

AseI  
|  
TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAA  
ATCAATAATTATCATTAGTTAATGCCCCAGTAATCAAGTATCGGGTATATACCTCAAGGCGCAATGTATT  
10 20 30 40 50 60 70

Bgl I AatII  
| |  
CTTACGGTAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCATTGACGTCAATAATGACGTATG  
GAATGCCATTTACCGGGCGGACCGACTGGCGGGTTGCTGGGGGCGGGTAACTGCAGTTATTACTGCATAC  
80 90 100 110 120 130 140

AatII  
|  
TTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCA  
AAGGTATCATTGCGGTTATCCCTGAAAGGTAAGTGCAGTTACCCACCTCATAAATGCCATTTGACGGGT  
150 160 170 180 190 200 210

Bgl I NdeI AatII  
| | |  
CTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCC  
GAACCGTCATGTAGTTCACATAGTATACGGTTCATGCGGGGGATAACTGCAGTTACTGCCATTTACCGGG  
220 230 240 250 260 270 280

Bgl I SnaBI  
| |  
GCCTGGCATTATGCCCAGTACATGACCTTATGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCA  
CGGACCGTAATACGGGTCATGTACTGGAATACCCTGAAAGGATGAACCGTCATGTAGATGCATAATCAGT  
290 300 310 320 330 340 350

NcoI  
|  
TCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAATGGGCGTGGATAGCGGTTTTGACTCACGGGG  
AGCGATAATGGTACCCTACGCCAAAACCGTCATGTAGTTACCCGCACCTATCGCCAAACTGAGTGCCCC  
360 370 380 390 400 410 420

AatII  
|  
ATTTCCAAGTCTCCACCCCATGACGTCAATGGGAGTTTGT'TTTGGCACCAAATCAACGGGACTTTCCA  
TAAAGGTTTCAGAGGTGGGGTAACTGCAGTTACCCTCAAACAAAACCGTGGTTTTAGTTGCCCTGAAAGGT  
430 440 450 460 470 480 490

AAATGTCGTAACAACCTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAA  
TTTACAGCATTGTTGAGGCGGGGTAAGTGCAGTTTACCCGCCATCCGCACATGCCACCCCTCCAGATATAT  
500 510 520 530 540 550 560

EcoRI  
BstBI  
HindIII  
XhoI SacI  
NheI Eco47 III Bgl II Ecl1136 II

GCAGAGCTGGTTT TAGTGAACCGTCAGATCCGCTAGCGCTACCGGACTCAGATCTCGAGCTCAAGCTTCGA  
CGTCTCGACCAAATCACTTGGCAGTCTAGGCGATCGCGATGGCCTGAGTCTAGAGCTCGAGTTCGAAGCT

570 580 590 600 610 620 630

BamHI  
Bsp120 I  
SacII SmaI  
Sal I KpnI ApaI  
PstI Asp718 I XmaI AgeI

ATTCTGCAGTCGACGGTACCGCGGGCCCGGGATCCACCGGTCGCCACCATGCTGTGCTGTATGAGAAGAA  
TAAGACGTCAGCTGCCATGGCGCCCGGGCCCTAGGTGGCCAGCGGTGGTACGACACGACATACTCTTCTT

640 650 660 670 680 690 700

BseRI

CCAAACAGGTTGAAAAGAATGATGAGGACCAAAGATCATGGTGAGCAAGGGCGAGGAGCTGTTACCGG  
GGTTTGTCCAACCTTTTCTTACTACTCCTGGTTTTCTAGTACCACTCGTTCCCGCTCCTCGACAAGTGGCC

710 720 730 740 750 760 770

BcgI

GGTGGTGCCCATCCTGGTCGAGCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGTCCGGCGAGGGC  
CCACCACGGGTAGGACCAGCTCGACCTGCCGCTGCATTTGCCGGTGTTC AAGTCGCACAGGCCGCTCCCC

780 790 800 810 820 830 840

BsgI  
BcgI Eco57 I

GAGGGCGATGCCACCTACGGCAAGCTGACCCTGAAGTTCATCTGCACCACCGGCAAGCTGCCCGTGCCCT  
CTCCCGCTACGGTGGATGCCGTTTCGACTGGGACTTCAAGTAGACGTGGTGGCCGTTTCGACGGGCACGGGA

850 860 870 880 890 900 910

BssSI PstI

GGCCCACCCCTCGTGACCACCTTCGGCTACGGCCTGCAGTGTTCGCCCGCTACCCCGACCACATGAAGCA  
CCGGGTGGGAGCACTGGTGG AAGCCGATGCCGGACGTCACGAAGCGGGCGATGGGGCTGGTGTACTTCGT

920 930 940 950 960 970 980

GCACGACTTCTTCAAGTCCGCCATGCCCCGAAGGCTACGTCCAGGAGCGCACCATCTTCTTCAAGGACGAC  
CGTGCTGAAGAAGTTCAGGCGGTACGGGCTTCCGATGCAGGTCTTCGCGTGGTAGAAGAAGTTCCTGCTG

990 1000 1010 1020 1030 1040 1050

GGCAACTACAAGACCCGCGCCGAGGTGAAGTTCGAGGGCGACACCCTGGTGAACCGCATCGAGCTGAAGG  
CCGTTGATGTTCTGGGCGCGGCTCCACTTCAAGCTCCCGCTGTGGGACCACTTGGCGTAGCTCGACTTCC

1060 1070 1080 1090 1100 1110 1120

Eco57 I | BpmI |  
 GCATCGACTTCAAGGAGGACGGCAACATCCTGGGGCACAAGCTGGAGTACAACACTACAACAGCCACAACGT  
 CGTAGCTGAAGTTCCTCCTGCCGTTGTAGGACCCCGTGTTCGACCTCATGTTGATGTTGTTCGGTGTTCGCA  
 1130 1140 1150 1160 1170 1180 1190

CTATATCATGGCCGACAAGCAGAAGAACGGCATCAAGGTGAACTTCAAGATCCGCCACAACATCGAGGAC  
 GATATAGTACCGGCTGTTTCGTCTTCTTGCCGTAGTTCCACTTGAAGTTCCTAGGCCGGTGTGTAGCTCCTG  
 1200 1210 1220 1230 1240 1250 1260

BsgI |  
 GGCAGCGTGCAGCTCGCCGACCACTACCAGCAGAACACCCCATCGGCGACGGCCCCGTGCTGCTGCCCCG  
 CCGTCGCACGTTCGAGCGGCTGGTGTATGGTTCGTCTTGTGGGGGTAGCCGCTGCCGGGGCACGACGACGGGC  
 1270 1280 1290 1300 1310 1320 1330

ACAACCACTACCTGAGCTACCAGTCCGCCCTGAGCAAAGACCCCAACGAGAAGCGCGATCACATGGTCCCT  
 TGTGGTGTATGGACTCGATGGTTCAGGCGGGACTCGTTTTCTGGGGTTGCTCTTCGCGCTAGTGTACCAGGA  
 1340 1350 1360 1370 1380 1390 1400

BpmI | BsrGI | EagI | NotI |  
 GCTGGAGTTCGTGACCGCCCGGGGATCACTCTCGGCATGGACGAGCTGTACAAGTAAAGCGGCCGCGAC  
 CGACCTCAAGCACTGGCGGCGGCCCTAGTGAGAGCCGTACCTGCTCGACATGTTTCAATTCGCCGGCGCTG  
 1410 1420 1430 1440 1450 1460 1470

XbaI | BsaBI | DraI |  
 TCTAGATCATAATCAGCCATAACACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTCCCACACCTCCC  
 AGATCTAGTATTAGTCGGTATGGTGTAAACATCTCCAAAATGAACGAAATTTTTTGGAGGGTGTGGAGGG  
 1480 1490 1500 1510 1520 1530 1540

BsmI | MfeI | HpaI |  
 CCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGTTTATTGCGACTTATAATGGTTAC  
 GGACTTGGACTTTGTATTTTACTTACGTTAACAACAACAATTGAACAAATAACGTGCAATATTACCAATG  
 1550 1560 1570 1580 1590 1600 1610

BsmI |  
 AAATAAAGCAATAGCATCACAATTTTACAAATAAAGCATTTTTTTTCACTGCATTCTAGTTGTGGTTTGT  
 TTTATTTTCGTTATCGTAGTGTTTAAAGTGTTTATTTTCGTAAAAAAGTGACGTAAGATCAACACCAAACA  
 1620 1630 1640 1650 1660 1670 1680

Afl II | SspI |  
 CCAAACCTCATCAATGTATCTTAAGGCGTAAATTTGTAAGCGTTAATATTTTGTAAATTCGCGTTAAAT  
 GGTTTGGAGTAGTTACATAGAATTCGCAATTTAACATTCGCAATTATAAAACAATTTTAAGCGCAATTTAA  
 1690 1700 1710 1720 1730 1740 1750

TTTGTTAAATCAGCTCATTTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAGAATA  
 AAACAATTTAGTCGAGTAAAAAATTGGTTATCCGCTTTAGCCGTTTTAGGGAATATTTAGTTTTCTTAT  
 1760 1770 1780 1790 1800 1810 1820

DrdI

GACCGAGATAGGGTTGAGTGTGTTCCAGTTTGGAAACAAGAGTCCACTATTAAGAACGTGGACTCCAAC  
 CTGGCTCTATCCCAACTCACAACAAGGTCAAACCTTGTCTCAGGTGATAATTTCTTGCACCTGAGGTTG  
 1830 1840 1850 1860 1870 1880 1890

DraIII

GTCAAAGGGCGAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCTAATCAAGTTTTT  
 CAGTTTCCCGCTTTTTGGCAGATAGTCCCGCTACCGGGTGATGCACTTGGTAGTGGGATTAGTTCAAAA  
 1900 1910 1920 1930 1940 1950 1960

TGGGGTCGAGGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGG  
 ACCCCAGCTCCACGGCATTTCGTGATTTAGCCTTGGGATTTCCCTCGGGGGCTAAATCTCGAACTGCCCC  
 1970 1980 1990 2000 2010 2020 2030

NaeI  
NcoMI

BsrBI

AAAGCCGGCGAACGTGGCGAGAAAGGAAGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGT  
 TTTCGGCCGCTTGCACCGCTCTTTCTTCCCTTCTTTTCGCTTTCTCGCCCGCGATCCCGCGACCGTTCA  
 2040 2050 2060 2070 2080 2090 2100

GTAGCGGTCACGCTGCGCGTAACCACCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCAGGTG  
 CATCGCCAGTGCACGCGCATTTGGTGGTGTGGGCGGCGGAATTACGCGGCGATGTCCCGCGCAGTCCAC  
 2110 2120 2130 2140 2150 2160 2170

GCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCC  
 CGTGAAAAGCCCCTTTACACGCGCCTTGGGGATAAACAATAAAAAGATTTATGTAAGTTTATACATAGG  
 2180 2190 2200 2210 2220 2230 2240

BspHI  
BsrBI

SspI EarI

Bsu36 I

GCTCATGAGACAATAACCCTGATAAATGCTTCAATAATATTGAAAAGGAAGAGTCTGAGGCGGAAAGA  
 CGAGTACTCTGTTATTGGGACTATTTACGAAGTTATTATAACTTTTTCTTCTCAGGACTCCGCCTTTCT  
 2250 2260 2270 2280 2290 2300 2310

PvuII

ACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCA  
 TGGTGCACACCTTACACACAGTCAATCCCACACCTTTCAGGGGTCCGAGGGGTCGTCCGTCTTCATACGT  
 2320 2330 2340 2350 2360 2370 2380

NsiI  
 SphI  
 Ppu10 I                      SexAI  
 | | |                      |  
 AAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATG  
 TTCGTACGTAGAGTTAATCAGTCGTTGGTCCACACCTTTCAGGGGTCCGAGGGGTCTCCGTCTTCATAC  
 2390                      2400                      2410                      2420                      2430                      2440                      2450

NsiI  
 SphI  
 Ppu10 I  
 | | |  
 CAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACTCCGCCCATCCCGCCCCTAACTC  
 GTTTCGTACGTAGAGTTAATCAGTCGTTGGTATCAGGGCGGGGATTGAGGCGGGTAGGGCGGGGATTGAG  
 2460                      2470                      2480                      2490                      2500                      2510                      2520

NcoI  
 |  
 CGCCCAGTTCCGCCCATTTCTCCGCCCATGGCTGACTAATTTTTTTTTTATTTATGCAGAGGCCGAGGCCGC  
 GCGGGTCAAGGCGGGTAAGAGGCGGGGTACCGACTGATTAATAAAAAATAAATACGTCTCCGGCTCCGGCG  
 2530                      2540                      2550                      2560                      2570                      2580                      2590

AvrII  
 StuI  
 Bgl I                      Sfi I                      BseRI                      ClaI  
 |                      |                      | |                      |  
 CTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTTGGAGGCCTAGGCTTTTGC AAAAGATCGA  
 GAGCCGGAGACTCGATAAGGTCTTCATCACTCTCCGAAAAAACCTCCGGATCCGAAAACGTTTCTAGCT  
 2600                      2610                      2620                      2630                      2640                      2650                      2660

BsaBI                      BspMI                      EagI  
 |                      |                      |  
 TCAAGAGACAGGATGAGGATCGTTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCT  
 AGTTCTCTGTCTACTCCTAGCAAAGCGTACTAACTTGTCTACCTAACGTGCGTCCAAGAGGCCGGCGA  
 2670                      2680                      2690                      2700                      2710                      2720                      2730

TGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCC  
 ACCCACCTCTCCGATAAGCCGATACTGACCCGTGTTGTCTGTTAGCCGACGAGACTACGGCGGCACAAGG  
 2740                      2750                      2760                      2770                      2780                      2790                      2800

BbeI  
 EheI  
 NarI  
 KasI                      DrdI  
 | | |                      |  
 GGCTGTCAGCGCAGGGCGCCCGTTC TTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCA  
 CCGACAGTCGCGTCCCGCGGGCCAAGAAAAACAGTTCTGGCTGGACAGGCCACGGGACTTACTTGACGT  
 2810                      2820                      2830                      2840                      2850                      2860                      2870

AGACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCTTGCGCAGCTGTGCTCGACGTTGTC  
TCTGCTCCGTCGCGCCGATAGCACCGACCGGTGCTGCCCGCAAGGAACGCGTTCGACACGAGCTGCAACAG  
2880 2890 2900 2910 2920 2930 2940

MscI PvuII FspI Tth111 I

ACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTG  
TGACTTCGCCCTTCCCTGACCGACGATAACCCGCTTACAGGCCCGTCCCTAGAGGACAGTAGAGTGGAAC  
2950 2960 2970 2980 2990 3000 3010

Eco57 I

CTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTG  
GAGGACGGCTCTTTCATAGGTAGTACCGACTACGTTACGCCGCCGACGTATGCGAACTAGGCCGATGGAC  
3020 3030 3040 3050 3060 3070 3080

BsrDI

CCCATTTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTTCGAT  
GGGTAAGCTGGTGGTTTCGCTTTGTAGCGTAGCTCGCTCGTGCATGAGCCTACCTTCGGCCAGAACAGCTA  
3090 3100 3110 3120 3130 3140 3150

BspMI

CAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAACTGTTTCGCCAGGCTCAAGGCGAGCA  
GTCCCTACTAGACCTGCTTCTCGTAGTCCCCGAGCGCGGTTCGGCTTGACAAGCGGTCCGAGTTCCGCTCGT  
3160 3170 3180 3190 3200 3210 3220

SapI EarI

TGCCCGACGGCGAGGATCTCGTTCGTGACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGG  
ACGGGCTGCCGCTCCTAGAGCAGCACTGGGTACCGCTACGGACGAACGGCTTATAGTACCACCTTTTACC  
3230 3240 3250 3260 3270 3280 3290

SphI NcoI

CCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCT  
GGCGAAAAGACCTAAGTAGCTGACACCGGCCGACCCACACCGCCTGGCGATAGTCCCTGTATCGCAACCGA  
3300 3310 3320 3330 3340 3350 3360

NaeI NgoMI RsrII

ACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCCTCGTGTCTTACGGTATCGCCG  
TGGGCACTATAACGACTTCTCGAACCGCCGCTTACCCGACTGGCGAAGGAGCACGAAATGCCATAGCGCG  
3370 3380 3390 3400 3410 3420 3430

EarI SapI Eco57 I BssSI

BsrBI | BsrBI | BstBI |  
CTCCCATTTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGGGGTTC  
GAGGGCTAAGCGTCGCGTAGCGGAAGATAGCGGAAGAAGTCTCAAGAAGACTCGCCCTGAGACCCCAAG  
3440 3450 3460 3470 3480 3490 3500

BssSI |  
BspMI |  
GAAATGACCGACCAAGCGACGCCAACCTGCCATCACGAGATTTTCGATTCCACCGCCGCCTTCTATGAAA  
CTTTACTGGCTGGTTTCGCTGCGGGTTGGACGGTAGTGCTCTAAAGCTAAGGTGGCGGCGGAAGATACTTT  
3510 3520 3530 3540 3550 3560 3570

NaeI |  
BpmI |  
NgoMI | |  
GGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGA  
CCAACCCGAAGCCTTAGCAAAAGGCCCTGCGGCCGACCTACTAGGAGGTTCGCGCCCTAGAGTACGACCT  
3580 3590 3600 3610 3620 3630 3640

BpmI |  
AvrII | |  
GTTCTTCGCCCACCCTAGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAACCCGCGCT  
CAAGAAGCGGGTGGGATCCCCCTCCGATTGACTTTGTGCCTTCTCTGTTATGGCCTTCCTTGGGCGCGA  
3650 3660 3670 3680 3690 3700 3710

ATGACGGCAATAAAAAGACAGAATAAAACGCACGGTGTGGGTCGTTTGTTCATAAACGCGGGGTTCCGT  
TACTGCCGTTATTTTTCTGTCTTATTTTTGCGTGCCACAACCCAGCAAACAAGTATTTGCGCCCCAAGCCA  
3720 3730 3740 3750 3760 3770 3780

BsaI |  
CCCAGGGCTGGCACTCTGTTCGATACCCACCGAGACCCATTGGGGCCAATACGCCCGCGTTTCTTCCTT  
GGGTCCCGACCGTGAGACAGCTATGGGGTGGCTCTGGGGTAACCCCGGTTATGCGGGCGCAAAGAAGGAA  
3790 3800 3810 3820 3830 3840 3850

AlwNI |  
TTCCCCACCCACCCCAAGTTCGGGTGAAGGCCAGGGCTCGCAGCCAACGTTCGGGGCGGCAGGCCCT  
AAGGGGTGGGGTGGGGGGTTCAAGCCCACTTCCGGGTCCCGAGCGTCGGTTGCAGCCCCGCGTCCGGGA  
3860 3870 3880 3890 3900 3910 3920

Bsu36 I | DraI | DraI |  
GCCATAGCCTCAGGTTACTCATATATACTTTAGATTGATTTAAACTTTCATTTTTAATTTAAAGGATCT  
CGGTATCGGAGTCCAATGAGTATATATGAAATCTAACTAAATTTTGAAGTAAAATTAATTTTCCTAGA  
3930 3940 3950 3960 3970 3980 3990

BspHI  
|

AGGTGAAGATCCTTTTTGATAATCTCATGACCAAATCCCTAACGTGAGTTTTTCGTTCCACTGAGCGTC  
TCCACTTCTAGGAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAGCAAGGTGACTCGCAG  
4000 4010 4020 4030 4040 4050 4060

AGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAA  
TCTGGGGCATCTTTTCTAGTTTCCTAGAAGAACTCTAGGAAAAAAGACGCGCATTAGACGACGAACGTT  
4070 4080 4090 4100 4110 4120 4130

Eco57 I  
|

ACAAAAAACCACCGCTACCAGCGGTGGTTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGG  
TGTTTTTTTTGGTGGCGATGGTCGCCACCAAACAAACGGCCTAGTTCTCGATGGTTGAGAAAAAGGCTTCC  
4140 4150 4160 4170 4180 4190 4200

TAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTT  
ATTGACCGAAGTCGTCTCGGTCTATGTTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAA  
4210 4220 4230 4240 4250 4260 4270

AlwNI  
|

CAAGAACTCTGTAGCACCGCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGC  
GTTCTTGAGACATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCACCGACGACGGTCACCG  
4280 4290 4300 4310 4320 4330 4340

GATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTTCGGGCTGAA  
CTATTCAGCACAGAATGGCCCAACCTGAGTTCTGCTATCAATGGCCTATTCCGCGTCGCCAGCCCGACTT  
4350 4360 4370 4380 4390 4400 4410

ApaLI  
|

CGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGA  
GCCCCCAAGCACGTGTGTCGGGTGCGAACCTCGCTTGTGGATGTGGCTTGACTCTATGGATGTGCGACT  
4420 4430 4440 4450 4460 4470 4480

GCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTTCGGA  
CGATACTCTTTCGCGGTGCGAAGGGCTTCCCTCTTTCGCGCTGTCCATAGGCCATTGCGCGTCCAGCCT  
4490 4500 4510 4520 4530 4540 4550

BssSI  
|

ACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCCTGGTATCTTTATAGTCCTGTTCGGTTTTCGCC  
TGTCCTCTCGCGTGTCCCTCGAAGGTCCCCCTTTCGCGGACCATAGAAATATCAGGACAGCCCAAAGCGG  
4560 4570 4580 4590 4600 4610 4620

DrdI  
|

ACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGCGGAGCCTATGGAAAAACGCCAGCAA  
TGGAGACTGAACTCGCAGCTAAAAACACTACGAGCAGTCCCCCGCCTCGGATACCTTTTTGCGGTCGTT

4630            4640            4650            4660            4670            4680            4690

BspLU11 I  
|

CGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCTGCGTTATCCCCCT  
GCGCCGAAAAATGCCAAGGACCGAAAAACGACCGAAAAACGAGTGTACAAGAAAGGACGCAATAGGGGA

4700            4710            4720            4730            4740            4750            4760

NsiI  
Ppu10 I  
|        |

GATTCTGTGGATAACCGTATTACCGCCATGCAT  
CTAAGACACCTATTGGCATAATGGCGGTACGTA

4770            4780            4790            4800