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Product Information

pT7-FLAG™-1 Expression Vector

Catalog Number **P1118** Storage Temperature –20 °C

TECHNICAL BULLETIN

Product Description

The pT7-FLAG-1 Expression Vector is a 4889 bp *E. coli* expression vector used for cloning and cytoplasmic expression of a properly inserted open reading frame as a N-terminal Met-FLAG fusion protein containing the FLAG® epitope (DYKDDDDK). This vector requires the use of *E. coli* cells containing the DE3 lysogen as a source of the T7 polymerase, such as BL21(DE3)T1R cells, Catalog Number B2935.

The N-terminal FLAG fusion protein may be detected using the Monoclonal ANTI-FLAG® M2, Catalog Number F3165, and purified using the ANTI-FLAG M2 Affinity Gel, Catalog Number A2220.

See the chart under pT7-FLAG-1 Features for map positions of the features in the pT7-FLAG-1 vector.

Reagents Provided

- pT7-FLAG-1 Expression Vector Catalog Number P6742
- pT7-FLAG-1-BAP Control Vector Catalog Number P6992

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

This product ships on dry ice and storage at -20 $^{\circ}\text{C}$ is recommended.

References

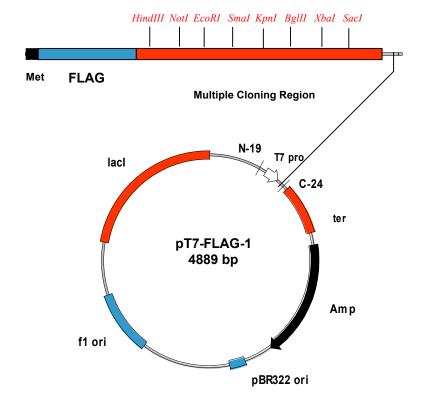
- Hopp, T.V., et al., Bio/Technology, 6, 1204-1210 (1988).
- Studier, F.W. et.al., *Journal of Molecular Biology*, 79, 115-131 (1986).

Academic and Non-Profit Laboratory Assurance Letter

The T7 system is based on technology developed at Brookhaven National Laboratory under contract with the U.S. Department of Energy. BSA will grant a non-exclusive license for the use of this technology, including the enclosed material, based upon the following assurances:

- 1. These materials are to be used for noncommercial research purposes only. A separate license is required for any commercial use, including use of these materials for research purposes or production purposes by any commercial entity. Information about commercial licenses may be obtained from the Office of Economic Development and Technology Transfer, Bookhaven National Laboratory, Bldg. 475D, P.O. Box 5000, Upton, New York 11973-5000, telephone (516)-344-7134.
- 2. No materials that contain the cloned copy of T7 gene 1, the gene for T7 RNA polymerase, may be distributed further to third parties outside of your laboratory, unless the recipient receives a copy of this license and agrees to be bound by its terms. This limitation applies to strains of BL21(DE3), BL21(DE3)pLysS, and BL21(DE3pLysE, and any derivatives you may make of them.

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pT7-FLAG-1 Features

| Feature | Map Position | | |
|--------------|--------------|--|--|
| pT7 Promoter | 436-452 | | |
| FLAG | 521-544 | | |
| MCS | 542-593 | | |
| T1/T2 ter. | 634-1004 | | |
| Amp | 1096-1956 | | |
| pBR322 ori | 2168-2287 | | |
| f1 ori | 2951-3414 | | |
| lacl | 3807-4889 | | |

Sequence of the Multiple Cloning Region

Sequence Range: 515 to 598 bp

| Translational initiation | Hind III | Not I | EcoR I |
|--|---------------------------|---------------|--------------------|
| ACC <u>ATG</u> GAC TAC AAA GAC GAT GAC GAC TGG TAC CTG ATG TTT CTG CTA CTG CTG ASP Tyr Lys Asp Asp Asp Asp | T TC $GA \uparrow A$ CG | | |
| ←——— FLAG Coding Sequence — | -——→ ←———— Multip | le Cloning Ro | egion $ ightarrow$ |
| Smal Kpnl Bgill Xbal | Sac I | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| ←—————— Multiple Cloning Region – | → | | |

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