




Gene to Protein Pvt. Ltd.

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BL21 (DE3 Rosetta) Agar Stab (*E. Coli*)

Cat# STR-003

Pack Size: 1 vial

Storage: 4°C

Avoid freezing and exposure to extreme temperatures.

Kit content:

S.No	Agar Stab	Quantity
1	BL21 (DE3 Rosetta))	1 vial

Introduction

The BL21 (DE3 Rosetta) Agar Stab is an *E. coli* strain specially engineered for the robust expression of recombinant proteins that contain codons rarely used in *E. coli*. This strain carries extra copies of genes encoding tRNAs that recognize such codons, ensuring higher expression levels of proteins from genes of non-bacterial origin. The strain is provided in agar stab form for short term storage.

Product Features

- Application: Suitable for overexpression of recombinant proteins
- Resistance: Chloramphenicol
- The genotype of Rosetta (DE3) cells includes features such as F- ompT hsdSB (r B- m B-) gal dcm (DE3) pRARE (Cam R). The presence of the pRARE plasmid ensures the availability of rare tRNAs.

Revival and Inoculation Procedure

1. Streaking on LB Plate:

- Allow the agar stab to come to room temperature.
- Aseptically take a sterile inoculating loop and insert it into the agar stab to collect a small portion of the culture.
- Gently streak the culture on a plain LB agar +Chloramphenicol plate in a zig-zag pattern to isolate individual colonies.
- Incubate the plate at 37°C overnight or until distinct colonies are visible.

2. Inoculation of Separate Colony:

- Choose a well-isolated colony from the LB agar plate.
- Using a sterile inoculating loop, carefully pick the selected colony.
- Inoculate the colony into a tube containing liquid LB medium with Chloramphenicol for further downstream processes.
- Incubate the culture at 37°C with shaking (typically at 200-225 rpm) until the desired density is reached.

Quality Control

- Tested for absence of contamination and verified for strain identity
- Guaranteed to be free from mycoplasma, virus, and other common contaminants

Note

- Strictly adhere to aseptic techniques to prevent contamination.
- This product is for research use only and is not intended for human or animal diagnostic or therapeutic uses.