



Jul 09, 2024

Terrific Broth Medium

DOI

dx.doi.org/10.17504/protocols.io.x54v9pb24g3e/v1

is Sparrow¹, Steven J Burgess¹

¹UIUC

burgess-lab-uiuc



Steven J Burgess

University of Illinois at Urbana-Champaign

OPEN  ACCESS



DOI: **dx.doi.org/10.17504/protocols.io.x54v9pb24g3e/v1**

Protocol Citation: is Sparrow, Steven J Burgess 2024. Terrific Broth Medium. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.x54v9pb24g3e/v1>

License: This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: January 03, 2024

Last Modified: July 09, 2024

Protocol Integer ID: 92922



Disclaimer

DISCLAIMER – FOR INFORMATIONAL PURPOSES ONLY; USE AT YOUR OWN RISK

The protocol content here is for informational purposes only and does not constitute legal, medical, clinical, or safety advice, or otherwise; content added to **protocols.io** is not peer reviewed and may not have undergone a formal approval of any kind. Information presented in this protocol should not substitute for independent professional judgment, advice, diagnosis, or treatment. Any action you take or refrain from taking using or relying upon the information presented here is strictly at your own risk. You agree that neither the Company nor any of the authors, contributors, administrators, or anyone else associated with **protocols.io**, can be held responsible for your use of the information contained in or linked to this protocol or any of our Sites/Apps and Services.

Abstract

Tartoff, K.D. and Hobbs, C.A. (1987) Improved Media for Growing Plasmid and Cosmid Clones. Bethesda Research Laboratories Focus, 9, 12.

Guidelines

Prepare the stock solutions and autoclave separately before combining when cooled to create TB medium. The reason for this is that Glycerol is believed to react with amines in the Tryptone/Yeast extract via the Malliard reaction, leading to the formation of compounds which

Protocol materials

 Bacto™ Tryptone Life Technologies **VWR International Catalog #211705** Step 1

 BD Bacto™ Yeast Extract **Becton Dickinson (BD) Catalog #212750** Step 1



Prepare stock solutions

1h

- 1 Combine the following components for 1L TB buffer

30m

24 g BD Bacto™ Yeast Extract **Becton Dickinson (BD) Catalog #212750**

20 g Bacto™ Tryptone Life Technologies **VWR International Catalog #211705**

4 mL Glycerol

Make up volume to 900 mL with dH₂O

Autoclave 121 °C 00:30:00

- 2 Prepare 1L of 10x TB Salts (0.17 M KH₂PO₄, 0.72 M K₂HPO₄) by combining the following

30m

23.1 g KH₂PO₄

125.4 g K₂HPO₄

Make up volume to 1 L with dH₂O

Autoclave 121 °C 00:30:00

Prepare medium

1h

- 3 Allow solutions to cool to 60 °C or less then add
 100 mL of 10x TB salts to 900 mL TB buffer.

- 4 Store at Room temperature

Practical use

- 5 We have found that using TB for plasmid preps consistently yields higher than using LB regardless of prep kit used, with half the volume of culture required.

It is not recommended to exceed ~2 mL of saturated TB culture per prep column due to overloading the column and not yielding clean preps.