



Gene to Protein Pvt. Ltd.

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800 GENOME, 800 GENETIC



pET 28a Plasmid DNA

Cat # P028

Pack Size: 5 µg

Storage: -20°C.

It is stable for at least 6 months under these storage conditions. Avoid repeated freeze-thaw cycles.

Kit content:

S.No	Plasmid	Concentration
1	pET 28a	5µg (50µL-100ng/µl)

Introduction

pET 28a Plasmid DNA is a versatile cloning vector that allows for efficient expression and purification of recombinant proteins in *E. coli*. Its T7 promoter system, 6xHis-tag, and Kanamycin resistance gene provide strong transcription, easy purification, and selection in *E. coli*. pET 28a Plasmid DNA is a valuable tool for molecular cloning, subcloning, mutagenesis, and site-directed mutagenesis, and is widely used in protein expression and purification research.

Features

- T7 promoter system for strong and efficient transcription of the target gene
- C-terminal 6xHis-tag for easy purification of target protein using IMAC
- Kanamycin resistance gene for selection in *E. coli*
- Multiple cloning sites for easy insertion of target DNA fragment

Applications

- Expression and purification of recombinant proteins in *E. coli*
- Cloning and subcloning of DNA fragments
- Mutagenesis and site-directed mutagenesis

Quality Control

The quality of the pET 28a Plasmid DNA is tested on a lot-to-lot basis to ensure consistent product quality. The Plasmid DNA is analyzed by agarose gel electrophoresis and quantified by Nanodrop.

Protocol for pET-28a Plasmid DNA upon Arrival

1. Upon receipt of the pET 28a Plasmid DNA, immediately store it at -20°C to -80°C to maintain its stability.
2. Thaw the DNA on ice or at room temperature, but avoid repeated freeze-thaw cycles to prevent damage to the DNA.
3. Before use, gently vortex the DNA to ensure it is fully resuspended.
4. Verify the concentration and purity of the DNA by spectrophotometry and/or gel electrophoresis before use.
5. Use sterile techniques and proper biosafety precautions when handling the DNA to avoid contamination or exposure to hazardous materials.
6. Store any unused DNA at -20°C to -80°C for future use.

Note:

- This product is for research use only and is not intended for human or animal diagnostic or therapeutic uses.
- Handling of Plasmid DNA should be performed in a manner consistent with biosafety level 1 or 2 guidelines, as appropriate.
- The price of pET 21b Plasmid DNA is solely for the maintenance and distribution of the Plasmid for research purposes only. Gene to protein Pvt. Ltd does not sell or make any profit from the use of this product.

