

T7

39,937 base pairs
 GenBank Accession #: NC_001604
 Not currently available from NEB.

There are no restriction sites for the following enzymes: Afel, Apal, AscI, AsiSI, BamHI, BsiWI, BspEI, EagI, Eco53KI, EcoRI, EcoRV, FseI, HindIII, I-CeuI, I-SceI, NaeI, NgoMIV, NotI, PI-PspI, PI-SceI, PaeR7I, PspOMI, PspXI, PstI, PvuI, SacI, SacII, Sall, SbfI, SexAI, SgrAI, SmaI, SphI, SrfI(x), TiiI, TspMI, XhoI, XmaI
 (x) = enzyme not available from NEB

T7 is a lytic *E. coli* bacteriophage with a linear, double-stranded DNA genome containing 56 genes (1-4). Genes are classified as early or late based on the order of transcription in the infected host and their dependence on host or phage RNA polymerase.

Numbering of the sequence begins at the first (5'-most) base of the left end (bottom of the diagram below) and continues rightward (upward) in the direction of early to late genes. The map below shows the positions of all known ORFs larger than 200 codons.

Enzymes with unique restriction sites are shown in **bold** type, and enzymes with two restriction sites are shown in regular type. Location of sites of all NEB restriction enzymes can be found on the NEB web site (choose Technical Reference > DNA Sequences and Maps). Restriction site coordinates refer to the position of the 5'-most base on the top strand in each recognition sequence.

References

- (1) Oakley, J.L. and Coleman, J.E. (1977) *Proc. Natl. Acad. Sci. USA*, 74, 4266-4270.
- (2) Stahl, S.J. and Zinn, K. (1981) *J. Mol. Biol.*, 148, 481-485.
- (3) Dunn, J.J. and Studier, F.W. (1981) *J. Mol. Biol.*, 148, 303-330.
- (4) Dunn, J.J. and Studier, F.W. (1983) *J. Mol. Biol.*, 166, 477-535.

