

pTurboRFP-C vector restriction map

The data has not been verified by restriction digestion with each enzyme listed and does not take into account possible methylation sites. Enzymes that recognize unambiguous sequences less than 6 basepairs long are not included – for the more complete enzyme list please refer to the Table of restriction sites.

Unique sites shown in bold blue. The location given specifies the 3' end of the cut DNA (the base to the left of the cut site). MCS sequence shown in frame, amino acids coded by MCS shown in black.



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                                Aat2                                Eci1
                                |                                |
401 TAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTGGTGGCACCACAAAATCAACGGGACTTTCCAAAATGTGCGTA 500
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
ATCGCCAAACTGAGTGCCCTAAAGGTTTCAGAGGTGGGGTAACTGCAGTTACCCCTCAAACAAAACCGTGGTTTTAGTTGCCCTGAAAGGTTTTACAGCAT

                                Nhe1 Afel
                                |                                |
501 ACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTTAGTGAACCGTCAGATCCGCTAGCGCTA 600
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
TGTTGAGGCGGGTAACTGCGTTTTACCCGCCATCCGCACATGCCACCCCTCCAGATATATTCGTCTCGACCAAATCACTTGGCAGTCTAGGCGATCGCGAT

Agel                                Bcl1                                BsrG1                                ApaL1
|                                |                                |                                |
601 CCGGTCGCCACCATGAGCGAGCTGATCAAGGAGAACATGCACATGAAGCTGTACATGGAGGGCACCGTGAACAACACCACCCTTCAAGTGCACATCCGAGG 700
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
GGCCAGCGGTGGTACTCGCTCGACTAGTTCCTCTTGTACGTGTACTTCGACATGTACCTCCCGTGGCACTTGTTGGTGGTGAAGTTCACGTGTAGGCTCC

TurboRFP > M S E L I K E N M H M K L Y M E G T V N N H H F K C T S E G

                                SpAcc
                                |
701 GCGAAGGCAAGCCCTACGAGGGCACCCAGACCATGAAGATCAAGGTGGTTCGAGGGCGGCCCTCTCCCTTCGCCTTCGACATCCTGGCTACCAGCTTCAT 800
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
CGCTTCGGTTCGGGATGCTCCCGTGGGTCTGGTACTTCTAGTTCCACCAGCTCCCGCCGGGAGAGGGGAAGCGGAAGCTGTAGGACCGATGGTTCGAAGTA

TurboRFP > E G K P Y E G T Q T M K I K V V E G G P L P F A F D I L A T S F M

                                Bsu36                                SpDon
                                |                                |
801 GTACGGCAGCAAAGCCTTCATCAACCACACCCAGGGCATCCCCGACTTCTTTAAGCAGTCCTTCCTGAGGGCTTCACATGGGAGAGAATCACACATAC 900
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
CATGCCGTCGTTTTCGGAAGTAGTTGGTGTGGGTCCCGTAGGGGCTGAAGAAAATTCGTCAGGAAGGGACTCCCCAAGTGTACCCCTCTCTTAGTGGTGTATG

TurboRFP > Y G S K A F I N H T Q G I P D F F K Q S F P E G F T W E R I T T Y

                                Bbs1
                                |
901 GAAGACGGGGCGTGTGCTGACCGCTACCCAGGACACCAGCTTCCAGAACGGCTGCATCATCTACAACGTCAAGATCAACGGGGTGAACTTCCCATCCAACG 1000
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*
CTTCTGCCCCCGCACGACTGGCGATGGGTCTTGTGGTTCGAAGGCTTTGCCGACGTAGTAGATGTTGCAGTTCAGTTGCCCCACTTGAAGGGTAGGTTGC

TurboRFP > E D G G V L T A T Q D T S F Q N G C I I Y N V K I N G V N F P S N G
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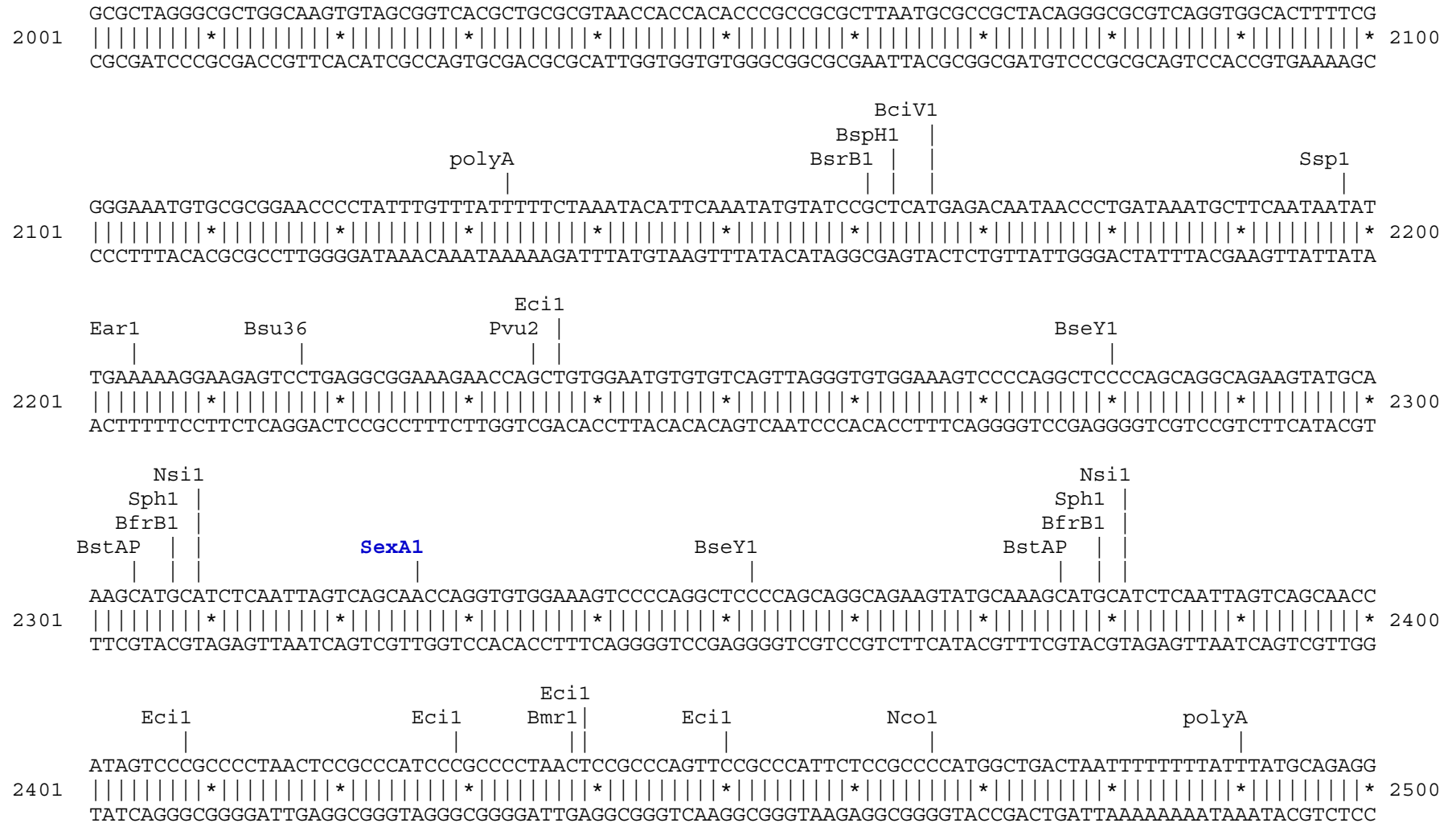
                                                                SfiI
                                                                BglI
                                                                |
                                BseYI
                                |
GCCCTGTGATGCAGAAGAAAACACGCGGCTGGGAGGCCAACACCCGAGATGCTGTACCCCGCTGACGGCGGCCTGAGAGGCCACAGCCAGATGGCCCTGAA
1001 |||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||* 1100
CGGGACACTACGTCTTCTTTTGTGCGCCGACCCCTCCGGTTGTGGCTCTACGACATGGGGCGACTGCCGCCGACTCTCCGGTGTGCGGTCTACCGGGACTT
TurboRFP > P V M Q K K T R G W E A N T E M L Y P A D G G L R G H S Q M A L K

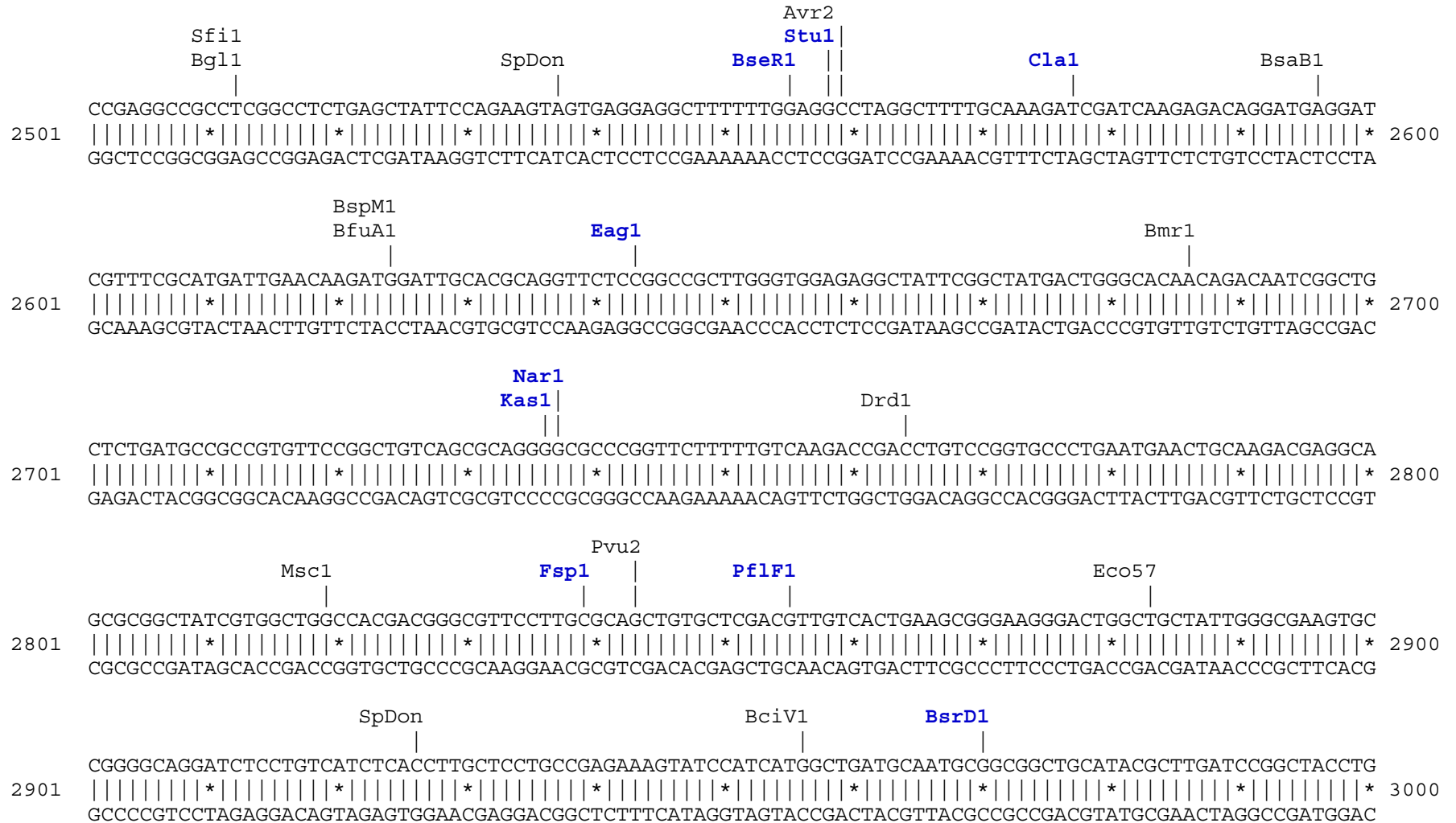
                                BspM1
                                |
                                BssS1 | Eco57 | Bts1BfuA1 | BpuE1 | PflM1
                                |          |          |          |          |          |
GCTCGTGGGCGGGGGCTACCTGCACTGCTCCTTCAAGACCACATACAGATCCAAGAAACCCGCTAAGAACCTCAAGATGCCCGGCTTCCACTTTCGTGGAC
1101 |||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||* 1200
CGAGCACCCGCCCCGATGGACGTGACGAGGAAGTTCTGGTGTATGTCTAGGTTCTTTGGGCGATTCTTGGAGTTCTACGGGCCGAAGGTGAAGCACCTG
TurboRFP > L V G G G Y L H C S F K T T Y R S K K P A K N L K M P G F H F V D

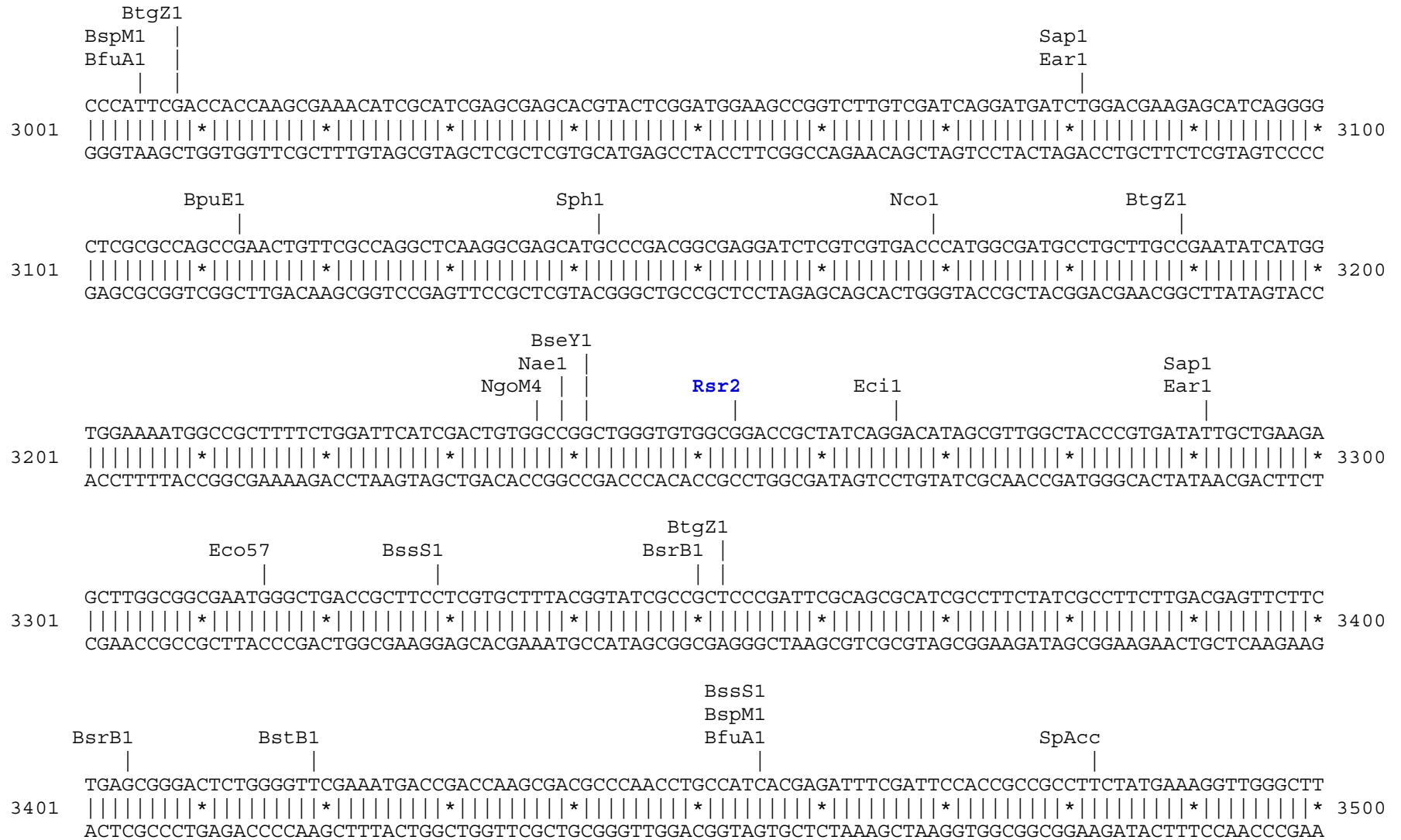
                                SpAcc
                                PflM1
                                |
                                BsaI
                                |
                                PshA1
                                |
                                BssS1
                                |
                                MscI
                                |
                                Scal
                                |
                                SpAcc
                                |
CACAGACTGGAAAAGAATCAAGGAGGCCGACAAAAGAGACCTACGTGCGAGCAGCACGAGATGGCTGTGGCCAAGTACTGCGACCTCCCTAGCAAACCTGGGGC
1201 |||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||* 1300
GTGTCTGACCTTTCTTAGTTCTCCGGCTGTTTCTCTGGATGCAGCTCGTCTGCTCTACCGACACCGGTTTCATGACGCTGGAGGGATCGTTTGACCCCG
TurboRFP > H R L E R I K E A D K E T Y V E Q H E M A V A K Y C D L P S K L G H

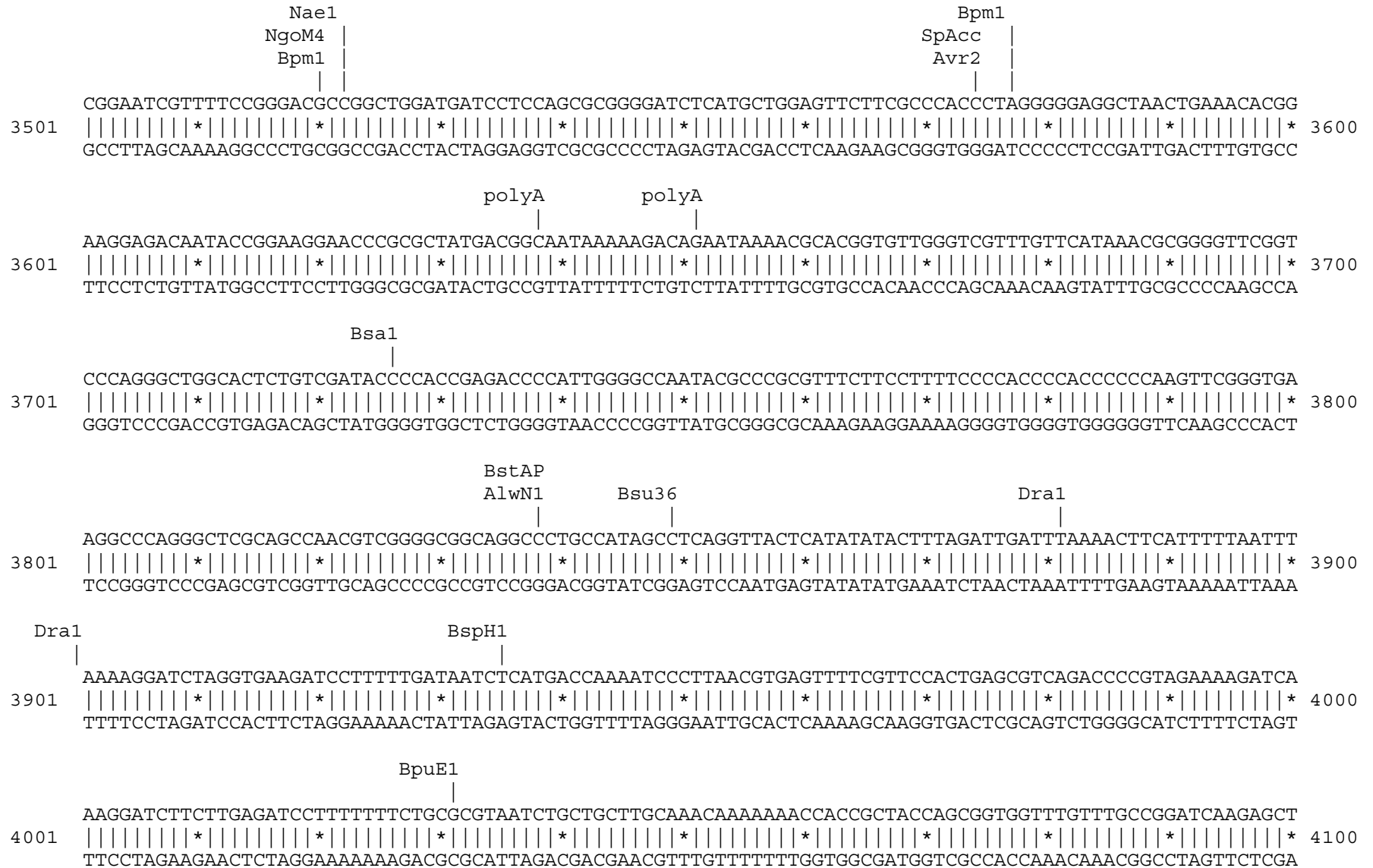
                                                                BamHI
                                                                Smal
                                                                ApaI
                                                                PspOM
                                                                Sac2
                                                                BpuE1
                                                                XhoI
                                                                Hind3
                                                                EcoRI
                                                                SalI
                                                                KpnI
                                                                BmrI
                                                                BspE1
                                                                Bgl2
                                                                Sac1
                                                                BstB1
                                                                Pst1
                                                                Acc65
                                                                XbaI
                                                                Bcl1BsaB1
ACAGAGATGAATCCGGACTCAGATCTCGAGCTCAAGCTTTCGAATTCTGCAGTCGACGGTACC GCGGGCCCGGGATCCACCGGATCTAGATAACTGATCAT
1301 |||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||*||||||* 1400
TGTCTTACTTAGGCCTGAGTCTAGAGCTCGAGTTTCGAAGCTTAAGACGTCAGCTGCCATGGCGCCCGGGCCCTAGGTGGCCTAGATCTATTGACTAGTA
TurboRFP/MCS > R D E S G L R S R A Q A S N S A V D G T A G P G S T G S R *

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          Eco57                               SpAcc
          |                                   |
4101 ACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCT
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4200
    TGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCTCGCGTCTATGGTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAGTTCTTGAGA

                AlwN1                               BpuE1
                |                                   |
4201 GTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGT
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4300
    CATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCACCGACGACGGTCACCGCTATTGAGCAGAGAATGGCCCAACCTGAGTTCTGCTATCA

                ApaL1           BseY1
                |               |
4301 TACCGATAAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACTACAGCGTGA
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4400
    ATGGCCTATTCCGCGTCGCCAGCCGACTTGCCCCCAAGCACGTGTGTCTGGGTGGAACCTCGCTTGCTGGATGTGGCTTGACTCTATGGATGTGCGACT

          SpAcc                               BciV1           Eci1           BssS1
          |                                   |               |           |           |
4401 GCTATGAGAAAAGCGCCACGCTTCCCGAAGGGAGAAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTTCGGAACAGGAGAGCGCACGAGGGGAGCTTCCAGGG
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4500
    CGATACTCTTTCGCGGTGCGAAGGGCTTCCCTCTTTCGCTGTCCATAGGCCATTGCGCGTCCCAGCCTTGTCTCTCGCGTGCTCCCTCGAAGGTCCC

          SpAcc           Drd1           BpuE1           SpAcc           Eci1
          |               |           |           |           |           |
4501 GGAAACGCCTGGTATCTTTATAGTCTTGTCTCGGGTTTCGCCACCTCTGACTTGAGCGTTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAA
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4600
    CCTTTGCGGACCATAGAAATATCAGGACAGCCCAAAGCGGTGGAGACTGAACTCGCAGCTAAAAAACTACGAGCAGTCCCCCGCCTCGGATACTTTTT

          SpDon
          BspLU
          ||
4601 ACGCCAGCAACGCGCCTTTTTACGGTTCCTGGCCTTTTGTCTGGCCTTTTGTCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAACCGTAT
    |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4700
    TGCGGTCGTTGCGCCGAAAAATGCCAAGGACCGGAAAACGACCGGAAAACGAGTGTACAAGAAAGGACGCAATAGGGGACTAAGACACCTATTGGCATA
  
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          NsiI
        BfrB1 |
          |   |
TACCGCCATGCAT
4701  |||||*||| 4713
ATGGCGGTACGTA
    
```

Found:

Aat2	Acc65	Afe1	Age1	AlwN1	Apa1	ApaL1	Ase1	Avr2	BamH1	Bbs1	BciV1	Bcl1	BfrB1
BfuA1	Bgl1	Bgl2	Bmr1	Bpm1	BpuE1	Bsa1	BsaB1	BsaXa	BsaXb	BseR1	BseY1	Bsg1	Bsm1
BspE1	BspH1	BspLU	BspM1	BsrB1	BsrD1	BsrG1	BssS1	BstAP	BstB1	Bsu36	BtgZ1	Bts1	Clal
Dra1	Dra3	Drd1	Eag1	Ear1	Eci1	Eco57	EcoR1	Fsp1	Hind3	Hpa1	Kas1	Kpn1	Mfe1
Mlu1	Msc1	Nae1	Nar1	Nco1	Nde1	Ngom4	Nhe1	Nsi1	PflF1	PflM1	polyA	PshA1	Psi1
PspOM	Pst1	Pvu2	Rsr2	Sac1	Sac2	Sall	Sap1	Sca1	SexA1	Sfi1	Sma1	SnaB1	SpAcc
SpDon	Sph1	Ssp1	Stu1	Xba1	Xho1								

Unique:

Acc65	Afe1	Age1	Apa1	Ase1	BamH1	Bbs1	Bgl2	BsaXa	BsaXb	BseR1	Bsg1	BspE1	BspLU
BsrD1	BsrG1	Clal	Eag1	EcoR1	Fsp1	Hind3	Hpa1	Kas1	Kpn1	Mfe1	Mlu1	Nar1	Nde1
Nhe1	PflF1	PshA1	PspOM	Pst1	Rsr2	Sac1	Sac2	Sall	Sca1	SexA1	Sma1	SnaB1	Stu1
Xba1	Xho1												

Not found:

Aar1	Acl1	Afl2	Ahd1	Ale1	Asc1	AsiS1	Bae1a	Bae1b	BbvC1	Bcg1a	Bcg1b	Blp1	BmgB1
Bpu10	BsiW1	BsmB1	BssH2	BstE2	BstX1	BstZ1	_Chi	EcoK	EcoN1	EcoRV	ScFRT	Fse1	FspA1
I_Ceu	loxP	Not1	Nru1	Pac1	Pme1	Pml1	Pvu1	SanD1	Sbf1	Sgf1	SgrA1	Spe1	Srf1
Swal	T3RNA	T7RNA	T7Ter	PISce	Xcm1	Xmn1							

Excluded by site complexity:

Acc1	Aci1	Afl3	Alu1	Alw1	Apo1	Ava1	Ava2	Ban1	Ban2	Bbv1	BceA1	Bfa1	Bme15
BsaA1	BsaH1	BsaJ1	BsaW1	BseM2	BsiE1	BsiH1	Bsl1	BsmA1	BsmF1	Bsp12	BspCa	BspCb	Bsr1
BsrF1	BssK1	BstF5	BstN1	BstU1	BstY1	Btg1	Cac8	CviJ1	Dde1	Eae1	EcoO1	Fau1	Fnu4H
Fok1	Hae2	Hae3	Hga1	Hha1	Hinc2	Hinf1	HinP1	Hpa2	Hph1	Hpy99	Hpy1	Hpy3	HpyC3
HpyC4	HpyC5	Mae3	Mbo2	Mnl1	Mse1	Msl1	MspA1	Mwo1	Nci1	Nla3	Nla4	Nsp1	Ple1
PpuM1	Rsa1	Sau3A	Sau96	SfaN1	Sfc1	Sml1	Sty1	Taq1	Tat1	Tfi1	Tse1	Tsp45	Tsp50
TspR1													