adjusted before using it.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Miriam Dreesbach

created: 12.04.2018 12:49

Entry 12/61: TE Buffer

updated: 13.05.2018 13:56

In Project: Solutions

With tags: TE buffer

The TE buffer should contain:

- 10 mM Tris/HCl
- 1 mM EDTA
- pH = 8.0

We used the following stocks for preparing the buffer:

- 0.5 M EDTA
- 1 M Tris-HCl

We pipetted the following volumina:

- 40 μ L 0.5 M EDTA
- 200 μ L 1 M Tris-HCl

Then we filled up the flask to 20 mL with milliQ water (nuclease-free).

Afterwards, we autoclaved it.

The pH needs to be adjusted before using it.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Carina Gude
Entry 13/61: 1% Agarose gel, TAE Buffer and working solution
In Project: Solutions
With tags: agarose gel, TAE

created: 16.04.2018 15:12

updated: 16.04.2018 15:16

1% Agarose gel:

- 3g Agarose
- 300ml TAE Buffer

TAE Buffer

- weigh out 242 grams of Tris-base (MW = 121.14 g/mol) and dissolve in approximately 700 milliliters of deionized water
- Carefully add 57.1 milliliters of 100 % glacial acid (or acetic acid) and 100 milliliters of 0.5 M EDTA (pH 8.0)
- adjust the solution to a final volume of 1 liter
- the pH of this buffer is not adjusted and should be about 8.5
- store stock solution at room temperature

TAE working solution:

- 20 ml 50 x TAE
- ad 1000 ml a. dest.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Thomas Bick
Entry 15/61: SD media preparation
In Project: Solutions
With tags: yeast, SD

created: 23.04.2018 22:27
updated: 14.08.2018 11:24

Yeast Synthetic Dropout Medium 10x (SD Medium 10x)

6,7 g Difco Yeast Nitrogene Base w/o AA

5 g Glucose

1,92 g Yeast Synthetic Drop-out Medium Supplements (-His, -Leu, -Trp, -Ura)

ad. 100 ml H₂O

stir until completly solved (if necessary heated)

sterile filtering

Aminoacid stock solutions for Adenin

18 mg/l

Aminoacid stock solutions for Histidine and Tryptophane

76 mg/l

Aminoacid stock solutions for Leucine

380 mg/l

For working concentrations add 5 ml SD Medium 10x with 1 ml Aminoacid stock solution (depends on your yeast marker).

ad. to 50 ml with H₂O for liquid media

2% (w/v) Agar in H₂O for plates

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen

created: 15.05.2018 07:13

Entry 16/61: Antibiotics

updated: 15.05.2018 07:15

In Project: Solutions

With tags: antibiotic, ampicillin, chloramphenicol

Chloramphenicol:

Prepared Chloramphenicol stock solution with a concentration of 25 mg/mL. Chloramphenicol was solved in 100% EtOH. The solution was sterilized by sterile filtration and stored at -20°C.--> 10 mL with 250 mg Chloramphenicol

Ampicillin:

Prepared Ampicillin stock solution with a concentration of 10 mg/mL. Ampicillin was solved in H₂O (MilliQ). The solution was sterilized by sterile filtration and stored at -20°C.--> 40 mL with 400 mg Ampicillin

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Sarah Seyffert
Entry 17/61: Xgal in DMSO
In Project: Solutions
With tags: X-gal

created: 15.05.2018 13:48
updated: 15.05.2018 13:48

Preparation of a X-gal solution 20mg/ml

- prepare a with aluminium foil coated tube(x-gal is light sensitive)
- weigh 20 mg X-gal powder
- add in a tube
- fill in 1ml DMSO **sterile**
- resuspend
- store at 4°C

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer
Entry 18/61: No entry title yet
In Project: Solutions
No tags associated

created: 17.05.2018 09:53
updated: 17.05.2018 09:54

refill of 1l 1x TAE with 20ml 50x TAE and 980ml Milli Q

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Ylenia Longo

created: 17.05.2018 14:39

Entry 19/61: 1xTAE buffer

updated: 17.05.2018 14:40

In Project: Solutions

With tags: TAE, Buffer, gel, electrophoresis

50xTAE solution has been diluted to 1x TAE solution by mixing 20mL of 50xTAE solution with 900mL MilliQ water. The solution is stored in the iGEM lab.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen

created: 24.05.2018 11:43

Entry 20/61: Amp plates

updated: 24.05.2018 11:45

In Project: Solutions

With tags: amp, ampicillin, plates

Making of Amp and Amp law salt plates.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen
Entry 21/61: Tae Buffer
In Project: Solutions
No tags associated

created: 24.05.2018 11:45
updated: 24.05.2018 11:45

Refill of 1x TAE buffer.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Sarah Seyffert

created: 24.05.2018 12:55

Entry 22/61: TAE refill

updated: 24.05.2018 12:56

In Project: Solutions

With tags: TAE

Refill of 2 bottles of 1x TAE-buffer

- 20ml 50TAE-buffer
- fill up to 1L with miliQ

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Carina Gude
Entry 23/61: 2x BG11
In Project: Solutions
With tags: BG-11, Cyanobacteria

created: 28.05.2018 14:21
updated: 28.05.2018 14:23

Standard 2x BG11

2 500 ml bottles were filled with 250 ml ultra pure water each

Then

- 10ml 100x BG11 stock
- 1ml 1000x Na_2CO_3
- 1ml 1000x $\text{K}_2\text{HPO}_4 \times 3 \text{H}_2\text{O}$
- 10ml 100x TES-buffer, pH = 8.0
- 1ml 1000x Trace Metal Mix

was added to each bottle.

Ultra pure water was added to 500ml

Autoclave.

Date:	Signed and understood by:
Date:	Witnessed and understood by:

Author: Carina Gude
Entry 24/61: Preparation of 1x BG-11
In Project: Solutions
With tags: BG-11, Cyanobacteria

created: 28.05.2018 17:24
updated: 28.05.2018 17:27

1. Fill 1 L bottle with 500 mL ultra pure water.
2. Add stock solutions:
 1. 10ml 100x BG11 Stock
 2. 1 ml 1000x Na_2CO_3
 3. 1 ml 1000x $\text{K}_2\text{HPO}_4 \times 3 \text{H}_2\text{O}$
 4. 10 ml 100x TES-buffer
 5. 1 ml 1000x Trace Metal Mix
3. Add ultra pure water to 1 L.
4. Autoclave.

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Ylenia Longo
Entry 25/61: IPTG stock solution 0.1M
In Project: Solutions
With tags: IPTG, stock, 0.1M

created: 30.05.2018 15:44
updated: 30.05.2018 15:46

An IPTG stock solution has been prepared with a final concentration of 0.1M.

For this purpose 0.6g of IPTG were added to 25mL of ddH₂O and the tube was inverted until the IPTG was completely dissolved. The final stock solution is sterile filtrated, aliquoted and stored at -20°C.

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Ylenia Longo

created: 31.05.2018 10:49

Entry 26/61: X-gal in DMSO

updated: 31.05.2018 10:58

In Project: Solutions

With tags: X-gal, DMSO, blue white screening

A X-gal solution with a final concentration of 20mg/ml was prepared.

For this purpose 200mg of X-gal were dissolved in 10mL DMSO in a 15mL falcon tube. Afterwards the falcon was vortexed until the powder is completely dissolved.

The stock solution was aliquoted in 1.5mL tubes, wrapped with aluminium foil and stored at -20°C.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Thomas Bick
Entry 27/61: 1x TAE
In Project: Solutions
With tags: TAE

created: 31.05.2018 13:05
updated: 31.05.2018 13:06

Refill of 2 bottles of 1x TAE-buffer

- 20ml 50TAE-buffer
- fill up to 1L with MiliQ

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Sarah Seyffert
Entry 28/61: 100xM2-stock
In Project: Solutions
With tags: M2-Medium

created: 05.06.2018 20:52
updated: 28.09.2018 13:00

M2-Medium has to be prepared for our co-culturing experiments. Therefore a 100x stock solution has been made

1 L 100x M2 stock solution contains:

- $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ ($3.6 \text{ g} \cdot \text{L}^{-1}$)
 - We do not have hydrated CaCl_2 . Therefore, we used 2.718 g CaCl_2 (powder) for 1L of the stock.
- Citric acid ($0.6 \text{ g} \cdot \text{L}^{-1}$)
- NaNO_3 ($17 \text{ g} \cdot \text{L}^{-1}$)
- $\text{MgSO}_4 \cdot 7 \text{ H}_2\text{O}$ ($7.49 \text{ g} \cdot \text{L}^{-1}$)
 - We do not have hydrated MgSO_4 . Therefore, we used 3.659 g MgSO_4 (powder) for 1L of the stock.
- 0.25 M $\text{Na}_2\text{-EDTA}$, pH 8.0 ($0.56 \text{ ml} \cdot \text{L}^{-1}$)
 - We did not have a 0.25 M $\text{Na}_2\text{-EDTA}$ stock. Therefore, we dissolved 2.32 g $\text{Na}_2\text{-EDTA}$ (powder) and filled the bottle up with MilliQ (nuclease-free) water up to 25 mL. Afterwards, the pH was adjusted with diluted NaOH to pH = 8.0. (Done by Miriam and Susanne 06.04.18)
- K_2HPO_4 ($82,3\text{g} \cdot \text{L}^{-1}$)

The bottle was filled with MilliQ (nuclease-free) water up to 1L and mixed a big stir bar. The solution did not dissolve completely.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen
Entry 29/61: Ampicillin
In Project: Solutions
With tags: ampicillin, antibiotic

created: 06.06.2018 15:30
updated: 06.06.2018 15:32

Ampicillin:

A Ampicillin stock solution with a concentration of 10 mg/mL was prepared. Ampicillin was solved in H₂O (MilliQ). The solution was sterilized by sterile filtration and stored at -20 °C.--> 40 mL with 400 mg Ampicillin

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Sarah Seyffert
Entry 30/61: No entry title yet
In Project: Solutions
With tags: M2-Medium

created: 06.06.2018 16:42
updated: 28.09.2018 13:01

Because the salts did not resolve in the M2 medium a new approach was made:

100 x K₂HPO₄(82,3g/l) stock for the M2-Medium

- 41,15g were dissolved in 500ml until the solution was clear

M2-Medium has to be prepared for our co-culturing experiments. Therefore a 100x stock solution has been made

1 L 100x M2 stock solution contains:

- CaCl₂ · 2H₂O (3.6 g · L⁻¹)
 - We do not have hydrated CaCl₂. Therefore, we used 2.718 g CaCl₂ (powder) for 1L of the stock.
- Citric acid (0.6 g · L⁻¹)
- NaNO₃ (17 g · L⁻¹)
- MgSO₄ · 7 H₂O (7.49 g · L⁻¹)
 - We do not have hydrated MgSO₄. Therefore, we used 3.659 g MgSO₄ (powder) for 1L of the stock.
- 0.25 M Na₂-EDTA, pH 8.0 (0.56 ml · L⁻¹)
 - We did not have a 0.25 M Na₂-EDTA stock. Therefore, we dissolved 2.32 g Na₂-EDTA (powder) and filled the bottle up with MilliQ (nuclease-free) water up to 25 mL. Afterwards, the pH was adjusted with diluted NaOH to pH = 8.0. (Done by Miriam and Susanne 06.04.18)

The bottle was filled with MilliQ (nuclease-free) water up to 1L and mixed a big stir bar until the powder was completely dissolved and the solution was clear.

PH was adjusted to 8.3

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Katharina Polzen
Entry 31/61: Dropout medium

created: 07.06.2018 14:53

updated: 07.06.2018 14:56

In Project: Solutions

With tags: sterile filtration, Medium, Dropout

Dropoutmedium (10X)

- 6,7 g Difco Yeast Nitrogene Base w/o AA
- 5 g Glucose
- 1,92 g Yeast Synthetic Drop-out Medium Supplements
- ad. 100 ml H₂O

Double the amount was made and then sterile filtered.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Ylenia Longo

created: 08.06.2018 14:58

Entry 32/61: 30% sucrose solution

updated: 08.06.2018 15:03

In Project: Solutions

With tags: saccharose, sucrose

A 30% sucrose solution is prepared by weighting 60g saccharose and adding 200mL water to it. The solution is stirred until completely dissolved and then sterile filtrated by vacuum pumping.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Sarah Seyffert

created: 08.06.2018 22:58

Entry 33/61: 1x M2

updated: 08.06.2018 23:05

In Project: Solutions

With tags: M2-Medium

1x M2 was made from the 100x M2 stock

- 10 ml 100x M2
- 10 ml 100x K_2HPO_4 (82g/l)
- 1 ml 1000x Na_2CO_3
- 1 ml 1000x trace metals
- 1 g Hepes
- fill up to 1 l with MiliQ-water

The medium has to be autoclaved afterwards

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Carina Gude
Entry 35/61: 1x SD medium
In Project: Solutions
With tags: for SD, SD medium, S.cerevisiae

created: 21.06.2018 08:18
updated: 21.06.2018 08:24

1x SD medium

- 5ml SD medium 10%
- 1ml Amino acid stock solutions (Histidine, Tryptophan, Uracil, Leucine)
- 50ml H₂O

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Carina Gude
Entry 36/61: 1x SD medium
In Project: Solutions
With tags: SD medium

created: 21.06.2018 08:53
updated: 21.06.2018 08:55

1x SD medium:

- 30ml SD Medium 10x
- 6ml Amino acid stock solutions (Histidine, Tryptophan, Uracil, Leucine)
- 300ml sterile MiliQ

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Sarah Seyffert

created: 28.06.2018 13:21

Entry 37/61: Stock-sultions of Kanamycin &Chloramphenicol

updated: 28.06.2018 13:57

In Project: Solutions

With tags: antibiotic, kanamycin, chloramphenicol, sterile filtration

Kanamycin:

We have prepared Kanamycin stock solution with a concentration of 10 mg/mL. Kanamycin was solved in H₂O (MilliQ). The solution was sterilized by sterile filtration and stored at -20°C.--> 40 mL with 400 mg Kanamycin

Chloramphenicol:

We have prepared Chloramphenicol stock solution with a concentration of 50 mg/mL. Chloramphenicol was solved in 100% EtOH. The solution was sterilized by sterile filtration and stored at -20°C.--> 40 mL with 4000 mg Chloramphenicol

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer
Entry 38/61: refill 1l 1x TAE
In Project: Solutions
With tags: TAE

created: 02.07.2018 17:40
updated: 02.07.2018 17:41

refill 1L 1xTAE with 20ml 50xTAE and 980ml milli Q

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Sarah Seyffert
Entry 39/61: No entry title yet
In Project: Solutions
With tags: TAE

created: 13.07.2018 16:46
updated: 13.07.2018 16:46

Refill of 2 bottles of 1x TAE-buffer

- 20ml 50TAE-buffer
- fill up to 1L with MiliQ

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer
Entry 40/61: ampicillin stock
In Project: Solutions
With tags: ampicillin, stock

created: 20.07.2018 18:07
updated: 20.07.2018 18:12

made 4 falcon tubes with each 20 ml ampicillin stock solution (10mg/ml), with following steps:

- weighing out 200mg ampicillin for each tube and fill up with water-> wear gloves and a protecting face mask
- sterile Filtration
- store at -20 °C

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer
Entry 41/61: refill 1x TAE
In Project: Solutions
With tags: TAE

created: 23.07.2018 14:16
updated: 23.07.2018 14:17

Refill 1l 1xTAE with 20ml 50x TAE and 980ml milli Q water

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer
Entry 42/61: refill of 1x TAE
In Project: Solutions
With tags: TAE

created: 27.07.2018 15:02
updated: 27.07.2018 15:02

Refill 2l 1xTAE with each 20ml 50x TAE and 980ml milli Q water

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer
Entry 43/61: X-Gal stocksolution
In Project: Solutions
With tags: X-gal, DMSO

created: 01.08.2018 18:12
updated: 01.08.2018 18:13

Preparation of a X-gal solution 20mg/ml

- prepare a with aluminium foil coated tube(x-gal is light sensitive)
- weigh 60 mg X-gal powder
- add in a tube
- fill in 3 ml DMSO **sterile**
- mix
- sterile filtration
- store at -20 °C

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer

created: 02.08.2018 16:11

Entry 44/61: DMSO sterile filtration for stock solution

updated: 02.08.2018 16:13

In Project: Solutions

No tags associated

sterile filtration of 20 ml Dimethylsulfoxide (DMSO)

store at room temperature

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Carina Gude
Entry 45/61: TAE buffer
In Project: Solutions
With tags: TAE

created: 06.08.2018 13:39
updated: 13.08.2018 13:22

Refill of 1 bottle of 1x TAE-buffer

- 20ml 50TAE-buffer
- fill up to 1L with MiliQ

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Sarah Seyffert
Entry 47/61: 1x M2 Media
In Project: Solutions
With tags: M2-Medium, X-gal

created: 09.08.2018 11:57
updated: 09.08.2018 15:45

1x M2 was made from the 100x M2 stock

- 10 ml 100x M2 (sterile)
- 10 ml 100x K_2HPO_4 (82g/l)
- 1 ml 1000x Na_2CO_3 (sterile)
- 1 ml 1000x trace metals (sterile)
- 1 g Hepes
- fill up to 1 l with MiliQ-water

The medium has to be autoclaved afterwards

Preparation of a X-gal solution 20mg/ml

- prepare a with aluminium foil coated tube(x-gal is light sensitive)
- weigh 140 mg X-gal powder in a tube
- fill in 7 ml DMSO **sterile**
- mix
- sterile filtration of the solution

store at -20°C

Date:	Signed and understood by:
Date:	Witnessed and understood by:

Author: Susanne Vollmer
Entry 48/61: refill of 1x TAE
In Project: Solutions
With tags: TAE

created: 10.08.2018 16:36
updated: 10.08.2018 16:37

Refill of 1 L 1x TAE with 20 ml 50x TAE and 980 ml Milli Q

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Sarah Seyffert
Entry 49/61: M2
In Project: Solutions
With tags: M2-Medium

created: 13.08.2018 11:32
updated: 13.08.2018 11:34

After autoclaving the M2-media 1 mL 1000x Fe(III) ammonium citrate and 200 μ L 5000x CuSO₄ were added.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer
Entry 50/61: refill of 1xTAE
In Project: Solutions
With tags: TAE

created: 13.08.2018 19:51
updated: 13.08.2018 19:52

refill of 1L 1xTAE with 20ml 50xTAE and 980ml milli Q

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Katharina Polzen
Entry 51/61: -URA plates
In Project: Solutions
With tags: Ura, plates, yeast

created: 14.08.2018 11:57
updated: 14.08.2018 11:59

Poured 3 plates -URA SD plates using 5 mL SD medium and 1ml each of LEU, HIS, TRP and fill up to 50 mL 2% water agar.

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Katharina Polzen
Entry 52/61: Leucine
In Project: Solutions
With tags: Aminoacid, leucine

created: 14.08.2018 12:01
updated: 14.08.2018 12:02

Aminoacid stock solutions for Leucine.

19 mg in 50 mL H₂O MilliQ then sterile filtration.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer
Entry 53/61: refill of 1x TAE
In Project: Solutions
With tags: TAE

created: 14.08.2018 15:24
updated: 14.08.2018 15:26

refill of 1L 1xTAE with 20 ml 50xTAE and 980 ml milli Q

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Susanne Vollmer

created: 15.08.2018 14:40

Entry 54/61: refill of spectomycin stock solution

updated: 15.08.2018 14:44

In Project: Solutions

With tags: spectionmycin

made new spectomycin stock with 400 mg spectomycin and 20 ml milli Q, dissolve and than sterilefiltration, stored at -20 °C

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer
Entry 55/61: dNTP solution
In Project: Solutions
With tags: dNTP

created: 17.08.2018 12:45
updated: 17.08.2018 12:48

preparing dNTP mix with 10 µl of each dNTP (100mM stock, dATP, dTTP, dGTP, dCTP, from Sigma Aldrich) and 60 µl of milli Q
stored at -20°C

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Ylenia Longo
Entry 56/61: IPTG
In Project: Solutions
With tags: IPTG

created: 31.08.2018 10:12
updated: 31.08.2018 10:13

An IPTG stock solution has been prepared with a final concentration of 0.1M.

For this purpose 0.6g of IPTG were added to 25mL of ddH₂O and the tube was inverted until the IPTG was completely dissolved. The final stock solution is sterile filtrated, aliquoted and stored at -20°C.

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Ylenia Longo
Entry 57/61: X-gal in DMSO
In Project: Solutions
With tags: xgal

created: 31.08.2018 10:13
updated: 31.08.2018 10:14

A X-gal solution with a final concentration of 20mg/ml was prepared.

For this purpose 200mg of X-gal were dissolved in 10mL DMSO in a 15mL falcon tube. Afterwards the falcon was vortexed until the powder is completely dissolved.

The stock solution was aliquoted in 1.5mL tubes, wrapped with aluminium foil and stored at -20°C.

Date:	Signed and understood by:
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Date:	Witnessed and understood by:
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Author: Carina Gude

created: 31.08.2018 11:48

Entry 58/61: 1x BG11 and 2xBG11

updated: 31.08.2018 13:51

In Project: Solutions

With tags: BG-11, 1xBG11, 2xBG11

1x BG11

- Fill 1 L bottle with 500 mL ultra pure water.
- Add stock solutions:
 1. 10ml 100x BG11 Stock
 2. 1 ml 1000x Na_2CO_3
 3. 1 ml 1000x $\text{K}_2\text{HPO}_4 \times 3 \text{ H}_2\text{O}$
 4. 10 ml 100x TES-buffer
 5. 1 ml 1000x Trace Metal Mix
- Add ultra pure water to 1 L.
- Autoclave.
- fill up to 1 L with nuclease-free water (milliQ)

Autoclave it directly

Fe(III) and CuSO_4 still need to be added.

2xBG11

- 1 500 ml bottles was filled with 250 ml ultra pure water
Then
 - 10ml 100x BG11 stock
 - 1ml 1000x Na_2CO_3
 - 1ml 1000x $\text{K}_2\text{HPO}_4 \times 3 \text{ H}_2\text{O}$
 - 10ml 100x TES-buffer, pH = 8.0
 - 1ml 1000x Trace Metal Mix
- was added to each bottle.
- Ultra pure water was added to 500ml

Autoclave

Fe(III) and CuSO_4 still need to be added

Date:	Signed and understood by:
Date:	Witnessed and understood by:

Author: Sarah Seyffert

created: 06.09.2018 15:42

Entry 60/61: dNTP

updated: 06.09.2018 15:42

In Project: Solutions

With tags: dNTP

Preparing dNTP mix with 10 µl of each dNTP (100mM stock, dATP, dTTP, dGTP, dCTP, from Sigma Aldrich) and 60 µl of milli Q stored at -20°C

Date:

Signed and understood by:

Date:

Witnessed and understood by:

Author: Susanne Vollmer

created: 04.10.2018 20:33

Entry 61/61: prepare M2 media with phosphite

updated: 04.10.2018 20:43

In Project: Solutions

With tags: M2-Medium, H₃PO₃

To measure if the ptxD construct work, preparation of phosphite but not phosphorus containing M2 media:

- 500 µl of 100x Stock M2
- 50 µl 1000x Stock Na₂CO₃
- 50 µl of 1000x Stock of trace metals
- 500 µl of 100x Stock phosphorous acid (H₃PO₃)
- fill up to 50 ml with milli Q

pH adjustment at nearly 5 (4,95) using KOH and HCL

autoclave

when using it for cyanobacteria add 1 ml Fe(III) and 200 µl CuSO₄ per Liter

preparation of 10x Stock of phosphorous acid:

- add 0,40995g phosphorous acid (H₃PO₃) to a falcon tube
- fill up to 50 ml with milli Q
- sterile filtration

Date:

Signed and understood by:

Date:

Witnessed and understood by: