

pPhi-Yellow-C vector

Table of restriction sites

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|---------------------------|-------|--|
| AanI | TTA!TAA | 2 | 1514; 1719 |
| AarI | CACCTGCNNNN! | 0 | |
| AarI | !NNNNNNNNGCAGGTG | 0 | |
| AasI | GACNNNN!NNGTC | 3 | 1802; 2758; 4547 |
| AatI | AGG!CCT | 1 | 2552 |
| AatII | GACGT!C | 4 | 125; 178; 261; 447 |
| AbsI | CC!TCGAGG | 0 | |
| AccI | GT!MKAC | 1 | 1346 |
| AccII | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| AccIII | T!CCGGA | 0 | |
| Acc16I | TGC!GCA | 1 | 2833 |
| Acc36I | ACCTGCNNNN! | 2 | 2999; 3449 |
| Acc36I | !NNNNNNNNGCAGGT | 1 | 2618 |
| Acc65I | G!GTACC | 1 | 1351 |
| AccB1I | G!GYRCC | 7 | 465; 622; 811; 1351; 1884; 2730; 2765 |
| AccB7I | CCANNNN!NTGG | 1 | 1014 |
| AccBSI | CCG!CTC | 2 | 2155; 3344 |
| AccBSI | GAG!CGG | 2 | 1991; 3398 |
| AceIII | CAGCTCNNNNNNN! | 1 | 1687 |
| AceIII | !NNNNNNNNNNGAGCTG | 3 | 552; 829; 849 |
| AciI | C!CGC | 36 | 58; 86; 98; 112; 279; 507; 589; 699; 930; 1254; 1299; 1355; 2046; 2049; 2063; 2153; 2401; 2413; 2422; 2434; 2444; 2455; 2501; 2640; 2703; 3205; 3250; 3316; 3342; 3467; 3470; 3618; 3750; 4057; 4201; 4697 |
| AciI | G!CGG | 28 | 370; 403; 528; 620; 701; 1178; 1181; 1357; 1991; 2018; 2106; 2216; 2797; 2861; 2962; 2965; 3245; 3300; 3398; 3536; 3683; 3823; 4066; 4311; 4432; 4451; 4578; 4606 |
| AclI | AA!CGTT | 0 | |
| AclWI | GGATCNNNN! | 10 | 1323; 1374; 1383; 2599; 2910; 3156; 3548; 3907; 4005; 4091 |
| AclWI | !NNNNNGATCC | 7 | 580; 639; 1361; 2975; 3519; 3906; 4003 |
| AcoI | Y!GGCCR | 8 | 681; 984; 1005; 1145; 2637; 2811; 3202; 3229 |
| AcsI | R!AATTY | 4 | 1335; 1545; 1649; 1660 |
| AcuI | CTGAAGNNNNNNNNNNNNNNNN! | 4 | 865; 1108; 2877; 3309 |
| AcuI | !NNNNNNNNNNNNNNCTTCAG | 2 | 675; 4107 |
| AcvI | CAC!GTG | 3 | 1011; 1194; 1224 |
| AcyI | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| AdeI | CACNNN!GTG | 1 | 1847 |
| AfaI | GT!AC | 12 | 219; 244; 299; 332; 383; 540; 832; 964; 1057; 1204; 1353; 3037 |
| AfeI | AGC!GCT | 1 | 596 |
| AfiI | CCNNNNN!NNGG | 22 | 49; 654; 705; 779; 936; 1014; 1177; 1743; 2069; 2461; 2712; 3256; 3537; 3569; 3701; 3736; 3786; 3818; 4171; 4450; 4616; 4634 |
| AfIII | C!TTAAG | 0 | |
| AfIII | A!CRYGT | 2 | 1617; 4649 |
| AgeI | A!CCGGT | 1 | 600 |
| AgsI | TTS!AA | 9 | 924; 996; 1035; 1101; 2142; 2186; 2196; 2609; 4185 |
| AhdI | GACNNN!NNGTC | 0 | |
| AhlI | A!CTAGT | 0 | |
| AjiI | CAC!GTC | 0 | |
| AjiI | GAC!GTG | 0 | |
| AjnI | !CCWGG | 15 | 88; 281; 778; 788; 986; 1310; 2265; 2320; 2337; 3116; 3695; 3798; 4488; 4501; 4622 |
| AjuI | GAANNNNNNNTTGGNNNNNNNNNN! | 0 | |
| AjuI | !NNNNNNCCAANNNNNNNTTC | 0 | |
| AjuI | CCAANNNNNNNTTCNNNNNNNNNN! | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------------|-------|---|
| AjuI | !NNNNNNNGAANNNNNNNTTGG | 0 | |
| AleI | CACNN!NNGTG | 1 | 790 |
| AlfI | GCANNNNNTGCNNNNNNNNNNNN! | 2 | 2305; 2377 |
| AlfI | !NNNNNNNNNGCANNNNNTGTC | 2 | 2271; 2343 |
| AloI | GAACNNNNNTCCNNNNNNNNNNNN! | 1 | 1813 |
| AloI | !NNNNNNNGGANNNNNNGTTC | 1 | 730 |
| AloI | GGANNNNNGTTCNNNNNNNNNNNN! | 1 | 762 |
| AloI | !NNNNNNNGAACNNNNNTCC | 1 | 1781 |
| AluI | AG!CT | 19 | 566; 843; 863; 978; 1217; 1230; 1324; 1330; 1510; 1677; 1934; 2229; 2517; 2837; 3295; 4092; 4349; 4395; 4485 |
| AluBI | AG!CT | 19 | 566; 843; 863; 978; 1217; 1230; 1324; 1330; 1510; 1677; 1934; 2229; 2517; 2837; 3295; 4092; 4349; 4395; 4485 |
| AlwI | GGATCNNNN! | 10 | 1323; 1374; 1383; 2599; 2910; 3156; 3548; 3907; 4005; 4091 |
| AlwI | !NNNNNGATCC | 7 | 580; 639; 1361; 2975; 3519; 3906; 4003 |
| Alw21I | GWGCW!C | 6 | 787; 1193; 1326; 2844; 3034; 4339 |
| Alw26I | GTCTCN! | 1 | 434 |
| Alw26I | !NNNNNGAGAC | 5 | 1270; 2155; 2573; 3592; 3720 |
| Alw44I | G!TGCAC | 2 | 1189; 4335 |
| AlwNI | CAGNNN!CTG | 2 | 3832; 4240 |
| Ama87I | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| Aor13HI | T!CCGGA | 0 | |
| Aor51HI | AGC!GCT | 1 | 596 |
| ApaI | GGGCC!C | 1 | 1363 |
| ApaBI | GCANNNNN!TGC | 3 | 2299; 2371; 3833 |
| ApaLI | G!TGCAC | 2 | 1189; 4335 |
| ApeKI | G!CWGC | 17 | 617; 863; 956; 1124; 1507; 2026; 2691; 2792; 2834; 2875; 2968; 3355; 3808; 4034; 4240; 4243; 4308 |
| ApoI | R!AATTY | 4 | 1335; 1545; 1649; 1660 |
| ApyPI | ATCGACNNNNNNNNNNNNNNNNNNNN! | 1 | 3246 |
| ApyPI | !NNNNNNNNNNNNNNNNNNNGTCGAT | 3 | 3040; 3693; 4531 |
| AquII | GCCGNACNNNNNNNNNNNNNNNNNNNN! | 1 | 3130 |
| AquII | !NNNNNNNNNNNNNNNNNNNGTNCGGC | 1 | 812 |
| AquIII | GAGGAGNNNNNNNNNNNNNNNNNNNN! | 1 | 2559 |
| AquIII | !NNNNNNNNNNNNNNNNNNNCTCCTC | 0 | |
| AquIV | GRGGAAGNNNNNNNNNNNNNNNNNNNN! | 0 | |
| AquIV | !NNNNNNNNNNNNNNNNNNCTCCYC | 1 | 3301 |
| ArsI | GACNNNNNTTYGNNNNNNNNNNNN! | 0 | |
| ArsI | !NNNNNNCRAANNNNNNNGTC | 0 | |
| ArsI | CRAANNNNNNNGTCNNNNNNNNNNNN! | 0 | |
| ArsI | !NNNNNNNGACNNNNNNNTTYG | 0 | |
| AscI | GG!CGCGCC | 0 | |
| AseI | AT!TAAT | 1 | 7 |
| Asi256I | G!ATC | 27 | 586; 645; 1069; 1104; 1116; 1150; 1249; 1316; 1367; 1376; 1389; 2569; 2573; 2592; 2903; 2981; 3062; 3071; 3149; 3525; 3541; 3900; 3912; 3990; 3998; 4009; 4084 |
| AsiGI | A!CCGGT | 1 | 600 |
| AsiSI | GCGAT!CGC | 0 | |
| AspI | GACN!NNGTC | 1 | 2849 |
| Asp700I | GAANN!NNTTC | 1 | 850 |
| Asp718I | G!GTACC | 1 | 1351 |
| AspA2I | C!CTAGG | 2 | 2553; 3568 |
| AspEI | GACNNN!NNGTC | 0 | |
| AspLEI | GCG!C | 28 | 597; 625; 814; 893; 934; 1096; 1286; 1288; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475 |
| AspS9I | G!GNCC | 11 | 83; 276; 835; 1183; 1360; 1838; 3247; 3692; 3738; 3796; 3829 |
| AssI | AGT!ACT | 0 | |
| AsuII | TT!CGAA | 2 | 1333; 3413 |
| AsuC2I | CC!SGG | 6 | 1363; 1364; 2735; 2895; 3508; 4272 |
| AsuHPI | GGTGANNNNNNNN! | 5 | 376; 804; 951; 3802; 3918 |
| AsuHPI | !NNNNNNNTCACC | 5 | 891; 1032; 1243; 1848; 2909 |
| AsuNHI | G!CTAGC | 1 | 591 |
| AvaI | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| AvaII | G!GWCC | 2 | 3247; 3692 |
| AviII | TGC!GCA | 1 | 2833 |
| AvrII | C!CTAGG | 2 | 2553; 3568 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|--|
| AxyI | CC!TNAGG | 2 | 2211; 3843 |
| BaeI | ACNNNGTAYCNNNNNNNNNNNN! | 0 | |
| BaeI | !NNNNNNNGRTACNNNNNGT | 0 | |
| BaeI | GRTACNNNNGTNNNNNNNNNNNN! | 0 | |
| BaeI | !NNNNNNNNNACNNNNNGTAYC | 0 | |
| BaeGI | GKGCMI!C | 8 | 773; 779; 1193; 1199; 1363; 2677; 2770; 4339 |
| BalI | TGG!CCA | 4 | 683; 986; 1007; 2813 |
| BamHI | G!GATCC | 1 | 1366 |
| BanI | G!GYRCC | 7 | 465; 622; 811; 1351; 1884; 2730; 2765 |
| BanII | GRGCY!C | 5 | 1326; 1363; 1922; 3096; 3806 |
| BanIII | AT!CGAT | 1 | 2571 |
| BarI | GAAGNNNNNTACNNNNNNNNNN! | 1 | 870 |
| BarI | !NNNNNNNGTANNNNNNCTTC | 0 | |
| BarI | GTANNNNNNCTTCNNNNNNNNNN! | 0 | |
| BarI | !NNNNNNNGAAGNNNNNTAC | 1 | 838 |
| BasI | CCANNNN!NTGG | 1 | 1014 |
| BauI | C!ACGAG | 3 | 1111; 3449; 4476 |
| BauI | C!TCGTG | 1 | 3323 |
| BbeI | GGCGC!C | 3 | 626; 815; 2734 |
| Bbr7I | GAAGACNNNNNN! | 0 | |
| Bbr7I | !NNNNNNNNNNNGTCTTC | 0 | |
| BbrPI | CAC!GTG | 3 | 1011; 1194; 1224 |
| BbsI | GAAGACNN! | 0 | |
| BbsI | !NNNNNNGTCTTC | 0 | |
| BbuI | GCATG!C | 4 | 870; 2301; 2373; 3136 |
| BbvI | GCAGCNNNNNN! | 9 | 629; 968; 1136; 1519; 2804; 2846; 3367; 3820; 4320 |
| BbvI | !NNNNNNNNNNNGCTGC | 7 | 850; 2013; 2678; 2862; 2955; 4021; 4227 |
| Bbv12I | GWGCW!C | 6 | 787; 1193; 1326; 2844; 3034; 4339 |
| BbvCI | CC!TCAGC | 0 | |
| BbvCI | GC!TGAGG | 0 | |
| BccI | CCATCNNNN! | 6 | 904; 1180; 1861; 2425; 2951; 3453 |
| BccI | !NNNNNGATGG | 8 | 657; 673; 868; 907; 997; 1829; 2609; 3037 |
| BceAI | ACGGCNNNNNNNNNN! | 7 | 654; 729; 825; 849; 1098; 3157; 3644 |
| BceAI | !NNNNNNNNNNNGCCGT | 4 | 1273; 1872; 2690; 4149 |
| BceFI | ACGGCNNNNNNNNNN! | 7 | 654; 729; 825; 849; 1098; 3157; 3644 |
| BceFI | !NNNNNNNNNNNGCCGT | 4 | 1274; 1873; 2691; 4150 |
| BcgI | CGANNNNNNTGCNNNNNNNNNN! | 0 | |
| BcgI | !NNNNNNNNNGCANNNNNNTCG | 0 | |
| BcgI | GCANNNNNNTCGNNNNNNNNNN! | 0 | |
| BcgI | !NNNNNNNNNCGANNNNNNTGC | 0 | |
| BciVI | GTATCCNNNNNN! | 3 | 2160; 2950; 4451 |
| BciVI | !NNNNNGGATAC | 0 | |
| BclI | T!GATCA | 1 | 1388 |
| BcnI | CC!SGG | 6 | 1363; 1364; 2735; 2895; 3508; 4272 |
| BcuI | A!CTAGT | 0 | |
| BdaI | TGANNNNNNTCANNNNNNNNNN! | 2 | 1411; 4584 |
| BdaI | !NNNNNNNNNTGANNNNNNNTCA | 2 | 1377; 4550 |
| BfaI | C!TAG | 8 | 592; 1379; 1580; 1998; 2554; 3569; 3903; 4156 |
| BfiI | ACTGGGNNNN! | 1 | 2680 |
| BfiI | !NNNNCCCAGT | 4 | 289; 738; 810; 2432 |
| BfmI | C!TRYAG | 4 | 1340; 2066; 4193; 4384 |
| BfoI | RGCGC!Y | 8 | 598; 626; 815; 1097; 1998; 2006; 2734; 4409 |
| BfrI | C!TTAAG | 0 | |
| BfuI | GTATCCNNNNNN! | 3 | 2160; 2950; 4451 |
| BfuI | !NNNNNGGATAC | 0 | |
| BfuAI | ACCTGCNNNN! | 2 | 2999; 3449 |
| BfuAI | !NNNNNNNGCAGGT | 1 | 2618 |
| BfuCI | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| BglI | GCCNNNN!NGGC | 4 | 90; 212; 283; 2506 |
| BglII | A!GATCT | 1 | 1103 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|---------------------------|-------|--|
| BisI | GC!NGC | 35 | 618; 621; 864; 957; 1125; 1179; 1182; 1299; 1508; 2027; 2049; 2063; 2501; 2640; 2692; 2703; 2793; 2798; 2835; 2876; 2963; 2969; 3205; 3301; 3342; 3356; 3470; 3809; 3824; 4035; 4241; 4244; 4309; 4452; 4607 |
| BlnI | C!CTAGG | 2 | 2553; 3568 |
| BlpI | GC!TNAGC | 1 | 1231 |
| BlsI | GCN!GC | 35 | 619; 622; 865; 958; 1126; 1180; 1183; 1300; 1509; 2028; 2050; 2064; 2502; 2641; 2693; 2704; 2794; 2799; 2836; 2877; 2964; 2970; 3206; 3302; 3343; 3357; 3471; 3810; 3825; 4036; 4242; 4245; 4310; 4453; 4608 |
| BmcAI | AGT!ACT | 0 | |
| Bme18I | G!GWCC | 2 | 3247; 3692 |
| Bme1390I | CC!NGG | 21 | 90; 283; 780; 790; 988; 1312; 1363; 1364; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624 |
| BmeRI | GACNNN!NNGTC | 0 | |
| BmeT110I | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| BmgBI | CAC!GTC | 0 | |
| BmgBI | GAC!GTG | 0 | |
| BmgT120I | GG!NCC | 11 | 84; 277; 836; 1184; 1361; 1839; 3248; 3693; 3739; 3797; 3830 |
| BmiI | GGN!NCC | 21 | 467; 624; 813; 837; 1185; 1353; 1361; 1368; 1886; 1907; 1919; 2110; 2271; 2343; 2732; 2767; 3615; 3694; 3739; 4582; 4621 |
| BmrI | ACTGGGNNNNN! | 1 | 2680 |
| BmrI | !NNNNCCCAGT | 4 | 289; 738; 810; 2432 |
| BmrFI | CC!NGG | 21 | 90; 283; 780; 790; 988; 1312; 1363; 1364; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624 |
| BmsI | GCATCNNNNN! | 7 | 704; 1547; 2310; 2382; 3030; 3094; 3369 |
| BmsI | !NNNNNNNNNGATGC | 7 | 357; 708; 729; 2689; 2944; 3160; 4552 |
| BmtI | GCTAG!C | 1 | 595 |
| BmuI | ACTGGGNNNNN! | 1 | 2680 |
| BmuI | !NNNNCCCAGT | 4 | 289; 738; 810; 2432 |
| BoxI | GACNN!NNGTC | 0 | |
| BpiI | GAAGACNN! | 0 | |
| BpiI | !NNNNNNGTCTTC | 0 | |
| BpI | GAGNNNNNCTCNNNNNNNNNNNN! | 2 | 2520; 3419 |
| BpI | !NNNNNNNNGAGNNNNNCTC | 2 | 2488; 3387 |
| BpmI | CTGGAGNNNNNNNNNNNNNNNN! | 3 | 801; 1048; 3571 |
| BpmI | !NNNNNNNNNNNNNNNCTCCAG | 1 | 3514 |
| Bpu10I | CC!TNAGC | 0 | |
| Bpu10I | GC!TNAGG | 0 | |
| Bpu14I | TT!CGAA | 2 | 1333; 3413 |
| Bpu1102I | GC!TNAGC | 1 | 1231 |
| BpuAI | GAAGACNN! | 0 | |
| BpuAI | !NNNNNNGTCTTC | 0 | |
| BpuEI | CTTGAGNNNNNNNNNNNNNNNN! | 2 | 4025; 4564 |
| BpuEI | !NNNNNNNNNNNNNNNCTCAAG | 3 | 1310; 3107; 4266 |
| BpuMI | CC!SGG | 6 | 1363; 1364; 2735; 2895; 3508; 4272 |
| BpvUI | CGAT!CG | 0 | |
| BsaI | GGTCTCN! | 0 | |
| BsaI | !NNNNNGAGACC | 2 | 1270; 3720 |
| Bsa29I | AT!CGAT | 1 | 2571 |
| BsaAI | YAC!GTR | 8 | 340; 654; 882; 1011; 1194; 1224; 1847; 3035 |
| BsaBI | GATNN!NNATC | 2 | 1393; 2590 |
| BsaHI | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| BsaJI | C!CNNGG | 23 | 360; 636; 699; 778; 788; 935; 987; 1289; 1311; 1355; 1362; 2265; 2337; 2460; 2495; 2504; 2553; 2894; 3163; 3568; 3696; 3799; 4489 |
| BsaMI | GAATGCN! | 1 | 1482 |
| BsaMI | G!CATTC | 1 | 1575 |
| BsaWI | W!CCGGW | 6 | 600; 1372; 2762; 3606; 4296; 4443 |
| BsaXI | ACNNNNNCTCCNNNNNNNNNN! | 1 | 1811 |
| BsaXI | !NNNNNNNGGAGNNNNNNGT | 0 | |
| BsaXI | GGAGNNNNNNGTNNNNNNNNNN! | 0 | |
| BsaXI | !NNNNNNNNNACNNNNNCTCC | 1 | 1781 |
| BsbI | CAACACNNNNNNNNNNNNNNNNNN! | 0 | |
| BsbI | !NNNNNNNNNNNNNNNNNNGTGTG | 2 | 1732; 3639 |

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|-------------|-------------------------|-------|--|
| Bsc4I | CCNNNNN!NNGG | 22 | 49; 654; 705; 779; 936; 1014; 1177; 1743; 2069; 2461; 2712; 3256; 3537; 3569; 3701; 3736; 3786; 3818; 4171; 4450; 4616; 4634 |
| BscAI | GCATCNNNN! | 7 | 703; 1546; 2309; 2381; 3029; 3093; 3368 |
| BscAI | !NNNNNNGATGC | 7 | 360; 711; 732; 2692; 2947; 3163; 4555 |
| BseI | ACTGGN! | 3 | 2675; 2876; 4122 |
| BseI | C!CAGT | 7 | 295; 744; 816; 1760; 2438; 4234; 4247 |
| Bse8I | GATNN!NNATC | 2 | 1393; 2590 |
| Bse21I | CC!TNAGG | 2 | 2211; 3843 |
| Bse118I | R!CCGGY | 7 | 600; 760; 1120; 1948; 3050; 3231; 3514 |
| BseAI | T!CCGGA | 0 | |
| BseBI | CC!WGG | 15 | 90; 283; 780; 790; 988; 1312; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624 |
| BseCI | AT!CGAT | 1 | 2571 |
| BseDI | C!CNNGG | 23 | 360; 636; 699; 778; 788; 935; 987; 1289; 1311; 1355; 1362; 2265; 2337; 2460; 2495; 2504; 2553; 2894; 3163; 3568; 3696; 3799; 4489 |
| Bse3DI | GCAATGNN! | 1 | 2964 |
| Bse3DI | !CATTGC | 0 | |
| BseGI | GGATGNN! | 8 | 684; 744; 1008; 1245; 2591; 3048; 3073; 3527 |
| BseGI | !CATCC | 2 | 695; 2417 |
| BseJI | GATNN!NNATC | 2 | 1393; 2590 |
| BseLI | CCNNNNN!NNGG | 22 | 49; 654; 705; 779; 936; 1014; 1177; 1743; 2069; 2461; 2712; 3256; 3537; 3569; 3701; 3736; 3786; 3818; 4171; 4450; 4616; 4634 |
| BseMI | GCAATGNN! | 1 | 2964 |
| BseMI | !CATTGC | 0 | |
| BseMII | CTCAGNNNNNNNNNN! | 1 | 3857 |
| BseMII | !NNNNNNNNCTGAG | 6 | 1222; 2202; 2504; 3385; 3957; 4366 |
| BseNI | ACTGGN! | 3 | 2675; 2876; 4122 |
| BseNI | C!CAGT | 7 | 295; 744; 816; 1760; 2438; 4234; 4247 |
| BsePI | G!CGCGC | 1 | 1284 |
| BseRI | GAGGAGNNNNNNNNNN! | 1 | 2549 |
| BseRI | !NNNNNNNNCTCCTC | 0 | |
| BseSI | GKGC!C | 8 | 773; 779; 1193; 1199; 1363; 2677; 2770; 4339 |
| BseXI | GCAGC!NNNNNNNN! | 9 | 629; 968; 1136; 1519; 2804; 2846; 3367; 3820; 4320 |
| BseXI | !NNNNNNNNNNNGCTGC | 7 | 850; 2013; 2678; 2862; 2955; 4021; 4227 |
| BseX3I | C!GGCCG | 1 | 2637 |
| BseYI | C!CCAGC | 3 | 2274; 2346; 4345 |
| BseYI | G!CTGGG | 2 | 1014; 3235 |
| BsgI | GTGCAGNNNNNNNNNNNNNNNN! | 1 | 904 |
| BsgI | !NNNNNNNNNNNNNNCTGCAC | 1 | 738 |
| Bsh1236I | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| Bsh1285I | CGRY!CG | 3 | 605; 2640; 4315 |
| BshFI | GG!CC | 28 | 84; 277; 683; 836; 986; 1007; 1075; 1085; 1147; 1184; 1361; 1697; 1839; 2494; 2500; 2509; 2552; 2639; 2813; 3204; 3231; 3740; 3797; 3830; 4175; 4609; 4627; 4638 |
| BshNI | G!GYRCC | 7 | 465; 622; 811; 1351; 1884; 2730; 2765 |
| BshTI | A!CCGGT | 1 | 600 |
| BshVI | AT!CGAT | 1 | 2571 |
| BsiEI | CGRY!CG | 3 | 605; 2640; 4315 |
| BsiHKAI | GWGCW!C | 6 | 787; 1193; 1326; 2844; 3034; 4339 |
| BsiHKCI | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| BsiSI | C!CGG | 21 | 601; 761; 1121; 1363; 1373; 1949; 2636; 2713; 2735; 2763; 2894; 2984; 3051; 3232; 3507; 3515; 3607; 4081; 4271; 4297; 4444 |
| BsiWI | C!GTACG | 0 | |
| BslI | CCNNNNN!NNGG | 22 | 49; 654; 705; 779; 936; 1014; 1177; 1743; 2069; 2461; 2712; 3256; 3537; 3569; 3701; 3736; 3786; 3818; 4171; 4450; 4616; 4634 |
| BslFI | GGGACNNNNNNNNNN! | 6 | 175; 326; 494; 2882; 3414; 3523 |
| BslFI | !NNNNNNNNNNNNNGTCCC | 4 | 2247; 2319; 2383; 3678 |
| BsmI | GAATGCN! | 1 | 1482 |
| BsmI | G!CATTC | 1 | 1575 |
| BsmAI | GTCTCN! | 1 | 434 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------|-------|--|
| BsmAI | !NNNNNGAGAC | 5 | 1270; 2155; 2573; 3592; 3720 |
| BsmBI | CGTCTCN! | 0 | |
| BsmBI | !NNNNNGAGACG | 0 | |
| BsmFI | GGGACNNNNNNNNNN! | 6 | 175; 326; 494; 2882; 3414; 3523 |
| BsmFI | !NNNNNNNNNNNGTCCC | 4 | 2247; 2319; 2383; 3678 |
| BsnI | GG!CC | 28 | 84; 277; 683; 836; 986; 1007; 1075; 1085; 1147; 1184; 1361; 1697; 1839; 2494; 2500; 2509; 2552; 2639; 2813; 3204; 3231; 3740; 3797; 3830; 4175; 4609; 4627; 4638 |
| Bso31I | GGTCTCN! | 0 | |
| Bso31I | !NNNNNGAGACC | 2 | 1270; 3720 |
| BsoBI | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| Bsp13I | T!CCGGA | 0 | |
| Bsp19I | C!CATGG | 3 | 360; 2460; 3163 |
| Bsp24I | GACNNNNNTGGNNNNNNNNNN! | 2 | 289; 3534 |
| Bsp24I | !NNNNNNCCANNNNNGTC | 2 | 3955; 4133 |
| Bsp24I | CCANNNNNGTCNNNNNNNNNN! | 2 | 3987; 4165 |
| Bsp24I | !NNNNNNNGACNNNNNTGG | 2 | 257; 3502 |
| Bsp68I | TCG!CGA | 0 | |
| Bsp119I | TT!CGAA | 2 | 1333; 3413 |
| Bsp120I | G!GGCCC | 1 | 1359 |
| Bsp143I | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| Bsp1286I | GDGCH!C | 15 | 773; 779; 787; 1193; 1199; 1326; 1363; 1922; 2677; 2770; 2844; 3034; 3096; 3806; 4339 |
| Bsp1407I | T!GTACA | 2 | 962; 1055 |
| Bsp1720I | GC!TNAGC | 1 | 1231 |
| BspACI | C!CGC | 36 | 58; 86; 98; 112; 279; 507; 589; 699; 930; 1254; 1299; 1355; 2046; 2049; 2063; 2153; 2401; 2413; 2422; 2434; 2444; 2455; 2501; 2640; 2703; 3205; 3250; 3316; 3342; 3467; 3470; 3618; 3750; 4057; 4201; 4697 |
| BspACI | G!CGG | 28 | 370; 403; 528; 620; 701; 1178; 1181; 1357; 1991; 2018; 2106; 2216; 2797; 2861; 2962; 2965; 3245; 3300; 3398; 3536; 3683; 3823; 4066; 4311; 4432; 4451; 4578; 4606 |
| BspCNI | CTCAGNNNNNNNN! | 1 | 3856 |
| BspCNI | !NNNNNNCTGAG | 6 | 1223; 2203; 2505; 3386; 3958; 4367 |
| BspDI | AT!CGAT | 1 | 2571 |
| BspD6I | GACTCNNNN! | 4 | 418; 1804; 3410; 4287 |
| BspD6I | !NNNNNGAGTC | 2 | 1767; 2199 |
| BspEI | T!CCGGA | 0 | |
| BspFNI | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| BspHI | T!CATGA | 2 | 2157; 3929 |
| BspLI | GGN!NCC | 21 | 467; 624; 813; 837; 1185; 1353; 1361; 1368; 1886; 1907; 1919; 2110; 2271; 2343; 2732; 2767; 3615; 3694; 3739; 4582; 4621 |
| BspMI | ACCTGCNNNN! | 2 | 2999; 3449 |
| BspMI | !NNNNNNNGCAGGT | 1 | 2618 |
| BspOI | GCTAG!C | 1 | 595 |
| BspPI | GGATCNNNN! | 10 | 1323; 1374; 1383; 2599; 2910; 3156; 3548; 3907; 4005; 4091 |
| BspPI | !NNNNNGATCC | 7 | 580; 639; 1361; 2975; 3519; 3906; 4003 |
| BspQI | GCTCTCN! | 0 | |
| BspQI | !NNNNGAAGAGC | 3 | 1084; 3075; 3285 |
| BspTI | C!TTAAG | 0 | |
| BspT104I | TT!CGAA | 2 | 1333; 3413 |
| BspT107I | G!GYRCC | 7 | 465; 622; 811; 1351; 1884; 2730; 2765 |
| BspTNI | GGTCTCN! | 0 | |
| BspTNI | !NNNNNGAGACC | 2 | 1270; 3720 |
| BsrI | ACTGGN! | 3 | 2675; 2876; 4122 |
| BsrI | C!CAGT | 7 | 295; 744; 816; 1760; 2438; 4234; 4247 |
| BsrBI | CCG!CTC | 2 | 2155; 3344 |
| BsrBI | GAG!CGG | 2 | 1991; 3398 |
| BsrDI | GCAATGNN! | 1 | 2964 |
| BsrDI | !CATTGC | 0 | |
| BsrFI | R!CCGGY | 7 | 600; 760; 1120; 1948; 3050; 3231; 3514 |
| BsrGI | T!GTACA | 2 | 962; 1055 |
| BsrSI | ACTGGN! | 3 | 2675; 2876; 4122 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------|-------|--|
| BsrSI | C!CAGT | 7 | 295; 744; 816; 1760; 2438; 4234; 4247 |
| BssAI | R!CCGGY | 7 | 600; 760; 1120; 1948; 3050; 3231; 3514 |
| BssECI | C!CNNGG | 23 | 360; 636; 699; 778; 788; 935; 987; 1289; 1311; 1355; 1362; 2265; 2337; 2460; 2495; 2504; 2553; 2894; 3163; 3568; 3696; 3799; 4489 |
| BssHII | G!CGCGC | 1 | 1284 |
| BssKI | !CCNGG | 21 | 88; 281; 778; 788; 986; 1310; 1361; 1362; 2265; 2320; 2337; 2733; 2893; 3116; 3506; 3695; 3798; 4270; 4488; 4501; 4622 |
| BssMI | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| BssNI | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| BssNAI | GTA!TAC | 0 | |
| BssSI | C!ACGAG | 3 | 1111; 3449; 4476 |
| BssSI | C!TCGTG | 1 | 3323 |
| BssT1I | C!CWWGG | 5 | 360; 2460; 2553; 3163; 3568 |
| Bst6I | CTCTCN! | 0 | |
| Bst6I | !NNNNGAAGAG | 4 | 1084; 2198; 3075; 3285 |
| Bst98I | C!TTAAG | 0 | |
| Bst1107I | GTA!TAC | 0 | |
| BstACI | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| BstAFI | C!TTAAG | 0 | |
| BstAPI | GCANNN!NTGC | 3 | 2298; 2370; 3832 |
| BstAUI | T!GTACA | 2 | 962; 1055 |
| BstBI | TT!CGAA | 2 | 1333; 3413 |
| Bst2BI | C!ACGAG | 3 | 1111; 3449; 4476 |
| Bst2BI | C!TCGTG | 1 | 3323 |
| BstBAI | YAC!GTR | 8 | 340; 654; 882; 1011; 1194; 1224; 1847; 3035 |
| Bst4CI | ACN!GT | 15 | 76; 198; 269; 543; 581; 1281; 1351; 1822; 3111; 3227; 3335; 3658; 4149; 4619; 4690 |
| BstC8I | GCN!NGC | 32 | 86; 279; 593; 723; 868; 1122; 1286; 1359; 1950; 1993; 2007; 2280; 2299; 2352; 2371; 2625; 2811; 3030; 3096; 3102; 3134; 3175; 3179; 3233; 3516; 3703; 3750; 3806; 3828; 4039; 4599; 4636 |
| BstDEI | C!TNAG | 7 | 1231; 2211; 2513; 3394; 3843; 3966; 4375 |
| BstDSI | C!CRYGG | 7 | 360; 636; 699; 1289; 1355; 2460; 3163 |
| BstEII | G!GTNACC | 2 | 792; 939 |
| BstENI | CCTNN!NNNAGG | 0 | |
| BstF5I | GGATGNN! | 8 | 684; 744; 1008; 1245; 2591; 3048; 3073; 3527 |
| BstF5I | !CATCC | 2 | 695; 2417 |
| BstFNI | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| BstH2I | RGCGC!Y | 8 | 598; 626; 815; 1097; 1998; 2006; 2734; 4409 |
| BstHHI | GCG!C | 28 | 597; 625; 814; 893; 934; 1096; 1286; 1288; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475 |
| BstKTI | GAT!C | 27 | 588; 647; 1071; 1106; 1118; 1152; 1251; 1318; 1369; 1378; 1391; 2571; 2575; 2594; 2905; 2983; 3064; 3073; 3151; 3527; 3543; 3902; 3914; 3992; 4000; 4011; 4086 |
| BstMAI | GTCTCN! | 1 | 434 |
| BstMAI | !NNNNGAGAC | 5 | 1270; 2155; 2573; 3592; 3720 |
| BstMBI | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| BstMCI | CGRY!CG | 3 | 605; 2640; 4315 |
| BstMWI | GCNNNN!NNGC | 31 | 90; 212; 244; 283; 376; 400; 707; 722; 761; 818; 1091; 1130; 1958; 1988; 2015; 2057; 2298; 2370; 2421; 2500; 2722; 2806; 2829; 2968; 3091; 3174; 3441; 3628; 3832; 4031; 4603 |
| BstNI | CC!WGG | 15 | 90; 283; 780; 790; 988; 1312; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624 |
| BstNSI | RCATG!Y | 5 | 870; 2301; 2373; 3136; 4653 |
| BstOI | CC!WGG | 15 | 90; 283; 780; 790; 988; 1312; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624 |
| BstPI | G!GTNACC | 2 | 792; 939 |
| BstPAI | GACNN!NNGTC | 0 | |
| BstSCI | !CCNGG | 21 | 88; 281; 778; 788; 986; 1310; 1361; 1362; 2265; 2320; 2337; 2733; 2893; 3116; 3506; 3695; 3798; 4270; 4488; 4501; 4622 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-------------------------------|-------|--|
| BstSFI | C!TRYAG | 4 | 1340; 2066; 4193; 4384 |
| BstSLI | GKGC!IC | 8 | 773; 779; 1193; 1199; 1363; 2677; 2770; 4339 |
| BstSNI | TAC!GTA | 1 | 340 |
| BstUI | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| Bst2UI | CC!WGG | 15 | 90; 283; 780; 790; 988; 1312; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624 |
| BstV1I | GCAGC!NNNNNNNN! | 9 | 629; 968; 1136; 1519; 2804; 2846; 3367; 3820; 4320 |
| BstV1I | !NNNNNNNNNNNGCTGC | 7 | 850; 2013; 2678; 2862; 2955; 4021; 4227 |
| BstV2I | GAAGACNN! | 0 | |
| BstV2I | !NNNNNNNGTCTTC | 0 | |
| BstXI | CCANNNNN!NTGG | 0 | |
| BstX2I | R!GATCY | 13 | 585; 644; 1103; 1315; 1366; 1375; 2902; 3148; 3540; 3899; 3911; 3997; 4008 |
| BstYI | R!GATCY | 13 | 585; 644; 1103; 1315; 1366; 1375; 2902; 3148; 3540; 3899; 3911; 3997; 4008 |
| BstZI | C!GGCCG | 1 | 2637 |
| BstZ17I | GTA!TAC | 0 | |
| BsuI | GTATCCNNNNNN! | 3 | 2160; 2950; 4451 |
| BsuI | !NNNNNGGATAC | 0 | |
| Bsu15I | AT!CGAT | 1 | 2571 |
| Bsu36I | CC!TNAGG | 2 | 2211; 3843 |
| BsuRI | GG!CC | 28 | 84; 277; 683; 836; 986; 1007; 1075; 1085; 1147; 1184; 1361; 1697; 1839; 2494; 2500; 2509; 2552; 2639; 2813; 3204; 3231; 3740; 3797; 3830; 4175; 4609; 4627; 4638 |
| BsuTUI | AT!CGAT | 1 | 2571 |
| BtgI | C!CRYGG | 7 | 360; 636; 699; 1289; 1355; 2460; 3163 |
| BtgZI | GCGATGNNNNNNNNNN! | 6 | 686; 731; 779; 926; 1848; 3183 |
| BtgZI | !NNNNNNNNNNNNNNNNCATCGC | 3 | 334; 3002; 3346 |
| BthCI | GCNG!IC | 35 | 620; 623; 866; 959; 1127; 1181; 1184; 1301; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609 |
| BtrI | CAC!GTC | 0 | |
| BtrI | GAC!GTG | 0 | |
| BtsI | GCAGTGNN! | 0 | |
| BtsI | !CACTGC | 2 | 1047; 1570 |
| BtsCI | GGATGNN! | 8 | 684; 744; 1008; 1245; 2591; 3048; 3073; 3527 |
| BtsCI | !CATCC | 2 | 695; 2417 |
| BtuMI | TCG!CGA | 0 | |
| BveI | ACCTGCNNNN! | 2 | 2999; 3449 |
| BveI | !NNNNNNNNNGCAGGT | 1 | 2618 |
| Cac8I | GCN!NGC | 32 | 86; 279; 593; 723; 868; 1122; 1286; 1359; 1950; 1993; 2007; 2280; 2299; 2352; 2371; 2625; 2811; 3030; 3096; 3102; 3134; 3175; 3179; 3233; 3516; 3703; 3750; 3806; 3828; 4039; 4599; 4636 |
| CaiI | CAGNNN!CTG | 2 | 3832; 4240 |
| CciI | T!CATGA | 2 | 2157; 3929 |
| CciNI | GC!GGCCGC | 0 | |
| CdiI | CATC!G | 7 | 352; 1143; 1176; 3020; 3025; 3223; 3364 |
| CdiI | C!GATG | 7 | 672; 717; 765; 873; 912; 1834; 3169 |
| CdpI | GCGGAGNNNNNNNNNNNNNNNNNNNNNN! | 1 | 4603 |
| CdpI | !NNNNNNNNNNNNNNNNNNNNCTCCGC | 3 | 486; 2392; 2434 |
| CelII | GC!TNAGC | 1 | 1231 |
| CfoI | GCG!C | 28 | 597; 625; 814; 893; 934; 1096; 1286; 1288; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475 |
| CfrI | Y!GGCCR | 8 | 681; 984; 1005; 1145; 2637; 2811; 3202; 3229 |
| Cfr9I | C!CCGGG | 1 | 1362 |
| Cfr10I | R!CCGGY | 7 | 600; 760; 1120; 1948; 3050; 3231; 3514 |
| Cfr13I | G!GNCC | 11 | 83; 276; 835; 1183; 1360; 1838; 3247; 3692; 3738; 3796; 3829 |
| Cfr42I | CCGC!GG | 2 | 702; 1358 |
| ChaI | GATC! | 27 | 589; 648; 1072; 1107; 1119; 1153; 1252; 1319; 1370; 1379; 1392; 2572; 2576; 2595; 2906; 2984; 3065; 3074; 3152; 3528; 3544; 3903; 3915; 3993; 4001; 4012; 4087 |
| CjeI | CCANNNNNNGTNNNNNNNNNNNNNNNN! | 5 | 1072; 2548; 3988; 4088; 4166 |
| CjeI | !NNNNNNNNNACNNNNNNNTGG | 7 | 64; 257; 2215; 2310; 3502; 4052; 4607 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|----------------------------|-------|---|
| CjeI | ACNNNNNTGGNNNNNNNNNNNNNN! | 7 | 98; 291; 2249; 2344; 3536; 4086; 4641 |
| CjeI | !NNNNNNNNCCANNNNNNGT | 5 | 1038; 2514; 3954; 4054; 4132 |
| CjePI | CCANNNNNNTCANNNNNNNNNNNN! | 2 | 3988; 4166 |
| CjePI | !NNNNNNNGANNNNNNNTGG | 4 | 257; 966; 3502; 4101 |
| CjePI | GANNNNNNNTGGNNNNNNNNNNNN! | 4 | 290; 999; 3535; 4134 |
| CjePI | !NNNNNNCCANNNNNNNNTC | 2 | 3955; 4133 |
| Clal | AT!CGAT | 1 | 2571 |
| CpoI | CG!GWCCG | 1 | 3247 |
| CseI | GACGCNNNNN! | 3 | 526; 3441; 3520 |
| CseI | !NNNNNNNNNGCGTC | 3 | 2064; 3959; 4537 |
| CsiI | A!CCWGGT | 1 | 2320 |
| CspI | CG!GWCCG | 1 | 3247 |
| Csp6I | G!TAC | 12 | 218; 243; 298; 331; 382; 539; 831; 963; 1056; 1203; 1352; 3036 |
| Csp45I | TT!CGAA | 2 | 1333; 3413 |
| CspAI | A!CCGGT | 1 | 600 |
| CspCI | CAANNNNNGTGGNNNNNNNNNNNN! | 1 | 411 |
| CspCI | !NNNNNNNNNNCCACNNNNNTTG | 0 | |
| CspCI | CCACNNNNNTTGNNNNNNNNNNNNN! | 0 | |
| CspCI | !NNNNNNNNNNCAANNNNNGTGG | 1 | 376 |
| CstMI | AAGGAGNNNNNNNNNNNNNNNNNN! | 2 | 2011; 3620 |
| CstMI | !NNNNNNNNNNNNNNNNNNCTCCTT | 0 | |
| CviAII | C!ATG | 18 | 301; 361; 612; 867; 1212; 2158; 2298; 2370; 2461; 2602; 2947; 3133; 3164; 3190; 3546; 3930; 4650; 4701 |
| CviJI | RG!CY | 91 | 42; 84; 93; 277; 566; 683; 710; 836; 843; 863; 878; 978; 986; 992; 1007; 1075; 1085; 1147; 1184; 1217; 1230; 1268; 1324; 1330; 1361; 1400; 1510; 1677; 1697; 1839; 1920; 1934; 1948; 2229; 2270; 2342; 2465; 2494; 2500; 2509; 2517; 2540; 2552; 2558; 2639; 2656; 2664; 2691; 2716; 2800; 2809; 2813; 2837; 2875; 2951; 2968; 2987; 3050; 3094; 3104; 3121; 3204; 3231; 3235; 3272; 3295; 3311; 3491; 3518; 3579; 3701; 3740; 3797; 3804; 3811; 3830; 3841; 4092; 4121; 4164; 4175; 4240; 4319; 4344; 4349; 4395; 4485; 4583; 4609; 4627; 4638 |
| CviKI-1 | RG!CY | 91 | 42; 84; 93; 277; 566; 683; 710; 836; 843; 863; 878; 978; 986; 992; 1007; 1075; 1085; 1147; 1184; 1217; 1230; 1268; 1324; 1330; 1361; 1400; 1510; 1677; 1697; 1839; 1920; 1934; 1948; 2229; 2270; 2342; 2465; 2494; 2500; 2509; 2517; 2540; 2552; 2558; 2639; 2656; 2664; 2691; 2716; 2800; 2809; 2813; 2837; 2875; 2951; 2968; 2987; 3050; 3094; 3104; 3121; 3204; 3231; 3235; 3272; 3295; 3311; 3491; 3518; 3579; 3701; 3740; 3797; 3804; 3811; 3830; 3841; 4092; 4121; 4164; 4175; 4240; 4319; 4344; 4349; 4395; 4485; 4583; 4609; 4627; 4638 |
| CviQI | G!TAC | 12 | 218; 243; 298; 331; 382; 539; 831; 963; 1056; 1203; 1352; 3036 |
| DdeI | C!TNAG | 7 | 1231; 2211; 2513; 3394; 3843; 3966; 4375 |
| DinI | GGC!GCC | 3 | 624; 813; 2732 |
| DpnI | GA!TC | 27 | 587; 646; 1070; 1105; 1117; 1151; 1250; 1317; 1368; 1377; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085 |
| DpnII | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| DraI | TTT!AAA | 3 | 1433; 3875; 3894 |
| DraII | RG!GNCCY | 1 | 3829 |
| DraIII | CACNN!GTG | 1 | 1847 |
| DraRI | CAAGNACNNNNNNNNNNNNNNNNNN! | 3 | 266; 854; 4211 |
| DraRI | !NNNNNNNNNNNNNNNNNGTNCCTT | 0 | |
| DrdI | GACNNN!NNGTC | 3 | 1802; 2758; 4547 |
| DrdIV | TACGACNNNNNNNNNNNNNNNNNN! | 0 | |
| DrdIV | !NNNNNNNNNNNNNNNNNGTCGTA | 1 | 476 |
| DriI | GACNNN!NNGTC | 0 | |
| DseDI | GACNNN!NNGTC | 3 | 1802; 2758; 4547 |
| EaeI | Y!GGCCR | 8 | 681; 984; 1005; 1145; 2637; 2811; 3202; 3229 |
| EagI | C!GGCCG | 1 | 2637 |
| Eam1104I | CTCTTCN! | 0 | |
| Eam1104I | !NNNNGAAGAG | 4 | 1084; 2198; 3075; 3285 |
| Eam1105I | GACNNN!NNGTC | 0 | |
| EarI | CTCTTCN! | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|--|
| EarI | !NNNNGAAGAG | 4 | 1084; 2198; 3075; 3285 |
| EciI | GGCGGANNNNNNNNNN! | 4 | 2231; 3260; 4447; 4593 |
| EciI | !NNNNNNNNNTCCGCC | 4 | 496; 2402; 2423; 2444 |
| Ecl136II | GAG!CTC | 1 | 1324 |
| EclXI | C!GGCCG | 1 | 2637 |
| Eco24I | GRGCY!C | 5 | 1326; 1363; 1922; 3096; 3806 |
| Eco31I | GGTCTCN! | 0 | |
| Eco31I | !NNNNNGAGACC | 2 | 1270; 3720 |
| Eco32I | GAT!ATC | 0 | |
| Eco47I | G!GWCC | 2 | 3247; 3692 |
| Eco47III | AGC!GCT | 1 | 596 |
| Eco52I | C!GGCCG | 1 | 2637 |
| Eco57I | CTGAAGNNNNNNNNNNNNNN! | 4 | 865; 1108; 2877; 3309 |
| Eco57I | !NNNNNNNNNNNNNNCTTCAG | 2 | 675; 4107 |
| Eco72I | CAC!GTG | 3 | 1011; 1194; 1224 |
| Eco81I | CC!TNAGG | 2 | 2211; 3843 |
| Eco88I | C!YCGRG | 4 | 838; 1198; 1319; 1362 |
| Eco91I | G!GTNACC | 2 | 792; 939 |
| Eco105I | TAC!GTA | 1 | 340 |
| Eco130I | C!CWWGG | 5 | 360; 2460; 2553; 3163; 3568 |
| Eco147I | AGG!CCT | 1 | 2552 |
| EcoHI | !CCSGG | 6 | 1361; 1362; 2733; 2893; 3506; 4270 |
| EcoICRI | GAG!CTC | 1 | 1324 |
| Eco57MI | CTGRAGNNNNNNNNNNNNNN! | 7 | 801; 865; 1048; 1108; 2877; 3309; 3571 |
| Eco57MI | !NNNNNNNNNNNNNNCTYCAG | 3 | 675; 3514; 4107 |
| EcoNI | CCTNN!NNNAGG | 0 | |
| Eco065I | G!GTNACC | 2 | 792; 939 |
| Eco0109I | RG!GNCCY | 1 | 3829 |
| EcoRI | G!AATTC | 1 | 1335 |
| EcoRII | !CCWGG | 15 | 88; 281; 778; 788; 986; 1310; 2265; 2320; 2337; 3116; 3695; 3798; 4488; 4501; 4622 |
| EcoRV | GAT!ATC | 0 | |
| EcoT14I | C!CWWGG | 5 | 360; 2460; 2553; 3163; 3568 |
| EcoT22I | ATGCA!T | 3 | 2303; 2375; 4706 |
| EcoT38I | GRGCY!C | 5 | 1326; 1363; 1922; 3096; 3806 |
| Eco53kI | GAG!CTC | 1 | 1324 |
| EgeI | GGC!GCC | 3 | 624; 813; 2732 |
| EheI | GGC!GCC | 3 | 624; 813; 2732 |
| ErhI | C!CWWGG | 5 | 360; 2460; 2553; 3163; 3568 |
| EsaBC3I | TC!GA | 16 | 906; 948; 1321; 1334; 1347; 1881; 2572; 2845; 3001; 3025; 3061; 3223; 3414; 3459; 3714; 4552 |
| Esp3I | CGTCTCN! | 0 | |
| Esp3I | !NNNNNGAGACG | 0 | |
| FaeI | CATG! | 18 | 304; 364; 615; 870; 1215; 2161; 2301; 2373; 2464; 2605; 2950; 3136; 3167; 3193; 3549; 3933; 4653; 4704 |
| Fail | YA!TR | 55 | 39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 613; 868; 1213; 1264; 1393; 1403; 1469; 1514; 1719; 2147; 2159; 2290; 2299; 2362; 2371; 2395; 2462; 2486; 2603; 2667; 2948; 2973; 3134; 3165; 3191; 3263; 3479; 3547; 3625; 3677; 3838; 3855; 3857; 3859; 3931; 4209; 4398; 4514; 4587; 4651; 4702 |
| FaII | AAGNNNNNCTTNNNNNNNNNNNN! | 2 | 1113; 3071 |
| FaII | !NNNNNNNNAAGNNNNNCTT | 2 | 1081; 3039 |
| FaqI | GGGACNNNNNNNNNN! | 6 | 175; 326; 494; 2882; 3414; 3523 |
| FaqI | !NNNNNNNNNNNNNGTCCC | 4 | 2247; 2319; 2383; 3678 |
| FatI | !CATG | 18 | 300; 360; 611; 866; 1211; 2157; 2297; 2369; 2460; 2601; 2946; 3132; 3163; 3189; 3545; 3929; 4649; 4700 |
| FauI | CCCGCNNNN! | 9 | 93; 119; 286; 937; 2053; 2408; 2429; 3625; 3757 |
| FauI | !NNNNNNGCGGG | 6 | 1350; 1984; 2854; 3391; 3529; 3676 |
| FauNDI | CA!TATG | 1 | 234 |
| FbaI | T!GATCA | 1 | 1388 |
| FblI | GT!MKAC | 1 | 1346 |
| FmuI | GGNC!C | 11 | 86; 279; 838; 1186; 1363; 1841; 3250; 3695; 3741; 3799; 3832 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|---|
| Fnu4HI | GC!NGC | 35 | 618; 621; 864; 957; 1125; 1179; 1182; 1299; 1508; 2027; 2049; 2063; 2501; 2640; 2692; 2703; 2793; 2798; 2835; 2876; 2963; 2969; 3205; 3301; 3342; 3356; 3470; 3809; 3824; 4035; 4241; 4244; 4309; 4452; 4607 |
| FokI | GGATGNNNNNNNNNN! | 8 | 691; 751; 1015; 1252; 2598; 3055; 3080; 3534 |
| FokI | !NNNNNNNNNNNNNNCATCC | 2 | 682; 2404 |
| FriOI | GRGCY!C | 5 | 1326; 1363; 1922; 3096; 3806 |
| FseI | GGCCGG!CC | 0 | |
| FspI | TGC!GCA | 1 | 2833 |
| FspAI | RTGC!GCAY | 0 | |
| FspBI | C!TAG | 8 | 592; 1379; 1580; 1998; 2554; 3569; 3903; 4156 |
| FspEI | CCNNNNNNNNNNNN! | 159 | 56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 639; 661; 697; 712; 735; 756; 771; 785; 801; 819; 840; 884; 909; 942; 957; 1000; 1021; 1056; 1089; 1110; 1134; 1161; 1182; 1198; 1212; 1234; 1260; 1282; 1302; 1320; 1368; 1383; 1414; 1453; 1467; 1608; 1703; 1727; 1750; 1773; 1791; 1813; 1834; 1853; 1872; 1901; 1922; 1936; 1962; 2050; 2076; 2125; 2166; 2184; 2223; 2239; 2277; 2334; 2349; 2406; 2426; 2440; 2457; 2471; 2508; 2523; 2566; 2649; 2716; 2747; 2767; 2782; 2827; 2841; 2907; 2921; 2940; 2956; 2997; 3017; 3064; 3114; 3130; 3150; 3175; 3195; 3218; 3245; 3263; 3289; 3329; 3355; 3379; 3435; 3449; 3477; 3520; 3541; 3576; 3620; 3708; 3732; 3754; 3774; 3790; 3811; 3825; 3844; 3928; 3948; 3976; 3991; 4025; 4067; 4094; 4109; 4154; 4178; 4192; 4214; 4240; 4260; 4284; 4310; 4358; 4377; 4396; 4422; 4457; 4502; 4532; 4546; 4597; 4611; 4636; 4652; 4673; 4702 |
| FspEI | !NNNNNNNNNNNNNNNGG | 130 | 8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 605; 623; 643; 661; 686; 712; 746; 765; 794; 818; 860; 892; 922; 968; 989; 1012; 1047; 1067; 1106; 1129; 1160; 1222; 1258; 1276; 1297; 1334; 1358; 1402; 1502; 1571; 1679; 1728; 1750; 1778; 1814; 1859; 1888; 1924; 1943; 1971; 1991; 2054; 2077; 2185; 2217; 2235; 2264; 2307; 2336; 2447; 2476; 2519; 2540; 2568; 2601; 2621; 2646; 2673; 2698; 2720; 2748; 2774; 2795; 2846; 2867; 2885; 2933; 2969; 3025; 3050; 3074; 3103; 3126; 3150; 3176; 3198; 3217; 3242; 3282; 3318; 3383; 3468; 3492; 3521; 3555; 3576; 3596; 3641; 3668; 3687; 3720; 3772; 3803; 3830; 3882; 3980; 4051; 4096; 4157; 4222; 4256; 4282; 4300; 4336; 4406; 4429; 4451; 4475; 4508; 4556; 4591; 4609; 4666 |
| Fsp4HI | GC!NGC | 35 | 618; 621; 864; 957; 1125; 1179; 1182; 1299; 1508; 2027; 2049; 2063; 2501; 2640; 2692; 2703; 2793; 2798; 2835; 2876; 2963; 2969; 3205; 3301; 3342; 3356; 3470; 3809; 3824; 4035; 4241; 4244; 4309; 4452; 4607 |
| GdiII | C!GGCCR | 1 | 2637 |
| GdiII | Y!GGCCG | 4 | 1145; 2637; 3202; 3229 |
| GlaI | GC!GC | 28 | 596; 624; 813; 892; 933; 1095; 1285; 1287; 1996; 2004; 2030; 2052; 2061; 2074; 2105; 2724; 2732; 2796; 2833; 3099; 3359; 3535; 3621; 4024; 4133; 4307; 4407; 4474 |
| GluI | GC!NGC | 35 | 618; 621; 864; 957; 1125; 1179; 1182; 1299; 1508; 2027; 2049; 2063; 2501; 2640; 2692; 2703; 2793; 2798; 2835; 2876; 2963; 2969; 3205; 3301; 3342; 3356; 3470; 3809; 3824; 4035; 4241; 4244; 4309; 4452; 4607 |
| GsaI | CCCAG!C | 3 | 2278; 2350; 4349 |
| GsaI | GCTGG!G | 2 | 1018; 3239 |
| GsuI | CTGGAGNNNNNNNNNNNNNNNN! | 3 | 801; 1048; 3571 |
| GsuI | !NNNNNNNNNNNNNNCTCCAG | 1 | 3514 |
| HaeI | WGG!CCW | 9 | 683; 986; 1007; 1075; 2552; 2813; 4175; 4627; 4638 |
| HaeII | RGCGC!Y | 8 | 598; 626; 815; 1097; 1998; 2006; 2734; 4409 |
| HaeIII | GG!CC | 28 | 84; 277; 683; 836; 986; 1007; 1075; 1085; 1147; 1184; 1361; 1697; 1839; 2494; 2500; 2509; 2552; 2639; 2813; 3204; 3231; 3740; 3797; 3830; 4175; 4609; 4627; 4638 |
| HaeIV | GAYNNNNNNRTCNNNNNNNNNNNNNN! | 2 | 1406; 2927 |
| HaeIV | !NNNNNNNNNGAYNNNNNNRTCC | 2 | 1372; 2893 |
| HaeIV | GAYNNNNNNRTCNNNNNNNNNNNNNN! | 2 | 1405; 2926 |
| HaeIV | !NNNNNNNNNGAYNNNNNNRTCC | 2 | 1374; 2895 |
| HapII | C!CGG | 21 | 601; 761; 1121; 1363; 1373; 1949; 2636; 2713; 2735; 2763; 2894; 2984; 3051; 3232; 3507; 3515; 3607; 4081; 4271; 4297; 4444 |
| HgaI | GACGCNNNNN! | 3 | 526; 3441; 3520 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|---|
| HgaI | !NNNNNNNNNGCGTC | 3 | 2064; 3959; 4537 |
| HhaI | GCG!C | 28 | 597; 625; 814; 893; 934; 1096; 1286; 1288; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475 |
| Hin1I | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| Hin1III | CATG! | 18 | 304; 364; 615; 870; 1215; 2161; 2301; 2373; 2464; 2605; 2950; 3136; 3167; 3193; 3549; 3933; 4653; 4704 |
| Hin4I | GAYNNNNNVTCNNNNNNNNNNNN! | 2 | 1405; 2926 |
| Hin4I | !NNNNNNNGABNNNNNRTC | 3 | 1373; 2894; 2924 |
| Hin4I | GABNNNNNRTCNNNNNNNNNNNN! | 3 | 1405; 2926; 2956 |
| Hin4I | !NNNNNNNGAYNNNNNVTC | 2 | 1373; 2894 |
| Hin6I | G!CGC | 28 | 595; 623; 812; 891; 932; 1094; 1284; 1286; 1995; 2003; 2029; 2051; 2060; 2073; 2104; 2723; 2731; 2795; 2832; 3098; 3358; 3534; 3620; 4023; 4132; 4306; 4406; 4473 |
| HinP1I | G!CGC | 28 | 595; 623; 812; 891; 932; 1094; 1284; 1286; 1995; 2003; 2029; 2051; 2060; 2073; 2104; 2723; 2731; 2795; 2832; 3098; 3358; 3534; 3620; 4023; 4132; 4306; 4406; 4473 |
| HincII | GTY!RAC | 2 | 1347; 1494 |
| HindII | GTY!RAC | 2 | 1347; 1494 |
| HindIII | A!AGCTT | 1 | 1328 |
| HinfI | G!ANTC | 12 | 410; 1023; 1774; 1796; 2206; 3216; 3350; 3402; 3460; 3497; 4279; 4675 |
| HpaI | GTT!AAC | 1 | 1494 |
| HpaII | C!CGG | 21 | 601; 761; 1121; 1363; 1373; 1949; 2636; 2713; 2735; 2763; 2894; 2984; 3051; 3232; 3507; 3515; 3607; 4081; 4271; 4297; 4444 |
| HphI | GGTGANNNNNNN! | 5 | 376; 804; 951; 3802; 3918 |
| HphI | !NNNNNNNTCACC | 5 | 891; 1032; 1243; 1848; 2909 |
| Hpy8I | GTN!NAC | 11 | 201; 539; 577; 963; 1191; 1347; 1494; 1778; 1795; 1850; 4337 |
| Hpy99I | CGWCG! | 8 | 1351; 2821; 2849; 3143; 3158; 3435; 3820; 4553 |
| Hpy166II | GTN!NAC | 11 | 201; 539; 577; 963; 1191; 1347; 1494; 1778; 1795; 1850; 4337 |
| Hpy188I | TCN!GA | 11 | 585; 1905; 2514; 2698; 3042; 3395; 3496; 3975; 4109; 4462; 4540 |
| Hpy188III | TC!NNGA | 26 | 924; 948; 996; 1027; 1101; 1319; 1379; 2158; 2210; 2523; 2576; 2749; 3065; 3074; 3157; 3213; 3257; 3347; 3380; 3449; 3930; 4004; 4087; 4185; 4283; 4417 |
| HpyAV | CCTTCNNNNNN! | 7 | 699; 912; 954; 1107; 3376; 3483; 4162 |
| HpyAV | !NNNNNGAAGG | 9 | 840; 993; 1964; 2859; 3588; 3604; 3787; 4104; 4414 |
| HpyCH4III | ACN!GT | 15 | 76; 198; 269; 543; 581; 1281; 1351; 1822; 3111; 3227; 3335; 3658; 4149; 4619; 4690 |
| HpyCH4IV | A!CGT | 19 | 122; 134; 175; 258; 339; 444; 653; 881; 1010; 1193; 1223; 1791; 1803; 1846; 1956; 2847; 3034; 3815; 3948 |
| HpyCH4V | TG!CA | 21 | 755; 866; 885; 1191; 1342; 1480; 1507; 1575; 2292; 2301; 2364; 2373; 2488; 2564; 2623; 2782; 2957; 2971; 4041; 4337; 4704 |
| HpyF3I | C!TNAG | 7 | 1231; 2211; 2513; 3394; 3843; 3966; 4375 |
| HpyF10VI | GCNNNNN!NNGC | 31 | 90; 212; 244; 283; 376; 400; 707; 722; 761; 818; 1091; 1130; 1958; 1988; 2015; 2057; 2298; 2370; 2421; 2500; 2722; 2806; 2829; 2968; 3091; 3174; 3441; 3628; 3832; 4031; 4603 |
| Hsp92I | GR!CGYC | 9 | 122; 175; 258; 444; 623; 812; 2731; 3433; 3512 |
| Hsp92II | CATG! | 18 | 304; 364; 615; 870; 1215; 2161; 2301; 2373; 2464; 2605; 2950; 3136; 3167; 3193; 3549; 3933; 4653; 4704 |
| HspAI | G!CGC | 28 | 595; 623; 812; 891; 932; 1094; 1284; 1286; 1995; 2003; 2029; 2051; 2060; 2073; 2104; 2723; 2731; 2795; 2832; 3098; 3358; 3534; 3620; 4023; 4132; 4306; 4406; 4473 |
| KasI | G!GCGCC | 3 | 622; 811; 2730 |
| KfiI | GG!GWCCC | 0 | |
| KpnI | GGTAC!C | 1 | 1355 |
| Kpn2I | T!CCGGA | 0 | |
| KspI | CCGC!GG | 2 | 702; 1358 |
| Ksp22I | T!GATCA | 1 | 1388 |
| KspAI | GTT!AAC | 1 | 1494 |
| Kzo9I | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| LguI | GCTCTTCN! | 0 | |
| LguI | !NNNNGAAGAGC | 3 | 1084; 3075; 3285 |
| LpnI | RGC!GCV | 8 | 596; 624; 813; 1095; 1996; 2004; 2732; 4407 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--|-------|--|
| LpnPI | CCDGNNNNNNNNNN! | 62 | 102; 295; 614; 640; 735; 757; 774; 792; 814; 829; 1000; 1066; 1099; 1134; 1171; 1282; 1324; 1376; 1468; 1773; 1962; 2185; 2223; 2239; 2279; 2334; 2351; 2451; 2536; 2649; 2726; 2748; 2771; 2907; 2921; 2940; 2997; 3064; 3114; 3130; 3187; 3245; 3454; 3520; 3544; 3620; 3709; 3812; 3845; 4076; 4094; 4240; 4260; 4284; 4310; 4359; 4457; 4502; 4532; 4611; 4636; 4673 |
| LpnPI | !NNNNNNNNNNNNCHGG | 54 | 75; 268; 552; 586; 746; 765; 871; 973; 1000; 1047; 1106; 1297; 1348; 1814; 1934; 1991; 2054; 2252; 2264; 2324; 2336; 2568; 2613; 2656; 2698; 2720; 2748; 2795; 2857; 2879; 2969; 3036; 3059; 3103; 3198; 3217; 3242; 3391; 3492; 3535; 3592; 3682; 3785; 3812; 3830; 4066; 4103; 4256; 4282; 4422; 4440; 4475; 4556; 4609 |
| Lsp1109I | GCAGCNNNNNNNN! | 9 | 629; 968; 1136; 1519; 2804; 2846; 3367; 3820; 4320 |
| Lsp1109I | !NNNNNNNNNNNGCTGC | 7 | 850; 2013; 2678; 2862; 2955; 4021; 4227 |
| LweI | GCATCNNNNN! | 7 | 704; 1547; 2310; 2382; 3030; 3094; 3369 |
| LweI | !NNNNNNNNNGATGC | 7 | 357; 708; 729; 2689; 2944; 3160; 4552 |
| MabI | A!CCWGGT | 1 | 2320 |
| MaeI | C!TAG | 8 | 592; 1379; 1580; 1998; 2554; 3569; 3903; 4156 |
| MaeII | A!CGT | 19 | 122; 134; 175; 258; 339; 444; 653; 881; 1010; 1193; 1223; 1791; 1803; 1846; 1956; 2847; 3034; 3815; 3948 |
| MaeIII | !GTNAC | 15 | 61; 148; 497; 792; 939; 1242; 1519; 2020; 2032; 2851; 3157; 3847; 4113; 4229; 4292 |
| MalI | GA!TC | 27 | 587; 646; 1070; 1105; 1117; 1151; 1250; 1317; 1368; 1377; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085 |
| MaqI | CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN! | 4 | 144; 197; 466; 540 |
| MaqI | !NNNNNNNNNNNNNNNNNNNGTCAAYG | 3 | 157; 240; 426 |
| MauBI | CG!CGCGCG | 0 | |
| MbiI | CCG!CTC | 2 | 2155; 3344 |
| MbiI | GAG!CGG | 2 | 1991; 3398 |
| MboI | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| MboII | GAAGANNNNNNNN! | 6 | 1101; 1987; 2215; 3092; 3302; 3921 |
| MboII | !NNNNNNNTCTTC | 4 | 3382; 3549; 3749; 3992 |
| McaTI | GCGC!GC | 1 | 1287 |
| MfeI | C!AATTG | 1 | 1481 |
| MflI | R!GATCY | 13 | 585; 644; 1103; 1315; 1366; 1375; 2902; 3148; 3540; 3899; 3911; 3997; 4008 |
| MhII | GDGCH!C | 15 | 773; 779; 787; 1193; 1199; 1326; 1363; 1922; 2677; 2770; 2844; 3034; 3096; 3806; 4339 |
| MisI | TGG!CCA | 4 | 683; 986; 1007; 2813 |
| MluI | A!CGCGT | 1 | 1617 |
| MluNI | TGG!CCA | 4 | 683; 986; 1007; 2813 |
| MlyI | GAGTCNNNNN! | 2 | 1783; 2215 |
| MlyI | !NNNNNGACTC | 4 | 404; 1790; 3396; 4273 |
| Mly113I | GG!CGCC | 3 | 623; 812; 2731 |
| MmeI | TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN! | 1 | 1824 |
| MmeI | !NNNNNNNNNNNNNNNNNNNGTYGGA | 2 | 4256; 4440 |
| MnII | CCTCNNNNNNN! | 7 | 1450; 2514; 3332; 3538; 3852; 4222; 4546 |
| MnII | !NNNNNNGAGG | 16 | 541; 660; 900; 930; 1410; 1875; 2206; 2484; 2527; 2542; 2582; 2646; 2782; 3139; 3569; 4472 |
| Mph1103I | ATGCA!T | 3 | 2303; 2375; 4706 |
| MreI | CG!CCGCGG | 0 | |
| MroI | T!CCGGA | 0 | |
| MroNI | G!CCGGC | 4 | 1120; 1948; 3231; 3514 |
| MroXI | GAANN!NNTTC | 1 | 850 |
| MscI | TGG!CCA | 4 | 683; 986; 1007; 2813 |
| MseI | T!TAA | 15 | 7; 1432; 1493; 1614; 1635; 1646; 1658; 1669; 1686; 1784; 2055; 3874; 3888; 3893; 3945 |
| MslI | CAYNN!NNRTG | 4 | 365; 790; 1159; 3168 |
| MspI | C!CGG | 21 | 601; 761; 1121; 1363; 1373; 1949; 2636; 2713; 2735; 2763; 2894; 2984; 3051; 3232; 3507; 3515; 3607; 4081; 4271; 4297; 4444 |
| Msp20I | TGG!CCA | 4 | 683; 986; 1007; 2813 |
| MspAII | CMG!CKG | 7 | 620; 701; 1357; 2229; 2837; 4066; 4311 |
| MspCI | C!TTAAG | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|----------------------------|-------|--|
| MspJI | CNNRNNNNNNNNNN! | 239 | 36; 50; 71; 97; 113; 127; 147; 167; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 639; 654; 697; 712; 734; 755; 773; 786; 801; 814; 827; 840; 856; 870; 883; 898; 918; 936; 960; 982; 999; 1021; 1039; 1058; 1074; 1088; 1113; 1133; 1155; 1169; 1183; 1198; 1211; 1224; 1243; 1259; 1281; 1297; 1312; 1331; 1346; 1368; 1385; 1399; 1414; 1438; 1455; 1468; 1509; 1523; 1536; 1554; 1592; 1607; 1625; 1666; 1690; 1710; 1728; 1749; 1772; 1804; 1819; 1841; 1859; 1872; 1893; 1910; 1923; 1936; 1952; 1965; 1995; 2010; 2035; 2053; 2066; 2081; 2105; 2119; 2143; 2168; 2184; 2222; 2238; 2277; 2291; 2305; 2333; 2349; 2363; 2377; 2406; 2419; 2440; 2449; 2471; 2501; 2517; 2535; 2565; 2588; 2612; 2636; 2655; 2683; 2709; 2725; 2738; 2761; 2775; 2795; 2808; 2822; 2841; 2855; 2868; 2884; 2899; 2912; 2928; 2943; 2959; 2984; 3003; 3019; 3032; 3045; 3063; 3077; 3091; 3107; 3129; 3145; 3164; 3186; 3202; 3225; 3244; 3258; 3274; 3288; 3308; 3324; 3337; 3359; 3392; 3406; 3426; 3439; 3453; 3507; 3520; 3543; 3556; 3575; 3592; 3619; 3655; 3688; 3707; 3732; 3753; 3780; 3793; 3810; 3824; 3839; 3855; 3915; 3940; 3956; 3978; 3991; 4005; 4036; 4050; 4075; 4093; 4108; 4121; 4140; 4153; 4168; 4197; 4216; 4234; 4259; 4274; 4293; 4309; 4328; 4346; 4362; 4376; 4395; 4422; 4445; 4467; 4486; 4501; 4514; 4531; 4551; 4578; 4591; 4610; 4635; 4658; 4672; 4685; 4702 |
| MspJI | !NNNNNNNNNNNNYNG | 201 | 8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 598; 623; 640; 661; 678; 698; 718; 738; 758; 775; 794; 814; 844; 866; 890; 910; 932; 956; 973; 995; 1012; 1039; 1057; 1087; 1107; 1129; 1161; 1178; 1198; 1218; 1241; 1267; 1288; 1305; 1325; 1342; 1359; 1383; 1412; 1441; 1483; 1566; 1604; 1628; 1651; 1680; 1724; 1746; 1778; 1814; 1831; 1852; 1889; 1909; 1926; 1943; 1978; 1996; 2014; 2031; 2055; 2077; 2104; 2132; 2158; 2196; 2217; 2234; 2252; 2275; 2296; 2324; 2347; 2368; 2386; 2407; 2424; 2447; 2471; 2491; 2509; 2531; 2562; 2584; 2610; 2629; 2646; 2674; 2693; 2712; 2730; 2748; 2769; 2791; 2815; 2848; 2868; 2886; 2907; 2933; 2960; 2977; 2994; 3011; 3037; 3059; 3081; 3099; 3119; 3138; 3160; 3198; 3218; 3242; 3262; 3282; 3309; 3333; 3366; 3385; 3413; 3435; 3464; 3492; 3517; 3536; 3555; 3576; 3593; 3610; 3641; 3668; 3688; 3711; 3731; 3768; 3785; 3804; 3830; 3850; 3889; 3916; 3935; 3953; 3990; 4008; 4049; 4067; 4093; 4110; 4142; 4171; 4199; 4220; 4243; 4262; 4283; 4301; 4318; 4336; 4362; 4383; 4403; 4423; 4441; 4462; 4488; 4505; 4524; 4543; 4572; 4591; 4609; 4628; 4646; 4664; 4687 |
| MspR9I | CC!NGG | 21 | 90; 283; 780; 790; 988; 1312; 1363; 1364; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624 |
| MssI | GTTT!AAAC | 0 | |
| MunI | C!AATTG | 1 | 1481 |
| MvaI | CC!WGG | 15 | 90; 283; 780; 790; 988; 1312; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624 |
| MvaI269I | GAATGCN! | 1 | 1482 |
| MvaI269I | G!CATTC | 1 | 1575 |
| MvnI | CG!CG | 21 | 60; 701; 932; 971; 1256; 1286; 1357; 1619; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606 |
| MvrI | CGAT!CG | 0 | |
| MwoI | GCNNNNN!NNGC | 31 | 90; 212; 244; 283; 376; 400; 707; 722; 761; 818; 1091; 1130; 1958; 1988; 2015; 2057; 2298; 2370; 2421; 2500; 2722; 2806; 2829; 2968; 3091; 3174; 3441; 3628; 3832; 4031; 4603 |
| NaeI | GCC!GGC | 4 | 1122; 1950; 3233; 3516 |
| NarI | GG!CGCC | 3 | 623; 812; 2731 |
| NciI | CC!SGG | 6 | 1363; 1364; 2735; 2895; 3508; 4272 |
| NcoI | C!CATGG | 3 | 360; 2460; 3163 |
| NdeI | CA!TATG | 1 | 234 |
| NdeII | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| NgoAVIII | GACNNNNNTGANNNNNNNNNNNN! | 2 | 280; 818 |
| NgoAVIII | !NNNNNNNNNNNTCANNNNNGTC | 0 | |
| NgoAVIII | TCANNNNNGTCNNNNNNNNNNNNNN! | 0 | |
| NgoAVIII | !NNNNNNNNNNNGACNNNNNTGA | 2 | 244; 782 |
| NgoMIV | G!CCGGC | 4 | 1120; 1948; 3231; 3514 |
| NheI | G!CTAGC | 1 | 591 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|---------------------------|-------|--|
| NlaIII | CATG! | 18 | 304; 364; 615; 870; 1215; 2161; 2301; 2373; 2464; 2605; 2950; 3136; 3167; 3193; 3549; 3933; 4653; 4704 |
| NlaIV | GGN!NCC | 21 | 467; 624; 813; 837; 1185; 1353; 1361; 1368; 1886; 1907; 1919; 2110; 2271; 2343; 2732; 2767; 3615; 3694; 3739; 4582; 4621 |
| NlaCI | CATCACNNNNNNNNNNNNNNNNNN! | 4 | 921; 1563; 1878; 3470 |
| NlaCI | !NNNNNNNNNNNNNNNNNGTGATG | 2 | 347; 4542 |
| Nli3877I | CYCGR!G | 4 | 842; 1202; 1323; 1366 |
| NmeAIII | GCCGAGNNNNNNNNNNNNNNNNNN! | 3 | 960; 2520; 2956 |
| NmeAIII | !NNNNNNNNNNNNNNNNNNCTCGGC | 1 | 2485 |
| NmeDI | RCCGGYNNNNNNN! | 7 | 612; 772; 1132; 1960; 3062; 3243; 3526 |
| NmeDI | !NNNNNNNNNNNNRCCGGY | 7 | 587; 747; 1107; 1935; 3037; 3218; 3501 |
| NmuCI | !GTSAC | 6 | 792; 939; 1242; 2020; 2851; 3157 |
| NotI | GC!GGCCGC | 0 | |
| NruI | TCG!CGA | 0 | |
| NsbI | TGC!GCA | 1 | 2833 |
| NsiI | ATGCA!T | 3 | 2303; 2375; 4706 |
| NspI | RCATG!Y | 5 | 870; 2301; 2373; 3136; 4653 |
| NspV | TT!CGAA | 2 | 1333; 3413 |
| OliI | CACNN!NNGTG | 1 | 790 |
| PabI | GTA!C | 12 | 220; 245; 300; 333; 384; 541; 833; 965; 1058; 1205; 1354; 3038 |
| PacI | TTAAT!TAA | 0 | |
| PaeI | GCATG!C | 4 | 870; 2301; 2373; 3136 |
| PaeR7I | C!TCGAG | 1 | 1319 |
| PagI | T!CATGA | 2 | 2157; 3929 |
| PalAI | GG!CGCGCC | 0 | |
| PasI | CC!CWGGG | 2 | 3696; 3799 |
| PauI | G!CGCGC | 1 | 1284 |
| PceI | AGG!CCT | 1 | 2552 |
| PciI | A!CATGT | 1 | 4649 |
| PciSI | GCTCTTCN! | 0 | |
| PciSI | !NNNNGAAGAGC | 3 | 1084; 3075; 3285 |
| PcsI | WCGNNNN!NNNCGW | 6 | 3025; 3102; 3345; 3419; 3812; 4330 |
| PctI | GAATGCN! | 1 | 1482 |
| PctI | G!CATTC | 1 | 1575 |
| PdiI | GCC!GGC | 4 | 1122; 1950; 3233; 3516 |
| PdmI | GAANN!NNTTC | 1 | 850 |
| PfeI | G!AWTC | 6 | 1023; 3216; 3350; 3460; 3497; 4675 |
| Pfl23II | C!GTACG | 0 | |
| PfIFI | GACN!NNGTC | 1 | 2849 |
| PfIMI | CCANNNN!NTGG | 1 | 1014 |
| PfoI | T!CCNGGA | 1 | 3506 |
| PhoI | GG!CC | 28 | 84; 277; 683; 836; 986; 1007; 1075; 1085; 1147; 1184; 1361; 1697; 1839; 2494; 2500; 2509; 2552; 2639; 2813; 3204; 3231; 3740; 3797; 3830; 4175; 4609; 4627; 4638 |
| PinAI | A!CCGGT | 1 | 600 |
| PlaDI | CATCAGNNNNNNNNNNNNNNNNNN! | 1 | 3112 |
| PlaDI | !NNNNNNNNNNNNNNNNNNCTGATG | 2 | 2677; 2932 |
| PleI | GAGTCNNNN! | 2 | 1782; 2214 |
| PleI | !NNNNNGACTC | 4 | 404; 1790; 3396; 4273 |
| Ple19I | CGAT!CG | 0 | |
| PmaCI | CAC!GTG | 3 | 1011; 1194; 1224 |
| PmeI | GTTT!AAAC | 0 | |
| PmlI | CAC!GTG | 3 | 1011; 1194; 1224 |
| PpiI | GAACNNNNCTCNNNNNNNNNNNN! | 1 | 1813 |
| PpiI | !NNNNNNNGAGNNNNNGTTC | 1 | 3943 |
| PpiI | GAGNNNNGTTCNNNNNNNNNNNN! | 1 | 3975 |
| PpiI | !NNNNNNNGAACNNNNNNCTC | 1 | 1781 |
| PpsI | GAGTCNNNN! | 2 | 1782; 2214 |
| PpsI | !NNNNNGACTC | 4 | 404; 1790; 3396; 4273 |
| Ppu10I | A!TGCAT | 3 | 2299; 2371; 4702 |
| Ppu21I | YAC!GTR | 8 | 340; 654; 882; 1011; 1194; 1224; 1847; 3035 |
| PpuMI | RG!GWCCY | 0 | |
| PscI | A!CATGT | 1 | 4649 |
| PshAI | GACNN!NNGTC | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|----------------------------|-------|--|
| PshBI | AT!TAAT | 1 | 7 |
| PsiI | TTA!TAA | 2 | 1514; 1719 |
| Psp03I | GGWC!C | 2 | 3250; 3695 |
| Psp5II | RG!GWCCY | 0 | |
| Psp6I | !CCWGG | 15 | 88; 281; 778; 788; 986; 1310; 2265; 2320; 2337; 3116; 3695; 3798; 4488; 4501; 4622 |
| Psp1406I | AA!CGTT | 0 | |
| Psp124BI | GAGCT!C | 1 | 1326 |
| PspCI | CAC!GTG | 3 | 1011; 1194; 1224 |
| PspEI | G!GTNACC | 2 | 792; 939 |
| PspGI | !CCWGG | 15 | 88; 281; 778; 788; 986; 1310; 2265; 2320; 2337; 3116; 3695; 3798; 4488; 4501; 4622 |
| PspLI | C!GTACG | 0 | |
| PspN4I | GGN!NCC | 21 | 467; 624; 813; 837; 1185; 1353; 1361; 1368; 1886; 1907; 1919; 2110; 2271; 2343; 2732; 2767; 3615; 3694; 3739; 4582; 4621 |
| PspOMI | G!GGCCC | 1 | 1359 |
| PspOMII | CGCCARNNNNNNNNNNNNNNNNNNN! | 4 | 125; 839; 2461; 3460 |
| PspOMII | !NNNNNNNNNNNNNNNNNYTGGGCG | 1 | 2863 |
| PspPI | G!GNCC | 11 | 83; 276; 835; 1183; 1360; 1838; 3247; 3692; 3738; 3796; 3829 |
| PspPPI | RG!GWCCY | 0 | |
| PspPRI | CCYAGNNNNNNNNNNNNNNNN! | 3 | 2284; 2356; 3862 |
| PspPRI | !NNNNNNNNNNNNNNCTGRGG | 3 | 1048; 2197; 3392 |
| PspXI | VC!TCGAGB | 0 | |
| PsrI | GAACNNNNNTACNNNNNNNNNN! | 0 | |
| PsrI | !NNNNNNNGTANNNNNNGTTC | 0 | |
| PsrI | GTANNNNNNGTTCNNNNNNNNNN! | 0 | |
| PsrI | !NNNNNNNGAACNNNNNTAC | 0 | |
| PssI | RGGN!CY | 1 | 3832 |
| PstI | CTGCA!G | 1 | 1344 |
| PstNI | CAGNNN!CTG | 2 | 3832; 4240 |
| PsuI | R!GATCY | 13 | 585; 644; 1103; 1315; 1366; 1375; 2902; 3148; 3540; 3899; 3911; 3997; 4008 |
| PsyI | GACN!NNGTC | 1 | 2849 |
| PteI | G!CGCGC | 1 | 1284 |
| PvuI | CGAT!CG | 0 | |
| PvuII | CAG!CTG | 2 | 2229; 2837 |
| RcaI | T!CATGA | 2 | 2157; 3929 |
| RceI | CATCGACNNNNNNNNNNNNNNNN! | 1 | 3246 |
| RceI | !NNNNNNNNNNNNNNNNNGTCGATG | 0 | |
| RgaI | GCGAT!CGC | 0 | |
| RigI | GGCCGG!CC | 0 | |
| RleAI | CCCACANNNNNNNNNNNN! | 1 | 1460 |
| RleAI | !NNNNNNNNNTGTGGG | 0 | |
| RpaBI | CCCGCAGNNNNNNNNNNNNNNNN! | 0 | |
| RpaBI | !NNNNNNNNNNNNNNNNNNCTGCGGG | 0 | |
| RpaB5I | CGRGGACNNNNNNNNNNNNNNNN! | 0 | |
| RpaB5I | !NNNNNNNNNNNNNNNNNGTCCYCG | 0 | |
| RruI | TCG!CGA | 0 | |
| RsaI | GT!AC | 12 | 219; 244; 299; 332; 383; 540; 832; 964; 1057; 1204; 1353; 3037 |
| RsaNI | G!TAC | 12 | 218; 243; 298; 331; 382; 539; 831; 963; 1056; 1203; 1352; 3036 |
| RseI | CAYNN!NNRTG | 4 | 365; 790; 1159; 3168 |
| RsrII | CG!GWCCG | 1 | 3247 |
| Rsr2I | CG!GWCCG | 1 | 3247 |
| SacI | GAGCT!C | 1 | 1326 |
| SacII | CCGC!GG | 2 | 702; 1358 |
| SalI | G!TCGAC | 1 | 1345 |
| SapI | GCTCTCN! | 0 | |
| SapI | !NNNNGAAGAGC | 3 | 1084; 3075; 3285 |
| SaqAI | T!TAA | 15 | 7; 1432; 1493; 1614; 1635; 1646; 1658; 1669; 1686; 1784; 2055; 3874; 3888; 3893; 3945 |
| SatI | GC!NGC | 35 | 618; 621; 864; 957; 1125; 1179; 1182; 1299; 1508; 2027; 2049; 2063; 2501; 2640; 2692; 2703; 2793; 2798; 2835; 2876; 2963; 2969; 3205; 3301; 3342; 3356; 3470; 3809; 3824; 4035; 4241; 4244; 4309; 4452; 4607 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|---------------------------------|-------|--|
| Sau96I | G!GNCC | 11 | 83; 276; 835; 1183; 1360; 1838; 3247; 3692; 3738; 3796; 3829 |
| Sau3AI | !GATC | 27 | 585; 644; 1068; 1103; 1115; 1149; 1248; 1315; 1366; 1375; 1388; 2568; 2572; 2591; 2902; 2980; 3061; 3070; 3148; 3524; 3540; 3899; 3911; 3989; 3997; 4008; 4083 |
| SbfI | CCTGCA!GG | 0 | |
| ScaI | AGT!ACT | 0 | |
| SchI | GAGTCNNNNN! | 2 | 1783; 2215 |
| SchI | !NNNNNGACTC | 4 | 404; 1790; 3396; 4273 |
| SciI | CTC!GAG | 1 | 1321 |
| ScrFI | CC!NGG | 21 | 90; 283; 780; 790; 988; 1312; 1363; 1364; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624 |
| SdaI | CCTGCA!GG | 0 | |
| SdeAI | CAGRAGNNNNNNNNNNNNNNNNNNNNNNNN! | 5 | 912; 2309; 2381; 2550; 4492 |
| SdeAI | !NNNNNNNNNNNNNNNNNNNNNNNNCTYCTG | 2 | 2886; 3371 |
| SdeOSI | GACNNNNRTGANNNNNNNNNNNN! | 1 | 279 |
| SdeOSI | !NNNNNNNNNNNTCAYNNNNNGTC | 0 | |
| SdeOSI | TCAYNNNNNGTCNNNNNNNNNNNNNN! | 0 | |
| SdeOSI | !NNNNNNNNNNNGACNNNNRTGA | 1 | 245 |
| SduI | GDGCH!C | 15 | 773; 779; 787; 1193; 1199; 1326; 1363; 1922; 2677; 2770; 2844; 3034; 3096; 3806; 4339 |
| SelI | !CGCG | 21 | 58; 699; 930; 969; 1254; 1284; 1355; 1617; 1653; 2029; 2049; 2073; 2104; 2795; 3096; 3534; 3618; 3681; 3750; 4023; 4604 |
| SetI | ASST! | 69 | 125; 137; 178; 261; 308; 342; 447; 552; 568; 656; 691; 737; 808; 845; 865; 884; 904; 941; 946; 980; 1013; 1196; 1219; 1226; 1232; 1309; 1313; 1326; 1332; 1421; 1442; 1451; 1463; 1512; 1679; 1794; 1806; 1849; 1886; 1936; 1959; 2083; 2231; 2326; 2519; 2632; 2760; 2839; 2850; 2922; 2993; 3037; 3297; 3443; 3487; 3818; 3849; 3908; 3951; 4094; 4115; 4214; 4351; 4366; 4385; 4397; 4441; 4487; 4538 |
| SexAI | A!CCWGGT | 1 | 2320 |
| SfaAI | GCGAT!CGC | 0 | |
| SfaNI | GCATCNNNNN! | 7 | 704; 1547; 2310; 2382; 3030; 3094; 3369 |
| SfaNI | !NNNNNNNNNGATGC | 7 | 357; 708; 729; 2689; 2944; 3160; 4552 |
| SfcI | C!TRYAG | 4 | 1340; 2066; 4193; 4384 |
| SfiI | GGCCNNNN!NGGCC | 1 | 2506 |
| SfoI | GGC!GCC | 3 | 624; 813; 2732 |
| Sfr274I | C!TCGAG | 1 | 1319 |
| Sfr303I | CCGC!GG | 2 | 702; 1358 |
| SfuI | TT!CGAA | 2 | 1333; 3413 |
| SgeI | CNNGNNNNNNNNN! | 191 | 6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 624; 639; 654; 712; 734; 756; 773; 786; 801; 828; 850; 870; 883; 898; 918; 936; 960; 982; 999; 1021; 1039; 1065; 1084; 1098; 1113; 1133; 1155; 1170; 1198; 1212; 1234; 1248; 1267; 1281; 1297; 1314; 1331; 1368; 1385; 1438; 1467; 1509; 1592; 1630; 1666; 1750; 1772; 1804; 1841; 1859; 1878; 1893; 1935; 1952; 1969; 2004; 2018; 2035; 2057; 2081; 2105; 2170; 2184; 2222; 2238; 2278; 2291; 2310; 2333; 2350; 2363; 2382; 2412; 2433; 2450; 2473; 2508; 2535; 2566; 2588; 2614; 2636; 2655; 2683; 2719; 2738; 2761; 2775; 2795; 2808; 2822; 2841; 2855; 2874; 2906; 2920; 2933; 2959; 2990; 3003; 3020; 3037; 3051; 3068; 3086; 3101; 3129; 3145; 3164; 3186; 3202; 3225; 3244; 3269; 3288; 3308; 3335; 3359; 3392; 3411; 3439; 3453; 3519; 3543; 3558; 3581; 3602; 3619; 3667; 3694; 3708; 3737; 3761; 3794; 3811; 3831; 3844; 3857; 3915; 3942; 3961; 3991; 4016; 4036; 4050; 4075; 4093; 4130; 4168; 4197; 4225; 4239; 4259; 4274; 4295; 4309; 4328; 4346; 4362; 4402; 4422; 4449; 4467; 4488; 4501; 4514; 4531; 4555; 4578; 4610; 4635; 4662; 4684 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------------|-------|--|
| SgeI | !NNNNNNNNNNNNNCNNG | 167 | 10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 598; 623; 640; 686; 708; 730; 747; 765; 787; 814; 844; 868; 892; 910; 934; 956; 973; 995; 1013; 1039; 1058; 1087; 1107; 1129; 1172; 1198; 1222; 1241; 1267; 1288; 1305; 1342; 1359; 1412; 1441; 1483; 1566; 1604; 1640; 1724; 1746; 1778; 1815; 1833; 1852; 1909; 1926; 1943; 1978; 1996; 2016; 2036; 2055; 2079; 2144; 2196; 2252; 2284; 2307; 2324; 2356; 2386; 2407; 2424; 2447; 2482; 2509; 2540; 2562; 2588; 2610; 2629; 2657; 2693; 2712; 2735; 2756; 2774; 2791; 2815; 2848; 2880; 2907; 2933; 2964; 2994; 3011; 3037; 3060; 3081; 3103; 3123; 3143; 3160; 3199; 3218; 3243; 3262; 3282; 3309; 3333; 3366; 3385; 3413; 3435; 3493; 3517; 3536; 3555; 3576; 3593; 3641; 3668; 3688; 3711; 3735; 3768; 3785; 3805; 3831; 3889; 3916; 3935; 3965; 3990; 4010; 4049; 4067; 4104; 4142; 4171; 4199; 4220; 4248; 4269; 4302; 4320; 4376; 4396; 4423; 4441; 4462; 4488; 4505; 4529; 4552; 4584; 4609; 4636; 4658; 4687 |
| Sgfl | GCGAT!CGC | 0 | |
| SgrAI | CR!CCGGYG | 1 | 760 |
| SgrBI | CCGC!GG | 2 | 702; 1358 |
| SgrDI | CG!TCGACG | 0 | |
| SgsI | GG!CGCGCC | 0 | |
| SimI | GG!GTC | 4 | 27; 1878; 3665; 4458 |
| SimI | !GACCC | 5 | 106; 926; 3159; 3727; 3975 |
| SinI | G!GWCC | 2 | 3247; 3692 |
| SlaI | C!TCGAG | 1 | 1319 |
| SmaI | CCC!GGG | 1 | 1364 |
| SmiI | ATTT!AAAT | 0 | |
| SmiMI | CAYNN!NNRTG | 4 | 365; 790; 1159; 3168 |
| SmlI | C!TYRAG | 6 | 1319; 1325; 3122; 4004; 4281; 4543 |
| SmoI | C!TYRAG | 6 | 1319; 1325; 3122; 4004; 4281; 4543 |
| SmuI | CCCGCNNNN! | 9 | 93; 119; 286; 937; 2053; 2408; 2429; 3625; 3757 |
| SmuI | !NNNNNNGCGGG | 6 | 1350; 1984; 2854; 3391; 3529; 3676 |
| SnaBI | TAC!GTA | 1 | 340 |
| SpeI | A!CTAGT | 0 | |
| SphI | GCATG!C | 4 | 870; 2301; 2373; 3136 |
| SrfI | GCCC!GGGC | 0 | |
| Sse9I | !AATT | 13 | 18; 918; 1035; 1335; 1481; 1545; 1623; 1649; 1660; 2307; 2379; 2471; 3889 |
| Sse8387I | CCTGCA!GG | 0 | |
| Sse8647I | AG!GWCCT | 0 | |
| SseBI | AGG!CCT | 1 | 2552 |
| SsiI | C!CGC | 36 | 58; 86; 98; 112; 279; 507; 589; 699; 930; 1254; 1299; 1355; 2046; 2049; 2063; 2153; 2401; 2413; 2422; 2434; 2444; 2455; 2501; 2640; 2703; 3205; 3250; 3316; 3342; 3467; 3470; 3618; 3750; 4057; 4201; 4697 |
| SsiI | G!CGG | 28 | 370; 403; 528; 620; 701; 1178; 1181; 1357; 1991; 2018; 2106; 2216; 2797; 2861; 2962; 2965; 3245; 3300; 3398; 3536; 3683; 3823; 4066; 4311; 4432; 4451; 4578; 4606 |
| SspI | AAT!ATT | 2 | 1639; 2192 |
| SspDI | G!GCGCC | 3 | 622; 811; 2730 |
| SspD5I | GGTGANNNNNNNN! | 5 | 376; 804; 951; 3802; 3918 |
| SspD5I | !NNNNNNNNNTCACC | 5 | 890; 1031; 1242; 1847; 2908 |
| SstI | GAGCT!C | 1 | 1326 |
| SstII | CCGC!GG | 2 | 702; 1358 |
| SstE37I | CGAAGACNNNNNNNNNNNNNNNNNNNN! | 0 | |
| SstE37I | !NNNNNNNNNNNNNNNNNGTCTTCG | 0 | |
| Sth132I | CCCGNNNN! | 22 | 92; 118; 285; 779; 845; 878; 936; 1193; 1205; 1369; 1930; 2052; 2407; 2428; 2741; 3144; 3283; 3354; 3624; 3756; 3986; 4424 |
| Sth132I | !NNNNNNNNCNGGG | 19 | 15; 407; 470; 1349; 1931; 1983; 2084; 2811; 2853; 2886; 3390; 3499; 3528; 3675; 3779; 3810; 4263; 4307; 4515 |
| Sth302II | CC!GG | 21 | 602; 762; 1122; 1364; 1374; 1950; 2637; 2714; 2736; 2764; 2895; 2985; 3052; 3233; 3508; 3516; 3608; 4082; 4272; 4298; 4445 |
| StrI | C!TCGAG | 1 | 1319 |
| StsI | GGATGNNNNNNNNNN! | 8 | 692; 752; 1016; 1253; 2599; 3056; 3081; 3535 |
| StsI | !NNNNNNNNNNNNNNCATCC | 2 | 681; 2403 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-------------------------|-------|--|
| StuI | AGG CCT | 1 | 2552 |
| StyI | C CWGG | 5 | 360; 2460; 2553; 3163; 3568 |
| StyD4I | !CCNGG | 21 | 88; 281; 778; 788; 986; 1310; 1361; 1362; 2265; 2320; 2337; 2733; 2893; 3116; 3506; 3695; 3798; 4270; 4488; 4501; 4622 |
| SwaI | ATTT!AAAT | 0 | |
| TaaI | ACN!GT | 15 | 76; 198; 269; 543; 581; 1281; 1351; 1822; 3111; 3227; 3335; 3658; 4149; 4619; 4690 |
| TaiI | ACGT! | 19 | 125; 137; 178; 261; 342; 447; 656; 884; 1013; 1196; 1226; 1794; 1806; 1849; 1959; 2850; 3037; 3818; 3951 |
| TaqI | T!CGA | 16 | 905; 947; 1320; 1333; 1346; 1880; 2571; 2844; 3000; 3024; 3060; 3222; 3413; 3458; 3713; 4551 |
| TaqII | GACCGANNNNNNNNNN! | 4 | 1261; 1751; 2768; 3436 |
| TaqII | !NNNNNNNNNTCGGTC | 1 | 3680 |
| TaqII | CACCCANNNNNNNNNN! | 1 | 1171 |
| TaqII | !NNNNNNNNNTGGGTG | 3 | 172; 2635; 3227 |
| TasI | !AATT | 13 | 18; 918; 1035; 1335; 1481; 1545; 1623; 1649; 1660; 2307; 2379; 2471; 3889 |
| TatI | W!GTACW | 6 | 217; 297; 330; 381; 962; 1055 |
| TauI | GCSG C | 19 | 623; 1181; 1184; 1301; 2051; 2065; 2503; 2642; 2705; 2800; 2965; 2968; 3207; 3303; 3344; 3472; 3826; 4454; 4609 |
| TfiI | G!AWTC | 6 | 1023; 3216; 3350; 3460; 3497; 4675 |
| TliI | C!TCGAG | 1 | 1319 |
| TruII | T!TAA | 15 | 7; 1432; 1493; 1614; 1635; 1646; 1658; 1669; 1686; 1784; 2055; 3874; 3888; 3893; 3945 |
| Tru9I | T!TAA | 15 | 7; 1432; 1493; 1614; 1635; 1646; 1658; 1669; 1686; 1784; 2055; 3874; 3888; 3893; 3945 |
| TscAI | CASTGNN! | 7 | 823; 1054; 1577; 2860; 3970; 4241; 4254 |
| TseI | G!CWGC | 17 | 617; 863; 956; 1124; 1507; 2026; 2691; 2792; 2834; 2875; 2968; 3355; 3808; 4034; 4240; 4243; 4308 |
| TsoI | TARCCANNNNNNNNNN! | 2 | 1703; 2050 |
| TsoI | !NNNNNNNNNTGGYTA | 3 | 866; 1508; 3260 |
| Tsp45I | !GTSAC | 6 | 792; 939; 1242; 2020; 2851; 3157 |
| Tsp509I | !AATT | 13 | 18; 918; 1035; 1335; 1481; 1545; 1623; 1649; 1660; 2307; 2379; 2471; 3889 |
| TspDTI | ATGAANNNNNNNNNN! | 4 | 1177; 1489; 2790; 3494 |
| TspDTI | !NNNNNNNNNTTCAT | 6 | 26; 738; 1128; 3208; 3664; 3871 |
| TspEI | !AATT | 13 | 18; 918; 1035; 1335; 1481; 1545; 1623; 1649; 1660; 2307; 2379; 2471; 3889 |
| TspGWI | ACGGANNNNNNNNNN! | 2 | 1288; 3606 |
| TspGWI | !NNNNNNNNNTCCGT | 0 | |
| TspMI | C!CCGGG | 1 | 1362 |
| TspRI | CASTGNN! | 7 | 823; 1054; 1577; 2860; 3970; 4241; 4254 |
| TstI | CACNNNNNTCCNNNNNNNNNN! | 0 | |
| TstI | !NNNNNNNGGANNNNNNGTG | 0 | |
| TstI | GGANNNNNNGTGNNNNNNNNNN! | 0 | |
| TstI | !NNNNNNNCCACNNNNNTCC | 0 | |
| Tth111I | GACN!NNGTC | 1 | 2849 |
| Tth111II | CAARCANNNNNNNNNN! | 1 | 4058 |
| Tth111III | !NNNNNNNNNTGYTTG | 3 | 3166; 4026; 4065 |
| UnbI | !GGNCC | 11 | 82; 275; 834; 1182; 1359; 1837; 3246; 3691; 3737; 3795; 3828 |
| Van91I | CCANNNN!NTGG | 1 | 1014 |
| Vha464I | C!TTAAG | 0 | |
| VneI | G!TGCAC | 2 | 1189; 4335 |
| VpaK11AI | !GGWCC | 2 | 3246; 3691 |
| VpaK11BI | G!GWCC | 2 | 3247; 3692 |
| VspI | AT!TAAT | 1 | 7 |
| XagI | CCTNN!NNNAGG | 0 | |
| XapI | R!AATTY | 4 | 1335; 1545; 1649; 1660 |
| XbaI | T!CTAGA | 1 | 1378 |
| XceI | RCATG!Y | 5 | 870; 2301; 2373; 3136; 4653 |
| XcmI | CCANNNNN!NNNTGG | 0 | |
| XhoI | C!TCGAG | 1 | 1319 |
| XhoII | R!GATCY | 13 | 585; 644; 1103; 1315; 1366; 1375; 2902; 3148; 3540; 3899; 3911; 3997; 4008 |
| XmaI | C!CCGGG | 1 | 1362 |
| XmaJI | C!CTAGG | 2 | 2553; 3568 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-------------|-------|---|
| XmiI | GT!MKAC | 1 | 1346 |
| XmnI | GAANN!NNTTC | 1 | 850 |
| XspI | C!TAG | 8 | 592; 1379; 1580; 1998; 2554; 3569; 3903; 4156 |
| ZraI | GAC!GTC | 4 | 123; 176; 259; 445 |
| ZrmI | AGT!ACT | 0 | |
| Zsp2I | ATGCA!T | 3 | 2303; 2375; 4706 |