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REFERENCES

1. **Adhya, S., M. Gottesman, and B. de Crombrughe.** 1974. Release of polarity in *Escherichia coli* by gene *N* of phage λ : termination and antitermination of transcription. Proc. Nat. Acad. Sci. USA **71**:2534-2538.
2. **Allgood, N. D., and T. J. Silhavy.** 1988. Illegitimate recombination in bacteria, pp. 309-330. *In*: R. Kucherlapati and G.R. Smith (eds.), Genetic Recombination. American Society for Microbiology, Washington D.C.
3. **Baker, T. A., A. D. Grossman, and C. A. Gross.** 1984. A gene regulating the heat-shock response in *Escherichia coli* affects proteolysis. Proc. Natl. Acad. Sci. USA **81**:6779-6783.
4. **Belev, T. N., M. Singh, and J. E. G. McCarthy.** 1991. A fully modular vector system for the optimization of gene expression in *Escherichia coli*. Plasmid **26**:147-150.
5. **Bernard, H.-U., and D. R. Hersinski.** 1979. Use of the lambda phage promoter p_L to promote gene expression in hybrid plasmid cloning vehicles. Methods Enzymol. **68**:482-492.
6. **Brammar, W. J.** 1977. The construction *in vitro* and exploitation of transducing derivatives of bacteriophage λ . Biochemical Society Transactions **5**:1633-1652.

7. **Brewer, B. J.** 1988. When polymerases collide: replication and the transcriptional organization of *E. coli*. *Cell* **53**:679-686.
8. **Bøvre, K., and W. Szybalski.** 1969. Pattern of convergent and overlapping transcription within the *b2* region of coliphage λ . *Virology* **38**:614-626.
9. **Buell, G., M.-E. Schultz, G. Selzer, A. Chollet, N. R. Movva, D. Semond, S. Escanez, and E. Kawashima.** 1985. Optimizing the expression in *E. coli* of a synthetic gene encoding somatomedin-C (IGF-I). *Nucleic Acids Res.* **13**:1923-1938.
10. **Burt, D. W., and W. J. Brammar.** 1982. Transcriptional termination sites in the *b2* region of bacteriophage lambda that are unresponsive to antitermination. *Mol. Gen. Genet.* **185**:462-467.
11. **Butler, E. T., and M. J. Chamberlin.** 1982. Bacteriophage SP6-specific RNA polymerase. I. Isolation and characterization of the enzyme. *J. Biol. Chem.* **257**:5772-5778.
12. **Campbell, A.** 1962. Episomes. *Adv. Genet.* **11**:101-145.
13. **Castellazzi, M., P. Brachet, and H. Eisen.** 1972. Isolation and characterization of deletions in bacteriophage lambda residing as prophage in *E. coli*. *Mol. Gen. Genet.* **117**:211-218.

14. **Chen, W., S. Tabor, and K. Struhl.** 1987. Distinguishing between mechanisms of eukaryotic transcriptional activation with bacteriophage T7 RNA polymerase. *Cell* **50**:1047-1055.
15. **Cohen, S. N., A. C. Y. Chang, H. W. Boyer, and R. Helling.** 1973. Construction of biologically functional plasmids *in vitro*. *Proc. Natl. Acad. Sci. USA* **70**:3240-3244.
16. **Coleman, J., P. J. Green, and M. Inouye.** 1984. The use of RNAs complementary to specific mRNAs to regulate the expression of individual bacterial genes. *Cell* **37**:429-436.
17. **Davanloo, P., A. H. Rosenberg, J. J. Dunn, and F. W. Studier.** 1984. Cloning and expression of the gene for bacteriophage T7 RNA polymerase. *Proc. Natl. Acad. USA* **81**:2035-2039.
18. **Davison, J., W. J. Brammar, and F. Brunel.** 1974. Quantitative aspects of gene expression in a λ -*trp* fusion operon, *Molec. Gen. Genet.* **130**:9-20.
19. **Dubendorff, J. W., and F. W. Studier.** 1991. Controlling basal expression in an inducible T7 expression system by blocking the target T7 promoter with *lac* repressor. *J. Mol. Biol.* **219**:45-49.
20. **Dunn, J. J., B. Krippel, K. E. Bernstein, H. Westphal, and F. W. Studier.** 1988. Targeting bacteriophage T7 RNA polymerase to the mammalian nucleus. *Gene* **68**:259-266.

21. **Duvoisin, R., D. Belin, and H. M. Krisch.** 1986. A plasmid expression vector that permits stabilization of both mRNAs and proteins encoded by cloned genes. *Gene* **45**:193-201.
22. **Edlind, T., R. Young, R. Eller, T. Hernandez, and G. Ihler.** 1986. Plasmid expression vector using the lambda late promoter. *Plasmid* **15**:242-244.
23. **Elledge, S. J., and R. W. Davis.** 1989. Position and density effects on repression by stationary and mobile DNA-binding proteins. *Genes & Develop.* **3**:185-197.
24. **Elledge, S. J., P. Sugiono, L. Guarente, and R. W. Davis.** 1989. Genetic selection for genes encoding sequence-specific DNA-binding proteins. *Proc. Natl. Acad. Sci. USA* **86**:3689-3693.
25. **Folkmanis, A., Y. Takeda, J. Simuth, G. Gussin, and H. Echols.** 1976. Purification and properties of a DNA-binding protein with characteristics expected for the Cro protein of bacteriophage λ , a repressor essential for lytic growth. *Proc. Natl. Acad. Sci. USA* **73**:2249-2253.
26. **Folkmanis, A., W. Maltzman, R. Mellon, A. Skalka, and H. Echols.** 1977. The essential role of the *cro* gene in lytic development by bacteriophage λ . *Virology* **81**:352-362.

27. **Franklin, N. C.** 1971. Illegitimate recombination, pp. 175-194. *In*: A.D. Hershey, (ed.), The Bacteriophage Lambda. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.
28. **Franklin, N. C.** 1971. The *N* operon of lambda: extent and regulation as observed in fusions to the tryptophan operon of *Escherichia coli*, pp. 621-638. *In*: A.D. Hershey, (ed.), The Bacteriophage Lambda, Cold Spring Harbor Laboratories, Cold Spring Harbor, New York.
29. **Franklin, N. C.** 1974. Altered reading of genetic signals fused to the *N* operon of bacteriophage λ : Genetic evidence for modification of polymerase by the protein product of the *N* gene. *J. Mol. Biol.* **89**:33-48.
30. **Franklin, N.C.** 1978. Genetic fusions for operon analysis. *Annu. Rev. Genet.* **12**:193-221.
31. **Fuerst, T. R., E. G. Niles, F. Studier, and B. Moss.** 1986. Eukaryotic transient-expression system based on recombinant vaccinia virus that synthesizes T7 RNA polymerase. *Proc. Natl. Acad. Sci. USA* **83**:8122-8126.
32. **Gibson, R. M., and J. Errington.** 1992. A novel *Bacillus subtilis* expression vector based on bacteriophage phi105. *Gene* **121**:137-142.
33. **Gottesman, M., S. Adhya, and A. Das.** 1980. Transcription antitermination by bacteriophage λ *N*- gene product. *J. Mol. Biol.* **140**:57-75.

34. **Harris, A. W., D. W. A. Mount, C. R. Fuerst, and L. Siminovitch.** 1967. Mutations in bacteriophage λ affecting host cell lysis. *Virology* **32**:553-569.
35. **Hedgpeth, J., M. Ballivet, and H. Eisen.** 1978. Lambda phage promoter used to enhance expression of a plasmid-cloned gene. *Mol. Gen. Genet.* **163**:197-203.
36. **Heinzelmann, E., G. Kienzlen, S. Kaspar, J. Recktenwald, W. Wohlleben, and D. Schwartz.** 2001. The phosphoinomethylmalate isomerase gene *pmi*, encoding an aconitase-like enzyme, is involved in the synthesis of phosphinothricin tripeptide in *Streptomyces viridochromogenes*. *Appl. Environ. Microbiol.* **67**:3603-3609.
37. **Honigman, A.** 1981. Cloning and characterisation of a transcription termination signal in bacteriophage λ unresponsive to the *N* gene product. *Gene* **13**:299-309.
38. **Hopkins, A. S., N. E. Murray, and W. J. Brammar.** 1976. Characterisation of λ *trp*-transducing bacteriophages made *in vitro*. *J. Mol. Biol.* **107**:549-569.
39. **Inouye, M., N. Arnheim, and R. Sternglanz.** 1973. Bacteriophage T7 lysozyme is an N-acetylmuramyl-L-alanine amidase. *J. Biol. Chem.* **248**:7247-7252.
40. **Iserentant, D., and W. Fiers.** 1980. Secondary structure of mRNA and efficiency of translation initiation. *Gene* **9**:1-12.

41. **Jacobs, W. R., R. Udani, R. Barletta, J. Chan, G. Kalkut, G. Sonse, T. Kieser, G. Sarkis, G. F. Hatfull, and B. R. Bloom.** 1993. Rapid assessment of drug susceptibilities of *Mycobacterium tuberculosis* by means of luciferase reporter phages. *Science* **260**:819-822.
42. **Jay, E., J. Tommens, L. Pomeroy-Cloney, D. MacKnight, C. Lutz-Wallace, P. Wishart, D. Harrison, W.-Y. Lui, V. Asundi, M. Dawood, and F. Joy.** 1984. High-level expression of a chemically synthesized gene for human interferon- γ using a prokaryotic expression vector. *Proc. Natl. Acad. Sci. USA* **81**:2290-2294.
43. **Kelley, W. S., K. Chalmers, and N. E. Murray.** 1977. Isolation and characterisation of a λ *polA* transducing phage. *Proc. Natl. Acad. Sci. USA* **74**:5632-5636.
44. **Kong, H., L.-F. Lin, N. Porter, S. Stickel, D. Byrd, J. Posfai, and R. J. Roberts.** 2000. Functional analysis of putative restriction-modification system genes in the *Helicobacter pylori* J99 genome. *Nucl. Acids Res.* **28**:3216-3223.
45. **Krell, K., M. E. Gottesman, J. S. Parks, and M. A. Eisenberg.** 1972. Escape synthesis of the biotin operon is induced $\lambda b2$ lysogens. *J. Mol. Biol.* **68**:69-82.
46. **Krinke, L., M. Mahoney, and D. L. Wulff.** 1991. The role of the OOP antisense RNA in coliphage development. *Mol. Microbiol.* **5**:1265-1272.

47. **Labes, G., M. Bibb, and W. Wohlleben.** 1997. Isolation and characterization of a strong promoter element from *Streptomyces ghanaensis* phage I19 using the gentamicin resistance gene (aacC1) of Tn1696 as reporter. *Microbiol.* **143**:1503-1512.

48. **Lautenberger, J. A., D. Court, and T. S. Papas.** 1983. High-level expression in *Escherichia coli* of the carboxyl-terminal sequences of the avian myelocytomatosis virus (MC29) *v-myc* protein. *Gene* **23**:75-84.

49. **LaVallie, E. R., E. A. Di Blasio, S. Kovacic, K. L. Grant, P. E. Schendel, and J. J. McCoy.** 1993. A thioredoxin gene fusion expression system that circumvents inclusion body formation in the *E. coli* cytoplasm. *Bio/Technology* **11**:187-193.

50. **Leung, Y-C., and J. Errington.** 1994. Characterization of an insertion in the phage phi105 genome that blocks host cell lysis and provides strong expression of heterologous genes. *Gene* **154**:1-6.

51. **Love, C.A., P. E. Lilley, and N. E. Dixon.** 1996. Stable high-copy number bacteriophage λ promoter vectors for the overproduction of proteins in *E. coli*. *Gene* **176**:49-53.

52. **McAllister, W. T., C. Morris, A. H. Rosenberg, and W. E. Studier.** 1981. Utilisation of bacteriophage T7 late promoters in recombinant plasmids during infection. *J. Molec. Biol.* **153**:527-544.

53. **McMacken, R., N. Mantei, B. Butler, A. Joyner, and H. Echols.** 1970. Effect of mutations in the *cII* and *cIII* genes of bacteriophage λ on macromolecular synthesis in infected cells. *J. Mol. Biol.* **49**:639-655.
54. **Melton, D. A., P. D. Krieg, M. R. Rebagliati, T. Maniatis, K. Zinn, and M. R. Green.** 1984. Efficient *in vitro* synthesis of biologically active RNA and RNA hybridization probes from plasmids containing a bacteriophage SP6 promoter. *Nucl. Acids Res.* **12**:7035-7056.
55. **Midgley, C. A., and N. E. Murray.** 1985. T4 polynucleotide kinase; cloning of the gene (*pseT*) and amplification of its product. *EMBO J.* **19**:2695-2703.
56. **Mieschendahl, M., T. Petri, and U. Hänggi.** 1986. A novel prophage independent *trp*-regulated lambda *p_L* expression system. *Bio/technology* **4**:802-808.
57. **Minkley, E. G., A. T. Leney, J. B. Bodner, M. P. Panicker, and W. E. Brown.** 1984. *Escherichia coli* DNA polymerase I. Construction of a *polA* plasmid for amplification and an improved purification scheme. *J. Biol. Chem.* **259**:10386-10392.
58. **Moffatt, B. A., and F. W. Studier.** 1987. T7 lysozyme inhibits transcription by T7 RNA polymerase. *Cell* **49**:221-227.
59. **Moir, A., and W. J. Brammar.** 1976. The use of specialised transducing phages in the amplification of enzyme production. *Molec. Gen. Genet.* **149**:87-99.

60. **Müller-Hill, B., L. Crapo, and W. Gilbert.** 1968. Mutants that make more *lac* repressor. Proc. Natl. Acad. Sci. USA **59**:1259-1264.
61. **Müller-Hill, B.** 1975. *Lac* repressor and *lac* operator. Prog. Biophys. Mol. Biol. **30**:227-252.
62. **Murray, N. E. and K. Murray.** 1974. Manipulation of restriction targets in phage λ to form receptor chromosomes for DNA fragments. Nature **252**:476-481.
63. **Murray, N. E., S. A. Bruce, and K. Murray.** 1979. Molecular cloning of the DNA ligase gene from bacteriophage T4. II. Amplification and purification of the gene product. J. Mol. Biol. **132**:493-505.
64. **Murray, N. E., and W. S. Kelley.** 1979. Characterisation of λ *polA* transducing phages; effective expression of the *E. coli polA* gene. Mol. Gen. Genet. **175**:77-87.
65. **O'Connor, C. D., and K. N. Timmis.** 1987. Highly repressible expression system for cloning genes that specify potentially toxic proteins. J. Bacteriol. **169**:4457-4462.
66. **Olins, P. O., C. S. Devine, S. H. Rangwala, and K. S. Kavka.** 1988. The T7 phage gene *10* leader RNA, a ribosome-binding site that dramatically enhances the expression of foreign genes in *E. coli*. Gene **73**:227-235.

67. **Panasenko, S. N., J. R. Cameron, R. W. Davis, and I. R. Lehman.** 1977. Five-hundred fold overproduction of DNA ligase after induction of a hybrid lambda lysogen constructed *in vitro*. *Science* **196**:188-189.
68. **Parro, V., C. Vives, F. Godia, and R. P. Mellado.** 1997. Overproduction of an agarase of bacterial origin. *J. Biotech.* **55**:59-66.
69. **Patterson, T. A., N. Costantino, S. Dasgupta, and D. L. Court.** 1993. Improved hosts for regulated expression of genes from p_L plasmid vectors. *Gene* **132**:83-87.
70. **Pero, J.** 1971. Deletion mapping of the site of action of the *tof* gene product, pp. 599-608. *In*: A.D. Hershey, (ed.), *The Bacteriophage Lambda*. Cold Spring Harbor Laboratories, Cold Spring Harbor, New York.
71. **Petrenko, L. A., I. P. Gileva, and V. V. Kravchenko.** 1989. Expression vector with two-step control by the $cI-p_R-Q-p_R'qut-t'_R$ module of coliphage lambda. *Gene* **78**:85-91.
72. **Pfeifer, V., G. J. Nicholson, J. Ries, J. Recktenwald, A. B. Schefer, R. Shawky, J. Schröder, W. Wohlleben, and S. Pelzer.** 2001. A polyketide synthase in glycopeptide biosynthesis: the biosynthesis of the non-proteinogenic amino acid (S)-3, 5-dihydroxyphenylglycine. *J. Biol. Chem.* **276**:38370-38377.

73. **Ptashne, M.** 1992. In: *The Genetic Switch*. Published by Cell Press and Blackwell Scientific Publications.
74. **Pulido, D., A. Jiménez, M. S. Salas, and R. P. Mellado.** 1986. *Bacillus subtilis* phage Ø29 main promoters are effectively recognized *in vivo* by the *Streptomyces lividans* RNAP. *Gene* **49**: 377-382.
75. **Queen, C.** 1983. A vector that uses phage signals for efficient synthesis of proteins in *Escherichia coli*. *J. Mol. Appl. Genet.* **2**:1-10.
76. **Rambach, A., and P. Tiollais.** 1974. Bacteriophage λ having *EcoRI* endonuclease sites only in the non-essential region of the genome. *Proc. Natl. Acad. Sci. USA* **71**:3927-3930.
77. **Remaut, E., P. Stanssens, and W. Fiers.** 1981. Plasmid vectors for high-efficiency expression controlled by the p_L promoter of coliphage lambda. *Gene* **15**:81-93.
78. **Roberts, T. M., R. Kacich, and M. Ptashne.** 1979. A general method for maximizing the expression of a cloned gene. *Proc. Natl. Acad. Sci. USA* **76**:760-764.
79. **Rosenberg, M., Y.-S. Ho, and A. Shatzman.** 1983. The use of pKC30 and its derivatives for controlled expression of genes, *Methods in Enzymol.* **101**:123-38.

80. **Rosenberg, A. H., B. N. Lade, D.-S. Chui, S.-W. Lin, J. J. Dunn, and F. W. Studier.** 1987. Vectors for selective expression of cloned DNAs by T7 RNA polymerase. *Gene* **56**:125-135.
81. **Salstrom, J. S., and W. Szybalski.** 1978. Coliphage λnut_L^- : a unique class of mutants defective in the site of gene *N* product utilization for antitermination of leftward transcription. *J. Mol. Biol.* **124**:195-221.
82. **Sarkis, G., W. J. Jacobs, Jr., and G. F. Hatfull.** 1995. L5 luciferase reporter mycobacteriophages: A sensitive tool for the detection and assay of live mycobacteria. *Mol. Microbiol.* **15**:1055-1067.
83. **Segawa, T., and F. Imamoto.** 1974. Diversity of regulation of genetic transcription. II Specific relaxation of polarity in read-through transcription of the translocated *trp* operon in bacteriophage λtrp . *J. Mol. Biol.* **87**:741-754.
84. **Sektas, M., and W. Szybalski.** 2002. Novel single-copy pETcocoTM vector with dual controls for amplification and expression. *in* *Innovations* **14**:6.
85. **Shatzman, A. R., and Rosenberg, M.** 1987. Expression, identification and characterization of recombinant gene products in *Escherichia coli*. *Methods Enzymol.* **152**: 661-673.

86. **Simon, L.** 1994. T4-induced inhibition of proteolysis, pp.382-384. *In*: J. Karam (ed.), *Escherichia coli* in Molecular Biology of Bacteriophage T4. American Society for Microbiology, Washington, D.C.
87. **Studier, F. W.** 1991. Use of bacteriophage T7 lysozyme to improve an inducible T7 expression system. *J. Mol. Biol.* **219**:37-44.
88. **Studier, F. W., and B. A. Moffatt.** 1986. Use of bacteriophage T7 polymerase to direct selective high-level expression of cloned genes. *J. Mol. Biol.* **189**:113-130.
89. **Studier, F. W., A. H. Rosenberg, J. J. Dunn, and J. W. Dubendorff.** 1990. Use of T7 RNA polymerase to direct expression of cloned genes. *Method Enzymol.* **185**:60-89.
90. **Stueber, D., L. Ibrahimi, D. Cutler, B. Dobberstein, and H. Bujard.** 1984. A novel *in vitro* transcription-translation system: accurate and efficient synthesis of single proteins from cloned DNA sequences. *EMBO J.* **3**: 3143-3148.
91. **Tabor, S., and C. C. Richardson.** 1985. A bacteriophage T7 RNA polymerase/promoter system for controlled exclusive expression of specific genes. *Proc. Natl. Acad. Sci. USA* **82**:1074-1078.
92. **Thomas, M., J. R. Cameron, and R. W. Davis.** 1974. Viable molecular hybrids of bacteriophage lambda and eukaryotic DNA. *Proc. Natl. Acad. Sci. USA* **71**:4579-4583.

93. **Thornewell, S. J., A. K. East, and J. Errington.** 1993. An efficient expression and secretion system based on *Bacillus subtilis* phage Ø105 and its use for the production of *B. cereus* β -lactamase I. *Gene* **133**:47-53.

94. **Vagner, V., E. Dervyn, and S. D. Ehrlich.** 1998. A vector for systematic gene inactivation in *Bacillus subtilis*. *Microbiol.* **144**:3097-3104.

95. **Ward, D. F., and N. E. Murray.** 1979. Convergent transcription in bacteriophage λ - Interference with gene expression. *J. Mol. Biol.* **133**:249-266.

96. **Weisberg, R. A., and S. Adhya.** 1977. Illegitimate recombination in bacteria and bacteriophage. *Annu. Rev. Genet.* **11**:451-473.

97. **Wild, J., and W. Szybalski.** 2004. Copy-control tightly regulated expression vectors based on pBA/oriV, pp.155-167. *In*: P. Balbas and A. Lorence (eds), *Recombinant Gene Expression Reviews and Protocols. Methods in Molecular Biology, Vol. 267*, (J.M. Walker, Series Editor), Humana Press Inc., Totowa, New Jersey.

98. **Yansura, D. G., and D. J. Henner.** 1984. Use of the *Escherichia coli lac* repressor and operator to control gene expression in *Bacillus subtilis*. *Proc. Natl. Acad. Sci. USA* **81**:439-443.

99. **Yarnell, W. S., and J. W. Roberts.** 1992. The phage λ gene *Q* transcription antiterminator binds DNA in the late gene promoter as it modifies RNA polymerase. *Cell* **69**: 1181-1189.