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peTurboYFP-PRL-dest1 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 and MODC amino acids are shown in bold black.

```
                                                                                           BamH1
                                                                                          Sma1 |
                                                                                         Apa1| |
                                                                                    PspOM   || |
                                                     Hind3                          Sac2|   || |
                                             Xho1   Sac1 |  EcoR1      Sal1      Kpn1  ||   || |
                            Afe1   BpuE1 Bgl2   | Ecl2 | |BstB1 |     Pst1| Acc65   |  ||   || |  Age1
                               |       |    |   |    | | |    | |        ||     |   |  ||   || |     |
                  TAGTTATTACTAGCGCTACCGGACTCAGATCTCGAGCTCAAGCTTCGAATTCTGCAGTCGACGGTACCGCGGGCCCGGGATCCACCGGTCGCCACCATGA
             1    |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 100
                  ATCAATAATGATCGCGATGGCCTGAGTCTAGAGCTCGAGTTCGAAGCTTAAGACGTCAGCTGCCATGGCGCCCGGGCCCTAGGTGGCCAGCGGTGGTACT
MCS/TurboYFP >       L  L  L  A  L  P  D  S  D  L  E  L  K  L  R  I  L  Q  S  T  V  P  R  A  R  D  P  P  V  A  T  M  S


                     Nar1                                                    BsrD1
                    Kas1|                                                 Eco57  | Msc1               Sac2
                       ||                                                    |  |    |                  |
                  GCAGCGGCGCCCTGCTGTTCCACGGCAAGATCCCCTACGTGGTGGAGATGGAGGGCAATGTGGATGGCCACACCTTCAGCATCCGCGGCAAGGGCTACGG
           101    |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 200
                  CGTCGCCGCGGGACGACAAGGTGCCGTTCTAGGGGATGCACCACCTCTACCTCCCGTTACACCTACCGGTGTGGAAGTCGTAGGCGCCGTTCCCGATGCC
TurboYFP     >      S  G  A  L  L  F  H  G  K  I  P  Y  V  V  E  M  E  G  N  V  D  G  H  T  F  S  I  R  G  K  G  Y  G
```

```
                                                                                                                Nar1
                                Bsg1                                                    BstE2                  Kas1|
                        BtgZ1   Bmr1                    SgrA1                BtgZ1       Ale1 |     Bpm1      Bmr1||
                            |      |                      |                    |           | |        |         |||
            CGATGCCAGCGTGGGCAAGGTGGATGCCCAGTTCATCTGCACCACCGGCGATGTGCCCGTGCCCTGGAGCACCCTGGTGACCACCCTGACCTACGGCGCC
        201 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 300
            GCTACGGTCGCACCCGTTCCACCTACGGGTCAAGTAGACGTGGTGGCCGCTACACGGGCACGGGACCTCGTGGGACCACTGGTGGGACTGGATGCCGCGG
TurboYFP     > D  A  S  V  G  K  V  D  A  Q  F  I  C  T  T  G  D  V  P  V  P  W  S  T  L  V  T  T  L  T  Y  G  A
```

```
                                        SpAcc
                                     Xmn1   |      Eco57 Sph1                                Bsg1
                                            |   |          |    |                                  |
            CAGTGCTTCGCCAAGTACGGCCCCGAGCTGAAGGATTTCTACAAGAGCTGCATGCCCGATGGCTACGTGCAGGAGCGCACCATCACCTTCGAGGGCGATG
        301 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 400
            GTCACGAAGCGGTTCATGCCGGGGCTCGACTTCCTAAAGATGTTCTCGACGTACGGGCTACCGATGCACGTCCTCGCGTGGTAGTGGAAGCTCCCGCTAC
TurboYFP     > Q  C  F  A  K  Y  G  P  E  L  K  D  F  Y  K  S  C  M  P  D  G  Y  V  Q  E  R  T  I  T  F  E  G  D  G
```

```
                                                                                                                PflM1
                                                                                                                BseY1
                                                                                                              Pml1  |
                 BtgZ1        BstE2                  BsrG1                    Msc1                 Msc1   |  |
                     |            |                      |                       |                    |   |  |
            GCAATTTCAAGACCCGCGCCGAGGTGACCTTCGAGAATGGCAGCGTGTACAATCGCGTGAAGCTGAATGGCCAGGGCTTCAAGAAGGATGGCCACGTGCT
        401 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 500
            CGTTAAAGTTCTGGGCGCGGCTCCACTGGAAGCTCTTACCGTCGCACATGTTAGCGCACTTCGACTTACCGGTCCCGAAGTTCTTCCTACCGGTGCACGA
TurboYFP     >  N  F  K  T  R  A  E  V  T  F  E  N  G  S  V  Y  N  R  V  K  L  N  G  Q  G  F  K  K  D  G  H  V  L
```

```
                                Bpm1                                Sap1                      BssS1
                               Bts1|  BsrG1                        Ear1                   Eco57  |
                                  ||      |                           |                       |  |
            GGGCAAGAATCTGGAGTTCAATTTCACCCCCCACTGCCTGTACATCTGGGGCGATCAGGCCAATCACGGCCTGAAGAGCGCCTTCAAAATCTGCCACGAG
        501 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 600
            CCCGTTCTTAGACCTCAAGTTAAAGTGGGGGGTGACGGACATGTAGACCCCGCTAGTCCGGTTAGTGCCGGACTTCTCGCGGAAGTTTTAGACGGTGCTC
TurboYFP     > G  K  N  L  E  F  N  F  T  P  H  C  L  Y  I  W  G  D  Q  A  N  H  G  L  K  S  A  F  K  I  C  H  E
```

```
                                                                                ApaL1 Pml1
                                                                                    |    |
            ATCACCGGCAGCAAGGGCGATTTCATCGTGGCCGATCACACCCAGATGAATACCCCCATCGGCGGCGGCCCCGTGCACGTGCCCGAGTACCACCACATGA
       601  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 700
            TAGTGGCCGTCGTTCCCGCTAAAGTAGCACCGGCTAGTGTGGGTCTACTTATGGGGGTAGCCGCCGCCGGGGCACGTGCACGGGCTCATGGTGGTGTACT
TurboYFP     > I  T  G  S  K  G  D  F  I  V  A  D  H  T  Q  M  N  T  P  I  G  G  G  P  V  H  V  P  E  Y  H  H  M  S

                                                        Bsa1
                Pml1   Blp1                           SpAcc|         BssH2  Eco57
                   |      |                              ||             |      |
            GCTACCACGTGAAGCTGAGCAAGGATGTGACCGATCACCGCGATAATATGAGCCTGAAGGAGACCGTGCGCGCCGTGGATTGCCGCAAGACCTACGACTT
       701  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 800
            CGATGGTGCACTTCGACTCGTTCCTACACTGGCTAGTGGCGCTATTATACTCGGACTTCCTCTGGCACGCGCGGCACCTAACGGCGTTCTGGATGCTGAA
TurboYFP     >   Y  H  V  K  L  S  K  D  V  T  D  H  R  D  N  M  S  L  K  E  T  V  R  A  V  D  C  R  K  T  Y  D  F

                                                                   Nae1
                                         Bsa1                    SgrA1 |
                 BspE1                   Bgl2          Nco1      NgoM4 |
                    |                      |             |          | |
            CGACGCCGGTTCCGGAGATACAAGCTCCGGTCTCAGATCTCGAATCAGCCATGGCTTCCCGCCGGCGGTGGCGGCGCAGGATGATGGCACGCTGCCCATG
       801  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 900
            GCTGCGGCCAAGGCCTCTATGTTCGAGGCCAGAGTCTAGAGCTTAGTCGGTACCGAAGGGCGGCCGCCACCGCCGCGTCCTACTACCGTGCGACGGGTAC
TurboYFP/MODC>  D  A  G  S  G  D  T  S  S  G  L  R  S  R  I  S  H  G  F  P  P  A  V  A  A  Q  D  D  G  T  L  P  M

                                                                          Not1                  BamH1
                                                BstAP                     Eag1                 Pml1  |
                     BsrB1                   Pst1   |                     Bsg1                Eco57  |
                        |                       |   |                       |                      |  |
            TCTTGTGCCCAGGAGAGCGGGATGGACCGTCACCCTGCAGCCTGTGCTTCTGCTAGGATCAATGTGTAGGCGGCCGCGTGACAAGCTGCACGTGGATCCT
       901  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1000
            AGAACACGGGTCCTCTCGCCCTACCTGGCAGTGGGACGTCGGACACGAAGACGATCCTAGTTACACATCCGCCGGCGCACTGTTCGACGTGCACCTAGGA
MODC         > S  C  A  Q  E  S  G  M  D  R  H  P  A  A  C  A  S  A  R  I  N  V  *

                                SanD1
                                   |
            GAGAACTTCAGGGTGAGTCTATGGGACCCTTGATGTTTTCTTTCCCCTTCTTTTCTATGGTTAAGTTCATGTCATAGGAAGGGGATAAGTAACAGGGTAC
      1001  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1100
            CTCTTGAAGTCCCACTCAGATACCCTGGGAACTACAAAAGAAAGGGGAAGAAAAGATACCAATTCAAGTACAGTATCCTTCCCCTATTCATTGTCCCATG
```

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                                                                   polyA         Mfe1
                                                                     |             |
     AGTTTAGAATGGGAAACAGACGAATGATTGCATCAGTGTGGAAGTCTCAGGATCGTTTTAGTTTCTTTTATTTGCTGTTCATAACAATTGTTTTCTTTTG
1101 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1200
     TCAAATCTTACCCTTTGTCTGCTTACTAACGTAGTCACACCTTCAGAGTCCTAGCAAAATCAAAGAAAATAAACGACAAGTATTGTTAACAAAAGAAAAC

                                          SpDon
                                            |
     TTTAATTCTTGCTTTCTTTTTTTTCTTCTCCGCAATTTTTACTATTATACTTAATGCCTTAACATTGTGTATAACAAAAGGAAATATCTCTGAGATACA
1201 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1300
     AAATTAAGAACGAAAGAAAAAAAAAGAAGAGGCGTTAAAAATGATAATATGAATTACGGAATTGTAACACATATTGTTTTCCTTTATAGAGACTCTATGT


     TTAAGTAACTTAAAAAAAAACTTTACACAGTCTGCCTAGTACATTACTATTTGGAATATATGTGTGCTTATTTGCATATTCATAATCTCCCTACTTTATT
1301 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1400
     AATTCATTGAATTTTTTTTTGAAATGTGTCAGACGGATCATGTAATGATAAACCTTATATACACACGAATAAACGTATAAGTATTAGAGGGATGAAATAA

 polyA     polyA                                                   BsrG1
    |         |                                                      |
     TTCTTTTATTTTTAATTGATACATAATCATTATACATATTTATGGGTTAAAGTGTAATGTTTTAATATGTGTACACATATTGACCAAATCAGGGTAATTT
1401 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1500
     AAGAAAATAAAAATTAACTATGTATTAGTAATATGTATAAATACCCAATTTCACATTACAAAATTATACACATGTGTATAACTGGTTTAGTCCCATTAAA

                Dra1                                                                      SpAcc
                  |                                                                         |
     TGCATTTGTAATTTTAAAAAATGCTTTCTTCTTTTAATATACTTTTTTGTTTATCTTATTTCTAATACTTTCCCTAATCTCTTTCTTTCAGGGCAATAAT
1501 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1600
     ACGTAAACATTAAAATTTTTTACGAAAGAAGAAAATTATATGAAAAAACAAATAGAATAAAGATTATGAAAGGGATTAGAGAAAGAAAGTCCCGTTATTA

                                                                          Ssp1            Ssp1
                                                                            |               |
     GATACAATGTATCATGCCTCTTTGCACCATTCTAAAGAATAACAGTGATAATTTCTGGGTTAAGGCAATAGCAATATTTCTGCATATAAATATTTCTGCA
1601 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1700
     CTATGTTACATAGTACGGAGAAACGTGGTAAGATTTCTTATTGTCACTATTAAAGACCCAATTCCGTTATCGTTATAAAGACGTATATTTATAAAGACGT

                 SpDon                                                   polyA
                   |                                                       |
     TATAAATTGTAACTGATGTAAGAGGTTTCATATTGCTAATAGCAGCTACAATCCAGCTACCATTCTGCTTTTATTTTATGGTTGGGATAAGGCTGGATTA
1701 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1800
     ATATTTAACATTGACTACATTCTCCAAAGTATAACGATTATCGTCGATGTTAGGTCGATGGTAAGACGAAAATAAAATACCAACCCTATTCCGACCTAAT
```

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                                                                  AlwN1
                                                              SpAcc  |
                                                                  |  |
     TTCTGAGTCCAAGCTAGGCCCTTTTGCTAATCATGTTCATACTTCTTATCTTCCTCCCACAGCTCCTGGGCAACGTGCTGGTCTGTGTGCTGGCCCATCA
1801 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 1900
     AAGACTCAGGTTCGATCCGGGAAAACGATTAGTACAAGTATGAAGAATAGAAGGAGGGTGTCGAGGACCCGTTGCACGACCAGACACACGACCGGGTAGT

   BstX1    EcoR1                                Bsg1
      |        |                                   |
     CTTTGGCAAAGAATTCACCCCACCAGTGCAGGCTGCCTATCAGAAAGTGGTGGCTGGTGTGGCTAATGCCCTGGCCCACAAGTATCACTAAGCTCGCTTT
1901 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2000
     GAAACCGTTTCTTAAGTGGGGTGGTCACGTCCGACGGATAGTCTTTCACCACCGACCACACCGATTACGGGACCGGGTGTTCATAGTGATTCGAGCGAAA

                                                                                                  BpuE1
                                                                  Bmr1                            Xba1|
                                                                     |                               ||
     CTTGCTGTCCAATTTCTATTAAAGGTTCCTTTGTTCCCTAAGTCCAACTACTAAACTGGGGGATATTATGAAGGGCCTTGAGCATTGGATTCTGCCTCTA
2001 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2100
     GAACGACAGGTTAAAGATAATTTCCAAGGAAACAAGGGATTCAGGTTGATGATTTGACCCCCTATAATACTTCCCGGAACTCGTAACCTAAGACGGAGAT

                                                                                                Bsm1
     BsaB1                            SpDon   Dra1                                           Mfe1|
         |                               |      |                                                ||
     GATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTT
2101 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2200
     CTAGTATTAGTCGGTATGGTGTAAACATCTCCAAAATGAACGAAATTTTTTGGAGGGTGTGGAGGGGGACTTGGACTTTGTATTTTACTTACGTTAACAA

       Hpa1       polyA    Psi1      polyA                        polyA            Bts1 Bsm1
         |           |       |          |                           |               |    |
     GTTGTTAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTG
2201 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2300
     CAACAATTGAACAAATAACGTCGAATATTACCAATGTTTATTTCGTTATCGTAGTGTTTAAAGTGTTTATTTCGTAAAAAAAGTGACGTAAGATCAACAC

                          Afl2         SpDon        Ssp1
                            |             |           |
     GTTTGTCCAAACTCATCAATGTATCTTAAGGCGTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTGTTAAATCAGCTCATTTTTTA
2301 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2400
     CAAACAGGTTTGAGTAGTTACATAGAATTCCGCATTTAACATTCGCAATTATAAAACAATTTTAAGCGCAATTTAAAAACAATTTAGTCGAGTAAAAAAT
```

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                                Psi1                                                                  BsaXb
                                  |                                                                     |
      ACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAA
2401  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2500
      TGGTTATCCGGCTTTAGCCGTTTTAGGGAATATTTAGTTTTCTTATCTGGCTCTATCCCAACTCACAACAAGGTCAAACCTTGTTCTCAGGTGATAATTT

                                                                 BtgZ1
                 Drd1    BsaXa                                   Dra3|
                    |        |                                      ||
      GAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTGGGGTCGAGGTGC
2501  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2600
      CTTGCACCTGAGGTTGCAGTTTCCCGCTTTTTGGCAGATAGTCCCGCTACCGGGTGATGCACTTGGTAGTGGGATTAGTTCAAAAAACCCCAGCTCCACG

                                                                    Nae1
                      SpAcc                                      NgoM4 |
                        |                                          | |
      CGTAAAGCACTAAATCGGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAAAGGAAGGGAAGAAAGCGAAAG
2601  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2700
      GCATTTCGTGATTTAGCCTTGGGATTTCCCTCGGGGGCTAAATCTCGAACTGCCCCTTTCGGCCGCTTGCACCGCTCTTTCCTTCCCTTCTTTCGCTTTC

    BsrB1
      |
      GAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCAGGTGGCAC
2701  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2800
      CTCGCCCGCGATCCCGCGACCGTTCACATCGCCAGTGCGACGCGCATTGGTGGTGTGGGCGGCGCGAATTACGCGGCGATGTCCCGCGCAGTCCACCGTG

                                                                        BciV1
                                                                     BspH1  |
                                      polyA                        BsrB1 |  |
                                          |                           | |  |
      TTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAA
2801  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 2900
      AAAAGCCCCTTTACACGCGCCTTGGGGATAAACAAATAAAAAGATTTATGTAAGTTTATACATAGGCGAGTACTCTGTTATTGGGACTATTTACGAAGTT
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                                        Eci1
      Ssp1  Ear1        Bsu36          Pvu2 |                                  BseY1
         |     |            |                | |                                     |
      TAATATTGAAAAAGGAAGAGTCCTGAGGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAG
2901  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3000
      ATTATAACTTTTTCCTTCTCAGGACTCCGCCTTTCTTGGTCGACACCTTACACACAGTCAATCCCACACCTTTCAGGGGTCCGAGGGGTCGTCCGTCTTC

                Nsi1                                                                  Nsi1
              Sph1 |                                                                Sph1 |
             BfrB1 |                                                               BfrB1 |
          BstAP  | |            SexA1                    BseY1                   BstAP  | |
              |  | |                |                       |                       |  | |
      TATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCA
3001  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3100
      ATACGTTTCGTACGTAGAGTTAATCAGTCGTTGGTCCACACCTTTCAGGGGTCCGAGGGGTCGTCCGTCTTCATACGTTTCGTACGTAGAGTTAATCAGT

                                            Eci1
                Eci1                 Eci1     Bmr1|       Eci1            Nco1                   polyA
                   |                    |        ||          |               |                      |
      GCAACCATAGTCCCGCCCCTAACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTATTTATG
3101  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3200
      CGTTGGTATCAGGGCGGGGATTGAGGCGGGTAGGGCGGGGATTGAGGCGGGTCAAGGCGGGTAAGAGGCGGGGTACCGACTGATTAAAAAAAATAAATAC

                                                          Avr2
                  Sfi1                                   Stu1|
                  Bgl1                     SpDon       BseR1  ||              Cla1
                     |                        |            |  ||                |
      CAGAGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAGATCGATCAAGAGACAGGAT
3201  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3300
      GTCTCCGGCTCCGGCGGAGCCGGAGACTCGATAAGGTCTTCATCACTCCTCCGAAAAAACCTCCGGATCCGAAAACGTTTCTAGCTAGTTCTCTGTCCTA

   BsaB1                       BspM1               Eag1                                      Bmr1
      |                           |                   |                                         |
      GAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAAT
3301  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3400
      CTCCTAGCAAAGCGTACTAACTTGTTCTACCTAACGTGCGTCCAAGAGGCCGGCGAACCCACCTCTCCGATAAGCCGATACTGACCCGTGTTGTCTGTTA
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                                        Nar1
                                       Kas1|                        Drd1
                                          ||                          |
     CGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAGAC
3401 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3500
     GCCGACGAGACTACGGCGGCACAAGGCCGACAGTCGCGTCCCCGCGGGCCAAGAAAAACAGTTCTGGCTGGACAGGCCACGGGACTTACTTGACGTTCTG

                                            Pvu2
                        Msc1                Fsp1   |       PflF1                        Eco57
                           |                   |   |           |                           |
     GAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCG
3501 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3600
     CTCCGTCGCGCCGATAGCACCGACCGGTGCTGCCCGCAAGGAACGCGTCGACACGAGCTGCAACAGTGACTTCGCCCTTCCCTGACCGACGATAACCCGC

                               SpDon                          BciV1         BsrD1
                                  |                              |             |
     AAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGC
3601 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3700
     TTCACGGCCCCGTCCTAGAGGACAGTAGAGTGGAACGAGGACGGCTCTTTCATAGGTAGTACCGACTACGTTACGCCGCCGACGTATGCGAACTAGGCCG

              BtgZ1                                                                  Sap1
           BspM1  |                                                                  Ear1
                |  |                                                                     |
     TACCTGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCAT
3701 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3800
     ATGGACGGGTAAGCTGGTGGTTCGCTTTGTAGCGTAGCTCGCTCGTGCATGAGCCTACCTTCGGCCAGAACAGCTAGTCCTACTAGACCTGCTTCTCGTA

                    BpuE1                          Sph1                          Nco1                 BtgZ1
                        |                             |                             |                     |
     CAGGGGCTCGCGCCAGCCGAACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACGGCGAGGATCTCGTCGTGACCCATGGCGATGCCTGCTTGCCGAATA
3801 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 3900
     GTCCCCGAGCGCGGTCGGCTTGACAAGCGGTCCGAGTTCCGCTCGTACGGGCTGCCGCTCCTAGAGCAGCACTGGGTACCGCTACGGACGAACGGCTTAT

                                            BseY1
                                           Nae1 |                                                Sap1
                                        NgoM4 | |        Rsr2         Eci1                      Ear1
                                            | | |           |            |                          |
     TCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGC
3901 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4000
     AGTACCACCTTTTACCGGCGAAAAGACCTAAGTAGCTGACACCGGCCGACCCACACCGCCTGGCGATAGTCCTGTATCGCAACCGATGGGCACTATAACG
```

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                                                   BtgZ1
                  Eco57         BssS1                BsrB1 |
                     |             |                    | |
     TGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAG
4001 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4100
     ACTTCTCGAACCGCCGCTTACCCGACTGGCGAAGGAGCACGAAATGCCATAGCGGCGAGGGCTAAGCGTCGCGTAGCGGAAGATAGCGGAAGAACTGCTC

                                                       BssS1
          BsrB1          BstB1                         BspM1                      SpAcc
              |              |                             |                          |
     TTCTTCTGAGCGGGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGGTT
4101 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4200
     AAGAAGACTCGCCCTGAGACCCCAAGCTTTACTGGCTGGTTCGCTGCGGGTTGGACGGTAGTGCTCTAAAGCTAAGGTGGCGGCGGAAGATACTTTCCAA

                            Nae1                                                   Bpm1
                         NgoM4 |                                              SpAcc  |
                          Bpm1 |                                               Avr2  |
                             | |                                                  |  |
     GGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCCACCCTAGGGGGAGGCTAACTGAA
4201 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4300
     CCCGAAGCCTTAGCAAAAGGCCCTGCGGCCGACCTACTAGGAGGTCGCGCCCCTAGAGTACGACCTCAAGAAGCGGGTGGGATCCCCCTCCGATTGACTT

                                          polyA        polyA
                                             |            |
     ACACGGAAGGAGACAATACCGGAAGGAACCCGCGCTATGACGGCAATAAAAAGACAGAATAAAACGCACGGTGTTGGGTCGTTTGTTCATAAACGCGGGG
4301 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4400
     TGTGCCTTCCTCTGTTATGGCCTTCCTTGGGCGCGATACTGCCGTTATTTTTCTGTCTTATTTTGCGTGCCACAACCCAGCAAACAAGTATTTGCGCCCC

                                Bsa1
                                   |
     TTCGGTCCCAGGGCTGGCACTCTGTCGATACCCCACCGAGACCCCATTGGGGCCAATACGCCCGCGTTTCTTCCTTTTCCCCACCCCACCCCCCAAGTTC
4401 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4500
     AAGCCAGGGTCCCGACCGTGAGACAGCTATGGGGTGGCTCTGGGGTAACCCCGGTTATGCGGGCGCAAAGAAGGAAAAGGGGTGGGGTGGGGGGTTCAAG
```

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                                        BstAP
                                        AlwN1      Bsu36                            Dra1
                                            |          |                                |
     GGGTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCTCAGGTTACTCATATATACTTTAGATTGATTTAAAACTTCATTTT
4501 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4600
     CCCACTTCCGGGTCCCGAGCGTCGGTTGCAGCCCCGCCGTCCGGGACGGTATCGGAGTCCAATGAGTATATATGAAATCTAACTAAATTTTGAAGTAAAA

       Dra1                              BspH1
          |                                  |
     TAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAA
4601 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4700
     ATTAAATTTTCCTAGATCCACTTCTAGGAAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAAGCAAGGTGACTCGCAGTCTGGGGCATCTTT


                                    BpuE1
                                        |
     AGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTTTGCCGGATCA
4701 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4800
     TCTAGTTTCCTAGAAGAACTCTAGGAAAAAAAGACGCGCATTAGACGACGAACGTTTGTTTTTTTGGTGGCGATGGTCGCCACCAAACAAACGGCCTAGT


                  Eco57                                                 SpAcc
                      |                                                     |
     AGAGCTACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAG
4801 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 4900
     TCTCGATGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCTCGCGTCTATGGTTTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAGTTC


                                                   AlwN1                     BpuE1
                                                       |                         |
     AACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGAC
4901 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 5000
     TTGAGACATCGTGGCGGATGTATGGAGCGAGACGATTAGGACAATGGTCACCGACGACGGTCACCGCTATTCAGCACAGAATGGCCCAACCTGAGTTCTG


                                                ApaL1     BseY1
                                                    |         |
     GATAGTTACCGGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACA
5001 |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 5100
     CTATCAATGGCCTATTCCGCGTCGCCAGCCCGACTTGCCCCCCAAGCACGTGTGTCGGGTCGAACCTCGCTTGCTGGATGTGGCTTGACTCTATGGATGT
```

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                                                        BciV1
        SpAcc                                         Eci1   |                    BssS1
            |                                            |   |                       |
      GCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTT
5101  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 5200
      CGCACTCGATACTCTTTCGCGGTGCGAAGGGCTTCCCTCTTTCCGCCTGTCCATAGGCCATTCGCCGTCCCAGCCTTGTCCTCTCGCGTGCTCCCTCGAA

                          SpAcc                         Drd1            BpuE1                SpAcc
                              |                            |               |                    |
      CCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTAT
5201  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 5300
      GGTCCCCCTTTGCGGACCATAGAAATATCAGGACAGCCCAAAGCGGTGGAGACTGAACTCGCAGCTAAAAACACTACGAGCAGTCCCCCCGCCTCGGATA

                                                         SpDon
       Eci1                                             BspLU|
          |                                                ||
      GGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAA
5301  |||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||*|||||||||* 5400
      CCTTTTTGCGGTCGTTGCGCCGGAAAAATGCCAAGGACCGGAAAACGACCGGAAAACGAGTGTACAAGAAAGGACGCAATAGGGGACTAAGACACCTATT

                   Nsi1
                BfrB1 |
                    | |
      CCGTATTACCGCCATGCAT
5401  |||||||||*||||||||| 5419
      GGCATAATGGCGGTACGTA
```

Found:

Acc65	**Afe1**	**Afl2**	**Age1**	**Ale1**	AlwN1	**Apa1**	ApaL1	Avr2	BamH1	BciV1	BfrB1	**Bgl1**	Bgl2
Blp1	Bmr1	Bpm1	BpuE1	Bsa1	BsaB1	**BsaXa**	**BsaXb**	**BseR1**	BseY1	Bsg1	Bsm1	**BspE1**	BspH1
BspLU	BspM1	BsrB1	BsrD1	BsrG1	**BssH2**	BssS1	BstAP	BstB1	BstE2	**BstX1**	Bsu36	BtgZ1	Bts1
Cla1	Dra1	**Dra3**	Drd1	Eag1	Ear1	Eci1	**Ecl2**	Eco57	EcoR1	**Fsp1**	**Hind3**	**Hpa1**	Kas1
Kpn1	Mfe1	Msc1	Nae1	Nar1	Nco1	NgoM4	**Not1**	Nsi1	**PflF1**	**PflM1**	Pml1	polyA	Psi1
PspOM	Pst1	Pvu2	**Rsr2**	**Sac1**	Sac2	**Sal1**	**SanD1**	Sap1	**SexA1**	**Sfi1**	SgrA1	**Sma1**	SpAcc
SpDon	Sph1	Ssp1	**Stu1**	**Xba1**	**Xho1**	**Xmn1**							

Unique:

Acc65	**Afe1**	**Afl2**	**Age1**	**Ale1**	**Apa1**	**Bgl1**	**Blp1**	**BsaXa**	**BsaXb**	**BseR1**	**BspE1**	**BspLU**	**BssH2**
BstX1	**Cla1**	**Dra3**	**Ecl2**	**Fsp1**	**Hind3**	**Hpa1**	**Kpn1**	**Not1**	**PflF1**	**PflM1**	**PspOM**	**Rsr2**	**Sac1**
Sal1	**SanD1**	**SexA1**	**Sfi1**	**Sma1**	**Stu1**	**Xba1**	**Xho1**	**Xmn1**					

Not found:

Aar1	Aat2	Acl1	Ahd1	Asc1	Ase1	AsiS1	Bae1a	Bae1b	Bbs1	BbvC1	Bcg1a	Bcg1b	Bcl1
BmgB1	Bpu10	BsiW1	BsmB1	BstZ1	BxatB	BxatL	BxatR	BxatP	_Chi	EcoK	EcoN1	EcoRV	FCatB
FCatL	FCatR	FCatP	ScFRT	Fse1	FspA1	I_Ceu	loxP	Mlu1	Nde1	Nhe1	Nru1	Pac1	Pme1
PshA1	Pvu1	R4atB	R4atL	R4atP	R4atR	Sbf1	Sca1	Sgf1	SnaB1	Spe1	Srf1	Swa1	T3RNA
T7RNA	T7Ter	PISce	Xcm1										

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													