

iGEM 2016 – SDU	
Title: Terrific Broth (TB)	Date issued: 2016/08/25
SOP number: SOP0031	Review date: 2016/10/11
Version number: 01	Written by: Joel Vej-Nielsen & Jakob Rønning

1. Purpose

High cell density and a high yield protein and plasmid production

2. Area of application

This procedure is valid for all *E. coli* strains

3. Apparatus and equipment

Apparatus/equipment	Location (Room number)	Check points	Criteria for approval/rejection
Autoclave	Chemical room		
Single use plastic			
Weight	Chemical room		
Weigh dishes			

4. Materials and reagents – their shelf life and risk labelling

Name	Components (Concentrations)	Manufacturer / Cat. #	Room	Safety considerations
Distilled water				
Tryptone		Sigma	Chemical room	
Yeast extract		Sigma	Chemical room	
Glycerol			Chemical room	
1L media bottle			Micro storage	
10 x TB phosphate	2.31 g KH_2PO_4 and 12.54 g K_2HPO_4 in 90 ml H_2O , adjust to 100 ml with H_2O .		Chemical room	

5. QC – Quality Control

6. List of other SOPs relevant to this SOP

SOP0001 – ON culture

7. Environmental conditions required

8. Procedure

1. Mix 12g Tryptone, 24 g yeast extract and 4 ml glycerol in 900 ml distilled H₂O.
2. Sterilize by autoclaving and cool down.
3. Adjust volume to 1000 ml with 100 ml with autoclaved solution 10 x TB phosphate (0.17M KH₂PO₄ (2.31 g) and 0.72M K₂HPO₄ (12.54 g)).
4. Store at room temperature until use.

9. Waste handling

Chemical name	Concentration	Type of waste (C, Z...)	Remarks
Weigh dishes			
Once use plastic			

10. Time consumption

- Total-time 3h.
- Hands-on-time 30 min.

11. Scheme of development

Date / Initials	Version No.	Description of changes
16.08.25 / JVN & JR	01	The SOP has been written
16.10.13 / JVN & JR		The SOP has been reviewed

12. Appendixes