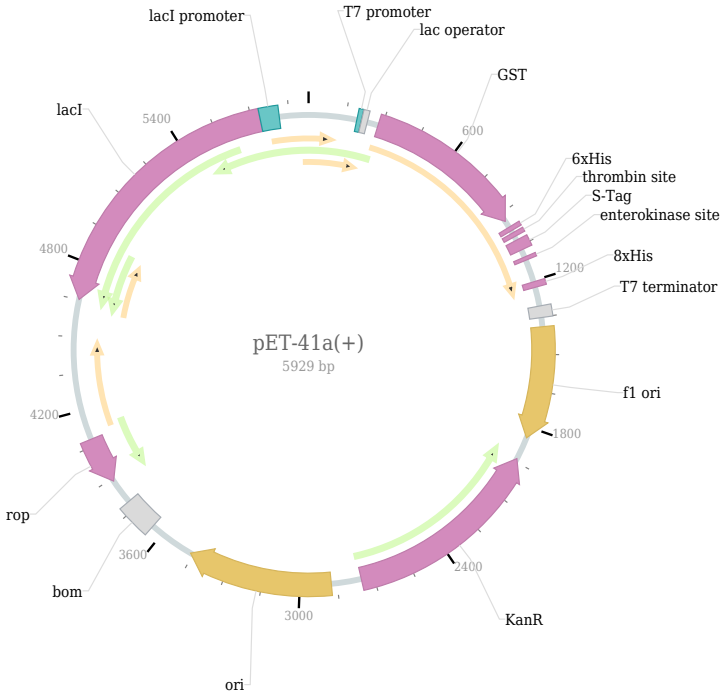
pET-41a(+)

Vector ID	V010975
Antibiotic Resistance	Kanamycin
Length	5929 bp
Vector Type	pET & Duet Vectors (Novagen)

Product Information

Replication Origin	ori
Source/Author	Novagen (EMD Millipore)
Copy Number	High copy number
Growth Strain(s)	DH10B
Growth Temperature	37℃
Comment	The pET-41a(+) is a high-level E. coli protein expression vector (5,929 bp) that utilizes a T7/lac promoter and carries a kanamycin resistance marker. It is designed to produce N-terminal fusion proteins with a 220-amino acid GST tag, which can enhance the solubility of the target protein. The vector also encodes additional tags, including a 6xHis tag, and features cleavage sites for thrombin and enterokinase to allow for tag removal. Its primary application is the cloning and IPTG-inducible expression of recombinant proteins in hosts like E. coli BL21(DE3).

Vector Map



Plasmid Resuspension Protocol

1. Centrifuge at 5,000×g for 5 min.
2. Carefully open the tube and add sterile water to dissolve the DNA: add 20 µl for 5 µg plasmid, and 100 µl for 100 µg plasmid.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin to concentrate the liquid at the bottom. Speed is less than 5000×g.
5. Store the plasmid at -20 ℃.