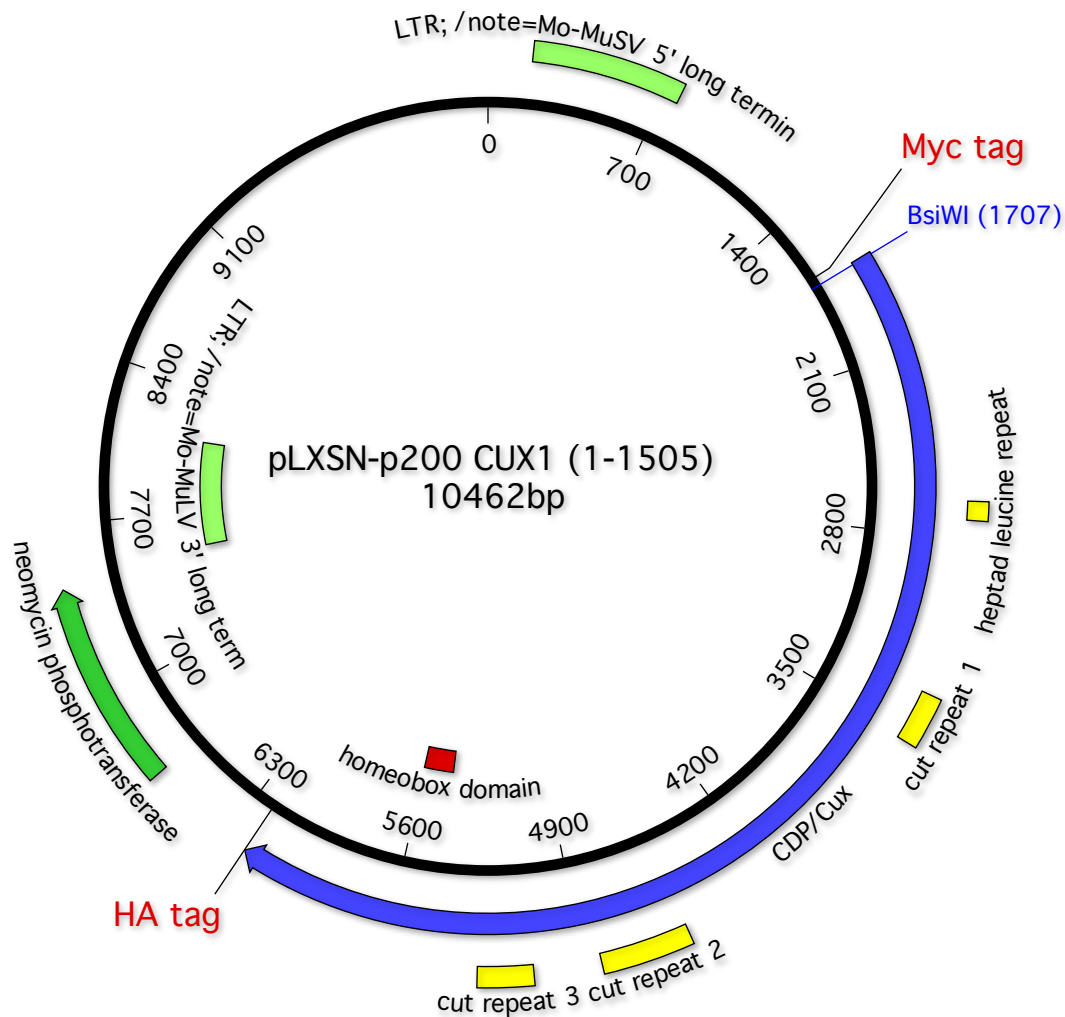
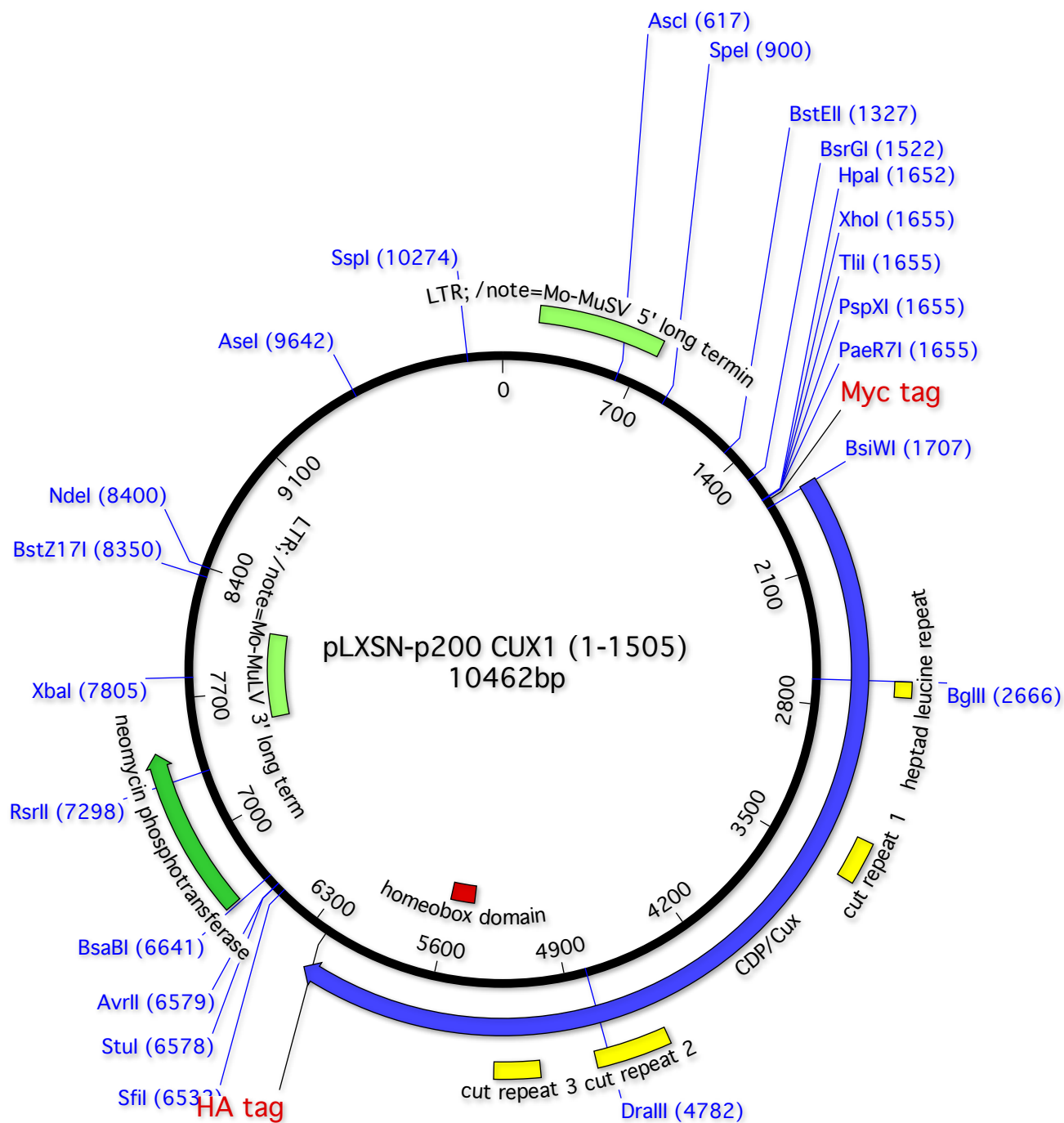






	10	20	30	40	50	60	70	80
	GAATTGCTAG	CAATTGCTAG	CAATTGCTAG	CAATTCATAC	CAGATCACCG	AAAACGTGCC	TCCAAATGTG	TCCCCCTCAC
	90	100	110	120	130	140	150	160
	ACTCCCAAAT	TCGCGGGCTT	CTGCCTCTTA	GACCACTCTA	CCCTATTCCC	CACACTCAC	GGAGCCAAAG	CCGCGGCCCT
	170	180	190	200	210	220	230	240
	TCCGTTTCTT	TGCTTTTGAA	AGACCCAC	CGTAGGTGGC	AAGCTAGCTT	AAGTAACGCC	ACTTTGCAAG	GCATGGAAAA
	250	260	270	280	290	300	310	320
	ATACATAACT	GAGAAATAGAA	AAGTTCAGAT	CAAGGTCAGG	AACAAAGAAA	CAGCTGAATA	CCAAACAGGA	TATCTGTGGT
	330	340	350	360	370	380	390	400
	AAGCGGTTC	TGCCCCGGCT	CAGGGCCAAG	AACAGATGAG	ACAGCTGAGT	GATGGGCCAA	ACAGGATATC	TGTGGTAAGC
	410	420	430	440	450	460	470	480
	AGTTCCTGCC	CCGGCTCGGG	GCCAAGAACA	GATGGTCGCC	AGATGCGGTC	CAGCCCTCAG	CAGTTTCTAG	TGAATCATCA
	490	500	510	520	530	540	550	560
	GATGTTTCCA	GGGTGCCCCA	AGGACCTGAA	AATGACCCTG	TACCTTATTT	GAACTAACCA	ATCAGTTTCG	TTCTCGCTTC
						>AscI		
	570	580	590	600	610	620	630	640
	TGTCGCGCG	CTTCCGCTCT	CCGAGCTCAA	TAAAGAGGCC	CACAACCCCT	CACTCGGCGC	GCCAGTCTTC	CGATAGACTG
	650	660	670	680	690	700	710	720
	CGTCGCCGG	GTACCCGTAT	TCCCAATAAA	GCCTCTTGCT	GTTTGCATCC	GAATCGTGGT	CTCGCTGTTT	CTTGGGAGGG
	730	740	750	760	770	780	790	800
	TCTCCTCTGA	GTGATTGACT	ACCCACGACG	GGGGTCTTTC	ATTTGGGGGC	TCGTCGGGGA	TTTGAGAGAC	CCTGCCCAGG
	810	820	830	840	850	860	870	880
	GACCACCGAC	CCACCACCGG	GAGGTAAGCT	GGCCAGCAAC	TTATCTGTGT	CTGTCCGATT	GTCTAGTGTC	TATGTTTGAT
		>SpeI						
	890	900	910	920	930	940	950	960
	GTTATGCGCC	TGCGTCTGTA	CTAGTTAGCT	AACTAGCTCT	GTATCTGGCG	GACCCGTGGT	GGAAGTGACG	AGTTCTGAAC
	970	980	990	1000	1010	1020	1030	1040
	ACCCGGCCGC	AACCCTGGGA	GACGTCCAG	GGACTTTGGG	GGCCGTTTTT	GTGGCCCGAC	CTGAGGAAGG	GAGTCGATGT
	1050	1060	1070	1080	1090	1100	1110	1120
	GGAATCCGAC	CCCGTCAGGA	TATGTGGTTC	TGGTAGGAGA	CGAGAACCTA	AAACAGTTCC	CGCCTCCGTC	TGAATTTTGG
	1130	1140	1150	1160	1170	1180	1190	1200
	CTTTCGGTTT	GGAACCGAAG	CCGCGCGTCT	TGCTCTGCTG	AGCGCTGCAG	CATCGTTCTG	TGTTGTCTCT	GTCTGACTGT
	1210	1220	1230	1240	1250	1260	1270	1280
	GTTTCTGTAT	TTGTCTGAAA	ATTAGGGCCA	GACTGTTACC	ACTCCCTTAA	GTTTGACCTT	AGGTCAGTGG	AAAGATGTCT
					>BstEII			
	1290	1300	1310	1320	1330	1340	1350	1360
	AGCGGATCGC	TCACAACAG	TCGGTAGATG	TCAAGAAGAG	ACGTTGGGTT	ACCTTCTGCT	CTGCAGAATG	GCCAACCTTT
	1370	1380	1390	1400	1410	1420	1430	1440
	AACGTCGGAT	GGCCGCGAGA	CGGCACCTTT	AACCGAGACC	TCATCACCCA	GGTTAAGATC	AAGGTCTTTT	CACCTGGCCC
	1450	1460	1470	1480	1490	1500	1510	1520
	GCATGGACAC	CCAGACCAGG	TCCCCTACAT	CGTGACCTGG	GAAGCCTTGG	CTTTTGACCC	CCCTCCCTGG	GTCAAGCCCT
>BsrGI								
	1530	1540	1550	1560	1570	1580	1590	1600
	TTGTACACCC	TAAGCCTCCG	CCTCCTCTTC	CTCCATCCGC	CCCGTCTCTC	CCCCTTGAAC	CTCCTCGTTC	GACCCCGCCT
						>TliI		
						>XhoI		
						>PaeR7I		
						>PspXI		
						>HpaI		
							>Myc_tag	
	1610	1620	1630	1640	1650	1660	1670	1680
	CGATCCTCCC	TTTATCCAG						

```

1890      1900      1910      1920      1930      1940
GGA GAG ATT GAT GCA CTG AGT AAA AGA AGC AAG GAA GCT GAA GCA GCT TTC TTG AAT GTC TAC AAA
G   E   I   D   A   L   S   K   R   S   K   E   A   E   A   A   F   L   N   V   Y   K>
1950      1960      1970      1980      1990      2000      2010
AGA TTG ATT GAC GTC CCA GAT CCC GTA CCA GCT TTG GAT CTC GGA CAG CAA CTC CAG CTC AAA GTG
R   L   I   D   V   P   D   P   V   P   A   L   D   L   G   Q   L   L   K   V>
2020      2030      2040      2050      2060      2070
CAG CGC CTG CAC GAT ATT GAA ACA GAG AAC CAG AAA CTT AGG GAA ACT CTG GAA GAA TAC AAC AAG
Q   R   L   H   D   I   E   T   E   N   Q   K   L   R   E   T   L   E   E   Y   N   K>
2080      2090      2100      2110      2120      2130      2140
GAA TTT GCT GAA GTG AAA AAT CAA GAG GTT ACG ATA AAA GCA CTT AAA GAG AAA ATC CGA GAA TAT
E   F   A   E   V   K   N   Q   E   V   T   I   K   A   L   K   E   K   I   R   E   Y>
2150      2160      2170      2180      2190      2200      2210
GAA CAG ACA CTG AAG AAC CAA GCC GAA ACC ATA GCT CTT GAG AAG GAA CAG AAG TTA CAG AAT GAC
E   Q   T   L   K   N   Q   A   E   T   I   A   L   E   K   E   Q   K   L   Q   N   D>
2220      2230      2240      2250      2260      2270
TTT GCA GAA AAG GAG AGA AAG CTG CAG GAG ACA CAG ATG TCC ACC ACC TCA AAG CTG GAG GAA GCT
F   A   E   K   E   R   K   L   Q   E   T   Q   M   S   T   T   S   K   L   E   E   A>
2280      2290      2300      2310      2320      2330      2340
GAG CAT AAG GTT CAG AGC CTA CAA ACA GCC CTG GAA AAA ACT CGA ACA GAA TTA TTT GAC CTG AAA
E   H   K   V   Q   S   L   Q   T   A   L   E   K   T   R   T   E   L   F   D   L   K>
2350      2360      2370      2380      2390      2400
ACC AAA TAC GAT GAA GAA ACT ACT GCA AAG GCC GAC GAG ATT GAA ATG ATC ATG ACG GAC CTT GAA
T   K   Y   D   E   E   T   T   A   K   A   D   E   I   E   M   I   M   T   D   L   E>
2410      2420      2430      2440      2450      2460      2470
AGG GCA AAC CAG AGG GCA GAG GTG GCT CAG AGA GAG GCG GAG ACC TTA AGG GAA CAG CTC TCA TCG
R   A   N   Q   R   A   E   V   A   Q   R   E   A   E   T   L   R   E   Q   L   S   S>
2480      2490      2500      2510      2520      2530      2540
GCC AAT CAC TCC CTC CAG CTG GCC TCA CAG ATC CAG AAG GCA CCA GAC GTG GAG CAG GCC ATA GAG
A   N   H   S   L   Q   L   A   S   Q   I   Q   K   A   P   D   V   E   Q   A   I   E>
2550      2560      2570      2580      2590      2600
GTG CTG ACC CGC TCC AGC CTA GAA GTT GAG TTG GCC GCC AAG GAG CGG GAG ATC GCA CAG CTG GTG
V   L   T   R   S   S   L   E   V   E   L   A   A   K   E   R   E   I   A   Q   L   V>
>BgIII
|
2610      2620      2630      2640      2650      2660      2670
GAG GAC GTG CAG AGA CTC CAG GCC AGC CTC ACC AAG CTG CGG GAG AAT TCG GCC AGC CAG ATC TCA
E   D   V   Q   R   L   Q   A   S   L   T   K   L   R   E   N   S   A   S   Q   I   S>
2680      2690      2700      2710      2720      2730
CAG CTT GAG CAG CAG CTG AGC GCC AAA AAC AGC ACA CTC AAA CAA CTG GAA GAA AAA CTC AAA GGC
Q   L   E   Q   Q   L   S   A   K   N   S   T   L   K   Q   L   E   E   K   L   K   G>
2740      2750      2760      2770      2780      2790      2800
CAG GCT GAC TAT GAA GAG GTG AAG AAA GAG CTG AAC ATT CTG AAG TCC ATG GAG TTT GCA CCG TCC
Q   A   D   Y   E   E   V   K   K   E   L   N   I   L   K   S   M   E   F   A   P   S>
2810      2820      2830      2840      2850      2860      2870
GAG GGC GCT GGG ACA CAG GAT GCG GCC AAG CCC CTG GAG GTG CTG TTG CTG GAG AAG AAC CGC TCG
E   G   A   G   T   Q   D   A   A   K   P   L   E   V   L   L   L   E   K   N   R   S>
2880      2890      2900      2910      2920      2930
CTG CAG TCC GAG AAC GCC GCG CTG CGC ATC TCC AAC AGC GAC CTG AGC GGG TCA GCC AGG AGG AAA
L   Q   S   E   N   A   A   L   R   I   S   N   S   D   L   S   G   S   A   R   R   K>
2940      2950      2960      2970      2980      2990      3000
GGG AAA GAC CAG CCT GAA AGT CGG CGC CCG GGA TCT TTG CCG GCC CCC CCT CCT TCT CAG TTG CCC
G   K   D   Q   P   E   S   R   R   P   G   S   L   P   A   P   P   P   S   Q   L   P>
3010      3020      3030      3040      3050      3060
CGC AAC CCG GGG GAG GAG GCT TCC AAT ACT AAT GGT ACA CAC CAG TTC TCA CCA CCG GGG TTA AGT
R   N   P   G   E   Q   A   S   N   T   N   G   T   H   Q   F   S   P   A   G   L   S>
3070      3080      3090      3100      3110      3120      3130
CAA GAC TTT TTC AGC TCA TCC CTG GCA AGC CCC AGC CTA CCC CTG GCT TCT ACA GGA AAA TTT GCA
Q   D   F   F   S   S   L   A   S   P   S   L   P   L   A   S   T   G   K   F   A>
3140      3150      3160      3170      3180      3190      3200
CTA AAC TCT CTT CTC CAG CGG CAG CTA ATG CAG TCC TTC TAC TCC AAG GCT ATG CAG GAA GCC GGA
L   N   S   L   L   Q   R   Q   L   M   Q   S   F   Y   S   K   A   M   Q   E   A   G>
3210      3220      3230      3240      3250      3260
AGC ACA AGC ATG ATT TTT TCA ACA GGT CCA TAC AGC ACA AAC TCC ATA TCT TCC CAA AGT CCA TTA
S   T   S   M   I   F   S   T   G   P   Y   S   T   N   S   I   S   S   Q   S   P   L>
3270      3280      3290      3300      3310      3320      3330
CAA CAA AGC CCA GAT GTC AAT GGC ATG GCC CCA TCC CCC AGC CAG TCA GAA AGT GCT GGG AGC GTC
Q   Q   S   P   D   V   N   G   M   A   P   S   P   S   Q   S   E   S   A   G   S   V>
3340      3350      3360      3370      3380      3390
TCC GAG GGA GAG GAG ATG GAC ACT GCA GAA ATC GCC CGG CAG GTG AAA GAG CAG CTG ATT AAG CAC
S   E   G   E   E   M   D   T   A   E   I   A   R   Q   V   K   E   Q   L   I   K   H>
3400      3410      3420      3430      3440      3450      3460
AAT ATC GGA CAA CGT ATT TTC GGA CAT TAT GTG TTG GGA CTG TCT CAA GGG TCC GTG AGC GAG ATT
N   I   G   Q   R   I   F   G   H   Y   V   L   G   L   S   Q   G   S   V   S   E   I>

```

```

3470      3480      3490      3500      3510      3520      3530
CTG GCC CGG CCC AAG CCA TGG AAT AAA CTG ACT GTT CGT GGC AAG GAG CCA TTT CAC AAG ATG AAA
L   A   R   P   K   P   W   N   K   L   T   V   R   G   K   E   P   F   H   K   M   K>
      3540      3550      3560      3570      3580      3590
CAG TTC CTC TCC GAT GAG CAG AAC ATC CTG GCC CTC CGT AGC ATC CAA GGC AGA CAA AGA GAG AAT
Q   F   L   S   D   E   Q   N   I   L   A   L   R   S   I   Q   G   R   Q   R   E   N>
3600      3610      3620      3630      3640      3650      3660
CCA GGC CAG AGC CTG AAC AGA CTA TTT CAG GAA GTA CCG AAA CGA AGA AAT GGG TCT GAA GGT AAC
P   G   Q   S   L   N   R   L   F   Q   E   V   P   K   R   R   N   G   S   E   G   N>
      3670      3680      3690      3700      3710      3720
ATC ACC ACC CGG ATC CGA GCC TCG GAG ACT GGC TCT GAT GAA GCC ATC AAG TCC ATC CTA GAG CAA
I   T   T   R   I   R   A   S   E   T   G   S   D   E   A   I   K   S   I   L   E   Q>
3730      3740      3750      3760      3770      3780      3790
GCC AAG AGG GAG CTC CAA GTG CAG AAA ACT GCA GAG CCG GCC CAG CCT TCC TCC GCA TCC GGC AGC
A   K   R   E   L   Q   V   Q   K   T   A   E   P   A   Q   P   S   S   A   S   G   S>
      3800      3810      3820      3830      3840      3850      3860
GGG AAC TCT GAT GAG CCC ATC CGC TCC ATC CTG CAG CAA GCC CGC CGG GAG ATG GAG GCC CAG CAG
G   N   S   D   E   P   I   R   S   I   L   Q   Q   A   R   R   E   M   E   A   Q   Q>
      3870      3880      3890      3900      3910      3920
GCT GCC CTC GAC CCT GCC TTA AAG CAG GCA CCA CTG TCC CAG AGT GAC ATC ACC ATC CTC ACC CCC
A   A   L   D   P   A   L   K   Q   A   P   L   S   Q   S   D   I   T   I   L   T   P>
3930      3940      3950      3960      3970      3980      3990
AAG CTT CTG TCC ACC TCG CCC ATG CCC ACC GTG TCC AGC TAC CCA CCT CTC GCC ATC TCC CTG AAG
K   L   L   S   T   S   P   M   P   T   V   S   S   Y   P   P   L   A   I   S   L   K>
      4000      4010      4020      4030      4040      4050
AAG CCC TCC GCA GCT CCT GAG GCC GGT GCC TCT CTG CCG AAC CCC CCG GCC CTC AAA AAG GAG
K   P   S   A   A   P   E   A   G   A   S   A   L   P   N   P   P   A   L   K   K   E>
4060      4070      4080      4090      4100      4110      4120
GCC CAG GAC GCC CCC GGG CTG GAC CCC CAG GGA GCA GCC GAT TGT GCA CAA GGG GTC CTG AGA CAG
A   Q   D   A   P   G   L   D   P   Q   G   A   A   D   C   A   Q   G   V   L   R   Q>
      4130      4140      4150      4160      4170      4180      4190
GTG AAA AAT GAG GTG GGC CGC AGC GGT GCC TGG AAG GAC CAC TGG TGG AGC GCG GTG CAG CCG GAG
V   K   N   E   V   G   R   S   G   A   W   K   D   H   W   W   S   A   V   Q   P   E>
      4200      4210      4220      4230      4240      4250
AGA AGA AAT GCC GCC TCC TCC GAG GAG GCC AAG GCC AGA GAA ACG GGC GGC AAA GAG AAG GGC
R   R   N   A   A   S   S   E   E   A   K   A   R   E   T   G   G   G   K   E   K   G>
4260      4270      4280      4290      4300      4310      4320
AGC GGT GGC AGC GGA GGT GGC AGC CAG CCT CGG GCC GAG CCG AGT CAG CTC CAG GGA CCC TCG TCG
S   G   G   S   G   G   S   Q   P   R   A   E   R   S   Q   L   Q   G   P   S   S>
      4330      4340      4350      4360      4370      4380
TCA GAG TAC TGG AAG GAG TGG CCC AGC GCT GAG TCC CCA TAC TCC CAG AGC TCA GAG CTG AGT CTG
S   E   Y   W   K   E   W   P   S   A   E   S   P   Y   S   Q   S   S   E   L   S   L>
4390      4400      4410      4420      4430      4440      4450
ACC GGG GCC AGC CGC AGC GAG ACA CCA CAG AAC AGC CCC CTG CCA TCC TCC CCG ATC GTG CCC ATG
T   G   A   S   R   S   E   T   P   Q   N   S   P   L   P   S   S   P   I   V   P   M>
      4460      4470      4480      4490      4500      4510      4520
TCC AAG CCC ACC AAG CCC TCG GTC CCC CCG CTG ACC CCC GAG CAG TAC GAG GTC TAC ATG TAC CAG
S   K   P   T   K   P   S   V   P   P   L   T   P   E   Q   Y   E   V   Y   M   Y   Q>
      4530      4540      4550      4560      4570      4580
GAG GTG GAC ACC ATC GAG CTC ACC CGG CAG GTT AAG GAA AAG CTG GCC AAG AAC GGC ATC TGC CAG
E   V   D   T   I   E   L   T   R   Q   V   K   E   K   L   A   K   N   G   I   C   Q>
4590      4600      4610      4620      4630      4640      4650
AGA ATC TTC GGG GAG AAG GTG CTG GGC CTG TCC CAG GGC AGC GTC AGC GAC ATG CTG TCC CGA CCG
R   I   F   G   E   K   V   L   G   L   S   Q   G   S   V   S   D   M   L   S   R   P>
      4660      4670      4680      4690      4700      4710
AAG CCA TGG AGC AAG CTG ACG CAG AAA GGC CGA GAA CCC TTC ATC CGG ATG CAG CTC TGG CTG AAC
K   P   W   S   K   L   T   Q   K   G   R   E   P   F   I   R   M   Q   L   W   L   N>
                                                                 >DraIII
                                                                 |
4720      4730      4740      4750      4760      4770      4780 |
GGC GAG CTA GGC CAG GGT GTT CTA CCC GTC CAG GGC CAG CAG CAA GGG CCA GTC CTC CAC TCC GTG
G   E   L   G   Q   G   V   L   P   V   Q   G   Q   Q   Q   G   P   V   L   H   S   V>
      4790      4800      4810      4820      4830      4840      4850
ACA TCG CTC CAG GAC CCG CTG CAG CAG GGC TGT GTG AGC TCA GAA AGC ACT CCA AAG ACC TCC GCC
T   S   L   Q   D   P   L   Q   Q   G   C   V   S   S   E   S   T   P   K   T   S   A>
      4860      4870      4880      4890      4900      4910
AGC TGC AGC CCT GCC GAG TCC CCG AGT AGT TCC AGT GAG TCG GTG AAG AGC CTG ACC GAG CTG
S   C   S   P   A   P   E   S   P   M   S   S   S   E   S   V   K   S   L   T   E   L>
4920      4930      4940      4950      4960      4970      4980
GTC CAG CAG CCC TGT CCC CCC ATC GAG GCG AGC AAG GAC AGC AAG CCA CCA GAG CCC AGT GAC CCG
V   Q   Q   P   C   P   P   I   E   A   S   D   S   K   P   E   P   S   D   P>
      4990      5000      5010      5020      5030      5040
CCA GCA TCC GAC TCC CAG CCC ACA ACC CCG CTG CCT CTC TCC GGA CAC TCG GCC CTC AGC ATC CAA
P   A   S   D   S   Q   P   T   T   P   L   P   L   S   G   H   S   A   L   S   I   Q>

```

```

5050          5060          5070          5080          5090          5100          5110
GAA TTA GTA GCC ATG TCC CCG GAG CTG GAC ACC TAC GGC ATA ACC AAG CGG GTG AAG GAG GTG CTG
E   L   V   A   M   S   P   E   L   D   T   Y   G   I   T   K   R   V   K   E   V   L>
5120          5130          5140          5150          5160          5170          5180
ACG GAC AAC AAC CTC GGC CAG CGC TTA TTT GGG GAG ACC ATC TTA GGG CTC ACC CAA GGC TCT GTC
T   D   N   N   L   G   Q   R   L   F   G   E   T   I   L   G   L   T   Q   G   S   V>
          5190          5200          5210          5220          5230          5240
TCT GAC CTC CTT GCC CGC CCC AAA CCC TGG CAT AAG CTC AGT CTG AAA GGA CGA GAG CCC TTC GTC
S   D   L   L   A   R   P   K   P   W   H   K   L   S   L   K   G   R   E   P   F   V>
5250          5260          5270          5280          5290          5300          5310
CGG ATG CAG CTG TGG CTG AAC GAC CCC AAC AAT GTG GAG AAG CTG ATG GAC ATG AAA CGG ATG GAG
R   M   Q   L   W   L   N   D   P   N   N   V   E   K   L   M   D   M   K   R   M   E>
          5320          5330          5340          5350          5360          5370
AAG AAA GCC TAC ATG AAG CGG CGG CAC AGC TCA GTC AGT GAC AGC CAG CCC TGC GAA CCG CCC TCT
K   K   A   Y   M   K   R   R   H   S   S   V   S   D   S   Q   P   C   E   P   P   S>
5380          5390          5400          5410          5420          5430          5440
GTC GGC ACC GAG TAC AGC CAG GGC GCC AGC CCC CAG CCC CAG CAC CAG CTG AAG AAA CCC CGG GTG
V   G   T   E   S   Q   G   A   S   P   Q   P   Q   Q   L   K   K   P   R   V>
          5450          5460          5470          5480          5490          5500          5510
GTG CTG GCT CCG GAG GAG AAG GAG GCG CTG AAA CGA GCG TAT CAG CAA AAG CCA TAC CCG TCA CCA
V   L   A   P   E   E   K   E   A   L   K   R   A   Y   Q   Q   K   P   Y   P   S   P>
          5520          5530          5540          5550          5560          5570
AAA ACC ATC GAA GAC CTC GCC ACC CAG CTC AAC CTG AAA ACA AGC ACC GTC ATC AAC TGG TTC CAC
K   T   I   E   D   L   A   T   Q   L   N   L   K   T   S   T   V   I   N   W   F   H>
5580          5590          5600          5610          5620          5630          5640
AAC TAC AGG TCT CGG ATC CGC AGA GAA CTG TTC ATT GAG GAA ATT CAG GCC GGG AGT CAG GGC CAG
N   Y   R   S   R   I   R   R   E   L   F   I   E   E   I   Q   A   G   S   Q   G   Q>
          5650          5660          5670          5680          5690          5700
GCG GGC GCC AGC GAC TCA CCC TCG GCC CGC AGC GGC CGG GCG GCG CCC AGC TCG GAG GGC GAC AGC
A   G   A   S   D   S   P   S   A   R   S   G   R   A   A   P   S   S   E   G   D   S>
5710          5720          5730          5740          5750          5760          5770
TGC GAC GGC GTG GAG GCC ACT GAG GGC CCA GGC AGC GCC GAC ACC GAG GAG CCC AAG TCT CAG GGA
C   D   G   V   E   A   T   E   G   P   G   S   A   D   T   E   E   P   K   S   Q   G>
          5780          5790          5800          5810          5820          5830          5840
GAG GCC GAG CGG GAG GAG GTG CCG CGG CCG GCG GAG CAG ACG GAG CCG CCG CCC TCG GGG ACC CCG
E   A   E   R   E   E   V   P   R   P   A   E   Q   T   E   P   P   P   S   G   T   P>
          5850          5860          5870          5880          5890          5900
GGC CCG GAC GAC GCC CGC GAC GAC CAC GAG GGA GGC CCC GTG GAA GGC CCG GGG CCC CTG CCC
G   P   D   D   A   R   D   D   H   E   G   G   P   V   E   G   P   G   P   L   P>
5910          5920          5930          5940          5950          5960          5970
AGC CCC GCC TCC GCG ACC GCC ACC GCC GCG CCC GCG GCC CCC GAG GAC GCC GCT ACC TCA GCC GCC
S   P   A   S   A   T   A   T   A   A   P   A   A   P   E   D   A   A   T   S   A   A>
          5980          5990          6000          6010          6020          6030
GCC GCG CCG GGG GAG GGC CCC GCG GCC CCG ACG TCC GCG CCA CCG CCC AGC AAC AGC AGC AGC AGC
A   A   P   G   E   G   P   A   A   P   T   S   A   P   P   P   S   N   S   S   S   S>
6040          6050          6060          6070          6080          6090          6100
AGC GCC CCC CGC AGG CCC AGC TCG CTG CAG AGC CTT TTC GGC CTC CCC GAG GCC GCG GGC GCC CGG
S   A   P   R   R   P   S   S   L   Q   S   L   F   G   L   P   E   A   A   G   A   R>
          6110          6120          6130          6140          6150          6160          6170
GAC TCG CGC GAC AAC CCC CTG CGC AAG AAG AAG GCC GCG AAC TTG AAC AGC ATC ATC CAC CGC CTG
D   S   R   D   N   P   L   R   K   K   K   A   A   A   N   L   N   S   I   I   H   R   L>
          >HA_tag
          |
          6180          6190          6200          6210          6220          6230          6240
GAG AAG GCC GCC AGC CGG GAG GAA CCT ATC GAA TGG GAG TTC TATCCAT ACGACGTACC TGACTACGCA
E   K   A   A   S   R   E   E   P   I   E   W   E   F>
          6250          6260          6270          6280          6290          6300          6310          6320
TGAGCGGCCA TCCGGCTGTG GAATGTGTGT CAGTTAGGGT GTGGAAAGTC CCCAGGCTCC CCAGCAGGCA GAAGTATGCA
6330          6340          6350          6360          6370          6380          6390          6400
AAGCATGCAT CTCAATTAGT CAGCAACCAG GTGTGGAAAG TCCCCAGGCT CCCCAGCAGG CAGAAGTATG CAAAGCATGC
6410          6420          6430          6440          6450          6460          6470          6480
ATCTCAATTA GTCAGCAACC ATAGTCCCGC CCCTAACTCC GCCCATCCCG CCCCTAACTC CGCCCAGTTC CGCCCATTCT
          >SfiI
          |
          6490          6500          6510          6520          6530          6540          6550          6560
CCGCCCCATG GCTGACTAAT TTTTATTATT TATGCAGAGG CCGAGGCCGC CTCGGCCTCT GAGCTATTCC AGAAGTAGTG
          >AvrII
          |
          >StuI
          ||
          6570          6580          6590          6600          6610          6620          6630          6640
AGGAGGCTTT TTTGGAGGCC TAGGCTTTTG CAAAAAGCTT GGGCTGCAGG TCGAGGCGGA TCTGATCAAG AGACAGGATG
>BsaBI
|

```

```

|      6650      6660      6670      6680      6690      6700
AGGATCGTTT CGC ATG ATT GAA CAA GAT GGA TTG CAC GCA GGT TCT CCG GCC GCT TGG GTG GAG AGG
      M   I   E   Q   D   G   L   H   A   G   S   P   A   A   W   V   E   R>
6710      6720      6730      6740      6750      6760      6770
CTA TTC GGC TAT GAC TGG GCA CAA CAG ACA ATC GGC TGC TCT GAT GCC GCC GTG TTC CGG CTG TCA
  L   F   G   Y   D   W   A   Q   T   I   G   C   S   D   A   A   V   F   R   L   S>
      6780      6790      6800      6810      6820      6830
GCG CAG GGG CGC CCG GTT CTT TTT GTC AAG ACC GAC CTG TCC GGT GCC CTG AAT GAA CTG CAG GAC
  A   Q   G   R   P   V   L   F   V   K   T   D   L   S   G   A   L   N   E   L   Q   D>
6840      6850      6860      6870      6880      6890      6900
GAG GCA GCG CGG CTA TCG TGG CTG GCC ACG ACG GGC GTT CCT TGC GCA GCT GTG CTC GAC GTT GTC
  E   A   A   R   L   S   W   L   A   T   T   G   V   P   C   A   A   V   L   D   V   V>
      6910      6920      6930      6940      6950      6960      6970
ACT GAA GCG GGA AGG GAC TGG CTG CTA TTG GGC GAA GTG CCG GGG CAG GAT CTC CTG TCA TCT CAC
  T   E   A   G   R   D   W   L   L   L   G   E   V   P   G   Q   D   L   L   S   S   H>
      6980      6990      7000      7010      7020      7030
CTT GCT CCT GCC GAG AAA GTA TCC ATC ATG GCT GAT GCA ATG CCG CGG CTG CAT ACG CTT GAT CCG
  L   A   P   A   E   K   V   S   I   M   A   D   A   M   R   R   L   H   T   L   D   P>
7040      7050      7060      7070      7080      7090      7100
GCT ACC TGC CCA TTC GAC CAC CAA GCG AAA CAT CGC ATC GAG CGA GCA CGT ACT CGG ATG GAA GCC
  A   T   C   P   F   D   H   Q   A   K   H   R   I   E   R   A   R   T   R   M   E   A>
      7110      7120      7130      7140      7150      7160
GGT CTT GTC GAT CAG GAT GAT CTG GAC GAA GAG CAT CAG GGG CTC GCG CCA GCC GAA CTG TTC GCC
  G   L   V   D   Q   D   D   L   D   E   E   H   Q   G   L   A   P   A   E   L   F   A>
7170      7180      7190      7200      7210      7220      7230
AGG CTC AAG GCG CGC ATG CCC GAC GGC GAG GAT CTC GTC GTG ACC CAT GGC GAT GCC TGC TTG CCG
  R   L   K   A   R   M   P   D   G   E   D   L   V   V   T   H   G   D   A   C   L   P>
      >RsrII
|
      7240      7250      7260      7270      7280      7290      7300
AAT ATC ATG GTG GAA AAT GGC CGC TTT TCT GGA TTC ATC GAC TGT GGC CGG CTG GGT GTG GCG GAC
  N   I   M   V   E   N   G   R   F   S   G   F   I   D   C   G   R   L   G   V   A   D>
      7310      7320      7330      7340      7350      7360
CGC TAT CAG GAC ATA GCG TTG GCT ACC CGT GAT ATT GCT GAA GAG CTT GGC GGC GAA TGG GCT GAC
  R   Y   Q   D   I   A   L   A   T   R   D   I   A   E   E   L   G   G   E   W   A   D>
7370      7380      7390      7400      7410      7420      7430
CGC TTC CTC GTG CTT TAC GGT ATC GCC GCT CCC GAT TCG CAG CGC ATC GCC TTC TAT CGC CTT CTT
  R   F   L   V   L   Y   G   I   A   A   P   D   S   Q   R   I   A   F   Y   R   L   L>
      7440      7450      7460      7470      7480      7490      7500      7510
GAC GAG TTC TTC TGA GC GGGACTCTGG GGTTCGATAA AATAAAAGAT TTTATTTAGT CTCCAGAAAA AGGGGGGAAT
  D   E   F   F   *>
      7520      7530      7540      7550      7560      7570      7580      7590
GAAAGACCCC ACCTGTAGGT TTGGCAAGCT AGCTTAAGTA ACGCCATTTT GCAAGGCATG GAAAAATACA TAACTGAGAA
      7600      7610      7620      7630      7640      7650      7660      7670
TAGAGAAGTT CAGATCAAGG TCAGGAACAG ATGGAACAGC TGAATATGGG CCAAACAGGA TATCTGTGGT AAGCAGTTCC
      7680      7690      7700      7710      7720      7730      7740      7750
TGCCCCGGCT CAGGGCCAAG AACAGATGGA ACAGCTGAAT ATGGGCCAAA CAGGATATCT GTGGTAAGCA GTTCCTGCCC
      >XbaI
|
      7760      7770      7780      7790      7800      7810      7820      7830
CGGCTCAGGG CCAAGAACAG ATGGTCCCCA GATGCGGTCC AGCCCTCAGC AGTTTCTAGA GAACCATCAG ATGTTTCCAG
      7840      7850      7860      7870      7880      7890      7900      7910
GGTGCCCAA GGACCTGAAA TGACCTGTGT CTTTATTTGA ACTAACCAAT CAGTTCGCTT CTCGCTTCTG TTCGCGCGCT
      7920      7930      7940      7950      7960      7970      7980      7990
TCTGCTCCCC GAGCTCAATA AAAGAGCCCA CAACCCCTCA CTCGGGGCGC CAGTCCTCCG ATTGACTGAG TCGCCCGGGT
      8000      8010      8020      8030      8040      8050      8060      8070
ACCCGTGTAT CCAATAAACC CTCTTGCACT TGCAATCCGAC TTGTGGTCTC GCTGTTCTCT GGGAGGGTCT CCTCTGAGTG
      8080      8090      8100      8110      8120      8130      8140      8150
ATTGACTACC CGTCAGCGGG GGTCTTTTCAT TTGGGGGCTC GTCCGGGATC GGGAGACCCC TGCCCAAGGA CCACCGACCC
      8160      8170      8180      8190      8200      8210      8220      8230
ACCACCGGGA GGTAAGCTGG CTGCCTCGCG CGTTTCGGTG ATGACGGTGA AAACCTCTGA CACATGCAGC TCCCGGAGAC
      8240      8250      8260      8270      8280      8290      8300      8310
GGTCACAGCT TGTCTGTAAG CGGATGCCGG GAGCAGACAA GCCCGTCAGG GCGCGTCAGC GGGTGTGGC GGGTGTGGG
      >BstZ17I
|
      8320      8330      8340      8350      8360      8370      8380      8390
GCGCAGCCAT GACCCAGTCA CGTAGCGATA GCGGAGTGTA TACTGGCTTA ACTATGCGGC ATCAGAGCAG ATTGTACTGA
      >NdeI
|
      8400      8410      8420      8430      8440      8450      8460      8470
GAGTGCACCA TATGCGGTGT GAAATACCGC ACAGATGCGT AAGGAGAAAA TACCGCATCA GGCGCTCTTC CGCTTCTCTG
      8480      8490      8500      8510      8520      8530      8540      8550
CTCACTGACT CGCTGCGCTC GGTGCTTCGG CTGCGGCGAG CGGTATCAGC TCACTCAAAG GCGGTAATAC GGTATCCAC
      8560      8570      8580      8590      8600      8610      8620      8630

```

AGAATCAGGG	GATAACGCAG	GAAAGAACAT	GTGAGCAAAA	GGCCAGCAAA	AGGCCAGGAA	CCGTAAAAAG	GCCGCGTTGC
8640	8650	8660	8670	8680	8690	8700	8710
TGGCGTTTTT	CCATAGGCTC	CGCCCCCTG	ACGAGCATCA	CAAAAATCGA	CGCTCAAGTC	AGAGGTGGCG	AAACCCGACA
8720	8730	8740	8750	8760	8770	8780	8790
GGACTATAAA	GATACCAGGC	GTTTCCCCCT	GGAAGCTCCC	TCGTGCGCTC	TCCTGTTCGG	ACCCCTGCCGC	TTACCCGATA
8800	8810	8820	8830	8840	8850	8860	8870
CCTGTCCGCC	TTTCTCCCTT	CGGGAAGCGT	GGCGCTTTCT	CATAGCTCAC	GCTGTAGGTA	TCTCAGTTCG	GTGTAGGTCG
8880	8890	8900	8910	8920	8930	8940	8950
TTCGCTCCAA	GCTGGGCTGT	GTGCACGAAC	CCCCCGTTCA	GCCCGACCGC	TGCGCCTTAT	CCGGTAACATA	TCGTCTTGAG
8960	8970	8980	8990	9000	9010	9020	9030
TCCAACCCGG	TAAGACACGA	CTTATCGCCA	CTGGCAGCAG	CCACTGGTAA	CAGGATTAGC	AGAGCGAGGT	ATGTAGGCGG
9040	9050	9060	9070	9080	9090	9100	9110
TGCTACAGAG	TTCTTGAAGT	GGTGGCCTAA	CTACGGCTAC	ACTAGAAGGA	CAGTATTTGG	TATCTGCGCT	CTGCTGAAGC
9120	9130	9140	9150	9160	9170	9180	9190
CAGTTACCTT	CGGAAAAAGA	GTTGGTAGCT	CTTGATCCGG	CAAACAAACC	ACCGCTGGTA	GCGGTGGTTT	TTTTGTTTGC
9200	9210	9220	9230	9240	9250	9260	9270
AAGCAGCAGA	TTACGCGCAG	AAAAAAGGA	TCTCAAGAAG	ATCCTTTGAT	CTTTTCTACG	GGGTCTGACG	CTCAGTGGA
9280	9290	9300	9310	9320	9330	9340	9350
CGAAAACTCA	CGTTAAGGGA	TTTTGGTCAT	GAGATTATCA	AAAAGGATCT	TCACCTAGAT	CCTTTTAAAT	TAAAAATGAA
9360	9370	9380	9390	9400	9410	9420	9430
GTTTTAAATC	AATCTAAAGT	ATATATGAGT	AAACTTGGTC	TGACAGTTAC	CAATGCTTAA	TCAGTGAGGC	ACCTATCTCA
9440	9450	9460	9470	9480	9490	9500	9510
GCGATCTGTC	TATTTTCGTT	ATCCATAGTT	GCCTGACTCC	CCGTCGTGTA	GATAACTACG	ATACGGGAGG	GCTTACCATC
9520	9530	9540	9550	9560	9570	9580	9590
TGGCCCCAGT	GCTGCAATGA	TACCGCGAGA	CCCACGCTCA	CCGGCTCCAG	ATTTATCAGC	AATAAACCCAG	CCAGCCGGAA
>AseI							
9600	9610	9620	9630	9640	9650	9660	9670
GGGCCGAGCG	CAGAAGTGGT	CCTGCAACTT	TATCCGCCTC	CATCCAGTCT	ATTAATTGTT	GCCGGGAAGC	TAGAGTAAGT
9680	9690	9700	9710	9720	9730	9740	9750
AGTTCGCCAG	TTAATAGTTT	GCGCAACGTT	GTTGCCATTG	CTGCAGGCAT	CGTGGTGTCA	CGCTCGTCGT	TTGGTATGGC
9760	9770	9780	9790	9800	9810	9820	9830
TTCATTCAGC	TCCGGTTCCT	AACGATCAAG	GCGAGTTACA	TGATCCCCCA	TGTTGTGCAA	AAAAGCGGTT	AGCTCCTTCG
9840	9850	9860	9870	9880	9890	9900	9910
GTCTCCGAT	CGTTGTGAGA	AGTAAGTTGG	CCGCAGTGTT	ATCACTCATG	GTTATGGCAG	CACTGCATAA	TTCTCTTACT
9920	9930	9940	9950	9960	9970	9980	9990
GTCATGCCAT	CCGTAAGATG	CTTTTCTGTG	ACTGGTGAGT	ACTCAACCAA	GTCATTCTGA	GAATAGTGTA	TGCGGCGACC
10000	10010	10020	10030	10040	10050	10060	10070
GAGTTGCTCT	TGCCCCGGCG	CAACACGGGA	TAATACCGCG	CCACATAGCA	GAACTTTAAA	AGTGCTCATC	ATTGGAAAAC
10080	10090	10100	10110	10120	10130	10140	10150
GTTCTTCGGG	GCGAAAACCT	TCAAGGATCT	TACCGCTGTT	GAGATCCAGT	TCGATGTAAC	CCACTCGTGC	ACCCAACTGA
10160	10170	10180	10190	10200	10210	10220	10230
TCTTCAGCAT	CTTTTACTTT	CACCAGCGTT	TCTGGGTGAG	CAAAAACAGG	AAGGCAAAAT	GCCGCAAAAA	AGGGAATAAG
>SspI							
10240	10250	10260	10270	10280	10290	10300	10310
GGCGACACGG	AAATGTTGAA	TACTCATACT	CTTCCTTTTT	CAATATTATT	GAAGCATTTA	TCAGGGTTAT	TGTCTCATGA
10320	10330	10340	10350	10360	10370	10380	10390
GCGGATACAT	ATTTGAATGT	ATTTAGAAAA	ATAAACAAAT	AGGGGTTCGG	CGCACATTTT	CCCGAAAAAGT	GCCACCTGAC
10400	10410	10420	10430	10440	10450	10460	
GTCTAAGAAA	CCATTATTAT	CATGACATTA	ACCTATAAAA	ATAGGCGTAT	CACGAGGCC	TTTCGTCTTC	AA