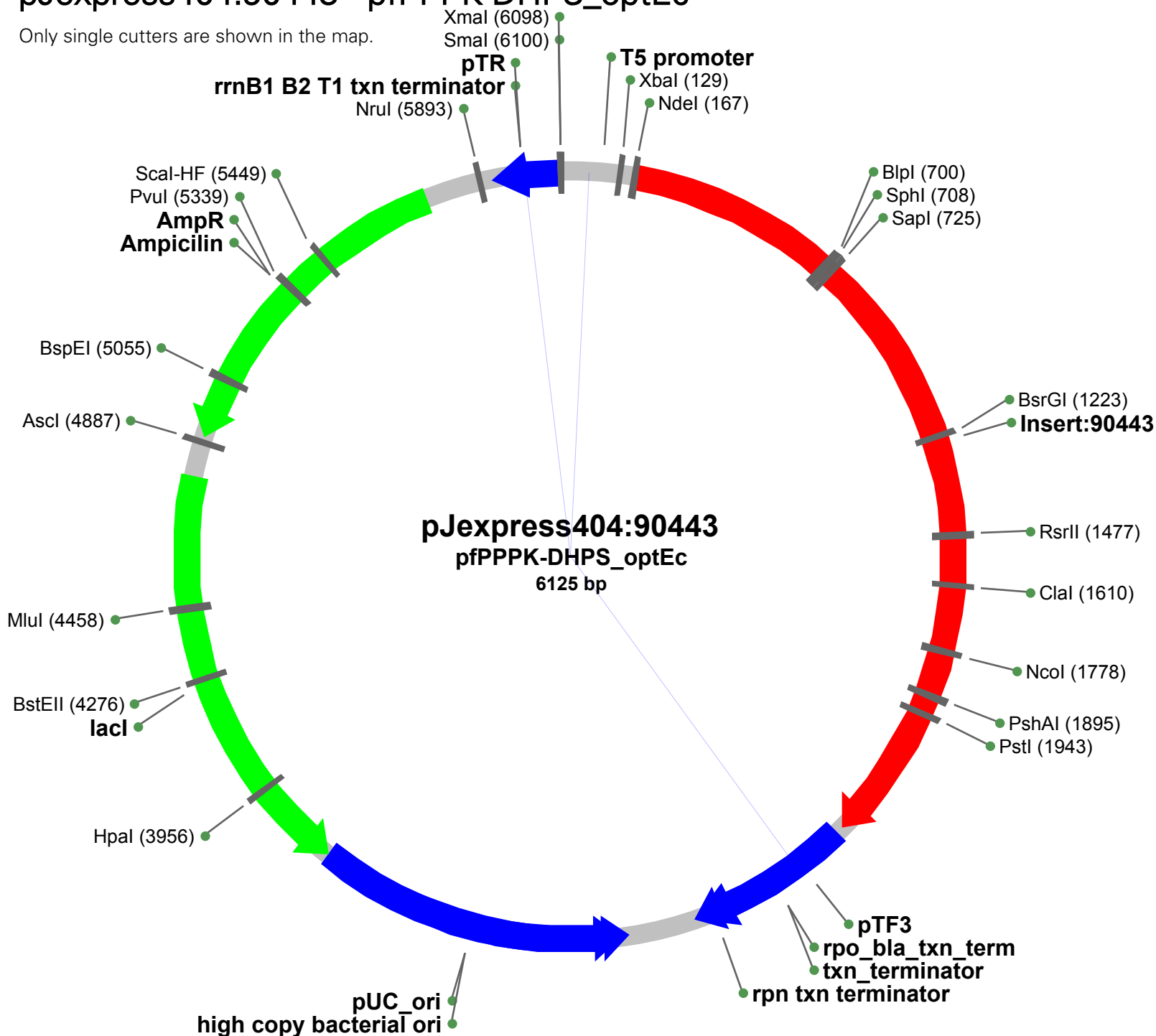


Plasmid Map

pJexpress404:90443 - pfPPPK-DHPS_optEc

Only single cutters are shown in the map.



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Original Author

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Feature Map

Insert:90443 - Start:155 End:2313
pUC_ori - Start:2926 End:3729 (Complementary)
rpn txn terminator - Start:2641 End:2754
rrnB1 B2 T1 txn terminator - Start:5935 End:6109 (Complementary)
pTF3 - Start:2425 End:2450 (Complementary)
pTR - Start:6010 End:6026
rpo_bla_txn_term - Start:2330 End:2754
T5 promoter - Start:41 End:88
txn_terminator - Start:2330 End:2754
high copy bacterial ori - Start:2927 End:3730 (Complementary)
Ampicilin - Start:4905 End:5753 (Complementary)
AmpR - Start:4911 End:5753 (Complementary)
lacI - Start:3740 End:4810 (Complementary)

Restriction Map

Name	Sequence	Cut Positions
AccI	GTMKAC	1013,1097
AclI	AACGTT	4798,5195,5568
AfeI	AGCGCT	103,1996,5019
AlwNI	CAGNNNCTG	1842,2151,3412
Apal	GGGCCC	2760,4255
ApaLI	GTGCAC	3310,4478,5636
AscI	GGCGCGCC	4887
Asel	ATTAAT	3775,5141
AvaI	CYCGRG	2759,6098
BclI	TGATCA	1430,4444
BglI	GCCNNNNNGGC	2755,5089
BlpI	GCTNAGC	700
BspEI	TCCGGA	5055
BspHI	TCATGA	44,605,827,3724,5804
BsrBI	CCGCTC	9(C),70(C),2929(C),5810(C)
BspCI	GCAATG	4417,4051(C)
BsrGI	TGTACA	1223

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BssHII	GCGCGC	3694,4047,4887
BstEII	GGTNACC	4276
BstXI	CCANNNNNNTGG	4412,4535,4664
BtsI	GCAGTG	4099,5369,2007(C),3731(C),5389(C)
Clal	ATCGAT	1610
EcoRV	GATATC	948,1563,2416,4012
HincII	GTyrAC	414,549,1014,1038,1098,1359,1662,2398,3956
HpaI	GTTAAC	3956
KasI	GGCGCC	2635,3819
MluI	ACGCGT	4458
NarI	GGCGCC	2636,3820
NcoI	CCATGG	1778
NdeI	CATATG	167
NruI	TCGCGA	5893
PciI	ACATGT	2400,2996
PshAI	GACNNNGTC	1895
PsiI	TTATAA	83,2596
PspOMI	GGGCCC	2756,4251
PstI	CTGCAG	1943
PvuI	CGATCG	5339
PvuII	CAGCTG	2148,3769,3862
RsrII	CGGWCCG	1477
Sall	GTCGAC	1012,1096
Sall-HF	GTCGAC	1012,1096
SapI	GCTCTTC	725(C)
Scal-HF	AGTACT	5449
SexAI	ACCWGGT	284,1517,2279
SmaI	CCCGGG	6100
SphI	GCATGC	708
SspI	AATATT	216,2486,2647,5773
XbaI	TCTAGA	129
XmaI	CCCGGG	6098
XmnI	GAANNNTTC	188,503,682,5568

No Cuts: AatII, Acc65I, AgeI, AsiSI, AvrII, BamHI, BbsI, BfuAI, BglII, BsaI, BsiWI, BsmBI, BstBI, EagI, EcoRI, FseI, HindIII, KpnI, MfeI, MscI, NgoMIV, NheI, NotI, NsiI, PacI, PmeI, PmlI, PpuMI, PspXI, SacI, SacII, SanDI, SbfI, SfiI, SnaBI, SpeI, Stul, Swal, XhoI, ZraI

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Sequence

1 AATTGTGAGC GGATAACAAT TACGAGCTTC ATGCACAGTG AAATCATGAA AAATTTATTT GCTTTGTGAG
71 CCGATAACAA TTATAATATG TGGAATTGTG AGCGCTCACA ATTCCACAAC GGTTTCCCTC TAGAAATAAT
141 TTTGTTTAAAC TTTTAGGAGG TAAAACATAT GGAGACTATT CAAGAAGTGA TTCTGAGCGA AGAGAACAAA
211 ACGAATATTG CGGTGTCTGAA TTTGGGCACG AATGACCGCC GTAACGCGGT TCTGATCCTG GAAACGGCCC
281 TGCACCTGGT GGAGAAGTAC CTGGGTAAGA TTATCAACAC CAGCTACCTG TATGAGACTG TCCCGGAGTA
351 TATTGTCTTG GACAAGAAAG AGAGCTGTGA AAAGATCAAT AAAGACTGCC GCATCTACGA TGTCAACTAT
421 ATCAATGAGC TGATGCAAAA TCTGGAAGAA AGCAAGTATG AAGAGAATAA AGAGCTGATT GATAAGTGCG
491 AAGAATACGA AACCTTTCTG AAGAATGGCA AGGTTGATAA TAGCATCCTG AAAGAGGTCA ACGTCGAGAA
561 CTACTTGCTG GAGTGCAATA ACATCATCGT CAAAACGAT GAAATCATGA AAAACAACCT GAGCAAGTAC
631 AAAGACAAAT ACTATACGTC TTACTTTTAC AATCTGACCG TCGTGGTGAA AACCTTCGTT AATGATCCGC
701 TGAGCATGCT GGTGGTCATC AAATACATCG AAGAGCTGAT GAAACGTGAA AATGTTAAAG AGAAAGAGAA
771 GTTTGAGAAG CGTATTATCG ACATCGACAT TCTGTTTTTC AACGATTTCG CGATTTTCAT GAAGAACATT
841 AAATGGGAGA AAAACATGAT TTACAAGATT CTGTCTAAAT ACATCCACCT GGAACGTGAC ATCAAGAACG
911 GTAACGACAA TATGTGGAAG GTGAACATGG ATAAGGATAT CAATCTGAAT AACAACAATA ACATTAAGAA
981 AAAGAACAAT AACGATATTG ACTGTGATTG CGTCGACCAG AAAATGAACA ACCATGTCAA CAACAAAAC
1051 TACATCAACT CTTTCCGCGA CCCGCAGGAA ATCATTAAACA ATATGGTCGA CAATATCGAG TTCTTGAGCA
1121 TCCCGCACGT TTATACCACC CATCGTTACT CGATCTTGCT GTGCTTGAAC GACATGATTG CAGAATACAA
1191 GCACAATGTT CTGAACAACA CCATTCTGCT TTTGTACAAC AAGTATGTTA GCCGTATGAA AGAGCAGTAC
1261 AACATTAACT TCAAAGAGAA TAACAAACGC ATTTATGTGC TGAAGGACCG TATCAGTAC TTGAAAGAGA
1331 AAACCAACAT TGTCGGCATC TTGAACGTCA ACTATGACAG CTTACGCGAT GGCGGCATTT TCCTTGAGCC
1401 GAAACGTGCA GTTCAGCGTA TGTTTGAAAT GATCAACGAG GGCGCGAGCG TGATTGACAT TGGCGGTGAG
1471 TCCAGCGGTC CGTTTGTCTAT TCCGAACCCG AAAATCAGCG AGCGCGACCT GGTTGTTCCG GTCCTGCAAC
1541 TGTTTCAGAA AGAGTGGAAT GATATCAAGA ACAAGATTGT CAAGTGTGAT GCGAAACCGA TTATCTCCAT
1611 CGATACCATC AACTACAATG TGTTTAAAGA ATGCGTGGAC AATGATCTGG TTGACATCCT GAATGACATC
1681 AGCGCGTGTA CCAATAACCC AGAGATCATC AAGCTGTGTA AAAAGAAAAA CAAGTTCTAT ACGTTGTCT
1751 TGATGCACAA GCGTGGAAT CCTCATACCA TGGACAAGCT GACCAATTAT GATAATCTGG TTTACGACAT
1821 TAAGAATTAC CTGGAACAGC GCCTGAATTT CCTGGTGCTG AACGGTATCC CGCGTTACCG TATTCTGTTT
1891 GACATCGGTC TGGGTTTCGC CAAGAAGCAC GACCAATTCA TTAAGCTGCT GCAGAACATC CATGTGTATG
1961 ACGAGTATCC GCTGTTTCAT GGTATTAGCC GCAAGCGCTT TATCGCACAC TGCATGAACG ATCAAAATGT
2031 TGTGATTGAA ACGCAACAAA AGCTGCACGA TGAGCAGCAG AACGAGAACA AGAATCATCG AGATAAGAGC
2101 CACAATTGGA TGTTCCAAAT GAATTACATG CGTAAGGATA AAGATCAGCT GCTGTATCAA AAGAACATTT
2171 GGGGTGGCTT GGCTATTGCA AGCTACAGCT ATTACAAGAA AGTGACCTG ATCCGTGTTT ACGACGTTCT
2241 GGAAACGAAG TCTGTGCTGG ACGTTCTGAC CAAGATTGAC CAGGTTTACC ACCATCACCA TCATTAACCTC
2311 AGACCCCAAG GGCGACACAA AATTTATTCT AAATGATAAT AAATACTGAT AACATCTTAT AGTTTGTATT
2381 ATATTTTGTG TTATCGTTGA CATGTATAAT TTTGATATCA AAACTGATT TTCCCTTTAT TATTTTCGAG
2451 ATTTATTTTC TTAATTCTCT TTAACAAACT AGAAATATTG TATATACAAA AAATCATAAA TAATAGATGA
2521 ATAGTTTAAAT TATAGGTGTT CATCAATCGA AAAAGCAACG TATCTTATTT AAAGTGC GTTTTTTCT
2591 CATTTATAAG GTTAAATAAT TCTCATATAT CAAGCAAAGT GACAGGCGCC CTTAAATATT CTGACAAATG
2661 CTCTTTCCCT AAACCTCCCC CATAAAAAAA CCCGCCGAAG CGGGTTTTTA CGTTATTTGC GGATTAACGA
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3011 GCCAGCAAAA GGCCAGGAAC CGTAAAAAGG CCGCGTTGCT GCGGTTTTTC CATAGGCTCC GCCCCCTGA
3081 CGAGCATCAC AAAAATCGAC GCTCAAGTCA GAGGTGGCGA AACCCGACAG GACTATAAAG ATACCAGGCG
3151 TTTCCCCCTG GAAGCTCCCT CGTGCGCTCT CCTGTTCCGA CCCTGCCGCT TACCGGATAC CTGTCCGCCT
3221 TTCTCCCTTC GGAAGAGCGT GCGCTTTCTC ATAGCTCACG CTGTAGGTAT CTCAGTTCGG TGTAGGTCGT
3291 TCGCTCCAAG CTGGGCTGTG TGCACGAACC CCCCCTTCAG CCCGACCCT GCGCCTTATC CGGTAACAT
3361 CGCTCTGAGT CCAACCCGGT AAGACACGAC TTATCGCCAC TGGCAGCAGC CACTGGTAAC AGGATTAGCA
3431 GAGCGAGGTA TGTAGGCGGT GCTACAGAGT TCTTGAAGTG GTGGGCTAAC TACGGCTACA CTAGAAGAAC
3501 AGTATTTGGT ATCTGCGCTC TGCTGAAGCC AGTTACCTTC GGAAAAAGAG TTGGTAGCTC TTGATCCGGC
3571 AAACAAACCA CCGCTGGTAG CGGTGGTTTT TTTGTTTGCA AGCAGCAGAT TACGCGCAGA AAAAAAGGAT
3641 CTCAAGGAAG TCCTTTGATC TTTTCTACGG GGTCTGACGC TCAGTGGAAAC GACGCGCGCG TAACTCACGT
3711 TAAGGAGATT TGGTCATGAG TCACTGCCCG CTTTCCAGTC GGGAAACCTG TCGTGCCAGC TGCATTAATG
3781 AATCGGCCAA CGCGCGGGGA GAGGCGGTTT GCGTATTGGG GCAGGAGGTG GTTTTTCTTT TCACCAAGTA
3851 GACTGGCAAC AGCTGATTGC CCTTACCAGC CTGGCCCTGA GAGAGTTGCA GCAAGCGGTC CACGCTGGTT
3921 TGCCCCAGCA GGCGAAAATC CTGTTTGATG GTGGTTAACG GCGGGATATA ACATGAGCTA TCTTCGGTAT
3991 CGTCGTATCC CACTACCGAG ATATCCGCAC CAACGCGCAG CCCGACTCG GTAATGGCGC GCATTGCGCC
4061 CAGCGCCATC TGATCGTTGG CAACACGATC CGCAGTGGGA ACGATGCCCT CATTACAGAT TTGCATGGTT
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4201 GATATTTATG CCAGCCAGCC AGACGCAGAC GCGCCGAGAC AGAACTTAAT GGGCCGCTA ACAGCGCAT
4271 TTGCTGGTGA CCAATGCGA CCAGATGCTC CACGCCAGT CGCGTACCGT CCTCATGGGA GAAAATAATA
4341 CTGTTGATGG GTGTCTGGTC AGAGACATCA AGAAATAACG CCGGAACATT AGTGCAGGCA GCTTCCACAG
4411 CAATGGCATC CTGGTCATCC AGCGGATAGT TAATGATCAG CCCACTGACG CGTTGCGCGA GAAGATTGTG
4481 CACCGCCGCT TTACAGGCTT CGACGCCGCT TCGTTCTTACC ATCGACACCA CCACGCTGGC ACCCAGTTGA
4551 TCGGCGCGAG ATTTAATCGC CGCGACAATT TCGCAGGGC CGTGACGGG CAGACTGGAG TTGGCAACGC
4621 CAATGAGCAA CGACTGTTTG CCGGCCAGTT GTTGTTGCCAC GCGGTTGGGA ATGTAATTCA GCTCCGCCAT
4691 TGAATGAGCA ACTTTTTCCC GCGTTTTTCG AGAAACGTGG CTGGCCTGGT TCACCACGCG GGAAACGGTC
4761 TGATAAGAGA CACCGGCATA CTCTGCGACA TCGTATAACG TTACTGTTTT CATATTACAC ACCCTGAATT

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4831 GACTCTCTTC CGGGCGCTAT CATGCCATAC CGCGAAAGGT TTTGCGCCAT TCGATGGCGC GCCGCTTACC
4901 AATGCTTAAT CAGTGAGGCA CCTATCTCAG CGATCTGTCT ATTTTCGTTCA TCCATAGTTG CCTGACTCCC
4971 CGTCGTGTAG ATAACACGA TACGGGAGGG CTTACCATCT GGCCCCAGCG CTGCGATGAT ACCGCGAGAA
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5111 CTGCAACTTT ATCCGCCTCC ATCCAGTCTA TTAATTGTTG CCGGGAAGCT AGAGTAAGTA GTTCGCCAGT
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5391 ACTGCATAAT TCTCTTACTG TCATGCCATC CGTAAGATGC TTTTCTGTGA CTGGTGAGTA CTCAACCAAG
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5671 ACCAGCGTTT CTGGGTGAGC AAAAACAGGA AGGCAAAATG CCGCAAAAAA GGAATAAGG GCGACACGGA
5741 AATGTTGAAT ACTCATATTC TTCCTTTTTT AATATTATTG AAGCATTTAT CAGGGTTATT GTCTCATGAG
5811 CGGATACATA TTTGAATGTA TTTAGAAAAA TAAACAAATA GGGGTCAGTG TTACAACCAA TTAACCAATT
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5951 AGCGCGGTGG TCCACCTGA CCCCATGCCG AACTCAGAAG TGAAACGCC TAGCGCCGAT GGTAGTGTGG
6021 GGAATCCCCA TGCGAGAGTA GGGAAGTGCC AGGCATCAAA TAAAACGAAA GGCTCAGTCG AAAGACTGGG
6091 CCTTTCGCC GGGCTAATTA TGGGGTGTCT CCCTT

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Only the synthesized DNA fragment (in red) has been sequence verified. We do not guarantee the vector sequence.

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