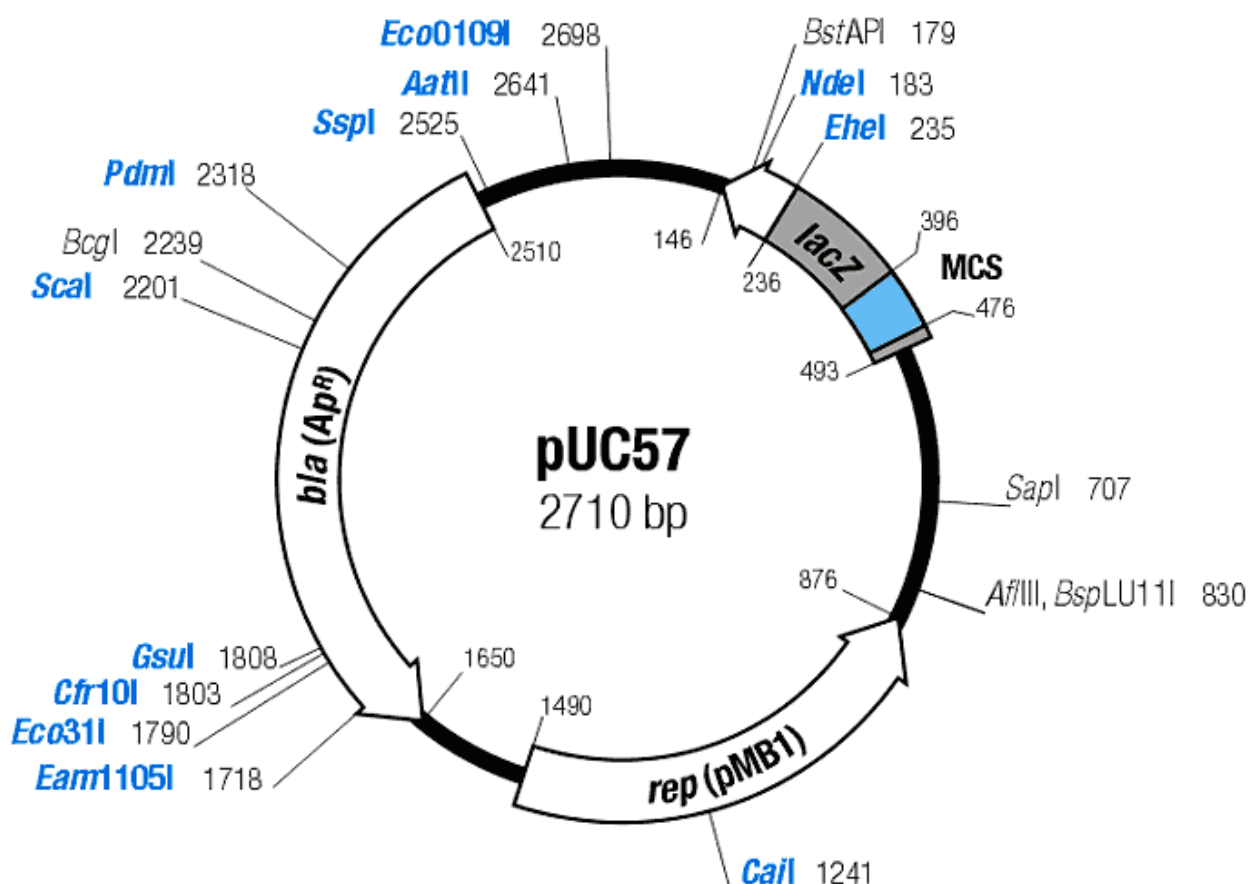


pUC57

Plasmid pUC57, 2710 bp in length, is a derivative of pUC19. pUC57 MCS contains 6 restriction sites with protruding 3'-ends, which are resistant to E.coli exonuclease III. This vector is designed for cloning and generation of ExoIII deletions. The exact position of genetic elements is shown on the map (termination codons included). DNA replication initiates at position 890 (+/- 1) and proceeds in indicated direction. The bla gene nucleotides 2510-2442 (compl. strand) code for a single peptide.



Multiple Cloning Sites

M13/pUC sequencing primer (-20), 17-mer 396 EcoRI XapI Ec136II SacI Acc65I KpnI Bsp68I Mph1103I XbaI EcoRV BamHI Cfr9I Eco88I SmaI ApaI Bsp120I HincII SalI XmiI PstI Eco147I PaeI HindIII 476
 5' G TAA AAC GAC GGC CAG T GA ATT CGA GCT CGG TAC CTC GCG AAT GCA TCT AGA TAT CGG ATC CCG GGC CCG TCG ACT GCA GAG GCC TGC ATG CAA GCT TGG
 3' C ATT TTG CTG CCG GTC ACT TAA GCT CGA GCC ATG GAG CGC TTA CGT AGA TCT ATA GCC TAG GGC CCG GGC AGC TGA CGT CTC CGG ACG TAC GTT CGA Acc
 LacZ ← Val Val Ala Leu Ser Asn Ser Ser Pro Val Glu Arg Ile Cys Arg Ser Ile Pro Asp Arg Ala Arg Arg Ser Cys Leu Gly Ala His Leu Ser Pro

 CGT AAT CAT GGT CAT AGC TGT TTC CTG 3'
 GCA TTA GTA CCA GTA TCG ACA AAG GAC 5'
 Thr Ile Met Thr Met
 M13/pUC reverse sequencing primer (-20), 17-mer

Additional Information:

CAP protein binding site - 615-578 (compl. strand);
mRNA (LacZ) starts at nt position 531 (compl. strand);
lac repressor binding site - 531-511 (compl. strand).

There are no restriction sites in pUC57 DNA for the following enzymes:

AarI, Abel, AcaI, AccIII, AclI, Adel, Afa24RI, Afel, AfIII, AgeI, AhyAI, AleI, Alol, Alol', AoslIII, Apel, Apu16I, AscI, AsiSI, Atel, AtuCI, AvrII, BaeI, BaeI', Ball, Bbf7411I, BbsI, BbvCI, BceI, BclI, Bco102II, Bco63I, BcuI, BglIII, BlnI, BmeTI, BmgBI, BmtI, BoxI, BplI, BplI', Bpu10I, Bpu1268I, BsaAI, BsaBI, BsaFI, BsaKI, BscEI, BscJI, Bse59I, BseRI, BsgI, BsiWI, BsmFI, BsmGI, BsoDI, Bsp19I, Bsp87I, BspDI, BspEI, BspGI, BspLU11III, BspMI, BsrBRI, BsrGI, BssHII, Bst1107I, Bst224I, Bst29I, Bst98I, BstBI, BstEII, BstHPI, BstXI, BstZ17I, Bsu36I, BsuMI, BtgI, BtrI, CciNI, CfrAI, ClaI, CspI, Csp45I, DraIII, DrdII, DsaI, EagI, EacI, EciAI, Eco47III, Eco52I, Eco72I, EcoAI, EcoBI, EcoDI, EcoDXXI, EcoDR3, EcoEI, EcoNI, EcoR124I, EcoR124II, EcoRD3, Fall, Fall', FinI, FseI, FspAI, FsuI, HpaI, M.Mxa879I, MfeI, Mlu1106I, Mlu113I, MluI, MscI, Msp20I, MunI, NaeI, NcoI, NcrI, NgoMIV, NheI, NotI, PacI, Paul, PfiMI, PfuI, PinAI, PmeI, PmlI, Ppu6I, PpuMI, PshAI, PstI, PstI', RleAI, RsrII, SacI, SanDI, SauLPI, SbfI, ScfI, SdiI, SexAI, SfiI, SgfI, SgrAI, SmaAI, SnaI, SnaBI, SpeI, SrfI, Sse232I, Sse8387I, Sse8647I, Styl, StySKI, StySQ, SwaI, TaqII, Tth111I, Uba1221I, Van91I, XcmI, XhoI, XmaIII.

Enzymes which cut pUC57 DNA once:

AacI 434, AatII 2645, Acc65I 408, AccEBI 435, AccI 449, AclI 438, AcsI 396, Acs1371I 447, AflIV 2200, AflIII 830, AhdI 1723, AinI 452, AlwNI 1246, Amal 413, ApaBI 186, ApaI 446, Apol 396, AqlI 439, Asp52I 470, Asp5HI 464, Asp78I 458, AvaIII 419, Aval 439, BamHI 435, BbeAI 234, BbeI 239, BbrI 471, Bcgl 2228, Bcgl' 2262, Bco35I 1807, BfrBI 422, Bli49I 1789, BnaI 435, BpmI 1793, BsaI 1784, BsaMI 424, BsaXI 705, BsaXI' 675, BsbI 117, BseYI 1134, BshLI 428, BsmBI 45, BsmI 424, BspJ106I 407, BspLU11I 830, BsrFI 1803, BstAPI 185, Cfr10I 1803, Cfr9I 439, CfrJ4I 441, ChulI 447, DsaVI 447, EciEI 441, Ecl137I 401, EclHKI 1723, EcoVIII 471, Eco31I 1784, Eco82I 395, Eco88I 439, EcoDR2 397, EcoCRI 404, EcoKI 2380, EcoO109I 2699, EcoRI 396, EcoRV 431, EcoprrI 478, Ehel 237, Esp3I 45, FblI 449, Hall 396, HinJCI 450, HincII 450, HindIII 471, KasI 235, KpnI 412, NarI 236, NdeI 184, Nli387/7I 443, Nrul 416, NsiI 424, PciI 830, Pfi1108I 1738, Ppel 446, Ppu10I 420, Ppu1253I 2640, PspAI 439, PspOMI 442, PssI 2702, PstI 457, Rrh4273I 447, SacI 406, Sall 448, SapI 714, Scal 2203, Sfol 237, SmaI 441, SphI 469, SsoI 396, Sspl 2527, SstI 406, Stul 461, StySJ 158, StySPI 2380, SynII 2317, Tth111III 1427, Uba1220I 438, Uba1326I 2697, Uba1382I 417, XbaI 425, XmaI 439, XmnI 2322, ZraI 2643.

Sequence:

LOCUS PUC57CS 2710 bp DNA SYN 11-FEB-1999
DEFINITION Cloning vector pUC57, complete sequence.
ACCESSION Y14837
NID g2440162
VERSION Y14837.1 GI:2440162
KEYWORDS beta-galactosidase; beta-lactamase; bla gene; lac repressor; lacI gene; lacZ gene.
SOURCE Cloning vector pUC57.
ORGANISM Cloning vector pUC57
artificial sequence; vectors.
REFERENCE 1 (bases 1 to 2710)
AUTHORS Markausakas,A. and Dreguniene,G.
TITLE A new cloning vector pUC57
JOURNAL Unpublished

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AUTHORS       Markauskas, A.
TITLE         Direct Submission
JOURNAL       Submitted (16-SEP-1997) A. Markauskas, Fermentas AB, Graiciuno 8,
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