

pKillerRed-dMito vector

Table of restriction sites

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|----------------------------|-------|---|
| AanI | TTA!TAA | 2 | 1659; 1864 |
| AarI | CACCTGCNNNN! | 1 | 1155 |
| AarI | !NNNNNNNNGCAGGTG | 0 | |
| AasI | GACNNNN!NNGTC | 3 | 1947; 2903; 4692 |
| AatI | AGG!CCT | 1 | 2697 |
| AatII | GACGT!C | 4 | 125; 178; 261; 447 |
| AbsI | CC!TCGAGG | 0 | |
| AccI | GT!MKAC | 0 | |
| AccII | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| AccIII | T!CCGGA | 0 | |
| Acc16I | TGC!GCA | 1 | 2978 |
| Acc36I | ACCTGCNNNN! | 3 | 1155; 3144; 3594 |
| Acc36I | !NNNNNNNNGCAGGT | 1 | 2763 |
| Acc65I | G!GTACC | 0 | |
| AccB1I | G!GYRCC | 5 | 465; 1107; 2029; 2875; 2910 |
| AccB7I | CCANNNN!NTGG | 4 | 680; 773; 970; 1220 |
| AccBSI | CCG!CTC | 2 | 2300; 3489 |
| AccBSI | GAG!CGG | 2 | 2136; 3543 |
| AceIII | CAGCTCNNNNNNN! | 1 | 1832 |
| AceIII | !NNNNNNNNNNNGAGCTG | 3 | 552; 956; 1122 |
| Acil | C!CGC | 43 | 58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 817; 1019; 1082; 1160; 1303; 1361; 1481; 1523; 2191; 2194; 2208; 2298; 2546; 2558; 2567; 2579; 2589; 2600; 2646; 2785; 2848; 3350; 3395; 3461; 3487; 3612; 3615; 3763; 3895; 4202; 4346; 4842 |
| Acil | G!CGG | 30 | 370; 403; 528; 623; 647; 716; 740; 811; 1312; 1519; 2136; 2163; 2251; 2361; 2942; 3006; 3107; 3110; 3390; 3445; 3543; 3681; 3828; 3968; 4211; 4456; 4577; 4596; 4723; 4751 |
| AcII | AA!CGTT | 0 | |
| AcIWI | GGATCNNNN! | 9 | 694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236 |
| AcIWI | !NNNNNGATCC | 10 | 580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148 |
| AcoI | Y!GGCCR | 7 | 872; 892; 1520; 2782; 2956; 3347; 3374 |
| AcsI | R!AATTY | 3 | 1690; 1794; 1805 |
| AcuI | CTGAAGNNNNNNNNNNNNNNNN! | 2 | 3022; 3454 |
| AcuI | !NNNNNNNNNNNNNNCTTCAG | 1 | 4252 |
| AcvI | CAC!GTG | 1 | 1442 |
| AcyI | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| AdeI | CACNNN!GTG | 4 | 941; 1391; 1475; 1992 |
| Afal | GT!AC | 8 | 219; 244; 299; 332; 383; 540; 999; 3182 |
| AfeI | AGC!GCT | 0 | |
| AfiI | CCNNNNN!NNGG | 22 | 49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779 |
| AfiII | C!TTAAG | 1 | 1758 |
| AfiIII | A!CRYGT | 3 | 1246; 1441; 4794 |
| AgeI | A!CCGGT | 1 | 785 |
| AgsI | TTS!AA | 8 | 845; 929; 1352; 2287; 2331; 2341; 2754; 4330 |
| AhdI | GACNNN!NNGTC | 0 | |
| AhII | A!CTAGT | 0 | |
| AjiI | CAC!GTC | 0 | |
| AjiI | GAC!GTG | 0 | |
| AjnI | !CCWGG | 12 | 88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767 |
| AjuI | GAANNNNNNNNTTGGNNNNNNNNNN! | 0 | |
| AjuI | !NNNNNNCCAANNNNNNNNTTC | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------------|-------|--|
| AjuI | CCAANNNNNNNNTTCNNNNNNNNNNNN! | 0 | |
| AjuI | !NNNNNNNGAANNNNNNNTTGG | 0 | |
| AleI | CACNN!NNGTG | 2 | 888; 1149 |
| AlfI | GCANNNNNNTGCNNNNNNNNNNNN! | 2 | 2450; 2522 |
| AlfI | !NNNNNNNNNNNGCANNNNNNNTGC | 2 | 2416; 2488 |
| AloI | GAACNNNNNNNTCCNNNNNNNNNNNN! | 1 | 1958 |
| AloI | !NNNNNNNGGANNNNNNGTTC | 0 | |
| AloI | GGANNNNNNGTTCNNNNNNNNNNNN! | 0 | |
| AloI | !NNNNNNNGAACNNNNNNNTCC | 1 | 1926 |
| AluI | AG!CT | 17 | 566; 959; 970; 1136; 1217; 1280; 1655; 1822; 2079; 2374; 2662; 2982; 3440; 4237; 4494; 4540; 4630 |
| AluBI | AG!CT | 17 | 566; 959; 970; 1136; 1217; 1280; 1655; 1822; 2079; 2374; 2662; 2982; 3440; 4237; 4494; 4540; 4630 |
| AlwI | GGATCNNNN! | 9 | 694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236 |
| AlwI | !NNNNNGATCC | 10 | 580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148 |
| Alw21I | GWGCW!C | 4 | 937; 2989; 3179; 4484 |
| Alw26I | GTCTCN! | 1 | 434 |
| Alw26I | !NNNNNGAGAC | 6 | 942; 1233; 2300; 2718; 3737; 3865 |
| Alw44I | G!TGCAC | 2 | 933; 4480 |
| AlwNI | CAGNNN!CTG | 2 | 3977; 4385 |
| Ama87I | C!YCGRG | 1 | 1062 |
| Aor13HI | T!CCGGA | 0 | |
| Aor51HI | AGC!GCT | 0 | |
| ApaI | GGGCC!C | 0 | |
| ApaBI | GCANNNNN!TGC | 3 | 2444; 2516; 3978 |
| ApaLI | G!TGCAC | 2 | 933; 4480 |
| ApeKI | G!CWGC | 23 | 614; 617; 620; 707; 710; 713; 901; 904; 959; 1357; 1652; 2171; 2836; 2937; 2979; 3020; 3113; 3500; 3953; 4179; 4385; 4388; 4453 |
| ApoI | R!AATTY | 3 | 1690; 1794; 1805 |
| ApyPI | ATCGACNNNNNNNNNNNNNNNNNNNN! | 3 | 880; 1102; 3391 |
| ApyPI | !NNNNNNNNNNNNNNNNNNNGTCGAT | 3 | 3185; 3838; 4676 |
| AquI | GCCGNACNNNNNNNNNNNNNNNNNNNN! | 1 | 3275 |
| AquI | !NNNNNNNNNNNNNNNNNNNGTNCGGC | 1 | 979 |
| AquIII | GAGGAGNNNNNNNNNNNNNNNNNNNN! | 1 | 2704 |
| AquIII | !NNNNNNNNNNNNNNNNNNCTCCTC | 0 | |
| AquIV | GRGGAAGNNNNNNNNNNNNNNNNNNNN! | 0 | |
| AquIV | !NNNNNNNNNNNNNNNNNNCTCCYC | 2 | 1040; 3446 |
| ArsI | GACNNNNNTTYGNNNNNNNNNNNN! | 0 | |
| ArsI | !NNNNNCRANNNNNNNGTC | 0 | |
| ArsI | CRAANNNNNGTCNNNNNNNNNNNN! | 0 | |
| ArsI | !NNNNNNNNGACNNNNNNNTTYG | 0 | |
| AscI | GG!CGCGCC | 0 | |
| AseI | AT!TAAT | 1 | 7 |
| Asi256I | G!ATC | 24 | 586; 671; 687; 764; 780; 992; 1373; 1534; 2714; 2718; 2737; 3048; 3126; 3207; 3216; 3294; 3670; 3686; 4045; 4057; 4135; 4143; 4154; 4229 |
| AsiGI | A!CCGGT | 1 | 785 |
| AsiSI | GCGAT!CGC | 0 | |
| AspI | GACN!NNGTC | 1 | 2994 |
| Asp700I | GAANN!NNTTC | 0 | |
| Asp718I | G!GTACC | 0 | |
| AspA2I | C!CTAGG | 2 | 2698; 3713 |
| AspEI | GACNNN!NNGTC | 0 | |
| AspLEI | GCG!C | 31 | 664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620 |
| AspS9I | G!GNCC | 16 | 83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974 |
| AssI | AGT!ACT | 0 | |
| AsuII | TT!CGAA | 1 | 3558 |
| AsuC2I | CC!SGG | 7 | 644; 737; 1378; 2880; 3040; 3653; 4417 |
| AsuHPI | GGTGANNNNNNNN! | 5 | 376; 878; 1166; 3947; 4063 |
| AsuHPI | !NNNNNNNTCACC | 7 | 875; 1157; 1289; 1394; 1478; 1993; 3054 |
| AsuNHI | G!CTAGC | 1 | 591 |
| AvaI | C!YCGRG | 1 | 1062 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|--|
| AvaII | G!GWCC | 2 | 3392; 3837 |
| AviII | TGC!GCA | 1 | 2978 |
| AvrII | C!CTAGG | 2 | 2698; 3713 |
| AxyI | CC!TNAGG | 2 | 2356; 3988 |
| BaeI | ACNNNNGTAYCNNNNNNNNNN! | 0 | |
| BaeI | !NNNNNNNGRTACNNNNGT | 0 | |
| BaeI | GRTACNNNNGTNNNNNNNNNNNN! | 0 | |
| BaeI | !NNNNNNNNNACNNNNGTAYC | 0 | |
| BaeGI | GKGC!C | 5 | 937; 1480; 2822; 2915; 4484 |
| BalI | TGG!CCA | 1 | 2958 |
| BamHI | G!GATCC | 1 | 779 |
| BanI | G!GYRCC | 5 | 465; 1107; 2029; 2875; 2910 |
| BanII | GRGCY!C | 4 | 1009; 2067; 3241; 3951 |
| BanIII | AT!CGAT | 1 | 2716 |
| BarI | GAAGNNNNNTACNNNNNNNNNN! | 0 | |
| BarI | !NNNNNNNGTANNNNNNCTTC | 0 | |
| BarI | GTANNNNNNCTTCNNNNNNNNNN! | 0 | |
| BarI | !NNNNNNNGAAGNNNNNTAC | 0 | |
| BasI | CCANNN!NTGG | 4 | 680; 773; 970; 1220 |
| BauI | C!ACGAG | 2 | 3594; 4621 |
| BauI | C!TCGTG | 1 | 3468 |
| BbeI | GGCG!C | 1 | 2879 |
| Bbr7I | GAAGACNNNNNN! | 0 | |
| Bbr7I | !NNNNNNNNNNNGTCTTC | 0 | |
| BbrPI | CAC!GTG | 1 | 1442 |
| BbsI | GAAGACNN! | 0 | |
| BbsI | !NNNNNNGTCTTC | 0 | |
| BbuI | GCATG!C | 3 | 2446; 2518; 3281 |
| BbvI | GCAGCNNNNNNNN! | 8 | 913; 1369; 1664; 2949; 2991; 3512; 3965; 4465 |
| BbvI | !NNNNNNNNNNNGCTGC | 9 | 601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372 |
| Bbv12I | GWGCW!C | 4 | 937; 2989; 3179; 4484 |
| BbvCI | CC!TCAGC | 0 | |
| BbvCI | GC!TGAGG | 0 | |
| BccI | CCATCNNNN! | 10 | 894; 987; 1209; 1374; 1404; 1503; 2006; 2570; 3096; 3598 |
| BccI | !NNNNNGATGG | 4 | 1316; 1974; 2754; 3182 |
| BceAI | ACGGCNNNNNNNNNN! | 12 | 875; 914; 935; 1016; 1046; 1121; 1196; 1274; 1325; 1370; 3302; 3789 |
| BceAI | !NNNNNNNNNNNGCCGT | 5 | 924; 1254; 2017; 2835; 4294 |
| Bcefl | ACGGCNNNNNNNNNN! | 12 | 875; 914; 935; 1016; 1046; 1121; 1196; 1274; 1325; 1370; 3302; 3789 |
| Bcefl | !NNNNNNNNNNNGCCGT | 5 | 925; 1255; 2018; 2836; 4295 |
| BcgI | CGANNNNNNTGCNNNNNNNNNN! | 0 | |
| BcgI | !NNNNNNNNNNGCANNNNNNTCG | 0 | |
| BcgI | GCANNNNNNTCGNNNNNNNNNN! | 0 | |
| BcgI | !NNNNNNNNNNCGANNNNNNTGC | 0 | |
| BciVI | GTATCCNNNNNN! | 3 | 2305; 3095; 4596 |
| BciVI | !NNNNNGGATAC | 0 | |
| BclI | T!GATCA | 0 | |
| BcnI | CC!SGG | 7 | 644; 737; 1378; 2880; 3040; 3653; 4417 |
| BcuI | A!CTAGT | 0 | |
| BdaI | TGANNNNNNTCANNNNNNNNN! | 3 | 1179; 1416; 4729 |
| BdaI | !NNNNNNNNNTGANNNNNNTCA | 3 | 1145; 1382; 4695 |
| BfaI | C!TAG | 8 | 592; 1531; 1725; 2143; 2699; 3714; 4048; 4301 |
| BfiI | ACTGGGNNNN! | 1 | 2825 |
| BfiI | !NNNNCCCAGT | 4 | 289; 648; 741; 2577 |
| BfmI | C!TRYAG | 3 | 2211; 4338; 4529 |
| BfoI | RGCG!Y | 5 | 1495; 2143; 2151; 2879; 4554 |
| BfrI | C!TTAAG | 1 | 1758 |
| BfuI | GTATCCNNNNNN! | 3 | 2305; 3095; 4596 |
| BfuI | !NNNNNGGATAC | 0 | |
| BfuAI | ACCTGCNNNN! | 3 | 1155; 3144; 3594 |
| BfuAI | !NNNNNNNGCAGGT | 1 | 2763 |
| BfuCI | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|--|
| BglI | GCCNNNN!NGGC | 4 | 90; 212; 283; 2651 |
| BglII | A!GATCT | 0 | |
| BisI | GC!NGC | 47 | 612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752 |
| BlnI | C!CTAGG | 2 | 2698; 3713 |
| BlpI | GC!TNAGC | 0 | |
| BlsI | GCN!GC | 47 | 613; 616; 619; 622; 649; 661; 706; 709; 712; 715; 742; 754; 813; 903; 906; 961; 1161; 1314; 1362; 1524; 1654; 2173; 2195; 2209; 2647; 2786; 2838; 2849; 2939; 2944; 2981; 3022; 3109; 3115; 3351; 3447; 3488; 3502; 3616; 3955; 3970; 4181; 4387; 4390; 4455; 4598; 4753 |
| BmcAI | AGT!ACT | 0 | |
| Bme18I | G!GWCC | 2 | 3392; 3837 |
| Bme1390I | CC!NGG | 19 | 90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769 |
| BmeRI | GACNNN!NNGTC | 0 | |
| BmeT110I | C!YCGRG | 1 | 1062 |
| BmgBI | CAC!GTC | 0 | |
| BmgBI | GAC!GTG | 0 | |
| BmgT120I | GG!NCC | 16 | 84; 277; 642; 735; 814; 1068; 1198; 1261; 1326; 1381; 1984; 3393; 3838; 3884; 3942; 3975 |
| BmiI | GGN!NCC | 21 | 467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766 |
| BmrI | ACTGGGNNNNN! | 1 | 2825 |
| BmrI | !NNNNCCCAGT | 4 | 289; 648; 741; 2577 |
| BmrFI | CC!NGG | 19 | 90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769 |
| BmsI | GCATCNNNNN! | 10 | 1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514 |
| BmsI | !NNNNNNNNNGATGC | 5 | 357; 2834; 3089; 3305; 4697 |
| BmtI | GCTAG!C | 1 | 595 |
| BmuI | ACTGGGNNNNN! | 1 | 2825 |
| BmuI | !NNNNCCCAGT | 4 | 289; 648; 741; 2577 |
| BoxI | GACNN!NNGTC | 0 | |
| BpiI | GAAGACNN! | 0 | |
| BpiI | !NNNNNNGTCTTC | 0 | |
| BpI | GAGNNNNNCTCNNNNNNNNNNNN! | 2 | 2665; 3564 |
| BpI | !NNNNNNNGAGNNNNNCTC | 2 | 2633; 3532 |
| BpmI | CTGGAGNNNNNNNNNNNNNNNN! | 1 | 3716 |
| BpmI | !NNNNNNNNNNNNNNNCTCCAG | 1 | 3659 |
| Bpu10I | CC!TNAGC | 1 | 1071 |
| Bpu10I | GC!TNAGG | 0 | |
| Bpu14I | TT!CGAA | 1 | 3558 |
| Bpu1102I | GC!TNAGC | 0 | |
| BpuAI | GAAGACNN! | 0 | |
| BpuAI | !NNNNNNGTCTTC | 0 | |
| BpuEI | CTTGAGNNNNNNNNNNNNNNNN! | 2 | 4170; 4709 |
| BpuEI | !NNNNNNNNNNNNNNNCTCAAG | 2 | 3252; 4411 |
| BpuMI | CC!SGG | 7 | 644; 737; 1378; 2880; 3040; 3653; 4417 |
| BpvUI | CGAT!CG | 0 | |
| BsaI | GGTCTCN! | 0 | |
| BsaI | !NNNNNGAGACC | 3 | 942; 1233; 3865 |
| Bsa29I | AT!CGAT | 1 | 2716 |
| BsaAI | YAC!GTR | 4 | 340; 1442; 1992; 3180 |
| BsaBI | GATNN!NNATC | 2 | 1538; 2735 |
| BsaHI | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| BsaJI | C!CNNGG | 21 | 360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634 |
| BsaMI | GAATGCN! | 1 | 1627 |
| BsaMI | G!CATTC | 1 | 1720 |
| BsaWI | W!CCGGW | 5 | 785; 2907; 3751; 4441; 4588 |
| BsaXI | ACNNNNNCTCCNNNNNNNNNN! | 1 | 1956 |
| BsaXI | !NNNNNNNGGAGNNNNNNGT | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|--|
| BsaXI | GGAGNNNNNGTNNNNNNNNNNNN! | 0 | |
| BsaXI | !NNNNNNNNNACNNNNNCTCC | 1 | 1926 |
| BsbI | CAACACNNNNNNNNNNNNNNNNNNNN! | 0 | |
| BsbI | !NNNNNNNNNNNNNNNNNNNGTGTG | 2 | 1877; 3784 |
| Bsc4I | CCNNNNN!NNGG | 22 | 49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779 |
| BscAI | GCATCNNNN! | 10 | 1041; 1083; 1170; 1491; 1691; 2454; 2526; 3174; 3238; 3513 |
| BscAI | !NNNNNNGATGC | 5 | 360; 2837; 3092; 3308; 4700 |
| BseI | ACTGGN! | 3 | 2820; 3021; 4267 |
| BseI | C!CAGT | 8 | 295; 654; 747; 995; 1905; 2583; 4379; 4392 |
| Bse8I | GATNN!NNATC | 2 | 1538; 2735 |
| Bse21I | CC!TNAGG | 2 | 2356; 3988 |
| Bse118I | R!CCGGY | 6 | 785; 951; 2093; 3195; 3376; 3659 |
| BseAI | T!CCGGA | 0 | |
| BseBI | CC!WGG | 12 | 90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769 |
| BseCI | AT!CGAT | 1 | 2716 |
| BseDI | C!CNNGG | 21 | 360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634 |
| Bse3DI | GCAATGNN! | 1 | 3109 |
| Bse3DI | !CATTGC | 0 | |
| BseGI | GGATGNN! | 4 | 2736; 3193; 3218; 3672 |
| BseGI | !CATCC | 2 | 1225; 2562 |
| BseJI | GATNN!NNATC | 2 | 1538; 2735 |
| BseLI | CCNNNNN!NNGG | 22 | 49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779 |
| BseMI | GCAATGNN! | 1 | 3109 |
| BseMI | !CATTGC | 0 | |
| BseMII | CTCAGNNNNNNNNNN! | 1 | 4002 |
| BseMII | !NNNNNNNNCTGAG | 6 | 1062; 2347; 2649; 3530; 4102; 4511 |
| BseNI | ACTGGN! | 3 | 2820; 3021; 4267 |
| BseNI | C!CAGT | 8 | 295; 654; 747; 995; 1905; 2583; 4379; 4392 |
| BsePI | G!CGCGC | 2 | 662; 755 |
| BseRI | GAGGAGNNNNNNNNNN! | 1 | 2694 |
| BseRI | !NNNNNNNNNCTCCTC | 0 | |
| BseSI | GKGC!C | 5 | 937; 1480; 2822; 2915; 4484 |
| BseXI | GCAGCNNNNNNNN! | 8 | 913; 1369; 1664; 2949; 2991; 3512; 3965; 4465 |
| BseXI | !NNNNNNNNNNNGCTGC | 9 | 601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372 |
| BseX3I | C!GGCCG | 2 | 1520; 2782 |
| BseYI | C!CCAGC | 3 | 2419; 2491; 4490 |
| BseYI | G!CTGGG | 1 | 3380 |
| BsgI | GTGCAGNNNNNNNNNNNNNNNN! | 0 | |
| BsgI | !NNNNNNNNNNNNNNCTGCAC | 0 | |
| Bsh1236I | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| Bsh1285I | CGRY!CG | 5 | 790; 1082; 1523; 2785; 4460 |
| BshFI | GG!CC | 33 | 84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783 |
| BshNI | G!GYRCC | 5 | 465; 1107; 2029; 2875; 2910 |
| BshTI | A!CCGGT | 1 | 785 |
| BshVI | AT!CGAT | 1 | 2716 |
| BsiEI | CGRY!CG | 5 | 790; 1082; 1523; 2785; 4460 |
| BsiHKAI | GWGCW!C | 4 | 937; 2989; 3179; 4484 |
| BsiHKCI | C!YCGRG | 1 | 1062 |
| BsiSI | C!CGG | 21 | 644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589 |
| BsiWI | C!GTACG | 0 | |
| BsII | CCNNNNN!NNGG | 22 | 49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779 |
| BsIFI | GGGACNNNNNNNNNN! | 7 | 175; 326; 494; 1431; 3027; 3559; 3668 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------|-------|---|
| BsIF1 | !NNNNNNNNNNNNNGTCCC | 4 | 2392; 2464; 2528; 3823 |
| BsmI | GAATGCN! | 1 | 1627 |
| BsmI | G!CATTC | 1 | 1720 |
| BsmAI | GTCTCN! | 1 | 434 |
| BsmAI | !NNNNNGAGAC | 6 | 942; 1233; 2300; 2718; 3737; 3865 |
| BsmBI | CGTCTCN! | 0 | |
| BsmBI | !NNNNNGAGACG | 0 | |
| BsmFI | GGGACNNNNNNNNNN! | 7 | 175; 326; 494; 1431; 3027; 3559; 3668 |
| BsmFI | !NNNNNNNNNNNNNGTCCC | 4 | 2392; 2464; 2528; 3823 |
| BsnI | GG!CC | 33 | 84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783 |
| Bso31I | GGTCTCN! | 0 | |
| Bso31I | !NNNNNGAGACC | 3 | 942; 1233; 3865 |
| BsoBI | C!YCGRG | 1 | 1062 |
| Bsp13I | T!CCGGA | 0 | |
| Bsp19I | C!CATGG | 4 | 360; 796; 2605; 3308 |
| Bsp24I | GACNNNNNTGGNNNNNNNNNN! | 2 | 289; 3679 |
| Bsp24I | !NNNNNNCCANNNNNGTC | 2 | 4100; 4278 |
| Bsp24I | CCANNNNNGTCNNNNNNNNNN! | 2 | 4132; 4310 |
| Bsp24I | !NNNNNNNGACNNNNNTGG | 2 | 257; 3647 |
| Bsp68I | TCG!CGA | 0 | |
| Bsp119I | TT!CGAA | 1 | 3558 |
| Bsp120I | G!GGCCC | 0 | |
| Bsp143I | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| Bsp1286I | GDGCH!C | 11 | 937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484 |
| Bsp1407I | T!GTACA | 0 | |
| Bsp1720I | GC!TNAGC | 0 | |
| BspACI | C!CGC | 43 | 58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 817; 1019; 1082; 1160; 1303; 1361; 1481; 1523; 2191; 2194; 2208; 2298; 2546; 2558; 2567; 2579; 2589; 2600; 2646; 2785; 2848; 3350; 3395; 3461; 3487; 3612; 3615; 3763; 3895; 4202; 4346; 4842 |
| BspACI | G!CGG | 30 | 370; 403; 528; 623; 647; 716; 740; 811; 1312; 1519; 2136; 2163; 2251; 2361; 2942; 3006; 3107; 3110; 3390; 3445; 3543; 3681; 3828; 3968; 4211; 4456; 4577; 4596; 4723; 4751 |
| BspCNI | CTCAGNNNNNNNN! | 1 | 4001 |
| BspCNI | !NNNNNNCTGAG | 6 | 1063; 2348; 2650; 3531; 4103; 4512 |
| BspDI | AT!CGAT | 1 | 2716 |
| BspD6I | GACTCNNNN! | 5 | 418; 1535; 1949; 3555; 4432 |
| BspD6I | !NNNNNGAGTC | 2 | 1912; 2344 |
| BspEI | T!CCGGA | 0 | |
| BspFNI | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| BspHI | T!CATGA | 2 | 2302; 4074 |
| BspLI | GGN!NCC | 21 | 467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766 |
| BspMI | ACCTGCNNNN! | 3 | 1155; 3144; 3594 |
| BspMI | !NNNNNNNGCAGGT | 1 | 2763 |
| BspOI | GCTAG!C | 1 | 595 |
| BspPI | GGATCNNNN! | 9 | 694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236 |
| BspPI | !NNNNNGATCC | 10 | 580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148 |
| BspQI | GCTCTCN! | 0 | |
| BspQI | !NNNNGAAGAGC | 2 | 3220; 3430 |
| BspTI | C!TTAAG | 1 | 1758 |
| BspT104I | TT!CGAA | 1 | 3558 |
| BspT107I | G!GYRCC | 5 | 465; 1107; 2029; 2875; 2910 |
| BspTNI | GGTCTCN! | 0 | |
| BspTNI | !NNNNNGAGACC | 3 | 942; 1233; 3865 |
| BsrI | ACTGGN! | 3 | 2820; 3021; 4267 |
| BsrI | C!CAGT | 8 | 295; 654; 747; 995; 1905; 2583; 4379; 4392 |
| BsrBI | CCG!CTC | 2 | 2300; 3489 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------|-------|--|
| BsrBI | GAG!CGG | 2 | 2136; 3543 |
| BsrDI | GCAATGNN! | 1 | 3109 |
| BsrDI | !CATTGC | 0 | |
| BsrFI | R!CCGGY | 6 | 785; 951; 2093; 3195; 3376; 3659 |
| BsrGI | T!GTACA | 0 | |
| BsrSI | ACTGGN! | 3 | 2820; 3021; 4267 |
| BsrSI | C!CAGT | 8 | 295; 654; 747; 995; 1905; 2583; 4379; 4392 |
| BssAI | R!CCGGY | 6 | 785; 951; 2093; 3195; 3376; 3659 |
| BssECl | C!CNNGG | 21 | 360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634 |
| BssHII | G!CGCGC | 2 | 662; 755 |
| BssKI | !CCNGG | 19 | 88; 281; 642; 735; 1048; 1376; 2410; 2465; 2482; 2878; 3038; 3261; 3651; 3840; 3943; 4415; 4633; 4646; 4767 |
| BssMI | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| BssNI | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| BssNAI | GTA!TAC | 0 | |
| BssSI | C!ACGAG | 2 | 3594; 4621 |
| BssSI | C!TCGTG | 1 | 3468 |
| BssTII | C!CWWGG | 6 | 360; 796; 2605; 2698; 3308; 3713 |
| Bst6I | CTCTTCN! | 0 | |
| Bst6I | !NNNNGAAGAG | 3 | 2343; 3220; 3430 |
| Bst98I | C!TTAAG | 1 | 1758 |
| Bst1107I | GTA!TAC | 0 | |
| BstACI | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| BstAFI | C!TTAAG | 1 | 1758 |
| BstAPI | GCANNNN!NTGC | 3 | 2443; 2515; 3977 |
| BstAUI | T!GTACA | 0 | |
| BstBI | TT!CGAA | 1 | 3558 |
| Bst2BI | C!ACGAG | 2 | 3594; 4621 |
| Bst2BI | C!TCGTG | 1 | 3468 |
| BstBAI | YAC!GTR | 4 | 340; 1442; 1992; 3180 |
| Bst4CI | ACN!GT | 15 | 76; 198; 269; 543; 581; 1088; 1169; 1967; 3256; 3372; 3480; 3803; 4294; 4764; 4835 |
| BstC8I | GCN!NGC | 38 | 86; 279; 593; 664; 757; 937; 957; 1005; 1019; 1278; 1282; 1449; 1476; 2095; 2138; 2152; 2425; 2444; 2497; 2516; 2770; 2956; 3175; 3241; 3247; 3275; 3279; 3320; 3324; 3378; 3661; 3848; 3895; 3951; 3973; 4184; 4744; 4781 |
| BstDEI | C!TNAG | 7 | 1071; 2356; 2658; 3539; 3988; 4111; 4520 |
| BstDSI | C!CRYGG | 6 | 360; 796; 917; 1256; 2605; 3308 |
| BstEII | G!GTNACC | 0 | |
| BstENI | CCTNN!NNNAGG | 0 | |
| BstF5I | GGATGNN! | 4 | 2736; 3193; 3218; 3672 |
| BstF5I | !CATCC | 2 | 1225; 2562 |
| BstFNI | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| BstH2I | RGCGC!Y | 5 | 1495; 2143; 2151; 2879; 4554 |
| BstHHI | GCG!C | 31 | 664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620 |
| BstKTI | GAT!C | 24 | 588; 673; 689; 766; 782; 994; 1375; 1536; 2716; 2720; 2739; 3050; 3128; 3209; 3218; 3296; 3672; 3688; 4047; 4059; 4137; 4145; 4156; 4231 |
| BstMAI | GTCTCN! | 1 | 434 |
| BstMAI | !NNNNNGAGAC | 6 | 942; 1233; 2300; 2718; 3737; 3865 |
| BstMBI | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| BstMCI | CGRY!CG | 5 | 790; 1082; 1523; 2785; 4460 |
| BstMWI | GCNNNNN!NNGC | 37 | 90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|--|
| BstNI | CC!WGG | 12 | 90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769 |
| BstNSI | RCATG!Y | 6 | 599; 1250; 2446; 2518; 3281; 4798 |
| BstOI | CC!WGG | 12 | 90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769 |
| BstPI | G!GTNACC | 0 | |
| BstPAI | GACNN!NNGTC | 0 | |
| BstSCI | !CCNGG | 19 | 88; 281; 642; 735; 1048; 1376; 2410; 2465; 2482; 2878; 3038; 3261; 3651; 3840; 3943; 4415; 4633; 4646; 4767 |
| BstSFI | C!TRYAG | 3 | 2211; 4338; 4529 |
| BstSLI | GKGC!M!C | 5 | 937; 1480; 2822; 2915; 4484 |
| BstSNI | TAC!GTA | 1 | 340 |
| BstUI | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| Bst2UI | CC!WGG | 12 | 90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769 |
| BstVII | GCAGC!NNNNNNNN! | 8 | 913; 1369; 1664; 2949; 2991; 3512; 3965; 4465 |
| BstVII | !NNNNNNNNNNNNGCTGC | 9 | 601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372 |
| BstV2I | GAAGACNN! | 0 | |
| BstV2I | !NNNNNNGTCTTC | 0 | |
| BstXI | CCANNNNN!NTGG | 0 | |
| BstX2I | R!GATCY | 13 | 585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153 |
| BstYI | R!GATCY | 13 | 585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153 |
| BstZI | C!GGCCG | 2 | 1520; 2782 |
| BstZ17I | GTA!TAC | 0 | |
| BsuI | GTATCCNNNNNN! | 3 | 2305; 3095; 4596 |
| BsuI | !NNNNNGGATAC | 0 | |
| Bsu15I | AT!CGAT | 1 | 2716 |
| Bsu36I | CC!TNAGG | 2 | 2356; 3988 |
| BsuRI | GG!CC | 33 | 84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783 |
| BsuTUI | AT!CGAT | 1 | 2716 |
| BtgI | C!CRYGG | 6 | 360; 796; 917; 1256; 2605; 3308 |
| BtgZI | GCGATGNNNNNNNNNN! | 2 | 1993; 3328 |
| BtgZI | !NNNNNNNNNNNNNNCATCGC | 3 | 334; 3147; 3491 |
| BthCI | GCNG!C | 47 | 614; 617; 620; 623; 650; 662; 707; 710; 713; 716; 743; 755; 814; 904; 907; 962; 1162; 1315; 1363; 1525; 1655; 2174; 2196; 2210; 2648; 2787; 2839; 2850; 2940; 2945; 2982; 3023; 3110; 3116; 3352; 3448; 3489; 3503; 3617; 3956; 3971; 4182; 4388; 4391; 4456; 4599; 4754 |
| BtrI | CAC!GTC | 0 | |
| BtrI | GAC!GTG | 0 | |
| BtsI | GCAGTGNN! | 0 | |
| BtsI | !CACTGC | 1 | 1715 |
| BtsCI | GGATGNN! | 4 | 2736; 3193; 3218; 3672 |
| BtsCI | !CATCC | 2 | 1225; 2562 |
| BtuMI | TCG!CGA | 0 | |
| BveI | ACCTGCNNNN! | 3 | 1155; 3144; 3594 |
| BveI | !NNNNNNNNGCAGGT | 1 | 2763 |
| Cac8I | GCN!NGC | 38 | 86; 279; 593; 664; 757; 937; 957; 1005; 1019; 1278; 1282; 1449; 1476; 2095; 2138; 2152; 2425; 2444; 2497; 2516; 2770; 2956; 3175; 3241; 3247; 3275; 3279; 3320; 3324; 3378; 3661; 3848; 3895; 3951; 3973; 4184; 4744; 4781 |
| CaiI | CAGNNN!CTG | 2 | 3977; 4385 |
| CciI | T!CATGA | 2 | 2302; 4074 |
| CciNI | GC!GGCCGC | 1 | 1520 |
| CdiI | CATC!G | 11 | 352; 857; 890; 1079; 1292; 1370; 1499; 3165; 3170; 3368; 3509 |
| CdiI | C!GATG | 2 | 1979; 3314 |
| CdpI | GCGGAGNNNNNNNNNNNNNNNNNNNN! | 1 | 4748 |
| CdpI | !NNNNNNNNNNNNNNNNNNNNCTCCGC | 3 | 486; 2537; 2579 |
| CelII | GC!TNAGC | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|--|
| CfoI | GCG!C | 31 | 664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620 |
| CfrI | Y!GGCCR | 7 | 872; 892; 1520; 2782; 2956; 3347; 3374 |
| Cfr9I | C!CCGGG | 0 | |
| Cfr10I | R!CCGGY | 6 | 785; 951; 2093; 3195; 3376; 3659 |
| Cfr13I | G!GNCC | 16 | 83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974 |
| Cfr42I | CCGC!GG | 0 | |
| ChaI | GATC! | 24 | 589; 674; 690; 767; 783; 995; 1376; 1537; 2717; 2721; 2740; 3051; 3129; 3210; 3219; 3297; 3673; 3689; 4048; 4060; 4138; 4146; 4157; 4232 |
| CjeI | CCANNNNNNGTNNNNNNNNNNNNNN! | 6 | 818; 1408; 2693; 4133; 4233; 4311 |
| CjeI | !NNNNNNNNNACNNNNNTGG | 7 | 64; 257; 2360; 2455; 3647; 4197; 4752 |
| CjeI | ACNNNNNTGGNNNNNNNNNNNNNN! | 7 | 98; 291; 2394; 2489; 3681; 4231; 4786 |
| CjeI | !NNNNNNNNCCANNNNNNGT | 6 | 784; 1374; 2659; 4099; 4199; 4277 |
| CjePI | CCANNNNNNTCNNNNNNNNNNNNNN! | 2 | 4133; 4311 |
| CjePI | !NNNNNNNGANNNNNNNTGG | 3 | 257; 3647; 4246 |
| CjePI | GANNNNNNNTGGNNNNNNNNNNNNNN! | 3 | 290; 3680; 4279 |
| CjePI | !NNNNNNCCANNNNNNTC | 2 | 4100; 4278 |
| Clal | AT!CGAT | 1 | 2716 |
| CpoI | CG!GWCCG | 1 | 3392 |
| CseI | GACGCNNNNN! | 5 | 526; 617; 710; 3586; 3665 |
| CseI | !NNNNNNNNNGCGTC | 3 | 2209; 4104; 4682 |
| CsiI | A!CCWGGT | 1 | 2465 |
| CspI | CG!GWCCG | 1 | 3392 |
| Csp6I | G!TAC | 8 | 218; 243; 298; 331; 382; 539; 998; 3181 |
| Csp45I | TT!CGAA | 1 | 3558 |
| CspAI | A!CCGGT | 1 | 785 |
| CspCI | CAANNNNNGTGGNNNNNNNNNNNN! | 1 | 411 |
| CspCI | !NNNNNNNNCCACNNNNNTTG | 0 | |
| CspCI | CCACNNNNNTGNNNNNNNNNNNNNN! | 0 | |
| CspCI | !NNNNNNNNNNCAANNNNNGTGG | 1 | 376 |
| CstMI | AAGGAGNNNNNNNNNNNNNNNNNN! | 2 | 2156; 3765 |
| CstMI | !NNNNNNNNNNNNNNNNNNCTCCTT | 0 | |
| CviAII | C!ATG | 22 | 301; 361; 596; 797; 836; 965; 1112; 1205; 1247; 2303; 2443; 2515; 2606; 2747; 3092; 3278; 3309; 3335; 3691; 4075; 4795; 4846 |
| CviJI | RG!CY | 105 | 42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 814; 874; 894; 959; 970; 977; 1007; 1039; 1069; 1120; 1136; 1159; 1183; 1190; 1198; 1217; 1261; 1280; 1284; 1294; 1315; 1327; 1360; 1381; 1461; 1522; 1545; 1655; 1822; 1842; 1984; 2065; 2079; 2093; 2374; 2415; 2487; 2610; 2639; 2645; 2654; 2662; 2685; 2697; 2703; 2784; 2801; 2809; 2836; 2861; 2945; 2954; 2958; 2982; 3020; 3096; 3113; 3132; 3195; 3239; 3249; 3266; 3349; 3376; 3380; 3417; 3440; 3456; 3636; 3663; 3724; 3846; 3885; 3942; 3949; 3956; 3975; 3986; 4237; 4266; 4309; 4320; 4385; 4464; 4489; 4494; 4540; 4630; 4728; 4754; 4772; 4783 |
| CviKI-1 | RG!CY | 105 | 42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 814; 874; 894; 959; 970; 977; 1007; 1039; 1069; 1120; 1136; 1159; 1183; 1190; 1198; 1217; 1261; 1280; 1284; 1294; 1315; 1327; 1360; 1381; 1461; 1522; 1545; 1655; 1822; 1842; 1984; 2065; 2079; 2093; 2374; 2415; 2487; 2610; 2639; 2645; 2654; 2662; 2685; 2697; 2703; 2784; 2801; 2809; 2836; 2861; 2945; 2954; 2958; 2982; 3020; 3096; 3113; 3132; 3195; 3239; 3249; 3266; 3349; 3376; 3380; 3417; 3440; 3456; 3636; 3663; 3724; 3846; 3885; 3942; 3949; 3956; 3975; 3986; 4237; 4266; 4309; 4320; 4385; 4464; 4489; 4494; 4540; 4630; 4728; 4754; 4772; 4783 |
| CviQI | G!TAC | 8 | 218; 243; 298; 331; 382; 539; 998; 3181 |
| DdeI | C!TNAG | 7 | 1071; 2356; 2658; 3539; 3988; 4111; 4520 |
| DinI | GGC!GCC | 1 | 2877 |
| DpnI | GA!TC | 24 | 587; 672; 688; 765; 781; 993; 1374; 1535; 2715; 2719; 2738; 3049; 3127; 3208; 3217; 3295; 3671; 3687; 4046; 4058; 4136; 4144; 4155; 4230 |
| DpnII | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------------|-------|--|
| DraI | TTT!AAA | 3 | 1578; 4020; 4039 |
| DraII | RG!GNCCY | 2 | 1067; 3974 |
| DraIII | CACNNN!GTG | 4 | 941; 1391; 1475; 1992 |
| DraRI | CAAGNACNNNNNNNNNNNNNNNNNNNNNN! | 2 | 266; 4356 |
| DraRI | !NNNNNNNNNNNNNNNNNNNGTNCCTG | 0 | |
| DrdI | GACNNN!NNGTC | 3 | 1947; 2903; 4692 |
| DrdIV | TACGACNNNNNNNNNNNNNNNNNNNN! | 0 | |
| DrdIV | !NNNNNNNNNNNNNNNNNNNGTCGTA | 1 | 476 |
| DriI | GACNNN!NNGTC | 0 | |
| DseDI | GACNNN!NNGTC | 3 | 1947; 2903; 4692 |
| EaeI | Y!GGCCR | 7 | 872; 892; 1520; 2782; 2956; 3347; 3374 |
| EagI | C!GGCCG | 2 | 1520; 2782 |
| Eam1104I | CTCTTCN! | 0 | |
| Eam1104I | !NNNNGAAGAG | 3 | 2343; 3220; 3430 |
| Eam1105I | GACNNN!NNGTC | 0 | |
| EarI | CTCTTCN! | 0 | |
| EarI | !NNNNGAAGAG | 3 | 2343; 3220; 3430 |
| EciI | GGCGGANNNNNNNNNNNN! | 4 | 2376; 3405; 4592; 4738 |
| EciI | !NNNNNNNNNTCCGCC | 4 | 496; 2547; 2568; 2589 |
| Ecl136II | GAG!CTC | 0 | |
| EclXI | C!GGCCG | 2 | 1520; 2782 |
| Eco24I | GRGCY!C | 4 | 1009; 2067; 3241; 3951 |
| Eco31I | GGTCTCN! | 0 | |
| Eco31I | !NNNNGAGAGACC | 3 | 942; 1233; 3865 |
| Eco32I | GAT!ATC | 0 | |
| Eco47I | G!GWCC | 2 | 3392; 3837 |
| Eco47III | AGC!GCT | 0 | |
| Eco52I | C!GGCCG | 2 | 1520; 2782 |
| Eco57I | CTGAAGNNNNNNNNNNNNNNNN! | 2 | 3022; 3454 |
| Eco57I | !NNNNNNNNNNNNNNNNCTTCAG | 1 | 4252 |
| Eco72I | CAC!GTG | 1 | 1442 |
| Eco81I | CC!TNAGG | 2 | 2356; 3988 |
| Eco88I | C!YCGRG | 1 | 1062 |
| Eco91I | G!GTNACC | 0 | |
| Eco105I | TAC!GTA | 1 | 340 |
| Eco130I | C!CWWGG | 6 | 360; 796; 2605; 2698; 3308; 3713 |
| Eco147I | AGG!CCT | 1 | 2697 |
| EcoHI | !CCSGG | 7 | 642; 735; 1376; 2878; 3038; 3651; 4415 |
| EcoICRI | GAG!CTC | 0 | |
| Eco57MI | CTGRAGNNNNNNNNNNNNNNNN! | 3 | 3022; 3454; 3716 |
| Eco57MI | !NNNNNNNNNNNNNNNNCTYCAG | 2 | 3659; 4252 |
| EcoNI | CCTNN!NNNAGG | 0 | |
| Eco065I | G!GTNACC | 0 | |
| Eco0109I | RG!GNCCY | 2 | 1067; 3974 |
| EcoRI | G!AATTC | 0 | |
| EcoRII | !CCWGG | 12 | 88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767 |
| EcoRV | GAT!ATC | 0 | |
| EcoT14I | C!CWWGG | 6 | 360; 796; 2605; 2698; 3308; 3713 |
| EcoT22I | ATGCA!T | 3 | 2448; 2520; 4851 |
| EcoT38I | GRGCY!C | 4 | 1009; 2067; 3241; 3951 |
| Eco53kI | GAG!CTC | 0 | |
| EgeI | GGC!GCC | 1 | 2877 |
| EheI | GGC!GCC | 1 | 2877 |
| ErhI | C!CWWGG | 6 | 360; 796; 2605; 2698; 3308; 3713 |
| EsaBC3I | TC!GA | 16 | 857; 1079; 1097; 1334; 1370; 2026; 2717; 2990; 3146; 3170; 3206; 3368; 3559; 3604; 3859; 4697 |
| Esp3I | CGTCTCN! | 0 | |
| Esp3I | !NNNNGAGACG | 0 | |
| FaeI | CATG! | 22 | 304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------|-------|--|
| FaiI | YA!TR | 58 | 39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 798; 837; 966; 1113; 1206; 1248; 1538; 1548; 1614; 1659; 1864; 2292; 2304; 2435; 2444; 2507; 2516; 2540; 2607; 2631; 2748; 2812; 3093; 3118; 3279; 3310; 3336; 3408; 3624; 3692; 3770; 3822; 3983; 4000; 4002; 4004; 4076; 4354; 4543; 4659; 4732; 4796; 4847 |
| FalI | AAGNNNNNCTTNNNNNNNNNNNN! | 2 | 1364; 3216 |
| FalI | !NNNNNNNNAAGNNNNNCTT | 2 | 1332; 3184 |
| FaqI | GGGACNNNNNNNNNN! | 7 | 175; 326; 494; 1431; 3027; 3559; 3668 |
| FaqI | !NNNNNNNNNNNNNGTCCC | 4 | 2392; 2464; 2528; 3823 |
| FatI | !CATG | 22 | 300; 360; 595; 796; 835; 964; 1111; 1204; 1246; 2302; 2442; 2514; 2605; 2746; 3091; 3277; 3308; 3334; 3690; 4074; 4794; 4845 |
| FauI | CCCGCNNNN! | 11 | 93; 119; 286; 824; 1026; 1488; 2198; 2553; 2574; 3770; 3902 |
| FauI | !NNNNNNGCGGG | 7 | 616; 709; 2129; 2999; 3536; 3674; 3821 |
| FauNDI | CA!TATG | 1 | 234 |
| FbaI | T!GATCA | 0 | |
| FblI | GT!MKAC | 0 | |
| FmuI | GGNC!C | 16 | 86; 279; 644; 737; 816; 1070; 1200; 1263; 1328; 1383; 1986; 3395; 3840; 3886; 3944; 3977 |
| Fnu4HI | GC!NGC | 47 | 612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752 |
| FokI | GGATGNNNNNNNNNN! | 4 | 2743; 3200; 3225; 3679 |
| FokI | !NNNNNNNNNNNNNCATCC | 2 | 1212; 2549 |
| FriOI | GRGCY!C | 4 | 1009; 2067; 3241; 3951 |
| FseI | GGCCGG!CC | 0 | |
| FspI | TGC!GCA | 1 | 2978 |
| FspAI | RTGC!GCAY | 0 | |
| FspBI | C!TAG | 8 | 592; 1531; 1725; 2143; 2699; 3714; 4048; 4301 |
| FspEI | CCNNNNNNNNNNNN! | 171 | 56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 673; 687; 707; 749; 766; 780; 796; 828; 854; 888; 908; 927; 953; 976; 991; 1008; 1022; 1038; 1053; 1074; 1095; 1124; 1142; 1160; 1181; 1200; 1214; 1242; 1256; 1275; 1290; 1313; 1329; 1361; 1379; 1395; 1409; 1436; 1452; 1475; 1492; 1508; 1536; 1559; 1598; 1612; 1753; 1848; 1872; 1895; 1918; 1936; 1958; 1979; 1998; 2017; 2046; 2067; 2081; 2107; 2195; 2221; 2270; 2311; 2329; 2368; 2384; 2422; 2479; 2494; 2551; 2571; 2585; 2602; 2616; 2653; 2668; 2711; 2794; 2861; 2892; 2912; 2927; 2972; 2986; 3052; 3066; 3085; 3101; 3142; 3162; 3209; 3259; 3275; 3295; 3320; 3340; 3363; 3390; 3408; 3434; 3474; 3500; 3524; 3580; 3594; 3622; 3665; 3686; 3721; 3765; 3853; 3877; 3899; 3919; 3935; 3956; 3970; 3989; 4073; 4093; 4121; 4136; 4170; 4212; 4239; 4254; 4299; 4323; 4337; 4359; 4385; 4405; 4429; 4455; 4503; 4522; 4541; 4567; 4602; 4647; 4677; 4691; 4742; 4756; 4781; 4797; 4818; 4847 |
| FspEI | !NNNNNNNNNNNNNNGG | 131 | 8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 701; 722; 759; 783; 844; 876; 904; 937; 956; 985; 1015; 1035; 1090; 1122; 1165; 1203; 1243; 1266; 1294; 1339; 1363; 1400; 1440; 1483; 1504; 1547; 1647; 1716; 1746; 1824; 1873; 1895; 1923; 1959; 2004; 2033; 2069; 2088; 2116; 2136; 2199; 2222; 2330; 2362; 2380; 2409; 2452; 2481; 2592; 2621; 2664; 2685; 2713; 2746; 2766; 2791; 2818; 2843; 2865; 2893; 2919; 2940; 2991; 3012; 3030; 3078; 3114; 3170; 3195; 3219; 3248; 3271; 3295; 3321; 3343; 3362; 3387; 3427; 3463; 3528; 3613; 3637; 3666; 3700; 3721; 3741; 3786; 3813; 3832; 3865; 3917; 3948; 3975; 4027; 4125; 4196; 4241; 4302; 4367; 4401; 4427; 4445; 4481; 4551; 4574; 4596; 4620; 4653; 4701; 4736; 4754; 4811 |
| Fsp4HI | GC!NGC | 47 | 612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752 |
| GdiII | C!GGCCR | 3 | 872; 1520; 2782 |
| GdiII | Y!GGCCG | 5 | 892; 1520; 2782; 3347; 3374 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|----------------------------|-------|--|
| GlaI | GC!GC | 31 | 663; 665; 756; 758; 1092; 1209; 1275; 1364; 1434; 1452; 1493; 2141; 2149; 2175; 2197; 2206; 2219; 2250; 2869; 2877; 2941; 2978; 3244; 3504; 3680; 3766; 4169; 4278; 4452; 4552; 4619 |
| GluI | GC!NGC | 47 | 612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752 |
| GsaI | CCCAG!C | 3 | 2423; 2495; 4494 |
| GsaI | GCTGG!G | 1 | 3384 |
| GsuI | CTGGAGNNNNNNNNNNNNNNNN! | 1 | 3716 |
| GsuI | !NNNNNNNNNNNNNNCTCCAG | 1 | 3659 |
| HaeI | WGG!CCW | 7 | 1284; 1461; 2697; 2958; 4320; 4772; 4783 |
| HaeII | RGCGC!Y | 5 | 1495; 2143; 2151; 2879; 4554 |
| HaeIII | GG!CC | 33 | 84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783 |
| HaeIV | GAYNNNNNRTCNNNNNNNNNNNNNN! | 2 | 1551; 3072 |
| HaeIV | !NNNNNNNNNGAYNNNNNRTC | 2 | 1517; 3038 |
| HaeIV | GAYNNNNNRTCNNNNNNNNNNNNNN! | 2 | 1550; 3071 |
| HaeIV | !NNNNNNNNNGAYNNNNNRTC | 2 | 1519; 3040 |
| HapII | C!CGG | 21 | 644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589 |
| HgaI | GACGCNNNNN! | 5 | 526; 617; 710; 3586; 3665 |
| HgaI | !NNNNNNNNNNNGCGTC | 3 | 2209; 4104; 4682 |
| HhaI | GCG!C | 31 | 664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620 |
| HinI | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| HinIII | CATG! | 22 | 304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849 |
| Hin4I | GAYNNNNVTCNNNNNNNNNNNNNN! | 2 | 1550; 3071 |
| Hin4I | !NNNNNNNNNGABNNNNNRTC | 3 | 1518; 3039; 3069 |
| Hin4I | GABNNNNNRTCNNNNNNNNNNNNNN! | 3 | 1550; 3071; 3101 |
| Hin4I | !NNNNNNNNNGAYNNNNNVTC | 2 | 1518; 3039 |
| Hin6I | G!CGC | 31 | 662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618 |
| HinPII | G!CGC | 31 | 662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618 |
| HincII | GTY!RAC | 1 | 1639 |
| HindII | GTY!RAC | 1 | 1639 |
| HindIII | A!AGCTT | 0 | |
| Hinfl | G!ANTC | 12 | 410; 1527; 1919; 1941; 2351; 3361; 3495; 3547; 3605; 3642; 4424; 4820 |
| HpaI | GTT!AAC | 1 | 1639 |
| HpaII | C!CGG | 21 | 644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589 |
| HphI | GGTGANNNNNNNN! | 5 | 376; 878; 1166; 3947; 4063 |
| HphI | !NNNNNNNTCACC | 7 | 875; 1157; 1289; 1394; 1478; 1993; 3054 |
| Hpy8I | GTN!NAC | 13 | 201; 539; 577; 869; 883; 935; 1172; 1223; 1639; 1923; 1940; 1995; 4482 |
| Hpy99I | CGWCG! | 15 | 861; 900; 1032; 1107; 1182; 1197; 1311; 1509; 2966; 2994; 3288; 3303; 3580; 3965; 4698 |
| Hpy166II | GTN!NAC | 13 | 201; 539; 577; 869; 883; 935; 1172; 1223; 1639; 1923; 1940; 1995; 4482 |
| Hpy188I | TCN!GA | 12 | 585; 806; 2050; 2659; 2843; 3187; 3540; 3641; 4120; 4254; 4607; 4685 |
| Hpy188III | TC!NNGA | 26 | 605; 698; 827; 1097; 1370; 1391; 1531; 2303; 2355; 2668; 2721; 2894; 3210; 3219; 3302; 3358; 3402; 3492; 3525; 3594; 4075; 4149; 4232; 4330; 4428; 4562 |
| HpyAV | CCTCANNNNNN! | 7 | 851; 1019; 1295; 1358; 3521; 3628; 4307 |
| HpyAV | !NNNNNGAAGG | 7 | 2109; 3004; 3733; 3749; 3932; 4249; 4559 |
| HpyCH4III | ACN!GT | 15 | 76; 198; 269; 543; 581; 1088; 1169; 1967; 3256; 3372; 3480; 3803; 4294; 4764; 4835 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|--------------------------------|-------|--|
| HpyCH4IV | A!CGT | 16 | 122; 134; 175; 258; 339; 444; 931; 1441; 1936; 1948; 1991; 2101; 2992; 3179; 3960; 4093 |
| HpyCH4V | TG!CA | 17 | 935; 1625; 1652; 1720; 2437; 2446; 2509; 2518; 2633; 2709; 2768; 2927; 3102; 3116; 4186; 4482; 4849 |
| HpyF3I | C!TNAG | 7 | 1071; 2356; 2658; 3539; 3988; 4111; 4520 |
| HpyF10VI | GCNNNNN!NNGC | 37 | 90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748 |
| Hsp92I | GR!CGYC | 9 | 122; 175; 258; 444; 609; 702; 2876; 3578; 3657 |
| Hsp92II | CATG! | 22 | 304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849 |
| HspAI | G!CGC | 31 | 662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618 |
| KasI | G!GCGCC | 1 | 2875 |
| KfiI | GG!GWCCC | 0 | |
| KpnI | GGTAC!C | 0 | |
| Kpn2I | T!CCGGA | 0 | |
| KspI | CCG!GG | 0 | |
| Ksp22I | T!GATCA | 0 | |
| KspAI | GTT!AAC | 1 | 1639 |
| Kzo9I | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| LguI | GCTCTCN! | 0 | |
| LguI | !NNNNGAAGAGC | 2 | 3220; 3430 |
| LpnI | RG!GICY | 5 | 1493; 2141; 2149; 2877; 4552 |
| LpnPI | CCDGNNNNNNNNNN! | 68 | 102; 295; 618; 657; 711; 750; 799; 834; 888; 965; 1002; 1062; 1083; 1130; 1160; 1200; 1227; 1242; 1290; 1329; 1391; 1436; 1461; 1502; 1613; 1918; 2107; 2330; 2368; 2384; 2424; 2479; 2496; 2596; 2681; 2794; 2871; 2893; 2916; 3052; 3066; 3085; 3142; 3209; 3259; 3275; 3332; 3390; 3599; 3665; 3689; 3765; 3854; 3957; 3990; 4221; 4239; 4385; 4405; 4429; 4455; 4504; 4602; 4647; 4677; 4756; 4781; 4818 |
| LpnPI | !NNNNNNNNNNNNNCHGG | 54 | 75; 268; 552; 619; 712; 771; 937; 956; 1035; 1122; 1203; 1266; 1363; 1959; 2079; 2136; 2199; 2397; 2409; 2469; 2481; 2713; 2758; 2801; 2843; 2865; 2893; 2940; 3002; 3024; 3114; 3181; 3204; 3248; 3343; 3362; 3387; 3536; 3637; 3680; 3737; 3827; 3930; 3957; 3975; 4211; 4248; 4401; 4427; 4567; 4585; 4620; 4701; 4754 |
| Lsp1109I | GCAGCNNNNNNNN! | 8 | 913; 1369; 1664; 2949; 2991; 3512; 3965; 4465 |
| Lsp1109I | !NNNNNNNNNNNGCTGC | 9 | 601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372 |
| LweI | GCATCNNNNN! | 10 | 1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514 |
| LweI | !NNNNNNNNNGATGC | 5 | 357; 2834; 3089; 3305; 4697 |
| MabI | A!CCWGGT | 1 | 2465 |
| MaeI | C!TAG | 8 | 592; 1531; 1725; 2143; 2699; 3714; 4048; 4301 |
| MaeII | A!CGT | 16 | 122; 134; 175; 258; 339; 444; 931; 1441; 1936; 1948; 1991; 2101; 2992; 3179; 3960; 4093 |
| MaeIII | !GTNAC | 13 | 61; 148; 497; 1391; 1664; 2165; 2177; 2996; 3302; 3992; 4258; 4374; 4437 |
| MalI | GA!TC | 24 | 587; 672; 688; 765; 781; 993; 1374; 1535; 2715; 2719; 2738; 3049; 3127; 3208; 3217; 3295; 3671; 3687; 4046; 4058; 4136; 4144; 4155; 4230 |
| MaqI | CRTTGACNNNNNNNNNNNNNNNNNNNNNN! | 4 | 144; 197; 466; 540 |
| MaqI | !NNNNNNNNNNNNNNNNNNNGTCAAYG | 3 | 157; 240; 426 |
| MauBI | CG!CGCGCG | 0 | |
| MbiI | CCG!CTC | 2 | 2300; 3489 |
| MbiI | GAG!CGG | 2 | 2136; 3543 |
| MboI | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| MboII | GAAGANNNNNNNN! | 5 | 2132; 2360; 3237; 3447; 4066 |
| MboII | !NNNNNNNTCTTC | 6 | 842; 1004; 3527; 3694; 3894; 4137 |
| McaTI | GCGC!GC | 2 | 665; 758 |
| MfeI | C!AATTG | 1 | 1626 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|--|
| MfII | R!GATCY | 13 | 585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153 |
| MhII | GDGCH!C | 11 | 937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484 |
| MIsI | TGG!CCA | 1 | 2958 |
| MluI | A!CGCGT | 0 | |
| MluNI | TGG!CCA | 1 | 2958 |
| MlyI | GAGTCNNNNN! | 2 | 1928; 2360 |
| MlyI | !NNNNNGACTC | 5 | 404; 1521; 1935; 3541; 4418 |
| Mly113I | GG!CGCC | 1 | 2876 |
| MmeI | TCCRACNNNNNNNNNNNNNNNNNNNN! | 1 | 1969 |
| MmeI | !NNNNNNNNNNNNNNNNNGTYGGA | 2 | 4401; 4585 |
| MnII | CCTCNNNNNNN! | 7 | 1595; 2659; 3477; 3683; 3997; 4367; 4691 |
| MnII | !NNNNNGAGG | 19 | 541; 800; 857; 1058; 1408; 1448; 1502; 1555; 2020; 2351; 2629; 2672; 2687; 2727; 2791; 2927; 3284; 3714; 4617 |
| Mph1103I | ATGCA!T | 3 | 2448; 2520; 4851 |
| MreI | CG!CCGGCG | 0 | |
| MroI | T!CCGGA | 0 | |
| MroNI | G!CCGGC | 3 | 2093; 3376; 3659 |
| MroXI | GAANN!NN TTC | 0 | |
| MscI | TGG!CCA | 1 | 2958 |
| MseI | T!TAA | 16 | 7; 1514; 1577; 1638; 1759; 1780; 1791; 1803; 1814; 1831; 1929; 2200; 4019; 4033; 4038; 4090 |
| MslI | CAYNN!NNRTG | 5 | 365; 888; 1149; 1167; 3313 |
| MspI | C!CGG | 21 | 644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589 |
| Msp20I | TGG!CCA | 1 | 2958 |
| MspAII | CMG!CKG | 8 | 614; 707; 1217; 1280; 2374; 2982; 4211; 4456 |
| MspCI | C!TTAAG | 1 | 1758 |
| MspJI | CNNRRNNNNNNNN! | 247 | 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; 617; 636; 650; 665; 679; 710; 729; 743; 758; 772; 798; 817; 833; 848; 875; 888; 902; 920; 944; 959; 975; 990; 1007; 1030; 1060; 1074; 1095; 1109; 1124; 1137; 1159; 1173; 1199; 1212; 1226; 1241; 1255; 1269; 1283; 1318; 1352; 1374; 1389; 1403; 1417; 1435; 1452; 1466; 1480; 1494; 1520; 1536; 1549; 1564; 1583; 1600; 1613; 1654; 1668; 1681; 1699; 1737; 1752; 1770; 1811; 1835; 1855; 1873; 1894; 1917; 1949; 1964; 1986; 2004; 2017; 2038; 2055; 2068; 2081; 2097; 2110; 2140; 2155; 2180; 2198; 2211; 2226; 2250; 2264; 2288; 2313; 2329; 2367; 2383; 2422; 2436; 2450; 2478; 2494; 2508; 2522; 2551; 2564; 2585; 2594; 2616; 2646; 2662; 2680; 2710; 2733; 2757; 2781; 2800; 2828; 2854; 2870; 2883; 2906; 2920; 2940; 2953; 2967; 2986; 3000; 3013; 3029; 3044; 3057; 3073; 3088; 3104; 3129; 3148; 3164; 3177; 3190; 3208; 3222; 3236; 3252; 3274; 3290; 3309; 3331; 3347; 3370; 3389; 3403; 3419; 3433; 3453; 3469; 3482; 3504; 3537; 3551; 3571; 3584; 3598; 3652; 3665; 3688; 3701; 3720; 3737; 3764; 3800; 3833; 3852; 3877; 3898; 3925; 3938; 3955; 3969; 3984; 4000; 4060; 4085; 4101; 4123; 4136; 4150; 4181; 4195; 4220; 4238; 4253; 4266; 4285; 4298; 4313; 4342; 4361; 4379; 4404; 4419; 4438; 4454; 4473; 4491; 4507; 4521; 4540; 4567; 4590; 4612; 4631; 4646; 4659; 4676; 4696; 4723; 4736; 4755; 4780; 4803; 4817; 4830; 4847 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|---------------------------|-------|--|
| MspJI | !NNNNNNNNNNNNNNYNGG | 208 | 8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 591; 608; 625; 647; 667; 684; 701; 718; 740; 760; 783; 802; 822; 849; 876; 894; 918; 938; 957; 975; 1000; 1022; 1048; 1074; 1098; 1117; 1135; 1155; 1173; 1191; 1215; 1233; 1257; 1277; 1302; 1326; 1348; 1375; 1392; 1409; 1426; 1450; 1475; 1494; 1517; 1542; 1586; 1628; 1711; 1746; 1773; 1796; 1825; 1869; 1891; 1923; 1959; 1976; 1997; 2034; 2054; 2071; 2088; 2123; 2141; 2159; 2176; 2200; 2222; 2249; 2277; 2303; 2341; 2362; 2379; 2397; 2420; 2441; 2469; 2492; 2513; 2531; 2552; 2569; 2592; 2616; 2636; 2654; 2676; 2707; 2729; 2755; 2774; 2791; 2819; 2838; 2857; 2875; 2893; 2914; 2936; 2960; 2993; 3013; 3031; 3052; 3078; 3105; 3122; 3139; 3156; 3182; 3204; 3226; 3244; 3264; 3283; 3305; 3343; 3363; 3387; 3407; 3427; 3454; 3478; 3511; 3530; 3558; 3580; 3609; 3637; 3662; 3681; 3700; 3721; 3738; 3755; 3786; 3813; 3833; 3856; 3876; 3913; 3930; 3949; 3975; 3995; 4034; 4061; 4080; 4098; 4135; 4153; 4194; 4212; 4238; 4255; 4287; 4316; 4344; 4365; 4388; 4407; 4428; 4446; 4463; 4481; 4507; 4528; 4548; 4568; 4586; 4607; 4633; 4650; 4669; 4688; 4717; 4736; 4754; 4773; 4791; 4809; 4832 |
| MspR9I | CC!NGG | 19 | 90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769 |
| MssI | GTTT!AAAC | 0 | |
| MunI | C!AATTG | 1 | 1626 |
| MvaI | CC!WGG | 12 | 90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769 |
| Mva1269I | GAATGCN! | 1 | 1627 |
| Mva1269I | G!CATTC | 1 | 1720 |
| MvnI | CG!CG | 23 | 60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751 |
| MvrI | CGAT!CG | 0 | |
| MwoI | GCNNNNN!NNGC | 37 | 90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748 |
| NaeI | GCC!GGC | 3 | 2095; 3378; 3661 |
| NarI | GG!CGCC | 1 | 2876 |
| NciI | CC!SGG | 7 | 644; 737; 1378; 2880; 3040; 3653; 4417 |
| NcoI | C!CATGG | 4 | 360; 796; 2605; 3308 |
| NdeI | CA!TATG | 1 | 234 |
| NdeII | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| NgoAVIII | GACNNNNNTGANNNNNNNNNNNN! | 1 | 280 |
| NgoAVIII | !NNNNNNNNNNNTCANNNNNGTC | 0 | |
| NgoAVIII | TCANNNNNGTCNNNNNNNNNNNN! | 0 | |
| NgoAVIII | !NNNNNNNNNNNGACNNNNNTGA | 1 | 244 |
| NgoMIV | G!CCGGC | 3 | 2093; 3376; 3659 |
| NheI | G!CTAGC | 1 | 591 |
| NlaIII | CATG! | 22 | 304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849 |
| NlaIV | GGN!NCC | 21 | 467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766 |
| NlaCI | CATCACNNNNNNNNNNNNNNNNNN! | 6 | 1187; 1424; 1508; 1708; 2023; 3615 |
| NlaCI | !NNNNNNNNNNNNNNNNNGTGATG | 2 | 347; 4687 |
| Nli3877I | CYCGR!G | 1 | 1066 |
| NmeAIII | GCCGAGNNNNNNNNNNNNNNNNNN! | 2 | 2665; 3101 |
| NmeAIII | !NNNNNNNNNNNNNNNNNNCTCGGC | 3 | 618; 711; 2630 |
| NmeDI | RCCGGYNNNNNNNN! | 6 | 797; 963; 2105; 3207; 3388; 3671 |
| NmeDI | !NNNNNNNNNNNNRCCGGY | 6 | 772; 938; 2080; 3182; 3363; 3646 |
| NmuCI | !GTSAC | 4 | 1391; 2165; 2996; 3302 |
| NotI | GC!GGCCGC | 1 | 1520 |
| NruI | TCG!CGA | 0 | |
| NsbI | TGC!GCA | 1 | 2978 |
| NsiI | ATGCA!T | 3 | 2448; 2520; 4851 |
| NspI | RCATG!Y | 6 | 599; 1250; 2446; 2518; 3281; 4798 |
| NspV | TT!CGAA | 1 | 3558 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-------------------------------|-------|--|
| OliI | CACNN!NNGTG | 2 | 888; 1149 |
| PabI | GTA!C | 8 | 220; 245; 300; 333; 384; 541; 1000; 3183 |
| PacI | TTAAT!TAA | 0 | |
| PaeI | GCATG!C | 3 | 2446; 2518; 3281 |
| PaeR7I | C!TCGAG | 0 | |
| PagI | T!CATGA | 2 | 2302; 4074 |
| PalAI | GG!CGCGCC | 0 | |
| PasI | CC!CWGGG | 2 | 3841; 3944 |
| PauI | G!CGCGC | 2 | 662; 755 |
| PceI | AGG!CCT | 1 | 2697 |
| PciI | A!CATGT | 2 | 1246; 4794 |
| PciSI | GCTCTCN! | 0 | |
| PciSI | !NNNNGAAGAGC | 2 | 3220; 3430 |
| PcsI | WCGNNNN!NNNCGW | 11 | 937; 1084; 1138; 1471; 1504; 3170; 3247; 3490; 3564; 3957; 4475 |
| PctI | GAATGCN! | 1 | 1627 |
| PctI | G!CATTC | 1 | 1720 |
| PdiI | GCC!GGC | 3 | 2095; 3378; 3661 |
| PdmI | GAANN!NNTTC | 0 | |
| PfeI | G!AWTC | 5 | 3361; 3495; 3605; 3642; 4820 |
| Pfl23II | C!GTACG | 0 | |
| PfIFI | GACN!NNGTC | 1 | 2994 |
| PfIMI | CCANNNN!NTGG | 4 | 680; 773; 970; 1220 |
| PfoI | T!CCNGGA | 1 | 3651 |
| PhoI | GG!CC | 33 | 84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783 |
| PinAI | A!CCGGT | 1 | 785 |
| PlaDI | CATCAGNNNNNNNNNNNNNNNNNNNNNN! | 2 | 1060; 3257 |
| PlaDI | !NNNNNNNNNNNNNNNNNNNNCTGATG | 3 | 1297; 2822; 3077 |
| PleI | GAGTCNNNN! | 2 | 1927; 2359 |
| PleI | !NNNNNGACTC | 5 | 404; 1521; 1935; 3541; 4418 |
| Ple19I | CGAT!CG | 0 | |
| PmaCI | CAC!GTG | 1 | 1442 |
| PmeI | GTTT!AAAC | 0 | |
| PmlI | CAC!GTG | 1 | 1442 |
| PpiI | GAACNNNNNCTCNNNNNNNNNNNNNN! | 1 | 1958 |
| PpiI | !NNNNNNNNGAGNNNNNGTTC | 1 | 4088 |
| PpiI | GAGNNNNNGTTCNNNNNNNNNNNNNN! | 1 | 4120 |
| PpiI | !NNNNNNNGAACNNNNNNCTC | 1 | 1926 |
| PpsI | GAGTCNNNN! | 2 | 1927; 2359 |
| PpsI | !NNNNNGACTC | 5 | 404; 1521; 1935; 3541; 4418 |
| Ppu10I | A!TGCAT | 3 | 2444; 2516; 4847 |
| Ppu21I | YAC!GTR | 4 | 340; 1442; 1992; 3180 |
| PpuMI | RG!GWCCY | 0 | |
| PscI | A!CATGT | 2 | 1246; 4794 |
| PshAI | GACNN!NNGTC | 0 | |
| PshBI | AT!TAAT | 1 | 7 |
| PsiI | TTA!TAA | 2 | 1659; 1864 |
| Psp03I | GGWC!C | 2 | 3395; 3840 |
| Psp5II | RG!GWCCY | 0 | |
| Psp6I | !CCWGG | 12 | 88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767 |
| Psp1406I | AA!CGTT | 0 | |
| Psp124BI | GAGCT!C | 0 | |
| PspCI | CAC!GTG | 1 | 1442 |
| PspEI | G!GTNACC | 0 | |
| PspGI | !CCWGG | 12 | 88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767 |
| PspLI | C!GTACG | 0 | |
| PspN4I | GGN!NCC | 21 | 467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766 |
| PspOMI | G!GGCCC | 0 | |
| PspOMII | CGCCARNNNNNNNNNNNNNNNNNNNNN! | 4 | 125; 1072; 2606; 3605 |
| PspOMII | !NNNNNNNNNNNNNNNNNNNYTGGGCG | 1 | 3008 |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|------------------------------|-------|--|
| PspPI | G!GNCC | 16 | 83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974 |
| PspPPI | RG!GWCCY | 0 | |
| PspPRI | CCYCAGNNNNNNNNNNNNNNNN! | 3 | 2429; 2501; 4007 |
| PspPRI | !NNNNNNNNNNNNNNCTGRGG | 2 | 2342; 3537 |
| PspXI | VC!TCGAGB | 0 | |
| PsrI | GAACNNNNNTACNNNNNNNNNNNN! | 0 | |
| PsrI | !NNNNNNNGTANNNNNNGTTC | 0 | |
| PsrI | GTANNNNNNGTTCNNNNNNNNNNNN! | 0 | |
| PsrI | !NNNNNNNGAACNNNNNNNTAC | 0 | |
| PssI | RGGNC!CY | 2 | 1070; 3977 |
| PstI | CTGCA!G | 0 | |
| PstNI | CAGNNN!CTG | 2 | 3977; 4385 |
| PsuI | R!GATCY | 13 | 585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153 |
| PsyI | GACN!NNGTC | 1 | 2994 |
| PteI | G!CGCGC | 2 | 662; 755 |
| PvuI | CGAT!CG | 0 | |
| PvuII | CAG!CTG | 4 | 1217; 1280; 2374; 2982 |
| RcaI | T!CATGA | 2 | 2302; 4074 |
| RceI | CATCGACNNNNNNNNNNNNNNNNNN! | 3 | 880; 1102; 3391 |
| RceI | !NNNNNNNNNNNNNNNNNGTCGATG | 0 | |
| RgaI | GCGAT!CGC | 0 | |
| RigI | GGCCGG!CC | 0 | |
| RleAI | CCCACANNNNNNNNNNNNNN! | 4 | 1260; 1399; 1485; 1605 |
| RleAI | !NNNNNNNNNTGTGGG | 0 | |
| RpaBI | CCCGCAGNNNNNNNNNNNNNNNNNNNN! | 0 | |
| RpaBI | !NNNNNNNNNNNNNNNNNNCTGCGGG | 2 | 602; 695 |
| RpaB5I | CGRGACNNNNNNNNNNNNNNNNNNNN! | 0 | |
| RpaB5I | !NNNNNNNNNNNNNNNNNGTCCYCG | 0 | |
| RruI | TCG!CGA | 0 | |
| RsaI | GT!AC | 8 | 219; 244; 299; 332; 383; 540; 999; 3182 |
| RsaNI | G!TAC | 8 | 218; 243; 298; 331; 382; 539; 998; 3181 |
| RseI | CAYNN!NNRTG | 5 | 365; 888; 1149; 1167; 3313 |
| RsrII | CG!GWCCG | 1 | 3392 |
| Rsr2I | CG!GWCCG | 1 | 3392 |
| SacI | GAGCT!C | 0 | |
| SacII | CCGC!GG | 0 | |
| SalI | G!TCGAC | 0 | |
| SapI | GCTCTTCN! | 0 | |
| SapI | !NNNNGAAGAGC | 2 | 3220; 3430 |
| SaqAI | T!TAA | 16 | 7; 1514; 1577; 1638; 1759; 1780; 1791; 1803; 1814; 1831; 1929; 2200; 4019; 4033; 4038; 4090 |
| SatI | GC!NGC | 47 | 612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752 |
| Sau96I | G!GNCC | 16 | 83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974 |
| Sau3AI | !GATC | 24 | 585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228 |
| SbfI | CCTGCA!GG | 0 | |
| ScaI | AGT!ACT | 0 | |
| SchI | GAGTCNNNNN! | 2 | 1928; 2360 |
| SchI | !NNNNNGACTC | 5 | 404; 1521; 1935; 3541; 4418 |
| SciI | CTC!GAG | 0 | |
| ScrFI | CC!NGG | 19 | 90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769 |
| SdaI | CCTGCA!GG | 0 | |
| SdeAI | CAGRAGNNNNNNNNNNNNNNNNNNNN! | 6 | 902; 1076; 2454; 2526; 2695; 4637 |
| SdeAI | !NNNNNNNNNNNNNNNNNNCTYCTG | 2 | 3031; 3516 |
| SdeOSI | GACNNNNRTGANNNNNNNNNNNNN! | 1 | 279 |
| SdeOSI | !NNNNNNNNNNNTCAYNNNNNGTC | 0 | |
| SdeOSI | TCAYNNNNNGTCNNNNNNNNNNNN! | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-------------------------|-------|--|
| SdeOSI | !NNNNNNNNNNNGACNNNNRTGA | 1 | 245 |
| SduI | GDGCH!C | 11 | 937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484 |
| SelI | !CGCG | 23 | 58; 660; 662; 753; 755; 1208; 1361; 1433; 1451; 1523; 1798; 2174; 2194; 2218; 2249; 2940; 3241; 3679; 3763; 3826; 3895; 4168; 4749 |
| SetI | ASST! | 63 | 125; 137; 178; 261; 308; 342; 447; 552; 568; 843; 868; 934; 961; 972; 991; 1131; 1138; 1149; 1219; 1282; 1350; 1444; 1459; 1566; 1587; 1596; 1608; 1657; 1824; 1939; 1951; 1994; 2031; 2081; 2104; 2228; 2376; 2471; 2664; 2777; 2905; 2984; 2995; 3067; 3138; 3182; 3442; 3588; 3632; 3963; 3994; 4053; 4096; 4239; 4260; 4359; 4496; 4511; 4530; 4542; 4586; 4632; 4683 |
| SexAI | A!CCWGGT | 1 | 2465 |
| SfaAI | GCGAT!CGC | 0 | |
| SfaNI | GCATCNNNNN! | 10 | 1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514 |
| SfaNI | !NNNNNNNNNGATGC | 5 | 357; 2834; 3089; 3305; 4697 |
| SfiI | C!TRYAG | 3 | 2211; 4338; 4529 |
| SfiI | GGCCNNNN!NGGCC | 1 | 2651 |
| SfoI | GGC!GCC | 1 | 2877 |
| Sfr274I | C!TCGAG | 0 | |
| Sfr303I | CCGC!GG | 0 | |
| SfuI | TT!CGAA | 1 | 3558 |
| SgeI | CNNGNNNNNNNN! | 199 | 6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 710; 729; 743; 759; 773; 798; 828; 848; 875; 902; 920; 944; 959; 977; 1001; 1016; 1030; 1061; 1074; 1100; 1124; 1145; 1159; 1181; 1199; 1217; 1230; 1250; 1269; 1283; 1328; 1352; 1374; 1389; 1403; 1418; 1435; 1452; 1466; 1487; 1501; 1520; 1536; 1583; 1612; 1654; 1737; 1811; 1895; 1917; 1949; 1986; 2004; 2023; 2038; 2080; 2097; 2114; 2149; 2163; 2180; 2202; 2226; 2250; 2315; 2329; 2367; 2383; 2423; 2436; 2455; 2478; 2495; 2508; 2527; 2557; 2578; 2595; 2618; 2653; 2680; 2711; 2733; 2759; 2781; 2800; 2828; 2864; 2883; 2906; 2920; 2940; 2953; 2967; 2986; 3000; 3019; 3051; 3065; 3078; 3104; 3135; 3148; 3165; 3182; 3196; 3213; 3231; 3246; 3274; 3290; 3309; 3331; 3347; 3370; 3389; 3414; 3433; 3453; 3480; 3504; 3537; 3556; 3584; 3598; 3664; 3688; 3703; 3726; 3747; 3764; 3812; 3839; 3853; 3882; 3906; 3939; 3956; 3976; 3989; 4002; 4060; 4087; 4106; 4136; 4161; 4181; 4195; 4220; 4238; 4275; 4313; 4342; 4370; 4384; 4404; 4419; 4440; 4454; 4473; 4491; 4507; 4547; 4567; 4594; 4612; 4633; 4646; 4659; 4676; 4700; 4723; 4755; 4780; 4807; 4829 |
| SgeI | !NNNNNNNNNNNNCNG | 172 | 10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 684; 703; 722; 740; 772; 802; 822; 849; 876; 894; 918; 938; 957; 975; 1004; 1035; 1056; 1074; 1098; 1119; 1137; 1155; 1173; 1191; 1215; 1233; 1257; 1302; 1326; 1348; 1377; 1409; 1426; 1461; 1494; 1517; 1557; 1586; 1628; 1711; 1785; 1869; 1891; 1923; 1960; 1978; 1997; 2054; 2071; 2088; 2123; 2141; 2161; 2181; 2200; 2224; 2289; 2341; 2397; 2429; 2452; 2469; 2501; 2531; 2552; 2569; 2592; 2627; 2654; 2685; 2707; 2733; 2755; 2774; 2802; 2838; 2857; 2880; 2901; 2919; 2936; 2960; 2993; 3025; 3052; 3078; 3109; 3139; 3156; 3182; 3205; 3226; 3248; 3268; 3288; 3305; 3344; 3363; 3388; 3407; 3427; 3454; 3478; 3511; 3530; 3558; 3580; 3638; 3662; 3681; 3700; 3721; 3738; 3786; 3813; 3833; 3856; 3880; 3913; 3930; 3950; 3976; 4034; 4061; 4080; 4110; 4135; 4155; 4194; 4212; 4249; 4287; 4316; 4344; 4365; 4393; 4414; 4447; 4465; 4521; 4541; 4568; 4586; 4607; 4633; 4650; 4674; 4697; 4729; 4754; 4781; 4803; 4832 |
| SgfI | GCGAT!CGC | 0 | |
| SgrAI | CR!CCGGYG | 0 | |
| SgrBI | CCGC!GG | 0 | |
| SgrDI | CG!TCGACG | 0 | |
| SgsI | GG!CGCGCC | 0 | |
| SimI | GG!GTC | 4 | 27; 2023; 3810; 4603 |
| SimI | !GACCC | 5 | 106; 1240; 3304; 3872; 4120 |
| SinI | G!GWCC | 2 | 3392; 3837 |
| SlaI | C!TCGAG | 0 | |
| SmaI | CCC!GGG | 0 | |

| Enzyme name | Sequence | Count | Cutting Position (the base to the left of the cut site) |
|-------------|-----------------------------|-------|---|
| TseI | G!CWGC | 23 | 614; 617; 620; 707; 710; 713; 901; 904; 959; 1357; 1652; 2171; 2836; 2937; 2979; 3020; 3113; 3500; 3953; 4179; 4385; 4388; 4453 |
| TsoI | TARCCANNNNNNNNNNN! | 2 | 1848; 2195 |
| TsoI | !NNNNNNNNNTGGYTA | 2 | 1653; 3405 |
| Tsp45I | !GTSAC | 4 | 1391; 2165; 2996; 3302 |
| Tsp509I | !AATT | 10 | 18; 1626; 1690; 1768; 1794; 1805; 2452; 2524; 2616; 4034 |
| TspDTI | ATGAANNNNNNNNNNN! | 3 | 1634; 2935; 3639 |
| TspDTI | !NNNNNNNNNTTCAT | 6 | 26; 842; 1277; 3353; 3809; 4016 |
| TspEI | !AATT | 10 | 18; 1626; 1690; 1768; 1794; 1805; 2452; 2524; 2616; 4034 |
| TspGWI | ACGGANNNNNNNNNNN! | 1 | 3751 |
| TspGWI | !NNNNNNNNNTCCGT | 2 | 590; 683 |
| TspMI | C!CCGGG | 0 | |
| TspRI | CASTGNN! | 7 | 661; 754; 1722; 3005; 4115; 4386; 4399 |
| TstI | CACNNNNNNNTCCNNNNNNNNNNNN! | 0 | |
| TstI | !NNNNNNNGGANNNNNNNGTG | 0 | |
| TstI | GGANNNNNNGTGNNNNNNNNNNNNNN! | 0 | |
| TstI | !NNNNNNNNNCACNNNNNNNTCC | 0 | |
| Tth111I | GACN!NNGTC | 1 | 2994 |
| Tth111II | CAARCANNNNNNNNNNN! | 2 | 1422; 4203 |
| Tth111II | !NNNNNNNNNTGYTTG | 3 | 3311; 4171; 4210 |
| UnbI | !GGNCC | 16 | 82; 275; 640; 733; 812; 1066; 1196; 1259; 1324; 1379; 1982; 3391; 3836; 3882; 3940; 3973 |
| Van91I | CCANNNN!NTGG | 4 | 680; 773; 970; 1220 |
| Vha464I | C!TTAAG | 1 | 1758 |
| VneI | G!TGCAC | 2 | 933; 4480 |
| VpaK11AI | !GGWCC | 2 | 3391; 3836 |
| VpaK11BI | G!GWCC | 2 | 3392; 3837 |
| VspI | AT!TAAT | 1 | 7 |
| XagI | CCTNN!NNNAGG | 0 | |
| XapI | R!AATY | 3 | 1690; 1794; 1805 |
| XbaI | T!CTAGA | 1 | 1530 |
| XceI | RCATG!Y | 6 | 599; 1250; 2446; 2518; 3281; 4798 |
| XcmI | CCANNNNN!NNNTGG | 0 | |
| XhoI | C!TCGAG | 0 | |
| XhoII | R!GATCY | 13 | 585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153 |
| XmaI | C!CCGGG | 0 | |
| XmaJI | C!CTAGG | 2 | 2698; 3713 |
| XmiI | GT!MKAC | 0 | |
| XmnI | GAANN!NNTTC | 0 | |
| XspI | C!TAG | 8 | 592; 1531; 1725; 2143; 2699; 3714; 4048; 4301 |
| ZraI | GAC!GTC | 4 | 123; 176; 259; 445 |
| ZrmI | AGT!ACT | 0 | |
| Zsp2I | ATGCA!T | 3 | 2448; 2520; 4851 |