Vector: **pSOK2**

Antibiotic Selection: Amp

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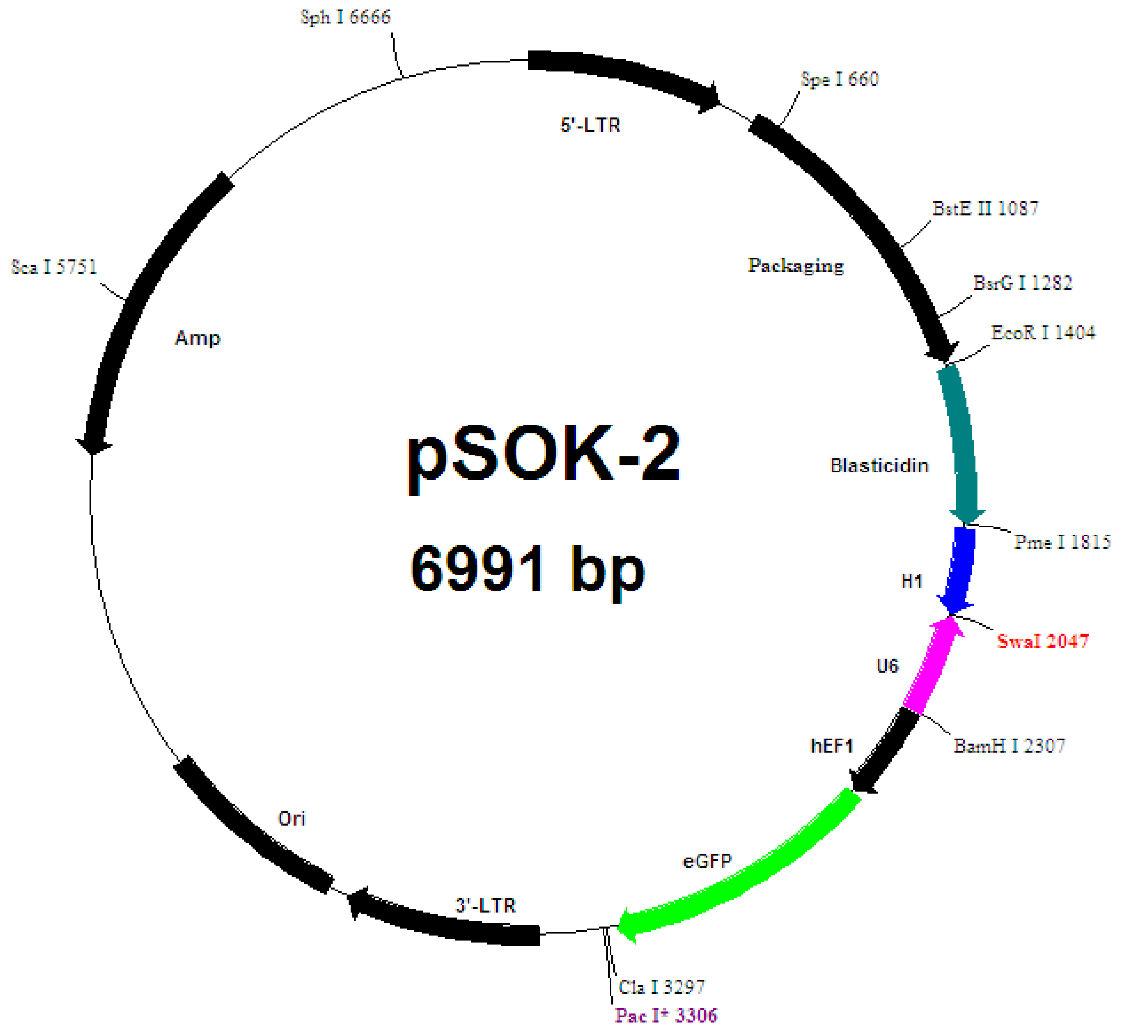
Date of Construction: June, 2013



pSOK2 Full-Length Sequence

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GCTCAGGGCCAAGAACAGATGGTCCCCAGATGCGGTCCCGCCCTCAGCAGTTTCTAGAGAACCATCAGATGTTTCCAGGGTG
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AAGCCTATAGAGTACGAGCCATAGATAAAATAAAAGATTTTATTTAGTCTCCAGAAAAAGGGGGGAA
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Unique enzymes in pSOK2:

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Spe I      A`CTAG,T       660
BstE II     G`GTNAC,C      1087
BsrG I      T`GTAC,A      1282
EcoR I      G`AATT,C      1404
Bbv II      GAAGAC 7/11    1497
Bbs I      GAAGAC 8/12    1498
Nru I      TCG|CGA       1644
Pme I      CTTT|AAAC      1815
BsiC I      TT`CG,AA      1828
BstB I      TT`CG,AA      1828
Bsp120 I    G`GGCC,C       1866
Apa I      G,GGCC`C      1870
SwaI       ATTT|AAAT     2047
BsaA I      YAC|GTR       2181
BamH I      G`GATC,C      2307
BspM II     T`CCGG,A      2310
Mun I      C`AATT,G      2395
Bsp1286 I   G,DGCH`C       3189
Cla I      AT`CG,AT      3297
PacI       TTA|ATTAA     3304
Afl III     A`CRYG,T      4378
Sca I      AGT|ACT       5751
Sph I      G,CATG`C      6666
Number of enzymes = 23
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The following enzymes do not cut in pSOK2:

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Acc I      Avr II     Bcl I      Bgl II     Blp I
BsiW I      Bsm I      BspM I      Bst1107 I   BstX I
Dra III     Eco72 I     Esp I       Fse I       HinC II
Hind II     HinD III    Hpa I       Mlu I       Not I
Nsi I      PaeR7 I     PflM I      Pml I       Rsr II
Sac II      Sal I      Sfi I      SnaB I      Spl I
Srf I      Stu I      Xca I      Xcm I      Xho I
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pSOK: sites sorted by name:

Aat II     (3)   745     1841     6193
Acc65 I    (2)   401     3756
Aci I      (69)  197     203     566     588
               688     727     860     901
               1042    1133    1199    1298
               1317    1355    1532    1614
               1681    1849    1864    1883
               2424    2461    2541    2798
               2839    2906    2945    3083
               3196    3256    3259    3552
               3558    3854    4068    4171
               4227    4237    4261    4304
               4311    4332    4423    4451
               4578    4597    4718    4828
               4963    4972    5334    5425
               5616    5662    5783    5827
               5904    6013    6112    6159
               6333    6372    6382    6408
               6446    6459    6485    6542
               6801
Afl II     (3)   35      1006     3388
Afl III    (1)   4378
Age I      (2)   2402     2567
Aha II     (10)  742     1398     1838     1944
               5808    6190     6494     6677
               6791    6812
Ahd I      (4)   1020     3801     3847     5271
Alu I      (37)  30      34       336      580
               668     676      1515     1620
               1821    2554     2600     2633
               2705    2738     2954     3002
               3113    3287     3383     3387
               3691    4010     4043     4138
               4202    4320     4546     4636
               4682    4939     5460     5560
               5623    6302     6321     6566
               6922
Alw I      (17)  453     1051     1357     1727
               2303    2314     2320     3075
               3272    4940     5026     5026
               5123    5124     5588     5903
               5909
AlwN I     (2)   3512     4794
Apa I      (1)   1870
ApaL I     (3)   4692     5938     6435
Apo I      (3)   872      1404     2048
Asc I      (2)   368      3723
Ase I      (5)   2218     4021     4149     4208
               5443
Asp718     (2)   401      3756
Ava I      (7)   331      397      498      2369
               2471    3686     3752
Ava II     (14)  186      199      254      551
               690     1219     1572     3236
               3541    3554     3609     5409
               5631    6886
BamH I     (1)   2307
Ban I      (17)  244      401      1142     1397
               1687    1943     2330     2405
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                  2615    3599    3756    4122
                  5219    6493    6676    6790
                  6811
Ban II      (8)    338     351     1677    1870
                  3693    3706    6743    6757
Bbe I       (6)    1401    1947    6497    6680
                  6794    6815
Bbs I       (1)    1498
Bbv I       (12)   931     939     1524    1629
                  2831    3115    3122    4797
                  4800    5006    5700    6311
Bbv II      (1)    1497
Bcn I       (16)   164     399     400     571
                  724     2610    3264    3519
                  3754    3755    4759    5455
                  5806    6307    6342    6693
Bfa I       (15)   31      219     661     673
                  1394    1522    1879    2410
                  2559    3384    3574    4873
                  5126    5461    6896
Bgl I       (2)    5391    6509
Bpm I       (5)    3024    3264    3321    5341
                  6959
Bsa I       (7)    476     530     1149    2031
                  3809    3830    5332
BsaA I      (1)    2181
BsaB I      (2)    1711    2312
BsaH I      (10)   742     1398    1838    1944
                  5808    6190    6494    6677
                  6791    6812
BsaJ I      (40)   161     240     250     397
                  461     497     546     547
                  694     733     734     746
                  747     1167    1236    1245
                  1265    1266    1411    1716
                  1854    1907    2303    2472
                  2578    2608    2748    2911
                  2935    2990    3516    3595
                  3605    3752    3815    4117
                  4538    6612    6690    6696
BsaW I      (7)    2310    2327    2402    2567
                  4584    4731    5562
BseR I      (5)    464     1293    1332    2610
                  3818
Bsg I       (5)    1600    2520    2708    2805
                  3129
BsiC I      (1)    1828
BsiE I      (11)   592     727     1532    1648
                  2323    2572    4294    4718
                  5641    5790    6537
BsiHKA I    (7)    338     3189    3693    4696
                  5857    5942    6439
BsmA I      (22)   107     475     531     609
                  734     832     949     1073
                  1132    1150    1328    1431
                  2032    3338    3461    3808
                  3829    5333    6107    6260
                  6304    6976
BsmB I      (7)    733     831     1072    1131
                  1329    6261    6303
BsmF I      (12)   172     185     564     729
                  764     1205    1585    1944
                  2351    3527    3540    6672
BsoF I      (43)   727     901     917     920
                  925     928     1133    1513
                  1532    1606    1609    1612
                  1615    1618    1782    2541
                  2739    2798    2820    3104
                  3111    3162    3165    3259
                  4203    4284    4302    4305
                  4423    4578    4721    4786
                  4789    4995    5323    5662
                  5689    5784    6013    6300
                  6409    6513    6586
Bsp120 I    (1)    1866
Bsp1286 I   (1)    3189
BspH I      (4)    5098    6106    6211    6735
BspM II     (1)    2310
Bsr I       (20)   374     1030    1058    1546
                  1570    1871    2437    2458
                  3192    3729    4179    4785
                  4798    4912    5318    5436
                  5479    5746    5918    6624
BsrB I      (5)    1042    1851    4070    4311
                  6112
BsrD I      (2)    5332    5506
BsrG I      (1)    1282
BssH II     (5)    317     368     1896    3672
                  3723
BssS I      (5)    1587    2760    4551    5935
                  6242
BstB I      (1)    1828
BstE II     (1)    1087
BstN I      (23)   241     548     735     748
                  1169    1194    1217    1237
                  1267    1717    1909    2625
                  2750    2862    2937    2991
                  3596    4118    4406    4527
                  4540    6613    6890
BstU I      (26)   317     319     370     903
                  905     1135    1644    1864
                  1898    1900    2424    2908
                  3226    3672    3674    3725
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                  4225    4227    4425    5006
                  5336    5829    6161    6261
                  6263    6366
BstY I      (9)    2307    2313    3079    5019
                  5030    5116    5128    5896
                  5913
Bsu36 I     (2)    781     1018
Cac8 I      (39)   28      32      319     370
                  582     586     631     650
                  1199    1508    1622    1866
                  1898    1902    2703    2736
                  2784    3108    3115    3381
                  3385    3674    3725    4171
                  4200    4309    4395    4432
                  4992    5383    6396    6544
                  6564    6568    6664    6705
                  6753    6795    6825
Cfr10 I     (7)    629     2402    2567    2730
                  5351    6814    6823
Cla I       (1)    3297
Csp6 I      (11)   402     658     1283    2189
                  2452    3008    3290    3757
                  5750    6426    6937
Dde I       (21)   75      167     208     476
                  781     1018    1290    1808
                  3183    3201    3428    3522
                  3563    3832    3903    4653
                  5062    5228    5768    6194
                  6429
Dpn I       (30)   94      459     1046    1178
                  1363    1647    1708    1722
                  2309    2315    2322    3081
                  3229    3267    3448    4946
                  5021    5032    5040    5118
                  5130    5235    5576    5594
                  5640    5898    5915    5951
                  6536    6760
DpnII       (30)   92      457     1044    1176
                  1361    1645    1706    1720
                  2307    2313    2320    3079
                  3227    3265    3446    4944
                  5019    5030    5038    5116
                  5128    5233    5574    5592
                  5638    5896    5913    5949
                  6534    6758
Dra I       (7)    1815    2047    2126    2139
                  5137    5156    5848
Drd I       (3)    1500    4486    6355
Dsa I       (4)    694     1411    2578    6696
Eae I       (12)   582     724     1109    1130
                  1414    1529    2651    3040
                  4217    5659    6693    6825
Eag I       (2)    724     1529
Ear I       (7)    1070    1311    2295    4000
                  4262    6066    6554
Eco47 III   (3)    923     2563    6732
Eco57 I     (7)    1509    2732    2778    2975
                  4925    5939    6943
EcoN I      (3)    784     1392    2413
EcoO109 I   (7)    254     1219    1572    2285
                  3609    6247    6701
EcoR I      (1)    1404
EcoR II     (23)   239     546     733     746
                  1167    1192    1215    1235
                  1265    1715    1907    2623
                  2748    2860    2935    2989
                  3594    4116    4404    4525
                  4538    6611    6888
EcoR V      (3)    140     3494    6879
Ehe I       (6)    1399    1945    6495    6678
                  6792    6813
Fnu4H I     (43)   727     901     917     920
                  925     928     1133    1513
                  1532    1606    1609    1612
                  1615    1618    1782    2541
                  2739    2798    2820    3104
                  3111    3162    3165    3259
                  4203    4284    4302    4305
                  4423    4578    4721    4786
                  4789    4995    5323    5662
                  5689    5784    6013    6300
                  6409    6513    6586
Fok I       (13)   423     1140    1300    1464
                  1699    2607    2973    3777
                  5237    5418    5705    6348
                  6592
Fsp I       (2)    5493    6516
Gdi II      (11)   723     725     1129    1528
                  1530    2652    3039    4218
                  5658    6694    6826
Gsu I       (5)    3023    3263    3322    5342
                  6960
Hae I       (6)    584     1111    1416    4393
                  4404    4856
Hae II      (11)   925     1401    1947    2565
                  4256    4626    6497    6680
                  6734    6794    6815
Hae III     (33)   129     173     584     726
                  762     774     987     1111
                  1132    1197    1416    1531
                  1868    2286    2653    2753
                  3042    3154    3483    3528
                  4219    4393    4404    4422
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                4856    5314    5394    5661
                6248    6546    6695    6703
                6827
Hga I      (10) 381     642     895     1491
                3736    4488    5066    5798
                6356    6825
HgiA I     (7)  338     3189    3693    4696
                5857    5942    6439
HgiE II    (2)  4957    6437
Hha I      (46) 319     321     370     372
                648     905     924     1400
                1512    1898    1900    1906
                1946    2352    2424    2564
                2869    2910    3226    3674
                3676    3725    3727    4002
                4162    4227    4255    4288
                4558    4625    4725    4899
                5008    5401    5494    5831
                6163    6263    6366    6496
                6517    6650    6679    6733
                6793    6814
Hinf I     (18) 442     450     791     802
                1437    1769    1859    2017
                2270    3913    3935    3956
                4213    4278    4353    4749
                5266    6904
HinI I     (10) 742     1398    1838    1944
                5808    6190    6494    6677
                6791    6812
HinP I     (46) 317     319     368     370
                646     903     922     1398
                1510    1896    1898    1904
                1944    2350    2422    2562
                2867    2908    3224    3672
                3674    3723    3725    4000
                4160    4225    4253    4286
                4556    4623    4723    4897
                5006    5399    5492    5829
                6161    6261    6364    6494
                6515    6648    6677    6731
                6791    6812
Hpa II     (32) 163     398     569     630
                723     1401    2311    2328
                2403    2568    2608    2671
                2731    3262    3518    3753
                4096    4585    4732    4758
                4948    5352    5386    5453
                5563    5805    6306    6340
                6692    6815    6824    6839
Hph I      (19) 1157    1183    1401    1978
                2593    2598    2926    2950
                3079    5115    5342    5756
                5964    5997    6281    6290
                6783    6828    6909
Kas I      (6)  1397    1943    6493    6676
                6790    6811
Kpn I      (2)  405     3760
Mae I      (15) 31      219     661     673
                1394    1522    1879    2410
                2559    3384    3574    4873
                5126    5461    6896
Mae II     (16) 742     1081    1122    1838
                1994    2175    2180    2517
                2644    2857    3028    5081
                5497    5870    6190    6632
Mae III    (23) 39      994     1022    1087
                1231    1874    2097    2176
                2762    3251    3392    3870
                4734    4797    4913    5196
                5527    5585    5738    5926
                6314    6605    6625
Mbo I      (30) 92      457     1044    1176
                1361    1645    1706    1720
                2307    2313    2320    3079
                3227    3265    3446    4944
                5019    5030    5038    5116
                5128    5233    5574    5592
                5638    5896    5913    5949
                6534    6758
Mbo II     (20) 1086    1299    1445    1502
                1530    1927    2283    2823
                2868    2871    3064    4016
                4250    5039    5112    5867
                5945    6054    6542    6754
Mme I      (6)  829     1106    3817    3869
                4592    4776
Mnl I      (58) 167     216     368     387
                432     460     484     506
                510     566     776     872
                1168    1271    1304    1310
                1313    1319    1349    1352
                1367    1374    1390    1454
                1795    1796    1921    2297
                2378    2467    2588    2669
                2675    2768    2906    2918
                2969    3089    3571    3723
                3742    3787    3814    3838
                3898    4227    4276    4486
                4559    4810    5210    5291
                5437    5643    6238    6296
                6556    6840
Msc I      (3)  584     1111    1416
Mse I      (30) 36      1007    1119    1149
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                1173    1814    1823    2046
                2125    2138    2218    3302
                3306    3389    3923    4021
                4149    4208    5084    5136
                5141    5155    5208    5443
                5482    5847    6219    6400
                6597    6867
Msl I      (4)  1993    3066    5523    5682
Msp I      (32) 163     398     569     630
                723     1401    2311    2328
                2403    2568    2608    2671
                2731    3262    3518    3753
                4096    4585    4732    4758
                4948    5352    5386    5453
                5563    5805    6306    6340
                6692    6815    6824    6839
MspA1 I    (11) 588     1620    2554    3854
                4202    4720    4965    5906
                6372    6566    6922
Mun I      (1)  2395
Nae I      (2)  631     6825
Nar I      (6)  1398    1944    6494    6677
                6791    6812
Nci I      (16) 163     398     399     570
                723     2609    3263    3518
                3753    3754    4758    5454
                5805    6306    6341    6692
Nco I      (2)  1411    2578
Nde I      (2)  2110    6442
NgoM I     (2)  629     6823
Nhe I      (2)  30      3383
Nla III    (25) 62      1205    1415    1964
                2277    2582    2816    2846
                3041    3236    3281    3415
                3869    4036    4382    5102
                5593    5603    5681    5717
                6110    6215    6299    6666
                6739
Nla IV     (39) 188     201     246     403
                521     552     692     761
                893     1144    1221    1399
                1573    1689    1868    1945
                2309    2332    2407    2459
                2617    3155    3543    3556
                3601    3758    4124    4410
                4449    5221    5315    5356
                5567    6157    6495    6678
                6702    6792    6813
Nru I      (1)  1644
Nsp7524 I  (4)  1960    4378    6295    6662
NspB II    (11) 588     1620    2554    3854
                4202    4720    4965    5906
                6372    6566    6922
NspH I     (4)  1964    4382    6299    6666
PacI       (1)  3304
Pal I      (33) 129     173     584     726
                762     774     987     1111
                1132    1197    1416    1531
                1868    2286    2653    2753
                3042    3154    3483    3528
                4219    4393    4404    4422
                4856    5314    5394    5661
                6248    6546    6695    6703
                6827
Ple I      (3)  799     3921    4757
Pme I      (1)  1815
PpuM I     (4)  254     1219    1572    3609
Psp1406 I  (3)  2517    5497    5870
PspA I     (2)  397     3752
Pst I      (3)  921     929     1105
Pvu I      (4)  1648    2323    5641    6537
Pvu II     (5)  1620    2554    4202    6566
                6922
Rsa I      (11) 403     659     1284    2190
                2453    3009    3291    3758
                5751    6427    6938
Sac I      (2)  338     3693
Sap I      (2)  4000    4262
Sau3A I    (30) 92      457     1044    1176
                1361    1645    1706    1720
                2307    2313    2320    3079
                3227    3265    3446    4944
                5019    5030    5038    5116
                5128    5233    5574    5592
                5638    5896    5913    5949
                6534    6758
Sau96 I    (32) 127     171     186     199
                254     551     690     760
                773     985     1196    1219
                1572    1866    1867    2285
                2752    3153    3236    3481
                3526    3541    3554    3609
                5313    5392    5409    5631
                6247    6544    6701    6886
Sca I      (1)  5751
ScrF I     (39) 163     241     398     399
                548     570     723     735
                748     1169    1194    1217
                1237    1267    1717    1909
                2609    2625    2750    2862
                2937    2991    3263    3518
                3596    3753    3754    4118
                4406    4527    4540    4758
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                5454     5805     6306     6341
                6613     6692     6890
Sec I      (40)  161      240      250      397
                461      497      546      547
                694      733      734      746
                747      1167     1236     1245
                1265     1266     1411     1716
                1854     1907     2303     2472
                2578     2608     2748     2911
                2935     2990     3516     3595
                3605     3752     3815     4117
                4538     6612     6690     6696
SfaN I     (24)  185      444      641      938
                1485     1542     1674     1720
                2679     2955     2970     3069
                3540     3798     4474     5526
                5719     5966     6327     6419
                6457     6495     6811     6823
Sfc I      (10)  15       917      925      1101
                1496     3368     4643     4834
                5512     6930
Sma I      (2)   399      3754
Spe I      (1)   660
Sph I      (1)   6666
Ssp I      (3)   1955     3921     6075
Sty I      (9)   250      461      1245     1411
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                1854     2303     2578     3605
                3815
SwaI       (1)   2047
Taq I      (16)  794      1038     1349     1360
                1705     1828     2083     2629
                2923     2950     2965     3094
                3297     3916     4478     5922
Tfi I      (10)  442      802      1437     1769
                1859     2017     2270     3956
                4213     4353
Tsp45 I    (10)  1022     1231     1874     2176
                2762     3251     5527     5738
                6314     6625
Tth111 I   (4)   390      811      1217     3745
Tth111 II  (9)   146      422      613      632
                3062     3500     4967     4976
                5006
Vsp I      (5)   2218     4021     4149     4208
                5443
Xba I      (2)   218      3573
Xho II     (9)   2307     2313     3079     5019
                5030     5116     5128     5896
                5913
Xma I      (2)   397      3752
Xma III    (2)   724      1529
Xmn I      (3)   3984     4022     5870
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