

# pACYC177

3,941 base pairs  
GenBank Accession #: X06402

pACYC177 is available as a transformant of ER2420 (#E4151S) at no charge when shipped with an order or for the cost of shipping if ordered separately.

There are no restriction sites for the following enzymes: AarI(x), Acc65I, AflII, AflIII, AleI, ApaI, AscI, AvrII, BaeI, BclI, BfuAI, BglII, BlpI, BmgBI, BsaAI, BsaBI, BseYI, BsiWI, BspEI, BspMI, BspQI, BsrGI, BssHII, BstAPI, BstXI, Bsu36I, BtgZI, CspCI, EagI, EcoRI, EcoRV, FseI, FspAI(x), HpaI, I-CeuI, I-SceI, KasI, KpnI, MfeI, MluI, MscI, NaeI, NarI, NcoI, NdeI, NgoMIV, NotI, P1-PspI, P1-SceI, PacI, PciI, PflFI, PmeI, PmlI, PpuMI, PshAI, PspOMI, PvuII, RsrII, SacI, Sall, SanDI(x), SapI, SbfI, SexAI, SfiI, SfoI, SnaBI, SpeI, SphI, SrfI(x), StyI, SwaI, Tth111I, XbaI, XcmI.

(x) = enzyme not available from NEB

pACYC177 is an *E. coli* plasmid cloning vector containing the p15A origin of replication (1-4). This allows pACYC177 to coexist in cells with plasmids of the ColE1 compatibility group (e.g., pBR322, pUC19). It is a low copy number vector, at about 15 copies per cell (5), but can be amplified with chloramphenicol or spectinomycin.

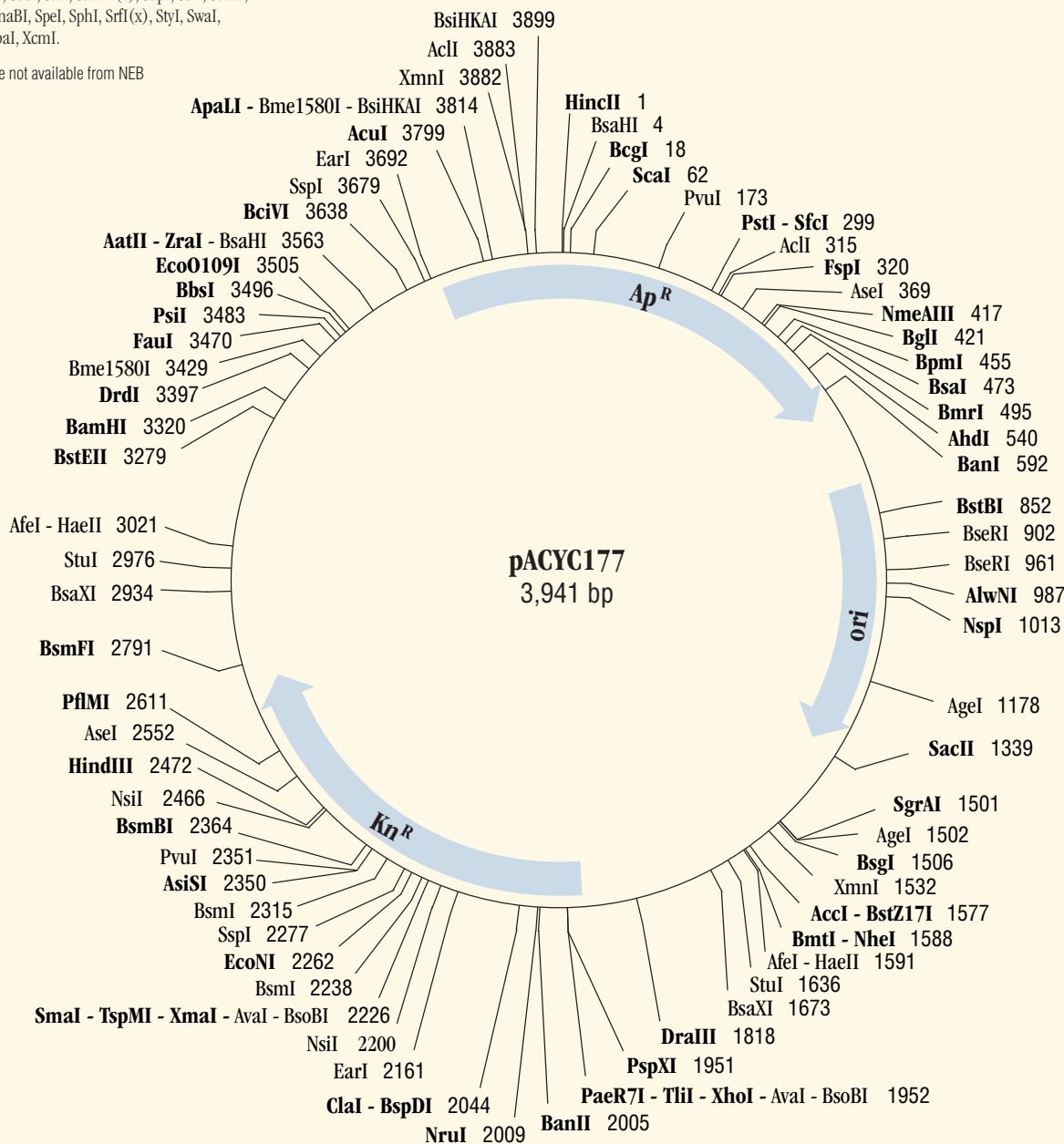
Enzymes with unique restriction sites are shown in **bold** type and enzymes with two restriction sites are shown in regular type. Location of sites of all NEB restriction enzymes can be found on the NEB web site (choose Technical Reference > DNA Sequences and Maps). Restriction site coordinates refer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

Open reading frame (ORF) coordinates are in the form "translational start – translational stop"; numbers refer to positions on the top (clockwise) strand, regardless of the direction of transcription and include the start and stop codons.

Origin of replication coordinates include the region from the -35 promoter sequence of the RNAII transcript to the RNA/DNA switch point. *bla* (Ap<sup>R</sup>) gene coordinates include the signal sequence.

Feature	Coordinates	Source
<i>bla</i> (Ap <sup>R</sup> )	3699-618 (cw)	<i>Tn3</i>
<i>aph</i> (3')- <i>la</i> (Kn <sup>R</sup> )	1923-2738	<i>Tn903</i>
ori	783-1328	p15A

ori = origin of replication  
Ap = ampicillin, Kn = kanamycin  
(cw) = clockwise



## References

- Chang, A.C.Y. and Cohen, S.N. (1978) *J. Bacteriol.* 134, 1141–1156.
- Rose, R.E. (1988) *Nucleic Acids Res.* 16, 356.
- Mok, Y.K., Clark, D.R., Kam, K.M. and Shaw, P.C. (1991) *Nucleic Acids Res.* 19, 2321–2323.
- Selzer, G., Som, T., Itoh, T. and Tomizawa, J.-i. (1983) *Cell* 32, 119–129.
- Sambrook, J., Fritsch, E.F. and Maniatis, T. (1989) *Molecular Cloning: A Laboratory Manual*, 2nd ed. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.