



Aat2 Eci1

401 TAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCATTGACGTCAATGGGAGTTTGTGTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTA  
 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 500  
 ATCGCCAAACTGAGTGCCCCATAAGGTTTCAGAGGTGGGGTAACTGCAGTTACCCTCAAACAAAACCGTGGTTTTAGTTGCCCTGAAAGGTTTTACAGCAT

Nhe1 Afel

501 ACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGCGTGACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTTAGTGAACCGTCAGATCCGCTAGCGCTA  
 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 600  
 TGTTGAGGCGGGTAACTGCGTTTTACCCGCCATCCGCACATGCCACCCTCCAGATATATTCGTCTCGACCAAATCACTTGGCAGTCTAGGCGATCGCGAT

SpDon

Agel Nco1 Ale1 BsrG1 ApaL1

601 CCGGTCGCCACCATGGTGAGCGAGCTGATTAAGGAGAACATGCCCATGAAGCTGTACATGGAGGGCACCGTGAACAACCACCACTTCAAGTGCACATCCG  
 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 700  
 GGCCAGCGGTGGTACCACTCGCTCGACTAATTCTTGTACGGGTACTTCGACATGTACCTCCCGTGGCACTTGTTGGTGGTGAAGTTCACGTGTAGGC

**FusionRed** > M V S E L I K E N M P M K L Y M E G T V N N H H F K C T S E

SpAcc

701 AGGGCGAAGGCAAGCCCTACGAGGGCACCCAGACCATGAGAATCAAGGTCGTCGAGGGCGGCCCTCTCCCCTTCGCCTTCGACATCCTGGCTACCAGCTT  
 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 800  
 TCCCGCTTCCGTTCCGGGATGCTCCCGTGGGTCTGGTACTCTTAGTTCCAGCAGCTCCCGCCGGGAGAGGGGAAGCGGAAGCTGTAGGACCGATGGTTCGAA

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

Bsu36 SpDon

801 CATGTACGGCAGCAGAACCTTCATCAAGCACCCCTCCGGGCATCCCCGACTTCTTTAAGCAGTCCCTTCCCCTGAGGGCTTCACATGGGAGAGAGTCACCACA  
 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 900  
 GTACATGCCGTCGTCTTGGAAGTAGTTTCGTGGGAGGCCCGTAGGGGCTGAAGAAATTCGTAGGAAAGGGACTCCCGAAGTGTACCCTCTCTCAGTGGTGT

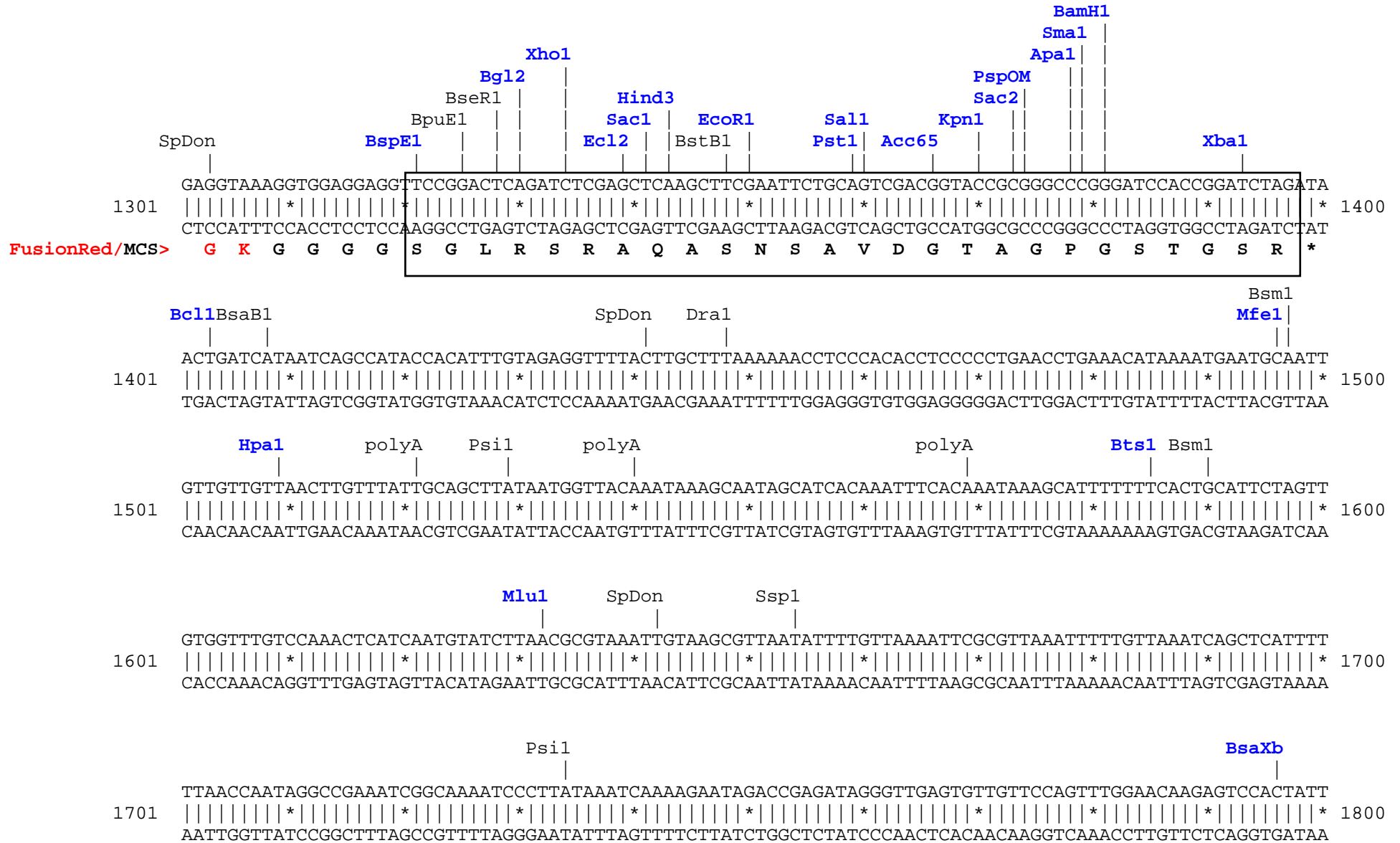
**FusionRed** > M Y G S R T F I K H P P G I P D F F K Q S F P E G F T W E R V T T

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          Bbs1              Bpm1                      BseY1
          |                |                          |
TACGAAGACGGGGCGTGCTGACCGCTACCCAGGACACCAGCCTCCAGGACGGCTGCCTCATCTACAACGTCAAGGTTAGAGGGGTGAACTTCCCAGCCA
901  |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 1000
ATGCTTCTGCCCCGCACGACTGGCGATGGGTCTGTGGTTCGGAGGTCCTGCCGACGGAGTAGATGTTGCAGTTCCAATCTCCCCACTTGAAGGGTTCGGT
FusionRed > Y E D G G V L T A T Q D T S L Q D G C L I Y N V K V R G V N F P A N
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          BsmB1
          |
          BseY1  StuI  BglI
          |      |      |
ACGGCCCTGTGATGCAGAAGAAAACACTCGGCTGGGAGGCCTCCACCGAGACGATGTACCCCGCTGACGGCGGCCTGGAAGGGCGCATGTGACATGGCCCT
1001 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 1100
TGCCGGGACACTACGTCTTCTTTGTGAGCCGACCCTCCGGAGGTGGCTCTGCTACATGGGGCGACTGCCGCGGACCTTCCGCGTACACTGTACCGGGA
FusionRed > G P V M Q K K T L G W E A S T E T M Y P A D G G L E G A C D M A L
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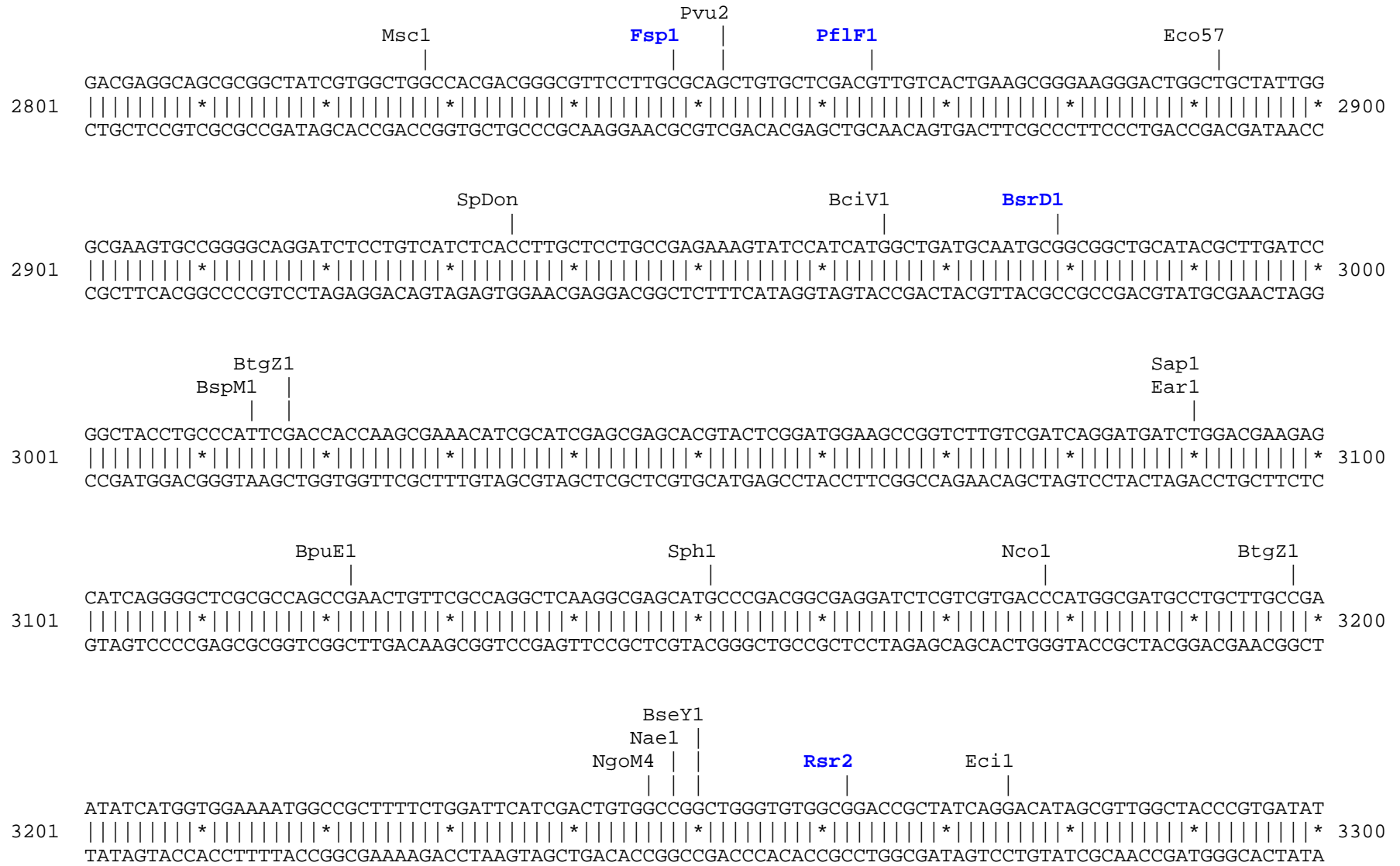
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          BssS1      Eco57      BsaI      BpuE1
          |          |          |          |
          BpuE1
          |
GAAGCTCGTGGGCGGGGCCACCTGATCTGCAACCTTGAGACCACATACAGATCCAAGAAACCCGCTACGAACTCAAGATGCCCGGCGTCTACAACGTG
1101 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 1200
CTTCGAGACCCCGCCCCGGTGGACTAGACGTTGGAACCTCTGGTGTATGTCTAGGTTCTTTGGGCGATGCTTGGAGTTCTACGGGCCGAGATGTTGCAC
FusionRed > K L V G G G H L I C N L E T T Y R S K K P A T N L K M P G V Y N V
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          SpAcc
          PflM1
          |
          BsaI      PshA1      BssS1  Dra3      MscI
          |          |          |      |          |
GACCACAGACTGGAAAGAATCAAGGAGGCCGACGATGAGACCTACGTCGAGCAGCAGGAGGTGGCTGTGGCCAGATACTCTACTGGTGGCGCTGGTGTATG
1201 |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 1300
CTGGTGTCTGACCTTTCTTAGTTCTCCGGCTGCTACTCTGGATGCAGCTCGTCGTGCTCCACCGACACCGGTCTATGAGATGACCACCGCACCCTACTAC
FusionRed > D H R L E R I K E A D D E T Y V E Q H E V A V A R Y S T G G A G D G
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                                     BstAP
                                     AlwN1
                                     Bsu36
                                     Dra1
3801  TTCGGGTGAAGGCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCTCAGGTTACTCATATATACTTTAGATTGATTTAAAACCTTCAT
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 3900
      AAGCCCACTTCCGGGTCCCAGCGTCGGTTGCAGCCCCGCCGTCCGGGACGGTATCGGAGTCCAATGAGTATATATGAAATCTAACTAAATTTTGAAGTA

      Dra1
      BspH1
3901  TTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTCCACTGAGCGTCAGACCCCGTAG
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4000
      AAAATTAAATTTTCCTAGATCCACTTCTAGGAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAGCAAGGTGACTCGCAGTCTGGGGCATC

                                     BpuE1
4001  AAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTCTGCGTAATCTGCTGCTTGCAAACAAAAAACACCGCTACCAGCGGTGGTTTTGTTTGCCGGA
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4100
      TTTTCTAGTTTCTTAGAAGAACTCTAGGAAAAAAGACGCGCATTAGACGACGAACGTTTGTTTTTTGGTGCGATGGTTCGCCACCAAACAAACGGCCT

      Eco57
      SpAcc
4101  TCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTTCAGCAGAGCGCAGATACCAAATACTGTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTC
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4200
      AGTTCTCGATGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCTCGCGTCTATGGTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAG

                                     AlwN1
                                     BpuE1
4201  AAGAACTCTGTAGCACCGCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAA
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4300
      TTCTTGAGACATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCACCGACGACGGTCACCGCTATTTCAGCACAGAATGGCCCAACCTGAGTT

                                     ApaL1
                                     BseY1
4301  GACGATAGTTACCGGATAAGGCGCAGCGGTTCGGGCTGAACGGGGGTTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCT
      |||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||*|||||* 4400
      CTGCTATCAATGGCCTATTCCGCGTCGCCAGCCCGACTTGCCCCCAAGCACGTGTGTCTGGGTTCGAACCTCGCTTGGTGGATGTGGCTTACTCTATGGA
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SpAcc | BciV1 | BssS1 |  
| Eci1 |  
ACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTTCGGAACAGGAGAGCGCACGAGGGAG  
4401 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 4500  
TGTTCGACTCGATACTCTTTCGCGGTGCGAAGGGCTTCCCTCTTTCGCGCTGTCCATAGGCCATTTCGCCGTCCCAGCCTTGTCTCTCGCGTGCTCCCTC

SpAcc | Drd1 | BpuE1 | SpAcc |  
CTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTTCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGCGGAGCC  
4501 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 4600  
GAAGGTCCCCCTTTCGCGACCATAGAAATATCAGGACAGCCCAAAGCGGTGGAGACTGAACTCGCAGCTAAAAACACTACGAGCAGTCCCCCGCCTCGG

Eci1 | SpDon | BspLU |  
TATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCTGGCCTTTTGTGGCCTTTTGTGCTCACATGTTCTTTCTGCGTTATCCCCTGATTCTGTGGA  
4601 |||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\*|||||\* 4700  
ATACCTTTTTGCGGTTCGTTGCGCCGAAAAATGCCAAGGACCGGAAAAACGACCGGAAAAACGAGTGTACAAGAAAGGACGCAATAGGGGACTAAGACACCT

Nsil | BfrB1 |  
TAACCGTATTACCGCCATGCAT  
4701 |||||\*|||||\*||| 4722  
ATTGGCATAATGGCGGTACGTA

Found:

Aat2	<b>Acc65</b>	<b>Afe1</b>	<b>Age1</b>	<b>Ale1</b>	AlwN1	<b>Apa1</b>	ApaL1	<b>Ase1</b>	Avr2	<b>BamH1</b>	<b>Bbs1</b>	BciV1	<b>Bcl1</b>
BfrB1	Bgl1	<b>Bgl2</b>	Bmr1	Bpm1	BpuE1	Bsa1	BsaB1	<b>BsaXa</b>	<b>BsaXb</b>	BseR1	BseY1	Bsm1	<b>BsmB1</b>
<b>BspE1</b>	BspH1	<b>BspLU</b>	BspM1	BsrB1	<b>BsrD1</b>	<b>BsrG1</b>	BssS1	BstAP	BstB1	Bsu36	BtgZ1	<b>Bts1</b>	<b>Clal</b>
Dra1	Dra3	Drd1	<b>Eag1</b>	Ear1	Ecil	<b>Ecl2</b>	Eco57	<b>EcoR1</b>	<b>Fsp1</b>	<b>Hind3</b>	<b>Hpa1</b>	<b>Kas1</b>	<b>Kpn1</b>
<b>Mfe1</b>	<b>Mlu1</b>	Msc1	Nae1	<b>Nar1</b>	Nco1	<b>Nde1</b>	NgoM4	<b>Nhe1</b>	Nsi1	<b>PflF1</b>	<b>PflM1</b>	polyA	<b>PshA1</b>
Psi1	<b>PspOM</b>	<b>Pst1</b>	Pvu2	<b>Rsr2</b>	<b>Sac1</b>	<b>Sac2</b>	<b>Sall</b>	Sap1	<b>SexA1</b>	<b>Sfi1</b>	<b>Sma1</b>	<b>SnaB1</b>	SpAcc
SpDon	Sph1	Ssp1	Stu1	<b>Xba1</b>	<b>Xho1</b>								

Unique:

<b>Acc65</b>	<b>Afe1</b>	<b>Age1</b>	<b>Ale1</b>	<b>Apa1</b>	<b>Ase1</b>	<b>BamH1</b>	<b>Bbs1</b>	<b>Bcl1</b>	<b>Bgl2</b>	<b>BsaXa</b>	<b>BsaXb</b>	<b>BsmB1</b>	<b>BspE1</b>
<b>BspLU</b>	<b>BsrD1</b>	<b>BsrG1</b>	<b>Bts1</b>	<b>Clal</b>	<b>Eag1</b>	<b>Ecl2</b>	<b>EcoR1</b>	<b>Fsp1</b>	<b>Hind3</b>	<b>Hpa1</b>	<b>Kas1</b>	<b>Kpn1</b>	<b>Mfe1</b>
<b>Mlu1</b>	<b>Nar1</b>	<b>Nde1</b>	<b>Nhe1</b>	<b>PflF1</b>	<b>PflM1</b>	<b>PshA1</b>	<b>PspOM</b>	<b>Pst1</b>	<b>Rsr2</b>	<b>Sac1</b>	<b>Sac2</b>	<b>Sall</b>	<b>SexA1</b>
<b>Sfi1</b>	<b>Sma1</b>	<b>SnaB1</b>	<b>Xba1</b>	<b>Xho1</b>									

Not found:

Aar1	Ac11	Afl2	Ahd1	Asc1	AsiS1	Baela	Baelb	BbvC1	Bcg1a	Bcg1b	Blp1	BmgB1	Bpu10
Bsg1	BsiW1	BssH2	BstE2	BstX1	BstZ1	BxatB	BxatL	BxatR	BxatP	_Chi	EcoK	EcoN1	EcoRV
FCatB	FCatL	FCatR	FCatP	ScFRT	Fse1	FspA1	I_Ceu	loxP	Not1	Nru1	Pac1	Pme1	Pml1
Pvu1	R4atB	R4atL	R4atP	R4atR	SanD1	Sbf1	Sca1	Sgf1	SgrA1	Spe1	Srf1	Swal	T3RNA
T7RNA	T7Ter	PISce	Xcm1	Xmn1									

Excluded by site complexity:

Acc1	Ac11	Afl3	Alu1	Alw1	Apo1	Ava1	Ava2	Ban1	Ban2	Bbv1	BceA1	Bfa1	Bme15
BsaA1	BsaH1	BsaJ1	BsaW1	BseM2	BsiE1	BsiH1	Bs11	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	Tfil	Tse1	Tsp45	Tsp50
TspR1													