

## pmKate2-f-mem vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1572; 1777
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1860; 2816; 4605
AatI	AGG!CCT	2	1039; 2610
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	2	1190; 1404
AccII	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
AccIII	T!CCGGA	1	1315
Acc16I	TGC!GCA	1	2891
Acc36I	ACCTGCNNNN!	2	3057; 3507
Acc36I	!NNNNNNNNGCAGGT	1	2676
Acc65I	G!GTACC	1	1409
AccB1I	G!GYRCC	7	465; 664; 724; 1409; 1942; 2788; 2823
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2213; 3402
AccBSI	GAG!CGG	2	2049; 3456
AceIII	CAGCTCNNNNNNN!	1	1745
AceIII	!NNNNNNNNNNGAGCTG	3	552; 610; 1356
AciI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1413; 2104; 2107; 2121; 2211; 2459; 2471; 2480; 2492; 2502; 2513; 2559; 2698; 2761; 3263; 3308; 3374; 3400; 3525; 3528; 3676; 3808; 4115; 4259; 4755
AciI	G!CGG	28	370; 403; 528; 748; 758; 1070; 1112; 1415; 2049; 2076; 2164; 2274; 2855; 2919; 3020; 3023; 3303; 3358; 3456; 3594; 3741; 3881; 4124; 4369; 4490; 4509; 4636; 4664
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	9	1432; 1441; 2657; 2968; 3214; 3606; 3965; 4063; 4149
AclWI	!NNNNNGATCC	7	580; 1145; 1419; 3033; 3577; 3964; 4061
AcoI	Y!GGCCR	5	1268; 2695; 2869; 3260; 3287
AcsI	R!AATY	4	1393; 1603; 1707; 1718
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1120; 2935; 3367
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4165
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
AdeI	CACNNN!GTG	2	1260; 1905
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 655; 805; 1057; 1411; 3095
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	20	49; 721; 834; 1000; 1066; 1801; 2127; 2519; 2770; 3314; 3595; 3627; 3759; 3794; 3844; 3876; 4229; 4508; 4674; 4692
AfII	C!TTAAG	0	
AfIII	A!CRYGT	2	1675; 4707
AgeI	A!CCGGT	1	600
AgsI	TTS!AA	7	687; 1137; 2200; 2244; 2254; 2667; 4243
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	16	88; 281; 785; 833; 929; 944; 1073; 2323; 2378; 2395; 3174; 3753; 3856; 4546; 4559; 4680
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	1	613
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	3	1396; 2363; 2435
AlfI	!NNNNNNNNNNNGCANNNNNNNTGC	3	1362; 2329; 2401
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1011; 1871
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	979; 1839
AluI	AG!CT	18	566; 624; 651; 797; 1104; 1332; 1370; 1568; 1735; 1992; 2287; 2575; 2895; 3353; 4150; 4407; 4453; 4543
AluBI	AG!CT	18	566; 624; 651; 797; 1104; 1332; 1370; 1568; 1735; 1992; 2287; 2575; 2895; 3353; 4150; 4407; 4453; 4543
AlwI	GGATCNNNN!	9	1432; 1441; 2657; 2968; 3214; 3606; 3965; 4063; 4149
AlwI	!NNNNNGATCC	7	580; 1145; 1419; 3033; 3577; 3964; 4061
Alw21I	GWGCW!C	5	694; 1385; 2902; 3092; 4397
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	6	1042; 1231; 2213; 2631; 3650; 3778
Alw44I	G!TGCAC	2	690; 4393
AlwNI	CAGNN!CTG	3	1277; 3890; 4298
Ama87I	C!YCGRG	1	1420
Aor13HI	T!CCGGA	1	1315
Aor51HI	AG!GCT	1	596
ApaI	GGGCC!C	1	1421
ApaBI	GCANNNNN!TGC	4	1371; 2357; 2429; 3891
ApaLI	G!TGCAC	2	690; 4393
ApeKI	G!CWGC	18	809; 953; 1251; 1361; 1370; 1565; 2084; 2749; 2850; 2892; 2933; 3026; 3413; 3866; 4092; 4298; 4301; 4366
ApoI	R!AATTY	4	1393; 1603; 1707; 1718
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3304
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3098; 3751; 4589
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3188
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	785
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2617
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3359
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 975; 1125; 1151; 1325; 1425; 1434; 1447; 2627; 2631; 2650; 2961; 3039; 3120; 3129; 3207; 3583; 3599; 3958; 3970; 4048; 4056; 4067; 4142
AsiGI	A!CCGGT	1	600
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2907
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	1409
AspA2I	C!CTAGG	2	2611; 3626
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	21	597; 2055; 2063; 2089; 2111; 2120; 2133; 2164; 2783; 2791; 2855; 2892; 3158; 3418; 3594; 3680; 4083; 4192; 4366; 4466; 4533
AspS9I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1354; 1418; 1896; 3305; 3750; 3796; 3854; 3887
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	3471
AsuC2I	CC!SGG	8	1184; 1358; 1421; 1422; 2793; 2953; 3566; 4330
AsuHPI	GGTGANNNNNNNNN!	5	376; 627; 996; 3860; 3976
AsuHPI	!NNNNNNNTCACC	3	885; 1906; 2967
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	1	1420
AvaII	G!GWCC	2	3305; 3750
AviII	TGC!GCA	1	2891
AvrII	C!CTAGG	2	2611; 3626

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	3	869; 2269; 3901
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI!C	8	667; 694; 727; 1304; 1421; 2735; 2828; 4397
BalI	TGG!CCA	2	1270; 2871
BamHI	G!GATCC	1	1424
BanI	G!GYRCC	7	465; 664; 724; 1409; 1942; 2788; 2823
BanII	GRGCY!C	4	1421; 1980; 3154; 3864
BanIII	AT!CGAT	1	2629
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	1	1161
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	1	1129
BasI	CCANNNN!NTGG	0	
BauI	C!ACGAG	3	1255; 3507; 4534
BauI	C!TCGTG	2	1105; 3381
BbeI	GGCGC!C	1	2792
Bbr7I	GAAGACNNNNNNN!	3	916; 1149; 1217
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	3	911; 1144; 1212
BbsI	!NNNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2359; 2431; 3194
BbvI	GCAGCNNNNNNNN!	8	821; 1263; 1577; 2862; 2904; 3425; 3878; 4378
BbvI	!NNNNNNNNNNNGCTGC	8	940; 1348; 2071; 2736; 2920; 3013; 4079; 4285
Bbv12I	GWGCW!C	5	694; 1385; 2902; 3092; 4397
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1002; 1919; 2483; 3009; 3511
BccI	!NNNNNGATGG	3	1887; 2667; 3095
BceAI	ACGGCNNNNNNNNNNNN!	6	822; 966; 1017; 1083; 3215; 3702
BceAI	!NNNNNNNNNNNNNGCCGT	3	1930; 2748; 4207
Bcefl	ACGGCNNNNNNNNNNNN!	6	822; 966; 1017; 1083; 3215; 3702
Bcefl	!NNNNNNNNNNNNNGCCGT	3	1931; 2749; 4208
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2218; 3008; 4509
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	1446
BcnI	CC!SGG	8	1184; 1358; 1421; 1422; 2793; 2953; 3566; 4330
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNNN!	2	1469; 4642
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	2	1435; 4608
BfaI	C!TAG	9	592; 1289; 1437; 1638; 2056; 2612; 3627; 3961; 4214
BfiI	ACTGGGNNNNN!	2	1306; 2738
BfiI	!NNNNCCCAGT	2	289; 2490
BfmI	C!TRYAG	4	1398; 2124; 4251; 4442
BfoI	RGCGC!Y	5	598; 2056; 2064; 2792; 4467
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	3	2218; 3008; 4509
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	3057; 3507
BfuAI	!NNNNNNNNNGCAGGT	1	2676
BfuCI	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
BglI	GCCNNNN!NGGC	6	90; 212; 283; 1079; 1093; 2564
BglII	A!GATCT	1	1324

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BisI	GC!NGC	35	759; 810; 954; 1071; 1252; 1362; 1371; 1566; 2085; 2107; 2121; 2559; 2698; 2750; 2761; 2851; 2856; 2893; 2934; 3021; 3024; 3027; 3263; 3359; 3400; 3414; 3528; 3867; 3882; 4093; 4299; 4302; 4367; 4510; 4665
BlnI	C!CTAGG	2	2611; 3626
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	35	760; 811; 955; 1072; 1253; 1363; 1372; 1567; 2086; 2108; 2122; 2560; 2699; 2751; 2762; 2852; 2857; 2894; 2935; 3022; 3025; 3028; 3264; 3360; 3401; 3415; 3529; 3868; 3883; 4094; 4300; 4303; 4368; 4511; 4666
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	2	3305; 3750
Bme1390I	CC!NGG	24	90; 283; 787; 835; 931; 946; 1075; 1184; 1358; 1421; 1422; 2325; 2380; 2397; 2793; 2953; 3176; 3566; 3755; 3858; 4330; 4548; 4561; 4682
BmeRI	GACNN!NNGTC	0	
BmeT110I	C!YCGRG	1	1420
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	84; 277; 761; 1004; 1096; 1117; 1355; 1419; 1897; 3306; 3751; 3797; 3855; 3888
BmiI	GGN!NCC	21	467; 666; 726; 1117; 1356; 1411; 1419; 1426; 1944; 1965; 1977; 2168; 2329; 2401; 2790; 2825; 3673; 3752; 3797; 4640; 4679
BmrI	ACTGGGNNNNN!	2	1306; 2738
BmrI	!NNNNCCCAGT	2	289; 2490
BmrFI	CC!NGG	24	90; 283; 787; 835; 931; 946; 1075; 1184; 1358; 1421; 1422; 2325; 2380; 2397; 2793; 2953; 3176; 3566; 3755; 3858; 4330; 4548; 4561; 4682
BmsI	GCATCNNNNN!	7	848; 1605; 2368; 2440; 3088; 3152; 3427
BmsI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2747; 3002; 3218; 4610
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1306; 2738
BmuI	!NNNNCCCAGT	2	289; 2490
BoxI	GACNN!NNGTC	1	1243
BpiI	GAAGACNN!	3	911; 1144; 1212
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2578; 3477
BpI	!NNNNNNNNNGAGNNNNNNCTC	2	2546; 3445
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3629
BpmI	!NNNNNNNNNNNNNNNCTCCAG	2	928; 3572
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3471
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	3	911; 1144; 1212
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4083; 4622
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	3	1159; 3165; 4324
BpuMI	CC!SGG	8	1184; 1358; 1421; 1422; 2793; 2953; 3566; 4330
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	1042; 1231; 3778
Bsa29I	AT!CGAT	1	2629
BsaAI	YAC!GTR	3	340; 1905; 3093
BsaBI	GATNN!NNATC	2	1451; 2648
BsaHI	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
BsaJI	C!CNNGG	23	360; 611; 698; 833; 834; 929; 1356; 1413; 1420; 2323; 2395; 2518; 2553; 2562; 2611; 2952; 3221; 3626; 3753; 3754; 3856; 3857; 4547
BsaMI	GAATGCN!	1	1540
BsaMI	G!CATTC	1	1633
BsaWI	W!CCGGW	7	600; 1315; 1430; 2820; 3664; 4354; 4501
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1869
BsaXI	!NNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1839

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1790; 3697
Bsc4I	CCNNNNN!NNGG	20	49; 721; 834; 1000; 1066; 1801; 2127; 2519; 2770; 3314; 3595; 3627; 3759; 3794; 3844; 3876; 4229; 4508; 4674; 4692
BscAI	GCATCNNNN!	7	847; 1604; 2367; 2439; 3087; 3151; 3426
BscAI	!NNNNNNGATGC	7	360; 1004; 1172; 2750; 3005; 3221; 4613
Bse1I	ACTGGN!	5	1214; 1301; 2733; 2934; 4180
Bse1I	C!CAGT	5	295; 1818; 2496; 4292; 4305
Bse8I	GATNN!NNATC	2	1451; 2648
Bse21I	CC!TNAGG	3	869; 2269; 3901
Bse118I	R!CCGGY	5	600; 2006; 3108; 3289; 3572
BseAI	T!CCGGA	1	1315
BseBI	CC!WGG	16	90; 283; 787; 835; 931; 946; 1075; 2325; 2380; 2397; 3176; 3755; 3858; 4548; 4561; 4682
BseCI	AT!CGAT	1	2629
BseDI	C!CNNGG	23	360; 611; 698; 833; 834; 929; 1356; 1413; 1420; 2323; 2395; 2518; 2553; 2562; 2611; 2952; 3221; 3626; 3753; 3754; 3856; 3857; 4547
Bse3DI	GCAATGNN!	1	3022
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2649; 3106; 3131; 3585
BseGI	!CATCC	5	694; 782; 839; 994; 2475
BseJI	GATNN!NNATC	2	1451; 2648
BseLI	CCNNNNN!NNGG	20	49; 721; 834; 1000; 1066; 1801; 2127; 2519; 2770; 3314; 3595; 3627; 3759; 3794; 3844; 3876; 4229; 4508; 4674; 4692
BseMI	GCAATGNN!	1	3022
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	1335; 3915
BseMII	!NNNNNNNNCTGAG	7	860; 1380; 2260; 2562; 3443; 4015; 4424
BseNI	ACTGGN!	5	1214; 1301; 2733; 2934; 4180
BseNI	C!CAGT	5	295; 1818; 2496; 4292; 4305
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2607
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!	8	667; 694; 727; 1304; 1421; 2735; 2828; 4397
BseXI	GCAGCNNNNNNNN!	8	821; 1263; 1577; 2862; 2904; 3425; 3878; 4378
BseXI	!NNNNNNNNNNNGCTGC	8	940; 1348; 2071; 2736; 2920; 3013; 4079; 4285
BseX3I	C!GGCCG	1	2695
BseYI	C!CCAGC	3	2332; 2404; 4403
BseYI	G!CTGGG	2	1031; 3293
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
Bsh1285I	CGRY!CG	4	605; 752; 2698; 4373
BshFI	GG!CC	29	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1355; 1419; 1755; 1897; 2552; 2558; 2567; 2610; 2697; 2871; 3262; 3289; 3798; 3855; 3888; 4233; 4667; 4685; 4696
BshNI	G!GYRCC	7	465; 664; 724; 1409; 1942; 2788; 2823
BshTI	A!CCGGT	1	600
BshVI	AT!CGAT	1	2629
BsiEI	CGRY!CG	4	605; 752; 2698; 4373
BsiHKAI	GWGCW!C	5	694; 1385; 2902; 3092; 4397
BsiHKCI	C!YCGRG	1	1420
BsiSI	C!CGG	22	601; 1184; 1316; 1358; 1421; 1431; 2007; 2694; 2771; 2793; 2821; 2952; 3042; 3109; 3290; 3565; 3573; 3665; 4139; 4329; 4355; 4502
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	20	49; 721; 834; 1000; 1066; 1801; 2127; 2519; 2770; 3314; 3595; 3627; 3759; 3794; 3844; 3876; 4229; 4508; 4674; 4692
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2940; 3472; 3581
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2305; 2377; 2441; 3736
BsmI	GAATGCN!	1	1540
BsmI	G!CATTC	1	1633
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	6	1042; 1231; 2213; 2631; 3650; 3778

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BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2940; 3472; 3581
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2305; 2377; 2441; 3736
BsnI	GG!CC	29	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1355; 1419; 1755; 1897; 2552; 2558; 2567; 2610; 2697; 2871; 3262; 3289; 3798; 3855; 3888; 4233; 4667; 4685; 4696
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACG	3	1042; 1231; 3778
BsoBI	C!YCGRG	1	1420
Bsp13I	T!CCGGA	1	1315
Bsp19I	C!CATGG	4	360; 611; 2518; 3221
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3592
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	4013; 4191
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	4045; 4223
Bsp24I	!NNNNNNNGACNNNNNNNTGG	2	257; 3560
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3471
Bsp120I	G!GGCCC	1	1417
Bsp143I	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
Bsp1286I	GDGCH!C	14	667; 694; 727; 1304; 1385; 1421; 1980; 2735; 2828; 2902; 3092; 3154; 3864; 4397
Bsp1407I	T!GTACA	1	653
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1413; 2104; 2107; 2121; 2211; 2459; 2471; 2480; 2492; 2502; 2513; 2559; 2698; 2761; 3263; 3308; 3374; 3400; 3525; 3528; 3676; 3808; 4115; 4259; 4755
BspACI	G!CGG	28	370; 403; 528; 748; 758; 1070; 1112; 1415; 2049; 2076; 2164; 2274; 2855; 2919; 3020; 3023; 3303; 3358; 3456; 3594; 3741; 3881; 4124; 4369; 4490; 4509; 4636; 4664
BspCNI	CTCAGNNNNNNNN!	2	1334; 3914
BspCNI	!NNNNNNNCTGAG	7	861; 1381; 2261; 2563; 3444; 4016; 4425
BspDI	AT!CGAT	1	2629
BspD6I	GACTCNNNN!	5	418; 1327; 1862; 3468; 4345
BspD6I	!NNNNNNGAGTC	3	883; 1825; 2257
BspEI	T!CCGGA	1	1315
BspFNI	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
BspHI	T!CATGA	2	2215; 3987
BspLI	GGN!NCC	21	467; 666; 726; 1117; 1356; 1411; 1419; 1426; 1944; 1965; 1977; 2168; 2329; 2401; 2790; 2825; 3673; 3752; 3797; 4640; 4679
BspMI	ACCTGCNNNN!	2	3057; 3507
BspMI	!NNNNNNNGCAGGT	1	2676
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	1432; 1441; 2657; 2968; 3214; 3606; 3965; 4063; 4149
BspPI	!NNNNNGATCC	7	580; 1145; 1419; 3033; 3577; 3964; 4061
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3133; 3343
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	1	3471
BspT107I	G!GYRCC	7	465; 664; 724; 1409; 1942; 2788; 2823
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	1042; 1231; 3778
BsrI	ACTGGN!	5	1214; 1301; 2733; 2934; 4180
BsrI	C!CAGT	5	295; 1818; 2496; 4292; 4305
BsrBI	CCG!CTC	2	2213; 3402
BsrBI	GAG!CGG	2	2049; 3456
BsrDI	GCAATGNN!	1	3022
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	600; 2006; 3108; 3289; 3572
BsrGI	T!GTACA	1	653
BsrSI	ACTGGN!	5	1214; 1301; 2733; 2934; 4180

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsrSI	C!CAGT	5	295; 1818; 2496; 4292; 4305
BssAI	R!CCGGY	5	600; 2006; 3108; 3289; 3572
BssECI	C!CNNGG	23	360; 611; 698; 833; 834; 929; 1356; 1413; 1420; 2323; 2395; 2518; 2553; 2562; 2611; 2952; 3221; 3626; 3753; 3754; 3856; 3857; 4547
BssHII	G!CGCGC	0	
BssKI	!CCNGG	24	88; 281; 785; 833; 929; 944; 1073; 1182; 1356; 1419; 1420; 2323; 2378; 2395; 2791; 2951; 3174; 3564; 3753; 3856; 4328; 4546; 4559; 4680
BssMI	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
BssNI	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1255; 3507; 4534
BssSI	C!TCGTG	2	1105; 3381
BssTII	C!CWWGG	6	360; 611; 2518; 2611; 3221; 3626
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2256; 3133; 3343
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	4	1370; 2356; 2428; 3890
BstAUI	T!GTACA	1	653
BstBI	TT!CGAA	1	3471
Bst2BI	C!ACGAG	3	1255; 3507; 4534
Bst2BI	C!TCGTG	2	1105; 3381
BstBAI	YAC!GTR	3	340; 1905; 3093
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 669; 1409; 1880; 3169; 3285; 3393; 3716; 4207; 4677; 4748
BstC8I	GCN!NGC	32	86; 279; 593; 622; 712; 916; 1417; 2008; 2051; 2065; 2338; 2357; 2410; 2429; 2683; 2869; 3088; 3154; 3160; 3188; 3192; 3233; 3237; 3291; 3574; 3761; 3808; 3864; 3886; 4097; 4657; 4694
BstDEI	C!TNAG	11	869; 1166; 1321; 1328; 1389; 2269; 2571; 3452; 3901; 4024; 4433
BstDSI	C!CRYGG	5	360; 611; 1413; 2518; 3221
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2649; 3106; 3131; 3585
BstF5I	!CATCC	5	694; 782; 839; 994; 2475
BstFNI	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
BstH2I	RGCGC!Y	5	598; 2056; 2064; 2792; 4467
BstHHI	GCG!C	21	597; 2055; 2063; 2089; 2111; 2120; 2133; 2164; 2783; 2791; 2855; 2892; 3158; 3418; 3594; 3680; 4083; 4192; 4366; 4466; 4533
BstKTI	GAT!C	24	588; 977; 1127; 1153; 1327; 1427; 1436; 1449; 2629; 2633; 2652; 2963; 3041; 3122; 3131; 3209; 3585; 3601; 3960; 3972; 4050; 4058; 4069; 4144
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	6	1042; 1231; 2213; 2631; 3650; 3778
BstMBI	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
BstMCI	CGRY!CG	4	605; 752; 2698; 4373
BstMWI	GCNNNNN!NNGC	29	90; 212; 244; 283; 376; 400; 648; 1079; 1093; 1361; 2016; 2046; 2073; 2115; 2356; 2428; 2479; 2558; 2780; 2864; 2887; 3026; 3149; 3232; 3499; 3686; 3890; 4089; 4661
BstNI	CC!WGG	16	90; 283; 787; 835; 931; 946; 1075; 2325; 2380; 2397; 3176; 3755; 3858; 4548; 4561; 4682
BstNSI	RCATG!Y	5	642; 2359; 2431; 3194; 4711
BstOI	CC!WGG	16	90; 283; 787; 835; 931; 946; 1075; 2325; 2380; 2397; 3176; 3755; 3858; 4548; 4561; 4682
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1243

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSCI	!CCNGG	24	88; 281; 785; 833; 929; 944; 1073; 1182; 1356; 1419; 1420; 2323; 2378; 2395; 2791; 2951; 3174; 3564; 3753; 3856; 4328; 4546; 4559; 4680
BstSFI	C!TRYAG	4	1398; 2124; 4251; 4442
BstSLI	GKGCMI!C	8	667; 694; 727; 1304; 1421; 2735; 2828; 4397
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
Bst2UI	CC!WGG	16	90; 283; 787; 835; 931; 946; 1075; 2325; 2380; 2397; 3176; 3755; 3858; 4548; 4561; 4682
BstV1I	GCAGCNNNNNNNN!	8	821; 1263; 1577; 2862; 2904; 3425; 3878; 4378
BstV1I	!NNNNNNNNNNNGCTGC	8	940; 1348; 2071; 2736; 2920; 3013; 4079; 4285
BstV2I	GAAGACNN!	3	911; 1144; 1212
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	12	585; 1150; 1324; 1424; 1433; 2960; 3206; 3598; 3957; 3969; 4055; 4066
BstYI	R!GATCY	12	585; 1150; 1324; 1424; 1433; 2960; 3206; 3598; 3957; 3969; 4055; 4066
BstZI	C!GGCCG	1	2695
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2218; 3008; 4509
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2629
Bsu36I	CC!TNAGG	3	869; 2269; 3901
BsuRI	GG!CC	29	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1355; 1419; 1755; 1897; 2552; 2558; 2567; 2610; 2697; 2871; 3262; 3289; 3798; 3855; 3888; 4233; 4667; 4685; 4696
BsuTUI	AT!CGAT	1	2629
BtgI	C!CRYGG	5	360; 611; 1413; 2518; 3221
BtgZI	GCGATGNNNNNNNNNN!	2	1906; 3241
BtgZI	!NNNNNNNNNNNNNNNCATCGC	3	334; 3060; 3404
BthCI	GCNG!C	35	761; 812; 956; 1073; 1254; 1364; 1373; 1568; 2087; 2109; 2123; 2561; 2700; 2752; 2763; 2853; 2858; 2895; 2936; 3023; 3026; 3029; 3265; 3361; 3402; 3416; 3530; 3869; 3884; 4095; 4301; 4304; 4369; 4512; 4667
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1628
BtsCI	GGATGNN!	4	2649; 3106; 3131; 3585
BtsCI	!CATCC	5	694; 782; 839; 994; 2475
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3057; 3507
BveI	!NNNNNNNNNGCAGGT	1	2676
Cac8I	GCN!NGC	32	86; 279; 593; 622; 712; 916; 1417; 2008; 2051; 2065; 2338; 2357; 2410; 2429; 2683; 2869; 3088; 3154; 3160; 3188; 3192; 3233; 3237; 3291; 3574; 3761; 3808; 3864; 3886; 4097; 4657; 4694
CaiI	CAGNNN!CTG	3	1277; 3890; 4298
CciI	T!CATGA	2	2215; 3987
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	5	352; 3078; 3083; 3281; 3422
CdiI	C!GATG	2	1892; 3227
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4661
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2450; 2492
CelII	GC!TNAGC	0	
CfoI	GCG!C	21	597; 2055; 2063; 2089; 2111; 2120; 2133; 2164; 2783; 2791; 2855; 2892; 3158; 3418; 3594; 3680; 4083; 4192; 4366; 4466; 4533
CfrI	Y!GGCCR	5	1268; 2695; 2869; 3260; 3287
Cfr9I	C!CCGGG	1	1420
Cfr10I	R!CCGGY	5	600; 2006; 3108; 3289; 3572
Cfr13I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1354; 1418; 1896; 3305; 3750; 3796; 3854; 3887
Cfr42I	CCGC!GG	1	1416



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ChaI	GATC!	24	589; 978; 1128; 1154; 1328; 1428; 1437; 1450; 2630; 2634; 2653; 2964; 3042; 3123; 3132; 3210; 3586; 3602; 3961; 3973; 4051; 4059; 4070; 4145
CjeI	CCANNNNNNGTNNNNNNNNNNNNNN!	5	706; 2606; 4046; 4146; 4224
CjeI	!NNNNNNNNNACNNNNNTGG	7	64; 257; 2273; 2368; 3560; 4110; 4665
CjeI	ACNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2307; 2402; 3594; 4144; 4699
CjeI	!NNNNNNNNCCANNNNNNGT	5	672; 2572; 4012; 4112; 4190
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	2	4046; 4224
CjePI	!NNNNNNNGANNNNNTGG	4	257; 1076; 3560; 4159
CjePI	GANNNNNTGGNNNNNNNNNNNNNN!	4	290; 1109; 3593; 4192
CjePI	!NNNNNNCCANNNNNNTC	2	4013; 4191
Clal	AT!CGAT	1	2629
CpoI	CG!GWCCG	1	3305
CseI	GACGCNNNNN!	3	526; 3499; 3578
CseI	!NNNNNNNNNGCGTC	4	1176; 2122; 4017; 4595
CsiI	A!CCWGGT	1	2378
CspI	CG!GWCCG	1	3305
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1410; 3094
Csp45I	TT!CGAA	1	3471
CspAI	A!CCGGT	1	600
CspCI	CAANNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNCAANNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	656; 1247; 2069; 3678
CstMI	!NNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	24	301; 361; 612; 639; 645; 657; 735; 801; 881; 1092; 1365; 2216; 2356; 2428; 2519; 2660; 3005; 3191; 3222; 3248; 3604; 3988; 4708; 4759
CviJI	RG!CY	96	42; 84; 93; 277; 566; 624; 651; 714; 761; 790; 797; 875; 941; 953; 1004; 1031; 1039; 1073; 1087; 1096; 1104; 1118; 1228; 1264; 1270; 1332; 1355; 1361; 1370; 1419; 1458; 1568; 1735; 1755; 1897; 1978; 1992; 2006; 2287; 2328; 2400; 2523; 2552; 2558; 2567; 2575; 2598; 2610; 2616; 2697; 2714; 2722; 2749; 2774; 2858; 2867; 2871; 2895; 2933; 3009; 3026; 3045; 3108; 3152; 3162; 3179; 3262; 3289; 3293; 3330; 3353; 3369; 3549; 3576; 3637; 3759; 3798; 3855; 3862; 3869; 3888; 3899; 4150; 4179; 4222; 4233; 4298; 4377; 4402; 4407; 4453; 4543; 4641; 4667; 4685; 4696
CviKI-1	RG!CY	96	42; 84; 93; 277; 566; 624; 651; 714; 761; 790; 797; 875; 941; 953; 1004; 1031; 1039; 1073; 1087; 1096; 1104; 1118; 1228; 1264; 1270; 1332; 1355; 1361; 1370; 1419; 1458; 1568; 1735; 1755; 1897; 1978; 1992; 2006; 2287; 2328; 2400; 2523; 2552; 2558; 2567; 2575; 2598; 2610; 2616; 2697; 2714; 2722; 2749; 2774; 2858; 2867; 2871; 2895; 2933; 3009; 3026; 3045; 3108; 3152; 3162; 3179; 3262; 3289; 3293; 3330; 3353; 3369; 3549; 3576; 3637; 3759; 3798; 3855; 3862; 3869; 3888; 3899; 4150; 4179; 4222; 4233; 4298; 4377; 4402; 4407; 4453; 4543; 4641; 4667; 4685; 4696
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1410; 3094
DdeI	C!TNAG	11	869; 1166; 1321; 1328; 1389; 2269; 2571; 3452; 3901; 4024; 4433
DinI	GGC!GCC	1	2790
DpnI	GA!TC	24	587; 976; 1126; 1152; 1326; 1426; 1435; 1448; 2628; 2632; 2651; 2962; 3040; 3121; 3130; 3208; 3584; 3600; 3959; 3971; 4049; 4057; 4068; 4143
DpnII	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
DraI	TTT!AAA	3	1491; 3933; 3952
DraII	RG!GNCCY	1	3887
DraIII	CACNN!GTG	2	1260; 1905
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4269
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1860; 2816; 4605
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
DseDI	GACNNNN!NNGTC	3	1860; 2816; 4605
EaeI	Y!GGCCR	5	1268; 2695; 2869; 3260; 3287
EagI	C!GGCCG	1	2695
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2256; 3133; 3343
Eam1105I	GACNNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2256; 3133; 3343
EciI	GGCGGANNNNNNNNNN!	4	2289; 3318; 4505; 4651
EciI	!NNNNNNNNNTCCGCC	4	496; 2460; 2481; 2502
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	1	2695
Eco24I	GRGCY!C	4	1421; 1980; 3154; 3864
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	3	1042; 1231; 3778
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	2	3305; 3750
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	1	2695
Eco57I	CTGAAGNNNNNNNNNNNNNN!	3	1120; 2935; 3367
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4165
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	869; 2269; 3901
Eco88I	C!YCGRG	1	1420
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 611; 2518; 2611; 3221; 3626
Eco147I	AGG!CCT	2	1039; 2610
EcoHI	!CCSGG	8	1182; 1356; 1419; 1420; 2791; 2951; 3564; 4328
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	4	1120; 2935; 3367; 3629
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	928; 3572; 4165
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3887
EcoRI	G!AATTC	1	1393
EcoRII	!CCWGG	16	88; 281; 785; 833; 929; 944; 1073; 2323; 2378; 2395; 3174; 3753; 3856; 4546; 4559; 4680
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 611; 2518; 2611; 3221; 3626
EcoT22I	ATGCA!T	3	2361; 2433; 4764
EcoT38I	GRGCY!C	4	1421; 1980; 3154; 3864
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2790
EheI	GGC!GCC	1	2790
ErhI	C!CWWGG	6	360; 611; 2518; 2611; 3221; 3626
EsaBC3I	TC!GA	15	753; 780; 1248; 1405; 1939; 2630; 2903; 3059; 3083; 3119; 3281; 3472; 3517; 3772; 4610
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1095; 1368; 2219; 2359; 2431; 2522; 2663; 3008; 3194; 3225; 3251; 3607; 3991; 4711; 4762
Fail	YA!TR	63	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 613; 640; 646; 658; 736; 802; 882; 900; 1093; 1146; 1196; 1366; 1451; 1461; 1527; 1572; 1777; 2205; 2217; 2348; 2357; 2420; 2429; 2453; 2520; 2544; 2661; 2725; 3006; 3031; 3192; 3223; 3249; 3321; 3537; 3605; 3683; 3735; 3896; 3913; 3915; 3917; 3989; 4267; 4456; 4572; 4645; 4709; 4760
Fail	AAGNNNNNCTNNNNNNNNNNNN!	2	879; 3129
Fail	!NNNNNNNNAAGNNNNNCTT	2	847; 3097
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2940; 3472; 3581
FaqI	!NNNNNNNNNNNNNGTCCC	4	2305; 2377; 2441; 3736
FatI	!CATG	24	300; 360; 611; 638; 644; 656; 734; 800; 880; 1091; 1364; 2215; 2355; 2427; 2518; 2659; 3004; 3190; 3221; 3247; 3603; 3987; 4707; 4758

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FauI	CCCGCNNNN!	10	93; 119; 286; 1068; 1170; 2111; 2466; 2487; 3683; 3815
FauI	!NNNNNNGCGGG	7	1105; 1408; 2042; 2912; 3449; 3587; 3734
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	1446
FblI	GT!MKAC	2	1190; 1404
FmuI	GGNC!C	14	86; 279; 763; 1006; 1098; 1119; 1357; 1421; 1899; 3308; 3753; 3799; 3857; 3890
Fnu4HI	GC!NGC	35	759; 810; 954; 1071; 1252; 1362; 1371; 1566; 2085; 2107; 2121; 2559; 2698; 2750; 2761; 2851; 2856; 2893; 2934; 3021; 3024; 3027; 3263; 3359; 3400; 3414; 3528; 3867; 3882; 4093; 4299; 4302; 4367; 4510; 4665
FokI	GGATGNNNNNNNNN!	4	2656; 3113; 3138; 3592
FokI	!NNNNNNNNNNNNNCATCC	5	681; 769; 826; 981; 2462
FriOI	GRGCY!C	4	1421; 1980; 3154; 3864
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2891
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1289; 1437; 1638; 2056; 2612; 3627; 3961; 4214
FspEI	CCNNNNNNNNNNNN!	159	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 681; 711; 728; 742; 775; 789; 807; 831; 846; 876; 909; 936; 951; 970; 1006; 1053; 1072; 1087; 1101; 1132; 1155; 1175; 1196; 1242; 1284; 1300; 1329; 1351; 1369; 1401; 1426; 1441; 1472; 1511; 1525; 1666; 1761; 1785; 1808; 1831; 1849; 1871; 1892; 1911; 1930; 1959; 1980; 1994; 2020; 2108; 2134; 2183; 2224; 2242; 2281; 2297; 2335; 2392; 2407; 2464; 2484; 2498; 2515; 2529; 2566; 2581; 2624; 2707; 2774; 2805; 2825; 2840; 2885; 2899; 2965; 2979; 2998; 3014; 3055; 3075; 3122; 3172; 3188; 3208; 3233; 3253; 3276; 3303; 3321; 3347; 3387; 3413; 3437; 3493; 3507; 3535; 3578; 3599; 3634; 3678; 3766; 3790; 3812; 3832; 3848; 3869; 3883; 3902; 3986; 4006; 4034; 4049; 4083; 4125; 4152; 4167; 4212; 4236; 4250; 4272; 4298; 4318; 4342; 4368; 4416; 4435; 4454; 4480; 4515; 4560; 4590; 4604; 4655; 4669; 4694; 4710; 4731; 4760
FspEI	!NNNNNNNNNNNNNNNGG	129	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 616; 643; 685; 706; 730; 772; 791; 820; 856; 893; 916; 935; 965; 986; 1013; 1052; 1078; 1097; 1169; 1195; 1243; 1282; 1301; 1337; 1392; 1416; 1460; 1560; 1629; 1737; 1786; 1808; 1836; 1872; 1917; 1946; 1982; 2001; 2029; 2049; 2112; 2135; 2243; 2275; 2293; 2322; 2365; 2394; 2505; 2534; 2577; 2598; 2626; 2659; 2679; 2704; 2731; 2756; 2778; 2806; 2832; 2853; 2904; 2925; 2943; 2991; 3027; 3083; 3108; 3132; 3161; 3184; 3208; 3234; 3256; 3275; 3300; 3340; 3376; 3441; 3526; 3550; 3579; 3613; 3634; 3654; 3699; 3726; 3745; 3778; 3830; 3861; 3888; 3940; 4038; 4109; 4154; 4215; 4280; 4314; 4340; 4358; 4394; 4464; 4487; 4509; 4533; 4566; 4614; 4649; 4667; 4724
Fsp4HI	GC!NGC	35	759; 810; 954; 1071; 1252; 1362; 1371; 1566; 2085; 2107; 2121; 2559; 2698; 2750; 2761; 2851; 2856; 2893; 2934; 3021; 3024; 3027; 3263; 3359; 3400; 3414; 3528; 3867; 3882; 4093; 4299; 4302; 4367; 4510; 4665
GdiII	C!GGCCR	1	2695
GdiII	Y!GGCCG	3	2695; 3260; 3287
GlaI	GC!GC	21	596; 2054; 2062; 2088; 2110; 2119; 2132; 2163; 2782; 2790; 2854; 2891; 3157; 3417; 3593; 3679; 4082; 4191; 4365; 4465; 4532
GluI	GC!NGC	35	759; 810; 954; 1071; 1252; 1362; 1371; 1566; 2085; 2107; 2121; 2559; 2698; 2750; 2761; 2851; 2856; 2893; 2934; 3021; 3024; 3027; 3263; 3359; 3400; 3414; 3528; 3867; 3882; 4093; 4299; 4302; 4367; 4510; 4665
GsaI	CCCAG!C	3	2336; 2408; 4407
GsaI	GCTGG!G	2	1035; 3297
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3629
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	928; 3572
HaeI	WGG!CCW	7	1039; 1270; 2610; 2871; 4233; 4685; 4696
HaeII	RGCGC!Y	5	598; 2056; 2064; 2792; 4467
HaeIII	GG!CC	29	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1355; 1419; 1755; 1897; 2552; 2558; 2567; 2610; 2697; 2871; 3262; 3289; 3798; 3855; 3888; 4233; 4667; 4685; 4696
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1464; 2985

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1430; 2951
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	2	1463; 2984
HaeIV	!NNNNNNNGAYNNNNNRTC	2	1432; 2953
HapII	C!CGG	22	601; 1184; 1316; 1358; 1421; 1431; 2007; 2694; 2771; 2793; 2821; 2952; 3042; 3109; 3290; 3565; 3573; 3665; 4139; 4329; 4355; 4502
HgaI	GACGCNNNNN!	3	526; 3499; 3578
HgaI	!NNNNNNNNNNGCGTC	4	1176; 2122; 4017; 4595
HhaI	GCG!C	21	597; 2055; 2063; 2089; 2111; 2120; 2133; 2164; 2783; 2791; 2855; 2892; 3158; 3418; 3594; 3680; 4083; 4192; 4366; 4466; 4533
HinI	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
Hin1II	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1095; 1368; 2219; 2359; 2431; 2522; 2663; 3008; 3194; 3225; 3251; 3607; 3991; 4711; 4762
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1463; 2984
Hin4I	!NNNNNNNNGABNNNNNRTC	3	1431; 2952; 2982
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1463; 2984; 3014
Hin4I	!NNNNNNNNGAYNNNNNVTC	2	1431; 2952
Hin6I	G!CGC	21	595; 2053; 2061; 2087; 2109; 2118; 2131; 2162; 2781; 2789; 2853; 2890; 3156; 3416; 3592; 3678; 4081; 4190; 4364; 4464; 4531
HinPII	G!CGC	21	595; 2053; 2061; 2087; 2109; 2118; 2131; 2162; 2781; 2789; 2853; 2890; 3156; 3416; 3592; 3678; 4081; 4190; 4364; 4464; 4531
HincII	GTY!RAC	2	1405; 1552
HindII	GTY!RAC	2	1405; 1552
HindIII	A!AGCTT	0	
Hinfl	G!ANTC	15	410; 740; 890; 1217; 1319; 1832; 1854; 2264; 3274; 3408; 3460; 3518; 3555; 4337; 4733
HpaI	GTT!AAC	1	1552
HpaII	C!CGG	22	601; 1184; 1316; 1358; 1421; 1431; 2007; 2694; 2771; 2793; 2821; 2952; 3042; 3109; 3290; 3565; 3573; 3665; 4139; 4329; 4355; 4502
HphI	GGTGANNNNNNN!	5	376; 627; 996; 3860; 3976
HphI	!NNNNNNNTCACC	3	885; 1906; 2967
Hpy8I	GTN!NAC	14	201; 539; 577; 672; 692; 987; 1191; 1200; 1405; 1552; 1836; 1853; 1908; 4395
Hpy99I	CGWCG!	9	1249; 1409; 2879; 2907; 3201; 3216; 3493; 3878; 4611
Hpy166II	GTN!NAC	14	201; 539; 577; 672; 692; 987; 1191; 1200; 1405; 1552; 1836; 1853; 1908; 4395
Hpy188I	TCN!GA	14	585; 699; 979; 1324; 1963; 2572; 2756; 3100; 3453; 3554; 4033; 4167; 4520; 4598
Hpy188III	TC!NNGA	25	972; 1176; 1316; 1342; 1388; 1437; 2216; 2268; 2581; 2634; 2807; 3123; 3132; 3215; 3271; 3315; 3405; 3438; 3507; 3988; 4062; 4145; 4243; 4341; 4475
HpyAV	CCTTCNNNNNN!	6	780; 828; 873; 3434; 3541; 4220
HpyAV	!NNNNNGAAGG	9	700; 1072; 2022; 2917; 3646; 3662; 3845; 4162; 4472
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 669; 1409; 1880; 3169; 3285; 3393; 3716; 4207; 4677; 4748
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 968; 1244; 1849; 1861; 1904; 2014; 2905; 3092; 3873; 4006
HpyCH4V	TG!CA	24	642; 692; 1014; 1130; 1280; 1364; 1373; 1400; 1538; 1565; 1633; 2350; 2359; 2422; 2431; 2546; 2622; 2681; 2840; 3015; 3029; 4099; 4395; 4762
HpyF3I	C!TNAG	11	869; 1166; 1321; 1328; 1389; 2269; 2571; 3452; 3901; 4024; 4433
HpyF10VI	GCNNNNN!NNGC	29	90; 212; 244; 283; 376; 400; 648; 1079; 1093; 1361; 2016; 2046; 2073; 2115; 2356; 2428; 2479; 2558; 2780; 2864; 2887; 3026; 3149; 3232; 3499; 3686; 3890; 4089; 4661
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 1187; 2789; 3491; 3570
Hsp92II	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1095; 1368; 2219; 2359; 2431; 2522; 2663; 3008; 3194; 3225; 3251; 3607; 3991; 4711; 4762
HspAI	G!CGC	21	595; 2053; 2061; 2087; 2109; 2118; 2131; 2162; 2781; 2789; 2853; 2890; 3156; 3416; 3592; 3678; 4081; 4190; 4364; 4464; 4531
KasI	G!GCGCC	1	2788

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
KfI	GG!GWCCC	0	
KpnI	GGTAC!C	1	1413
Kpn2I	T!CCGGA	1	1315
KspI	CCGC!GG	1	1416
Ksp22I	T!GATCA	1	1446
KspAI	GTT!AAC	1	1552
Kzo9I	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3133; 3343
LpnI	RGC!GCGY	5	596; 2054; 2062; 2790; 4465
LpnPI	CCDGNNNNNNNNNN!	65	102; 295; 614; 742; 799; 847; 881; 943; 958; 1019; 1066; 1087; 1111; 1135; 1197; 1284; 1329; 1355; 1371; 1401; 1434; 1526; 1831; 2020; 2243; 2281; 2297; 2337; 2392; 2409; 2509; 2594; 2707; 2784; 2806; 2829; 2965; 2979; 2998; 3055; 3122; 3172; 3188; 3245; 3303; 3512; 3578; 3602; 3678; 3767; 3870; 3903; 4134; 4152; 4298; 4318; 4342; 4368; 4417; 4515; 4560; 4590; 4669; 4694; 4731
LpnPI	!NNNNNNNNNNNNNCHGG	56	75; 268; 552; 586; 772; 820; 916; 1017; 1060; 1169; 1195; 1282; 1301; 1343; 1406; 1872; 1992; 2049; 2112; 2310; 2322; 2382; 2394; 2626; 2671; 2714; 2756; 2778; 2806; 2853; 2915; 2937; 3027; 3094; 3117; 3161; 3256; 3275; 3300; 3449; 3550; 3593; 3650; 3740; 3843; 3870; 3888; 4124; 4161; 4314; 4340; 4480; 4498; 4533; 4614; 4667
Lsp1109I	GCAGCNNNNNNNN!	8	821; 1263; 1577; 2862; 2904; 3425; 3878; 4378
Lsp1109I	!NNNNNNNNNNNNNGCTGC	8	940; 1348; 2071; 2736; 2920; 3013; 4079; 4285
LweI	GCATCNNNNN!	7	848; 1605; 2368; 2440; 3088; 3152; 3427
LweI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2747; 3002; 3218; 4610
MabI	A!CCWGGT	1	2378
MaeI	C!TAG	9	592; 1289; 1437; 1638; 2056; 2612; 3627; 3961; 4214
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 968; 1244; 1849; 1861; 1904; 2014; 2905; 3092; 3873; 4006
MaeIII	!GTNAC	13	61; 148; 497; 891; 1577; 2078; 2090; 2909; 3215; 3905; 4171; 4287; 4350
MalI	GA!TC	24	587; 976; 1126; 1152; 1326; 1426; 1435; 1448; 2628; 2632; 2651; 2962; 3040; 3121; 3130; 3208; 3584; 3600; 3959; 3971; 4049; 4057; 4068; 4143
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2213; 3402
MbiI	GAG!CGG	2	2049; 3456
MboI	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
MboII	GAAGANNNNNNNN!	9	916; 1029; 1149; 1217; 2045; 2273; 3150; 3360; 3979
MboII	!NNNNNNNTCTTC	4	3440; 3607; 3807; 4050
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1539
MfII	R!GATCY	12	585; 1150; 1324; 1424; 1433; 2960; 3206; 3598; 3957; 3969; 4055; 4066
MhII	GDGCH!C	14	667; 694; 727; 1304; 1385; 1421; 1980; 2735; 2828; 2902; 3092; 3154; 3864; 4397
MIsI	TGG!CCA	2	1270; 2871
MluI	A!CGCGT	1	1675
MluNI	TGG!CCA	2	1270; 2871
MlyI	GAGTCNNNNN!	3	899; 1841; 2273
MlyI	!NNNNNGACTC	5	404; 1313; 1848; 3454; 4331
Mly113I	GG!CGCC	1	2789
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNN!	2	1022; 1882
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4314; 4498
MnII	CCTCNNNNNNN!	14	773; 952; 967; 1050; 1183; 1294; 1349; 1508; 2572; 3390; 3596; 3910; 4280; 4604
MnII	!NNNNNGAGG	22	541; 654; 693; 714; 747; 864; 973; 1029; 1218; 1251; 1468; 1933; 2264; 2542; 2585; 2600; 2640; 2704; 2840; 3197; 3627; 4530
Mph1103I	ATGCA!T	3	2361; 2433; 4764

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1315
MroNI	G!CCGGC	3	2006; 3289; 3572
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1270; 2871
MseI	T!TAA	18	7; 629; 854; 1310; 1490; 1551; 1672; 1693; 1704; 1716; 1727; 1744; 1842; 2113; 3932; 3946; 3951; 4003
MslI	CAYNN!NNRTG	4	365; 613; 643; 3226
MspI	C!CGG	22	601; 1184; 1316; 1358; 1421; 1431; 2007; 2694; 2771; 2793; 2821; 2952; 3042; 3109; 3290; 3565; 3573; 3665; 4139; 4329; 4355; 4502
Msp20I	TGG!CCA	2	1270; 2871
MspAII	CMG!CKG	6	1063; 1415; 2287; 2895; 4124; 4369
MspCI	C!TTAAG	0	
MspJI	CNNRNNNNNNNN!	242	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; 633; 651; 669; 699; 717; 732; 747; 765; 798; 813; 841; 856; 880; 893; 909; 927; 941; 957; 970; 984; 1005; 1018; 1039; 1058; 1072; 1086; 1100; 1117; 1134; 1155; 1174; 1188; 1215; 1233; 1253; 1267; 1283; 1300; 1315; 1328; 1345; 1369; 1386; 1400; 1426; 1443; 1457; 1472; 1496; 1513; 1526; 1567; 1581; 1594; 1612; 1650; 1665; 1683; 1724; 1748; 1768; 1786; 1807; 1830; 1862; 1877; 1899; 1917; 1930; 1951; 1968; 1981; 1994; 2010; 2023; 2053; 2068; 2093; 2111; 2124; 2139; 2163; 2177; 2201; 2226; 2242; 2280; 2296; 2335; 2349; 2363; 2391; 2407; 2421; 2435; 2464; 2477; 2498; 2507; 2529; 2559; 2575; 2593; 2623; 2646; 2670; 2694; 2713; 2741; 2767; 2783; 2796; 2819; 2833; 2853; 2866; 2880; 2899; 2913; 2926; 2942; 2957; 2970; 2986; 3001; 3017; 3042; 3061; 3077; 3090; 3103; 3121; 3135; 3149; 3165; 3187; 3203; 3222; 3244; 3260; 3283; 3302; 3316; 3332; 3346; 3366; 3382; 3395; 3417; 3450; 3464; 3484; 3497; 3511; 3565; 3578; 3601; 3614; 3633; 3650; 3677; 3713; 3746; 3765; 3790; 3811; 3838; 3851; 3868; 3882; 3897; 3913; 3973; 3998; 4014; 4036; 4049; 4063; 4094; 4108; 4133; 4151; 4166; 4179; 4198; 4211; 4226; 4255; 4274; 4292; 4317; 4332; 4351; 4367; 4386; 4404; 4420; 4434; 4453; 4480; 4503; 4525; 4544; 4559; 4572; 4589; 4609; 4636; 4649; 4668; 4693; 4716; 4730; 4743; 4760
MspJI	!NNNNNNNNNNNNYNG	199	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; 616; 643; 673; 697; 715; 739; 758; 780; 820; 841; 867; 887; 916; 958; 992; 1013; 1033; 1060; 1078; 1095; 1113; 1141; 1162; 1181; 1207; 1229; 1252; 1275; 1301; 1328; 1351; 1374; 1400; 1417; 1441; 1470; 1499; 1541; 1624; 1662; 1686; 1709; 1738; 1782; 1804; 1836; 1872; 1889; 1910; 1947; 1967; 1984; 2001; 2036; 2054; 2072; 2089; 2113; 2135; 2162; 2190; 2216; 2254; 2275; 2292; 2310; 2333; 2354; 2382; 2405; 2426; 2444; 2465; 2482; 2505; 2529; 2549; 2567; 2589; 2620; 2642; 2668; 2687; 2704; 2732; 2751; 2770; 2788; 2806; 2827; 2849; 2873; 2906; 2926; 2944; 2965; 2991; 3018; 3035; 3052; 3069; 3095; 3117; 3139; 3157; 3177; 3196; 3218; 3256; 3276; 3300; 3320; 3340; 3367; 3391; 3424; 3443; 3471; 3493; 3522; 3550; 3575; 3594; 3613; 3634; 3651; 3668; 3699; 3726; 3746; 3769; 3789; 3826; 3843; 3862; 3888; 3908; 3947; 3974; 3993; 4011; 4048; 4066; 4107; 4125; 4151; 4168; 4200; 4229; 4257; 4278; 4301; 4320; 4341; 4359; 4376; 4394; 4420; 4441; 4461; 4481; 4499; 4520; 4546; 4563; 4582; 4601; 4630; 4649; 4667; 4686; 4704; 4722; 4745
MspR9I	CC!NGG	24	90; 283; 787; 835; 931; 946; 1075; 1184; 1358; 1421; 1422; 2325; 2380; 2397; 2793; 2953; 3176; 3566; 3755; 3858; 4330; 4548; 4561; 4682
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1539
MvaI	CC!WGG	16	90; 283; 787; 835; 931; 946; 1075; 2325; 2380; 2397; 3176; 3755; 3858; 4548; 4561; 4682
Mva1269I	GAATGCN!	1	1540
Mva1269I	G!CATTC	1	1633
MvnI	CG!CG	16	60; 1415; 1677; 1713; 2089; 2109; 2133; 2164; 2855; 3156; 3594; 3678; 3741; 3810; 4083; 4664
MvrI	CGAT!CG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MwoI	GCNNNNN!NNGC	29	90; 212; 244; 283; 376; 400; 648; 1079; 1093; 1361; 2016; 2046; 2073; 2115; 2356; 2428; 2479; 2558; 2780; 2864; 2887; 3026; 3149; 3232; 3499; 3686; 3890; 4089; 4661
NaeI	GCC!GGC	3	2008; 3291; 3574
NarI	GG!CGCC	1	2789
NciI	CC!SGG	8	1184; 1358; 1421; 1422; 2793; 2953; 3566; 4330
NcoI	C!CATGG	4	360; 611; 2518; 3221
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	731
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	767
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	2006; 3289; 3572
NheI	G!CTAGC	1	591
NlaIII	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1095; 1368; 2219; 2359; 2431; 2522; 2663; 3008; 3194; 3225; 3251; 3607; 3991; 4711; 4762
NlaIV	GGN!NCC	21	467; 666; 726; 1117; 1356; 1411; 1419; 1426; 1944; 1965; 1977; 2168; 2329; 2401; 2790; 2825; 3673; 3752; 3797; 4640; 4679
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1621; 1936; 3528
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 991; 4600
Nli3877I	CYCGR!G	1	1424
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2578; 3014
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	1007; 2543
NmeDI	RCCGGYNNNNNNN!	5	612; 2018; 3120; 3301; 3584
NmeDI	!NNNNNNNNNNNNRCCGGY	5	587; 1993; 3095; 3276; 3559
NmuCI	!GTSAC	4	891; 2078; 2909; 3215
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2891
NsiI	ATGCA!T	3	2361; 2433; 4764
NspI	RCATG!Y	5	642; 2359; 2431; 3194; 4711
NspV	TT!CGAA	1	3471
OliI	CACNN!NNGTG	1	613
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 656; 806; 1058; 1412; 3096
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2359; 2431; 3194
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2215; 3987
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	834; 3754; 3857
PauI	G!CGCGC	0	
PceI	AGG!CCT	2	1039; 2610
PciI	A!CATGT	1	4707
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3133; 3343
PcsI	WCGNNNN!NNNCGW	7	1253; 3083; 3160; 3403; 3477; 3870; 4388
PctI	GAATGCN!	1	1540
PctI	G!CATTC	1	1633
PdiI	GCC!GGC	3	2008; 3291; 3574
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	740; 1217; 3274; 3408; 3518; 3555; 4733
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2907
PfIMI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	2	944; 3564
PhoI	GG!CC	29	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1355; 1419; 1755; 1897; 2552; 2558; 2567; 2610; 2697; 2871; 3262; 3289; 3798; 3855; 3888; 4233; 4667; 4685; 4696
PinAI	A!CCGGT	1	600
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3170
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	3	1323; 2735; 2990

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PleI	GAGTCNNNN!	3	898; 1840; 2272
PleI	!NNNNNGACTC	5	404; 1313; 1848; 3454; 4331
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1871
PpiI	!NNNNNNNGAGNNNNNGTTC	1	4001
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4033
PpiI	!NNNNNNNGAACNNNNNCTC	1	1839
Ppsi	GAGTCNNNN!	3	898; 1840; 2272
Ppsi	!NNNNNGACTC	5	404; 1313; 1848; 3454; 4331
Ppu10I	A!TGCAT	3	2357; 2429; 4760
Ppu21I	YAC!GTR	3	340; 1905; 3093
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4707
PshAI	GACNN!NNGTC	1	1243
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1572; 1777
Psp03I	GGWC!C	2	3308; 3753
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	16	88; 281; 785; 833; 929; 944; 1073; 2323; 2378; 2395; 3174; 3753; 3856; 4546; 4559; 4680
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	16	88; 281; 785; 833; 929; 944; 1073; 2323; 2378; 2395; 3174; 3753; 3856; 4546; 4559; 4680
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	21	467; 666; 726; 1117; 1356; 1411; 1419; 1426; 1944; 1965; 1977; 2168; 2329; 2401; 2790; 2825; 3673; 3752; 3797; 4640; 4679
PspOMI	G!GGCCC	1	1417
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	3	125; 2519; 3518
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2921
PspPI	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1354; 1418; 1896; 3305; 3750; 3796; 3854; 3887
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	3	2342; 2414; 3920
PspPRI	!NNNNNNNNNNNNNCTGRGG	4	855; 1283; 2255; 3450
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNTAC	0	
PssI	RGGNC!CY	1	3890
PstI	CTGCA!G	1	1402
PstNI	CAGNN!CTG	3	1277; 3890; 4298
PsuI	R!GATCY	12	585; 1150; 1324; 1424; 1433; 2960; 3206; 3598; 3957; 3969; 4055; 4066
PsyI	GACN!NNGTC	1	2907
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2287; 2895
RcaI	T!CATGA	2	2215; 3987
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3304
RceI	!NNNNNNNNNNNNNNNNNGTCCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1518
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	11	219; 244; 299; 332; 383; 540; 655; 805; 1057; 1411; 3095
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1410; 3094
RseI	CAYNN!NNRTG	4	365; 613; 643; 3226
RsrII	CG!GWCCG	1	3305
Rsr2I	CG!GWCCG	1	3305
SacI	GAGCT!C	0	
SacII	CCGC!GG	1	1416
SalI	G!TCGAC	1	1403
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3133; 3343
SaqAI	T!TAA	18	7; 629; 854; 1310; 1490; 1551; 1672; 1693; 1704; 1716; 1727; 1744; 1842; 2113; 3932; 3946; 3951; 4003
SatI	GC!NGC	35	759; 810; 954; 1071; 1252; 1362; 1371; 1566; 2085; 2107; 2121; 2559; 2698; 2750; 2761; 2851; 2856; 2893; 2934; 3021; 3024; 3027; 3263; 3359; 3400; 3414; 3528; 3867; 3882; 4093; 4299; 4302; 4367; 4510; 4665
Sau96I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1354; 1418; 1896; 3305; 3750; 3796; 3854; 3887
Sau3AI	!GATC	24	585; 974; 1124; 1150; 1324; 1424; 1433; 1446; 2626; 2630; 2649; 2960; 3038; 3119; 3128; 3206; 3582; 3598; 3957; 3969; 4047; 4055; 4066; 4141
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	3	899; 1841; 2273
SchI	!NNNNNGACTC	5	404; 1313; 1848; 3454; 4331
SciI	CTC!GAG	0	
ScrFI	CC!NGG	24	90; 283; 787; 835; 931; 946; 1075; 1184; 1358; 1421; 1422; 2325; 2380; 2397; 2793; 2953; 3176; 3566; 3755; 3858; 4330; 4548; 4561; 4682
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	1041; 1229; 2367; 2439; 2608; 4550
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	4	1320; 1366; 2944; 3429
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	14	667; 694; 727; 1304; 1385; 1421; 1980; 2735; 2828; 2902; 3092; 3154; 3864; 4397
SelI	!CGCG	16	58; 1413; 1675; 1711; 2087; 2107; 2131; 2162; 2853; 3154; 3592; 3676; 3739; 3808; 4081; 4662
SetI	ASST!	63	125; 137; 178; 261; 308; 342; 447; 552; 568; 626; 653; 799; 820; 971; 1106; 1124; 1175; 1243; 1247; 1262; 1286; 1334; 1372; 1479; 1500; 1509; 1521; 1570; 1737; 1852; 1864; 1907; 1944; 1994; 2017; 2141; 2289; 2384; 2577; 2690; 2818; 2897; 2908; 2980; 3051; 3095; 3355; 3501; 3545; 3876; 3907; 3966; 4009; 4152; 4173; 4272; 4409; 4424; 4443; 4455; 4499; 4545; 4596
SexAI	A!CCWGGT	1	2378
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	848; 1605; 2368; 2440; 3088; 3152; 3427
SfaNI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2747; 3002; 3218; 4610
SfcI	C!TRYAG	4	1398; 2124; 4251; 4442
SfiI	GGCCNNNN!NGGCC	1	2564
SfoI	GGC!GCC	1	2790
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	1	1416
SfuI	TT!CGAA	1	3471

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	CNNGNNNNNNNNNN!	189	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 624; 651; 669; 699; 723; 741; 756; 798; 813; 846; 880; 893; 921; 942; 957; 984; 1018; 1039; 1059; 1072; 1086; 1104; 1117; 1134; 1167; 1188; 1222; 1260; 1283; 1301; 1328; 1354; 1369; 1386; 1400; 1426; 1443; 1496; 1525; 1567; 1650; 1688; 1724; 1808; 1830; 1862; 1899; 1917; 1936; 1951; 1993; 2010; 2027; 2062; 2076; 2093; 2115; 2139; 2163; 2228; 2242; 2280; 2296; 2336; 2349; 2368; 2391; 2408; 2421; 2440; 2470; 2491; 2508; 2531; 2566; 2593; 2624; 2646; 2672; 2694; 2713; 2741; 2777; 2796; 2819; 2833; 2853; 2866; 2880; 2899; 2913; 2932; 2964; 2978; 2991; 3017; 3048; 3061; 3078; 3095; 3109; 3126; 3144; 3159; 3187; 3203; 3222; 3244; 3260; 3283; 3302; 3327; 3346; 3366; 3393; 3417; 3450; 3469; 3497; 3511; 3577; 3601; 3616; 3639; 3660; 3677; 3725; 3752; 3766; 3795; 3819; 3852; 3869; 3889; 3902; 3915; 3973; 4000; 4019; 4049; 4074; 4094; 4108; 4133; 4151; 4188; 4226; 4255; 4283; 4297; 4317; 4332; 4353; 4367; 4386; 4404; 4420; 4460; 4480; 4507; 4525; 4546; 4559; 4572; 4589; 4613; 4636; 4668; 4693; 4720; 4742
SgeI	!NNNNNNNNNNNNCNG	166	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 598; 625; 643; 673; 697; 715; 739; 772; 820; 854; 895; 916; 958; 992; 1013; 1033; 1060; 1078; 1099; 1120; 1141; 1162; 1196; 1234; 1257; 1275; 1302; 1328; 1351; 1374; 1400; 1417; 1470; 1499; 1541; 1624; 1662; 1698; 1782; 1804; 1836; 1873; 1891; 1910; 1967; 1984; 2001; 2036; 2054; 2074; 2094; 2113; 2137; 2202; 2254; 2310; 2342; 2365; 2382; 2414; 2444; 2465; 2482; 2505; 2540; 2567; 2598; 2620; 2646; 2668; 2687; 2715; 2751; 2770; 2793; 2814; 2832; 2849; 2873; 2906; 2938; 2965; 2991; 3022; 3052; 3069; 3095; 3118; 3139; 3161; 3181; 3201; 3218; 3257; 3276; 3301; 3320; 3340; 3367; 3391; 3424; 3443; 3471; 3493; 3551; 3575; 3594; 3613; 3634; 3651; 3699; 3726; 3746; 3769; 3793; 3826; 3843; 3863; 3889; 3947; 3974; 3993; 4023; 4048; 4068; 4107; 4125; 4162; 4200; 4229; 4257; 4278; 4306; 4327; 4360; 4378; 4434; 4454; 4481; 4499; 4520; 4546; 4563; 4587; 4610; 4642; 4667; 4694; 4716; 4745
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	1416
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1936; 3723; 4516
SimI	!GACCC	5	106; 1049; 3217; 3785; 4033
SinI	G!GWCC	2	3305; 3750
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	1	1422
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	4	365; 613; 643; 3226
SmlI	C!TYRAG	5	1174; 3180; 4062; 4339; 4601
SmoI	C!TYRAG	5	1174; 3180; 4062; 4339; 4601
SmuI	CCCGCNNNN!	10	93; 119; 286; 1068; 1170; 2111; 2466; 2487; 3683; 3815
SmuI	!NNNNNNGCGGG	7	1105; 1408; 2042; 2912; 3449; 3587; 3734
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2359; 2431; 3194
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	12	18; 1311; 1393; 1539; 1603; 1681; 1707; 1718; 2365; 2437; 2529; 3947
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	2	1039; 2610
SsiI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1413; 2104; 2107; 2121; 2211; 2459; 2471; 2480; 2492; 2502; 2513; 2559; 2698; 2761; 3263; 3308; 3374; 3400; 3525; 3528; 3676; 3808; 4115; 4259; 4755
SsiI	G!CGG	28	370; 403; 528; 748; 758; 1070; 1112; 1415; 2049; 2076; 2164; 2274; 2855; 2919; 3020; 3023; 3303; 3358; 3456; 3594; 3741; 3881; 4124; 4369; 4490; 4509; 4636; 4664
SspI	AAT!ATT	2	1697; 2250
SspDI	G!GCGCC	1	2788
SspD5I	GGTGANNNNNNNN!	5	376; 627; 996; 3860; 3976

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SspD5I	!NNNNNNNNTCACC	3	884; 1905; 2966
SstI	GAGCT!C	0	
SstII	CCGC!GG	1	1416
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNN!	1	929
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	21	92; 118; 285; 851; 1067; 1169; 1190; 1364; 1427; 1988; 2110; 2465; 2486; 2799; 3202; 3341; 3412; 3682; 3814; 4044; 4482
Sth132I	!NNNNNNNNCCGGG	21	15; 407; 470; 900; 1104; 1407; 1989; 2041; 2142; 2869; 2911; 2944; 3448; 3557; 3586; 3733; 3837; 3868; 4321; 4365; 4573
Sth302II	CC!GG	22	602; 1185; 1317; 1359; 1422; 1432; 2008; 2695; 2772; 2794; 2822; 2953; 3043; 3110; 3291; 3566; 3574; 3666; 4140; 4330; 4356; 4503
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	4	2657; 3114; 3139; 3593
StsI	!NNNNNNNNNNNNNNNNCATCC	5	680; 768; 825; 980; 2461
StuI	AGG!CCT	2	1039; 2610
StyI	C!CWVGG	6	360; 611; 2518; 2611; 3221; 3626
StyD4I	!CCNGG	24	88; 281; 785; 833; 929; 944; 1073; 1182; 1356; 1419; 1420; 2323; 2378; 2395; 2791; 2951; 3174; 3564; 3753; 3856; 4328; 4546; 4559; 4680
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 669; 1409; 1880; 3169; 3285; 3393; 3716; 4207; 4677; 4748
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 971; 1247; 1852; 1864; 1907; 2017; 2908; 3095; 3876; 4009
TaqI	T!CGA	15	752; 779; 1247; 1404; 1938; 2629; 2902; 3058; 3082; 3118; 3280; 3471; 3516; 3771; 4609
TaqII	GACCGANNNNNNNNNN!	3	1809; 2826; 3494
TaqII	!NNNNNNNNNTCGGTC	1	3738
TaqII	CACCCANNNNNNNNNN!	2	742; 847
TaqII	!NNNNNNNNNTGGGTG	3	172; 2693; 3285
TasI	!AATT	12	18; 1311; 1393; 1539; 1603; 1681; 1707; 1718; 2365; 2437; 2529; 3947
TatI	W!GTACW	5	217; 297; 330; 381; 653
TauI	GCSG!C	17	761; 1073; 2109; 2123; 2561; 2700; 2763; 2858; 3023; 3026; 3265; 3361; 3402; 3530; 3884; 4512; 4667
TfiI	G!AWTC	7	740; 1217; 3274; 3408; 3518; 3555; 4733
TliI	C!TCGAG	0	
TruII	T!TAA	18	7; 629; 854; 1310; 1490; 1551; 1672; 1693; 1704; 1716; 1727; 1744; 1842; 2113; 3932; 3946; 3951; 4003
Tru9I	T!TAA	18	7; 629; 854; 1310; 1490; 1551; 1672; 1693; 1704; 1716; 1727; 1744; 1842; 2113; 3932; 3946; 3951; 4003
TscAI	CASTGNN!	5	1635; 2918; 4028; 4299; 4312
TseI	G!CWGC	18	809; 953; 1251; 1361; 1370; 1565; 2084; 2749; 2850; 2892; 2933; 3026; 3413; 3866; 4092; 4298; 4301; 4366
TsoI	TARCCANNNNNNNNNN!	2	1761; 2108
TsoI	!NNNNNNNNNTGGYTA	3	778; 1566; 3318
Tsp45I	!GTSAC	4	891; 2078; 2909; 3215
Tsp509I	!AATT	12	18; 1311; 1393; 1539; 1603; 1681; 1707; 1718; 2365; 2437; 2529; 3947
TspDTI	ATGAANNNNNNNNNN!	4	661; 1547; 2848; 3552
TspDTI	!NNNNNNNNNTTCAT	6	26; 789; 810; 3266; 3722; 3929
TspEI	!AATT	12	18; 1311; 1393; 1539; 1603; 1681; 1707; 1718; 2365; 2437; 2529; 3947
TspGWI	ACGGANNNNNNNNNN!	1	3664
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	1420
TspRI	CASTGNN!	5	1635; 2918; 4028; 4299; 4312
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2907
Tth111II	CAARCAANNNNNNNNNN!	1	4116
Tth111II	!NNNNNNNNNTGYTTG	3	3224; 4084; 4123
UnbI	!GGNCC	14	82; 275; 759; 1002; 1094; 1115; 1353; 1417; 1895; 3304; 3749; 3795; 3853; 3886

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Van9II	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	2	690; 4393
VpaK11AI	!GGWCC	2	3304; 3749
VpaK11BI	G!GWCC	2	3305; 3750
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	1393; 1603; 1707; 1718
XbaI	T!CTAGA	1	1436
XceI	RCATG!Y	5	642; 2359; 2431; 3194; 4711
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	12	585; 1150; 1324; 1424; 1433; 2960; 3206; 3598; 3957; 3969; 4055; 4066
XmaI	C!CCGGG	1	1420
XmaJI	C!CTAGG	2	2611; 3626
XmiI	GT!MKAC	2	1190; 1404
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1289; 1437; 1638; 2056; 2612; 3627; 3961; 4214
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2361; 2433; 4764