



BL21 (DE3) Agar Stab

Cat # STR-002

Pack Size: 1 vial

Storage: 4°C

Avoid freezing and exposure to extreme temperatures.

Kit content:

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

Introduction

Gene to Protein Pvt. Ltd's BL21 (DE3) Agar Stab is a stable form of the E. coli BL21 (DE3) strain, specially formulated for protein expression purposes. This strain contains the De3 lysogen, which enables the controlled expression of proteins under the control of the T7 promoter.

Product Features

- The genotype of BL21 (DE3) includes *fhuA2 [lon] ompT gal (λ DE3) [dcm] ΔhsdS λ DE3 = λ sBamHI ΔEcoRI-B int:: (lacI::PlacUV5::T7 gene1) i21 Δnin5*.
- BL21 (DE3) lacks the lon protease, which helps prevent degradation of heterologous proteins expressed in the cells. Additionally, it is deficient in the outer membrane protease OmpT.
- Application: Suitable for overexpression of recombinant proteins
- Resistance: None (unless transformed with a resistance plasmid)

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 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 the appropriate antibiotics (if needed) 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.