# pET-21a(+)

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| **Vector ID** | V011023 |
| **Antibiotic Resistance** | Ampicillin |
| **Length** | 5439 bp |
| **Vector Type** | pET & Duet Vectors (Novagen) |

## Product Information

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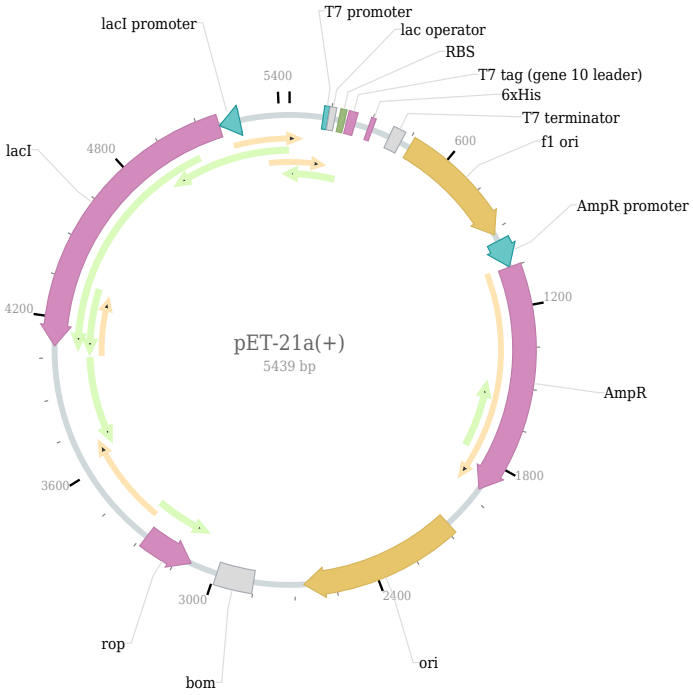
| **Replication Origin** | ori |
| **Source/Author** | Novagen (EMD Millipore) |
| **Copy Number** | High copy number |
| **Growth Strain(s)** | DH10b |
| **Growth Temperature** | 37℃ |
| **Comment** | pET-21a(+) is the classic E. coli T7-based cytoplasmic protein expression vector from Novagen (EMD Millipore / MilliporeSigma), part of the legendary pET system. Its defining feature: your gene is expressed with an in-frame C-terminal 6×His tag for one-step Ni-NTA purification, under the ironclad control of the T7 promoter / lac operator system. It differs from its siblings pET-21b(+), pET-21c(+), pET-21d(+) only in MCS orientation and reading frame — the backbone is identical. And it differs from the pET-24 series in one simple swap: AmpR instead of KanR. |

## 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 ℃.