

pmKate2-ER vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1581; 1786
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1869; 2825; 4614
AatI	AGG!CCT	2	1089; 2619
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	2	1240; 1413
AccII	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2900
Acc36I	ACCTGCNNNN!	2	3066; 3516
Acc36I	!NNNNNNNNGCAGGT	1	2685
Acc65I	G!GTACC	1	1418
AccB1I	G!GYRCC	7	465; 714; 774; 1418; 1951; 2797; 2832
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2222; 3411
AccBSI	GAG!CGG	2	2058; 3465
AceIII	CAGCTCNNNNNNN!	1	1754
AceIII	!NNNNNNNNNNGAGCTG	3	552; 660; 1374
AciI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 973; 1111; 1213; 1422; 2113; 2116; 2130; 2220; 2468; 2480; 2489; 2501; 2511; 2522; 2568; 2707; 2770; 3272; 3317; 3383; 3409; 3534; 3537; 3685; 3817; 4124; 4268; 4764
AciI	G!CGG	28	370; 403; 528; 798; 808; 1120; 1162; 1424; 2058; 2085; 2173; 2283; 2864; 2928; 3029; 3032; 3312; 3367; 3465; 3603; 3750; 3890; 4133; 4378; 4499; 4518; 4645; 4673
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	9	1441; 1450; 2666; 2977; 3223; 3615; 3974; 4072; 4158
AclWI	!NNNNNGATCC	7	580; 1195; 1428; 3042; 3586; 3973; 4070
AcoI	Y!GGCCR	6	637; 1318; 2704; 2878; 3269; 3296
AcsI	R!AATY	4	1402; 1612; 1716; 1727
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	3	1170; 2944; 3376
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4174
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
AdeI	CACNNN!GTG	2	1310; 1914
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 705; 855; 1107; 1420; 3104
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	21	49; 635; 771; 884; 1050; 1116; 1810; 2136; 2528; 2779; 3323; 3604; 3636; 3768; 3803; 3853; 3885; 4238; 4517; 4683; 4701
AflII	C!TTAAG	0	
AflIII	A!CRYGT	2	1684; 4716
AgeI	A!CCGGT	1	650
AgsI	TTS!AA	7	737; 1187; 2209; 2253; 2263; 2676; 4252
AhdI	GACNNN!NNGTC	0	
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	17	88; 281; 634; 835; 883; 979; 994; 1123; 2332; 2387; 2404; 3183; 3762; 3865; 4555; 4568; 4689
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	2	663; 1357
AlfI	GCANNNNNTGCGNNNNNNNNNN!	2	2372; 2444
AlfI	!NNNNNNNNNGCANNNNNTGC	2	2338; 2410
AloI	GAACNNNNNTCCNNNNNNNNNN!	2	1061; 1880
AloI	!NNNNNNNGGANNNNNGTTC	0	
AloI	GGANNNNNGTTCNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNTCC	2	1029; 1848
AluI	AG!CT	18	566; 674; 701; 847; 1154; 1388; 1397; 1577; 1744; 2001; 2296; 2584; 2904; 3362; 4159; 4416; 4462; 4552
AluBI	AG!CT	18	566; 674; 701; 847; 1154; 1388; 1397; 1577; 1744; 2001; 2296; 2584; 2904; 3362; 4159; 4416; 4462; 4552
AlwI	GGATCNNNN!	9	1441; 1450; 2666; 2977; 3223; 3615; 3974; 4072; 4158
AlwI	!NNNNNGATCC	7	580; 1195; 1428; 3042; 3586; 3973; 4070
Alw21I	GWGCW!C	4	744; 2911; 3101; 4406
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	6	1092; 1281; 2222; 2640; 3659; 3787
Alw44I	G!TGCAC	2	740; 4402
AlwNI	CAGNN!CTG	3	1327; 3899; 4307
Ama87I	C!YCGRG	2	918; 1429
Aor13HI	T!CCGGA	0	
Aor51HI	AG!GCT	0	
ApaI	GGGCC!C	1	1430
ApaBI	GCANNNN!TGC	3	2366; 2438; 3900
ApaLI	G!TGCAC	2	740; 4402
ApeKI	G!CWGC	18	599; 617; 859; 1003; 1301; 1574; 2093; 2758; 2859; 2901; 2942; 3035; 3422; 3875; 4101; 4307; 4310; 4375
ApoI	R!AATTY	4	1402; 1612; 1716; 1727
ApyPI	ATCGACNNNNNNNNNNNNNNNNNN!	1	3313
ApyPI	!NNNNNNNNNNNNNNNNNGTCGAT	3	3107; 3760; 4598
AquII	GCCGNACNNNNNNNNNNNNNNNNNN!	2	671; 3197
AquII	!NNNNNNNNNNNNNNNNNGTNCGGC	1	835
AquIII	GAGGAGNNNNNNNNNNNNNNNNNN!	2	1388; 2626
AquIII	!NNNNNNNNNNNNNNNNNCTCCTC	1	608
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNCTCCYC	2	896; 3368
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNGTC	0	
ArsI	CRAANNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 1025; 1175; 1201; 1372; 1434; 1443; 1456; 2636; 2640; 2659; 2970; 3048; 3129; 3138; 3216; 3592; 3608; 3967; 3979; 4057; 4065; 4076; 4151
AsiGI	A!CCGGT	1	650
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2916
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	1418
AspA2I	C!CTAGG	2	2620; 3635
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	20	2064; 2072; 2098; 2120; 2129; 2142; 2173; 2792; 2800; 2864; 2901; 3167; 3427; 3603; 3689; 4092; 4201; 4375; 4475; 4542
AspS9I	G!GNCC	14	83; 276; 648; 810; 1053; 1145; 1166; 1427; 1905; 3314; 3759; 3805; 3863; 3896
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	1400; 3480
AsuC2I	CC!SGG	7	1234; 1430; 1431; 2802; 2962; 3575; 4339
AsuHPI	GGTGANNNNNNNN!	5	376; 677; 1046; 3869; 3985
AsuHPI	!NNNNNNNTCACC	3	935; 1915; 2976
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	918; 1429
AvaII	G!GWCC	3	648; 3314; 3759
AviII	TGC!GCA	1	2900
AvrII	C!CTAGG	2	2620; 3635
AxyI	CC!TNAGG	2	2278; 3910

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	8	717; 744; 777; 1354; 1430; 2744; 2837; 4406
BalI	TGG!CCA	2	1320; 2880
BamHI	G!GATCC	1	1433
BanI	G!GYRCC	7	465; 714; 774; 1418; 1951; 2797; 2832
BanII	GRGCY!C	4	1430; 1989; 3163; 3873
BanIII	AT!CGAT	1	2638
BarI	GAAGNNNNNTACNNNNNNNNNN!	1	1211
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	1	1179
BasI	CCANNNN!NTGG	0	
BauI	C!ACGAG	3	1305; 3516; 4543
BauI	C!TCGTG	2	1155; 3390
BbeI	GGCGC!C	1	2801
Bbr7I	GAAGACNNNNNN!	3	966; 1199; 1267
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	3	961; 1194; 1262
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	4	599; 2368; 2440; 3203
BbvI	GCAGCNNNNNNN!	8	871; 1313; 1586; 2871; 2913; 3434; 3887; 4387
BbvI	!NNNNNNNNNNNGCTGC	9	586; 604; 990; 2080; 2745; 2929; 3022; 4088; 4294
Bbv12I	GWGCW!C	4	744; 2911; 3101; 4406
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1052; 1928; 2492; 3018; 3520
BccI	!NNNNNGATGG	3	1896; 2676; 3104
BceAI	ACGGCNNNNNNNNNN!	6	872; 1016; 1067; 1133; 3224; 3711
BceAI	!NNNNNNNNNNNGCCGT	5	596; 624; 1939; 2757; 4216
Bcefl	ACGGCNNNNNNNNNN!	6	872; 1016; 1067; 1133; 3224; 3711
Bcefl	!NNNNNNNNNNNGCCGT	5	597; 625; 1940; 2758; 4217
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNN!	3	2227; 3017; 4518
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	1455
BcnI	CC!SGG	7	1234; 1430; 1431; 2802; 2962; 3575; 4339
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	2	1478; 4651
BdaI	!NNNNNNNNNTGANNNNNNTCA	2	1444; 4617
BfaI	C!TAG	9	592; 1339; 1446; 1647; 2065; 2621; 3636; 3970; 4223
BfiI	ACTGGGNNNNN!	2	1356; 2747
BfiI	!NNNCCCAGT	2	289; 2499
BfmI	C!TRYAG	4	1407; 2133; 4260; 4451
BfoI	RGCGC!Y	4	2065; 2073; 2801; 4476
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNN!	3	2227; 3017; 4518
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	3066; 3516
BfuAI	!NNNNNNNGCAGGT	1	2685
BfuCI	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
BglI	GCCNNNN!NGGC	7	90; 212; 283; 631; 1129; 1143; 2573
BglII	A!GATCT	1	1371
BisI	GC!NGC	34	600; 618; 809; 860; 1004; 1121; 1302; 1575; 2094; 2116; 2130; 2568; 2707; 2759; 2770; 2860; 2865; 2902; 2943; 3030; 3036; 3272; 3368; 3409; 3423; 3537; 3876; 3891; 4102; 4308; 4311; 4376; 4519; 4674

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BlnI	C!CTAGG	2	2620; 3635
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	34	601; 619; 810; 861; 1005; 1122; 1303; 1576; 2095; 2117; 2131; 2569; 2708; 2760; 2771; 2861; 2866; 2903; 2944; 3031; 3037; 3273; 3369; 3410; 3424; 3538; 3877; 3892; 4103; 4309; 4312; 4377; 4520; 4675
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	648; 3314; 3759
Bme1390I	CC!NGG	24	90; 283; 636; 837; 885; 981; 996; 1125; 1234; 1430; 1431; 2334; 2389; 2406; 2802; 2962; 3185; 3575; 3764; 3867; 4339; 4557; 4570; 4691
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	918; 1429
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	84; 277; 649; 811; 1054; 1146; 1167; 1428; 1906; 3315; 3760; 3806; 3864; 3897
BmiI	GGN!NCC	20	467; 716; 776; 1167; 1420; 1428; 1435; 1953; 1974; 1986; 2177; 2338; 2410; 2799; 2834; 3682; 3761; 3806; 4649; 4688
BmrI	ACTGGGNNNNN!	2	1356; 2747
BmrI	!NNNNCCCAGT	2	289; 2499
BmrFI	CC!NGG	24	90; 283; 636; 837; 885; 981; 996; 1125; 1234; 1430; 1431; 2334; 2389; 2406; 2802; 2962; 3185; 3575; 3764; 3867; 4339; 4557; 4570; 4691
BmsI	GCATCNNNNN!	7	898; 1614; 2377; 2449; 3097; 3161; 3436
BmsI	!NNNNNNNNNGATGC	7	357; 1051; 1219; 2756; 3011; 3227; 4619
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1356; 2747
BmuI	!NNNNCCCAGT	2	289; 2499
BoxI	GACNN!NNGTC	1	1293
BpiI	GAAGACNN!	3	961; 1194; 1262
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2587; 3486
BpI	!NNNNNNNNGAGNNNNNCTC	2	2555; 3454
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3638
BpmI	!NNNNNNNNNNNNNNNCTCCAG	2	978; 3581
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	1400; 3480
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	3	961; 1194; 1262
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4092; 4631
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	3	1209; 3174; 4333
BpuMI	CC!SGG	7	1234; 1430; 1431; 2802; 2962; 3575; 4339
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	1092; 1281; 3787
Bsa29I	AT!CGAT	1	2638
BsaAI	YAC!GTR	3	340; 1914; 3102
BsaBI	GATNN!NNATC	2	1460; 2657
BsaHI	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
BsaJI	C!CNNGG	24	360; 629; 661; 748; 883; 884; 919; 979; 1422; 1429; 2332; 2404; 2527; 2562; 2571; 2620; 2961; 3230; 3635; 3762; 3763; 3865; 3866; 4556
BsaMI	GAATGCN!	1	1549
BsaMI	G!CATTC	1	1642
BsaWI	W!CCGGW	6	650; 1439; 2829; 3673; 4363; 4510
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1878
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1848
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	2	1799; 3706
Bsc4I	CCNNNNN!NNGG	21	49; 635; 771; 884; 1050; 1116; 1810; 2136; 2528; 2779; 3323; 3604; 3636; 3768; 3803; 3853; 3885; 4238; 4517; 4683; 4701

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BscAI	GCATCNNNN!	7	897; 1613; 2376; 2448; 3096; 3160; 3435
BscAI	!NNNNNNGATGC	7	360; 1054; 1222; 2759; 3014; 3230; 4622
BseI	ACTGGN!	5	1264; 1351; 2742; 2943; 4189
BseI	C!CAGT	5	295; 1827; 2505; 4301; 4314
Bse8I	GATNN!NNATC	2	1460; 2657
Bse21I	CC!TNAGG	2	2278; 3910
Bse118I	R!CCGGY	5	650; 2015; 3117; 3298; 3581
BseAI	T!CCGGA	0	
BseBI	CC!WGG	17	90; 283; 636; 837; 885; 981; 996; 1125; 2334; 2389; 2406; 3185; 3764; 3867; 4557; 4570; 4691
BseCI	AT!CGAT	1	2638
BseDI	C!CNNGG	24	360; 629; 661; 748; 883; 884; 919; 979; 1422; 1429; 2332; 2404; 2527; 2562; 2571; 2620; 2961; 3230; 3635; 3762; 3763; 3865; 3866; 4556
Bse3DI	GCAATGNN!	1	3031
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2658; 3115; 3140; 3594
BseGI	!CATCC	5	744; 832; 889; 1044; 2484
BseJI	GATNN!NNATC	2	1460; 2657
BseLI	CCNNNNN!NNGG	21	49; 635; 771; 884; 1050; 1116; 1810; 2136; 2528; 2779; 3323; 3604; 3636; 3768; 3803; 3853; 3885; 4238; 4517; 4683; 4701
BseMI	GCAATGNN!	1	3031
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3924
BseMII	!NNNNNNNNCTGAG	5	2269; 2571; 3452; 4024; 4433
BseNI	ACTGGN!	5	1264; 1351; 2742; 2943; 4189
BseNI	C!CAGT	5	295; 1827; 2505; 4301; 4314
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	2	1378; 2616
BseRI	!NNNNNNNNCTCCTC	1	618
BseSI	GKGC!C	8	717; 744; 777; 1354; 1430; 2744; 2837; 4406
BseXI	GCAGCNNNNNNNN!	8	871; 1313; 1586; 2871; 2913; 3434; 3887; 4387
BseXI	!NNNNNNNNNNNGCTGC	9	586; 604; 990; 2080; 2745; 2929; 3022; 4088; 4294
BseX3I	C!GGCCG	1	2704
BseYI	C!CCAGC	3	2341; 2413; 4412
BseYI	G!CTGGG	2	1081; 3302
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
Bsh1285I	CGRY!CG	4	655; 802; 2707; 4382
BshFI	GG!CC	31	84; 277; 625; 634; 639; 811; 1054; 1089; 1123; 1146; 1168; 1278; 1320; 1428; 1764; 1906; 2561; 2567; 2576; 2619; 2706; 2880; 3271; 3298; 3807; 3864; 3897; 4242; 4676; 4694; 4705
BshNI	G!GYRCC	7	465; 714; 774; 1418; 1951; 2797; 2832
BshTI	A!CCGGT	1	650
BshVI	AT!CGAT	1	2638
BsiEI	CGRY!CG	4	655; 802; 2707; 4382
BsiHKAI	GWGCW!C	4	744; 2911; 3101; 4406
BsiHKCI	C!YCGRG	2	918; 1429
BsiSI	C!CGG	21	646; 651; 1234; 1430; 1440; 2016; 2703; 2780; 2802; 2830; 2961; 3051; 3118; 3299; 3574; 3582; 3674; 4148; 4338; 4364; 4511
BsiWI	C!GTACG	0	
BslI	CCNNNNN!NNGG	21	49; 635; 771; 884; 1050; 1116; 1810; 2136; 2528; 2779; 3323; 3604; 3636; 3768; 3803; 3853; 3885; 4238; 4517; 4683; 4701
BslFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2949; 3481; 3590
BslFI	!NNNNNNNNNNNNNGTCCC	4	2314; 2386; 2450; 3745
BsmI	GAATGCN!	1	1549
BsmI	G!CATTC	1	1642
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	6	1092; 1281; 2222; 2640; 3659; 3787
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2949; 3481; 3590
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2314; 2386; 2450; 3745

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BsnI	GG!CC	31	84; 277; 625; 634; 639; 811; 1054; 1089; 1123; 1146; 1168; 1278; 1320; 1428; 1764; 1906; 2561; 2567; 2576; 2619; 2706; 2880; 3271; 3298; 3807; 3864; 3897; 4242; 4676; 4694; 4705
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	3	1092; 1281; 3787
BsoBI	C!YCGRG	2	918; 1429
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 661; 2527; 3230
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3601
Bsp24I	!NNNNNNCCANNNNNGTC	2	4022; 4200
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4054; 4232
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3569
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	1400; 3480
Bsp120I	G!GGCCC	1	1426
Bsp143I	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
Bsp1286I	GDGCH!C	13	717; 744; 777; 1354; 1430; 1989; 2744; 2837; 2911; 3101; 3163; 3873; 4406
Bsp1407I	T!GTACA	1	703
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 973; 1111; 1213; 1422; 2113; 2116; 2130; 2220; 2468; 2480; 2489; 2501; 2511; 2522; 2568; 2707; 2770; 3272; 3317; 3383; 3409; 3534; 3537; 3685; 3817; 4124; 4268; 4764
BspACI	G!CGG	28	370; 403; 528; 798; 808; 1120; 1162; 1424; 2058; 2085; 2173; 2283; 2864; 2928; 3029; 3032; 3312; 3367; 3465; 3603; 3750; 3890; 4133; 4378; 4499; 4518; 4645; 4673
BspCNI	CTCAGNNNNNNNN!	1	3923
BspCNI	!NNNNNNNCTGAG	5	2270; 2572; 3453; 4025; 4434
BspDI	AT!CGAT	1	2638
BspD6I	GACTCNNNN!	4	418; 1871; 3477; 4354
BspD6I	!NNNNNGAGTC	3	933; 1834; 2266
BspEI	T!CCGGA	0	
BspFNI	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
BspHI	T!CATGA	2	2224; 3996
BspLI	GGN!NCC	20	467; 716; 776; 1167; 1420; 1428; 1435; 1953; 1974; 1986; 2177; 2338; 2410; 2799; 2834; 3682; 3761; 3806; 4649; 4688
BspMI	ACCTGCNNNN!	2	3066; 3516
BspMI	!NNNNNNNGCAGGT	1	2685
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	1441; 1450; 2666; 2977; 3223; 3615; 3974; 4072; 4158
BspPI	!NNNNNGATCC	7	580; 1195; 1428; 3042; 3586; 3973; 4070
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3142; 3352
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	2	1400; 3480
BspT107I	G!GYRCC	7	465; 714; 774; 1418; 1951; 2797; 2832
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	1092; 1281; 3787
BsrI	ACTGGN!	5	1264; 1351; 2742; 2943; 4189
BsrI	C!CAGT	5	295; 1827; 2505; 4301; 4314
BsrBI	CCG!CTC	2	2222; 3411
BsrBI	GAG!CGG	2	2058; 3465
BsrDI	GCAATGNN!	1	3031
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	650; 2015; 3117; 3298; 3581
BsrGI	T!GTACA	1	703
BsrSI	ACTGGN!	5	1264; 1351; 2742; 2943; 4189
BsrSI	C!CAGT	5	295; 1827; 2505; 4301; 4314
BssAI	R!CCGGY	5	650; 2015; 3117; 3298; 3581
BssECI	C!CNNGG	24	360; 629; 661; 748; 883; 884; 919; 979; 1422; 1429; 2332; 2404; 2527; 2562; 2571; 2620; 2961; 3230; 3635; 3762; 3763; 3865; 3866; 4556

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssHII	G!CGCGC	0	
BssKI	!CCNGG	24	88; 281; 634; 835; 883; 979; 994; 1123; 1232; 1428; 1429; 2332; 2387; 2404; 2800; 2960; 3183; 3573; 3762; 3865; 4337; 4555; 4568; 4689
BssMI	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
BssNI	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1305; 3516; 4543
BssSI	C!TCGTG	2	1155; 3390
BssTII	C!CWGGG	6	360; 661; 2527; 2620; 3230; 3635
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2265; 3142; 3352
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	3	2365; 2437; 3899
BstAUI	T!GTACA	1	703
BstBI	TT!CGAA	2	1400; 3480
Bst2BI	C!ACGAG	3	1305; 3516; 4543
Bst2BI	C!TCGTG	2	1155; 3390
BstBAI	YAC!GTR	3	340; 1914; 3102
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 719; 1418; 1889; 3178; 3294; 3402; 3725; 4216; 4686; 4757
BstC8I	GCN!NGC	33	86; 279; 593; 597; 672; 762; 966; 1426; 2017; 2060; 2074; 2347; 2366; 2419; 2438; 2692; 2878; 3097; 3163; 3169; 3197; 3201; 3242; 3246; 3300; 3583; 3770; 3817; 3873; 3895; 4106; 4666; 4703
BstDEI	C!TNAG	7	1216; 2278; 2580; 3461; 3910; 4033; 4442
BstDSI	C!CRYGG	5	360; 661; 1422; 2527; 3230
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2658; 3115; 3140; 3594
BstF5I	!CATCC	5	744; 832; 889; 1044; 2484
BstFNI	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
BstH2I	RGCGC!Y	4	2065; 2073; 2801; 4476
BstHHI	GCG!C	20	2064; 2072; 2098; 2120; 2129; 2142; 2173; 2792; 2800; 2864; 2901; 3167; 3427; 3603; 3689; 4092; 4201; 4375; 4475; 4542
BstKTI	GAT!C	24	588; 1027; 1177; 1203; 1374; 1436; 1445; 1458; 2638; 2642; 2661; 2972; 3050; 3131; 3140; 3218; 3594; 3610; 3969; 3981; 4059; 4067; 4078; 4153
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	6	1092; 1281; 2222; 2640; 3659; 3787
BstMBI	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
BstMCI	CGRY!CG	4	655; 802; 2707; 4382
BstMWI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 608; 631; 698; 1129; 1143; 1394; 2025; 2055; 2082; 2124; 2365; 2437; 2488; 2567; 2789; 2873; 2896; 3035; 3158; 3241; 3508; 3695; 3899; 4098; 4670
BstNI	CC!WGG	17	90; 283; 636; 837; 885; 981; 996; 1125; 2334; 2389; 2406; 3185; 3764; 3867; 4557; 4570; 4691
BstNSI	RCATG!Y	6	599; 692; 2368; 2440; 3203; 4720
BstOI	CC!WGG	17	90; 283; 636; 837; 885; 981; 996; 1125; 2334; 2389; 2406; 3185; 3764; 3867; 4557; 4570; 4691
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1293
BstSCI	!CCNGG	24	88; 281; 634; 835; 883; 979; 994; 1123; 1232; 1428; 1429; 2332; 2387; 2404; 2800; 2960; 3183; 3573; 3762; 3865; 4337; 4555; 4568; 4689
BstSFI	C!TRYAG	4	1407; 2133; 4260; 4451
BstSLI	GKGC!C	8	717; 744; 777; 1354; 1430; 2744; 2837; 4406
BstSNI	TAC!GTA	1	340

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstUI	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
Bst2UI	CC!WGG	17	90; 283; 636; 837; 885; 981; 1125; 2334; 2389; 2406; 3185; 3764; 3867; 4557; 4570; 4691
BstV1I	GCAGCNNNNNNNN!	8	871; 1313; 1586; 2871; 2913; 3434; 3887; 4387
BstV1I	!NNNNNNNNNNNGCTGC	9	586; 604; 990; 2080; 2745; 2929; 3022; 4088; 4294
BstV2I	GAAGACNN!	3	961; 1194; 1262
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	12	585; 1200; 1371; 1433; 1442; 2969; 3215; 3607; 3966; 3978; 4064; 4075
BstYI	R!GATCY	12	585; 1200; 1371; 1433; 1442; 2969; 3215; 3607; 3966; 3978; 4064; 4075
BstZI	C!GGCCG	1	2704
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2227; 3017; 4518
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2638
Bsu36I	CC!TNAGG	2	2278; 3910
BsuRI	GG!CC	31	84; 277; 625; 634; 639; 811; 1054; 1089; 1123; 1146; 1168; 1278; 1320; 1428; 1764; 1906; 2561; 2567; 2576; 2619; 2706; 2880; 3271; 3298; 3807; 3864; 3897; 4242; 4676; 4694; 4705
BsuTUI	AT!CGAT	1	2638
BtgI	C!CRYGG	5	360; 661; 1422; 2527; 3230
BtgZI	GCGATGNNNNNNNNNN!	2	1915; 3250
BtgZI	!NNNNNNNNNNNNNNNCATCGC	3	334; 3069; 3413
BthCI	GCNG!C	34	602; 620; 811; 862; 1006; 1123; 1304; 1577; 2096; 2118; 2132; 2570; 2709; 2761; 2772; 2862; 2867; 2904; 2945; 3032; 3038; 3274; 3370; 3411; 3425; 3539; 3878; 3893; 4104; 4310; 4313; 4378; 4521; 4676
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1637
BtsCI	GGATGNN!	4	2658; 3115; 3140; 3594
BtsCI	!CATCC	5	744; 832; 889; 1044; 2484
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3066; 3516
BveI	!NNNNNNNNNGCAGGT	1	2685
Cac8I	GCN!NGC	33	86; 279; 593; 597; 672; 762; 966; 1426; 2017; 2060; 2074; 2347; 2366; 2419; 2438; 2692; 2878; 3097; 3163; 3169; 3197; 3201; 3242; 3246; 3300; 3583; 3770; 3817; 3873; 3895; 4106; 4666; 4703
CaiI	CAGNNN!CTG	3	1327; 3899; 4307
CciI	T!CATGA	2	2224; 3996
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	5	352; 3087; 3092; 3290; 3431
CdiI	C!GATG	2	1901; 3236
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4670
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2459; 2501
CelII	GC!TNAGC	0	
CfoI	GCG!C	20	2064; 2072; 2098; 2120; 2129; 2142; 2173; 2792; 2800; 2864; 2901; 3167; 3427; 3603; 3689; 4092; 4201; 4375; 4475; 4542
CfrI	Y!GGCCR	6	637; 1318; 2704; 2878; 3269; 3296
Cfr9I	C!CCGGG	1	1429
Cfr10I	R!CCGGY	5	650; 2015; 3117; 3298; 3581
Cfr13I	G!GNCC	14	83; 276; 648; 810; 1053; 1145; 1166; 1427; 1905; 3314; 3759; 3805; 3863; 3896
Cfr42I	CCGC!GG	1	1425
ChaI	GATC!	24	589; 1028; 1178; 1204; 1375; 1437; 1446; 1459; 2639; 2643; 2662; 2973; 3051; 3132; 3141; 3219; 3595; 3611; 3970; 3982; 4060; 4068; 4079; 4154
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	756; 2615; 4055; 4155; 4233
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2282; 2377; 3569; 4119; 4674
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2316; 2411; 3603; 4153; 4708
CjeI	!NNNNNNNNCCANNNNNNGT	5	722; 2581; 4021; 4121; 4199
CjePI	CCANNNNNNNNTCNNNNNNNNNNNNNNNN!	2	4055; 4233

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	!NNNNNNNNGANNNNNNNTGG	4	257; 1126; 3569; 4168
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	4	290; 1159; 3602; 4201
CjePI	!NNNNNNNCCANNNNNNNTC	2	4022; 4200
Clal	AT!CGAT	1	2638
CpoI	CG!GWCCG	2	648; 3314
CseI	GACGCNNNNN!	3	526; 3508; 3587
CseI	!NNNNNNNNNNGCGTC	4	1226; 2131; 4026; 4604
CsiI	A!CCWGGT	1	2387
CspI	CG!GWCCG	2	648; 3314
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 704; 854; 1106; 1419; 3103
Csp45I	TT!CGAA	2	1400; 3480
CspAI	A!CCGGT	1	650
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	706; 1297; 2078; 3687
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	24	301; 361; 596; 662; 689; 695; 707; 785; 851; 931; 1142; 2225; 2365; 2437; 2528; 2669; 3014; 3200; 3231; 3257; 3613; 3997; 4717; 4768
CviJI	RG!CY	97	42; 84; 93; 277; 566; 625; 634; 639; 674; 701; 764; 811; 840; 847; 925; 991; 1003; 1054; 1081; 1089; 1123; 1137; 1146; 1154; 1168; 1278; 1314; 1320; 1388; 1397; 1428; 1467; 1577; 1744; 1764; 1906; 1987; 2001; 2015; 2296; 2337; 2409; 2532; 2561; 2567; 2576; 2584; 2607; 2619; 2625; 2706; 2723; 2731; 2758; 2783; 2867; 2876; 2880; 2904; 2942; 3018; 3035; 3054; 3117; 3161; 3171; 3188; 3271; 3298; 3302; 3339; 3362; 3378; 3558; 3585; 3646; 3768; 3807; 3864; 3871; 3878; 3897; 3908; 4159; 4188; 4231; 4242; 4307; 4386; 4411; 4416; 4462; 4552; 4650; 4676; 4694; 4705
CviKI-1	RG!CY	97	42; 84; 93; 277; 566; 625; 634; 639; 674; 701; 764; 811; 840; 847; 925; 991; 1003; 1054; 1081; 1089; 1123; 1137; 1146; 1154; 1168; 1278; 1314; 1320; 1388; 1397; 1428; 1467; 1577; 1744; 1764; 1906; 1987; 2001; 2015; 2296; 2337; 2409; 2532; 2561; 2567; 2576; 2584; 2607; 2619; 2625; 2706; 2723; 2731; 2758; 2783; 2867; 2876; 2880; 2904; 2942; 3018; 3035; 3054; 3117; 3161; 3171; 3188; 3271; 3298; 3302; 3339; 3362; 3378; 3558; 3585; 3646; 3768; 3807; 3864; 3871; 3878; 3897; 3908; 4159; 4188; 4231; 4242; 4307; 4386; 4411; 4416; 4462; 4552; 4650; 4676; 4694; 4705
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 704; 854; 1106; 1419; 3103
DdeI	C!TNAG	7	1216; 2278; 2580; 3461; 3910; 4033; 4442
DinI	GGC!GCC	1	2799
DpnI	GA!TC	24	587; 1026; 1176; 1202; 1373; 1435; 1444; 1457; 2637; 2641; 2660; 2971; 3049; 3130; 3139; 3217; 3593; 3609; 3968; 3980; 4058; 4066; 4077; 4152
DpnII	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
DraI	TTT!AAA	3	1500; 3942; 3961
DraII	RG!GNCCY	1	3896
DraIII	CACNN!GTG	2	1310; 1914
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4278
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1869; 2825; 4614
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1869; 2825; 4614
EaeI	Y!GGCCR	6	637; 1318; 2704; 2878; 3269; 3296
EagI	C!GGCCG	1	2704
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2265; 3142; 3352
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2265; 3142; 3352
EciI	GGCGGANNNNNNNNNN!	4	2298; 3327; 4514; 4660

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EciI	!NNNNNNNNNTCCGCC	4	496; 2469; 2490; 2511
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	1	2704
Eco24I	GRGCY!C	4	1430; 1989; 3163; 3873
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	3	1092; 1281; 3787
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	648; 3314; 3759
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	1	2704
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	3	1170; 2944; 3376
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4174
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	2	2278; 3910
Eco88I	C!YCGRG	2	918; 1429
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 661; 2527; 2620; 3230; 3635
Eco147I	AGG!CCT	2	1089; 2619
EcoHI	!CCSGG	7	1232; 1428; 1429; 2800; 2960; 3573; 4337
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	4	1170; 2944; 3376; 3638
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	978; 3581; 4174
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3896
EcoRI	G!AATTC	1	1402
EcoRII	!CCWGG	17	88; 281; 634; 835; 883; 979; 994; 1123; 2332; 2387; 2404; 3183; 3762; 3865; 4555; 4568; 4689
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 661; 2527; 2620; 3230; 3635
EcoT22I	ATGCA!T	3	2370; 2442; 4773
EcoT38I	GRGCY!C	4	1430; 1989; 3163; 3873
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2799
EheI	GGC!GCC	1	2799
ErhI	C!CWWGG	6	360; 661; 2527; 2620; 3230; 3635
EsaBC3I	TC!GA	16	803; 830; 1298; 1401; 1414; 1948; 2639; 2912; 3068; 3092; 3128; 3290; 3481; 3526; 3781; 4619
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	24	304; 364; 599; 665; 692; 698; 710; 788; 854; 934; 1145; 2228; 2368; 2440; 2531; 2672; 3017; 3203; 3234; 3260; 3616; 4000; 4720; 4771
FaiI	YA!TR	63	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 663; 690; 696; 708; 786; 852; 932; 950; 1143; 1196; 1246; 1460; 1470; 1536; 1581; 1786; 2214; 2226; 2357; 2366; 2429; 2438; 2462; 2529; 2553; 2670; 2734; 3015; 3040; 3201; 3232; 3258; 3330; 3546; 3614; 3692; 3744; 3905; 3922; 3924; 3926; 3998; 4276; 4465; 4581; 4654; 4718; 4769
FaiI	AAGNNNNNCTNNNNNNNNNNNN!	2	929; 3138
FaiI	!NNNNNNNNAAGNNNNNCTT	2	897; 3106
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2949; 3481; 3590
FaqI	!NNNNNNNNNNNNNGTCCC	4	2314; 2386; 2450; 3745
FatI	!CATG	24	300; 360; 595; 661; 688; 694; 706; 784; 850; 930; 1141; 2224; 2364; 2436; 2527; 2668; 3013; 3199; 3230; 3256; 3612; 3996; 4716; 4767
FauI	CCCGCNNNN!	10	93; 119; 286; 1118; 1220; 2120; 2475; 2496; 3692; 3824
FauI	!NNNNNGCGGG	7	1155; 1417; 2051; 2921; 3458; 3596; 3743
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	1455
FblI	GT!MKAC	2	1240; 1413
FmuI	GGNC!C	14	86; 279; 651; 813; 1056; 1148; 1169; 1430; 1908; 3317; 3762; 3808; 3866; 3899

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	34	600; 618; 809; 860; 1004; 1121; 1302; 1575; 2094; 2116; 2130; 2568; 2707; 2759; 2770; 2860; 2865; 2902; 2943; 3030; 3036; 3272; 3368; 3409; 3423; 3537; 3876; 3891; 4102; 4308; 4311; 4376; 4519; 4674
FokI	GGATGNNNNNNNNNN!	4	2665; 3122; 3147; 3601
FokI	!NNNNNNNNNNNNNNCATCC	5	731; 819; 876; 1031; 2471
FriOI	GRGCY!C	4	1430; 1989; 3163; 3873
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2900
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1339; 1446; 1647; 2065; 2621; 3636; 3970; 4223
FspEI	CCNNNNNNNNNNNN!	158	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 620; 639; 653; 671; 731; 761; 778; 792; 825; 839; 857; 881; 896; 926; 959; 986; 1001; 1020; 1056; 1103; 1122; 1137; 1151; 1182; 1205; 1225; 1246; 1292; 1334; 1350; 1435; 1450; 1481; 1520; 1534; 1675; 1770; 1794; 1817; 1840; 1858; 1880; 1901; 1920; 1939; 1968; 1989; 2003; 2029; 2117; 2143; 2192; 2233; 2251; 2290; 2306; 2344; 2401; 2416; 2473; 2493; 2507; 2524; 2538; 2575; 2590; 2633; 2716; 2783; 2814; 2834; 2849; 2894; 2908; 2974; 2988; 3007; 3023; 3064; 3084; 3131; 3181; 3197; 3217; 3242; 3262; 3285; 3312; 3330; 3356; 3396; 3422; 3446; 3502; 3516; 3544; 3587; 3608; 3643; 3687; 3775; 3799; 3821; 3841; 3857; 3878; 3892; 3911; 3995; 4015; 4043; 4058; 4092; 4134; 4161; 4176; 4221; 4245; 4259; 4281; 4307; 4327; 4351; 4377; 4425; 4444; 4463; 4489; 4524; 4569; 4599; 4613; 4664; 4678; 4703; 4719; 4740; 4769
FspEI	!NNNNNNNNNNNNNNNGG	129	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 607; 631; 666; 693; 735; 756; 780; 822; 841; 870; 906; 943; 966; 985; 1015; 1036; 1063; 1102; 1128; 1147; 1219; 1245; 1293; 1332; 1351; 1401; 1425; 1469; 1569; 1638; 1746; 1795; 1817; 1845; 1881; 1926; 1955; 1991; 2010; 2038; 2058; 2121; 2144; 2252; 2284; 2302; 2331; 2374; 2403; 2514; 2543; 2586; 2607; 2635; 2668; 2688; 2713; 2740; 2765; 2787; 2815; 2841; 2862; 2913; 2934; 2952; 3000; 3036; 3092; 3117; 3141; 3170; 3193; 3217; 3243; 3265; 3284; 3309; 3349; 3385; 3450; 3535; 3559; 3588; 3622; 3643; 3663; 3708; 3735; 3754; 3787; 3839; 3870; 3897; 3949; 4047; 4118; 4163; 4224; 4289; 4323; 4349; 4367; 4403; 4473; 4496; 4518; 4542; 4575; 4623; 4658; 4676; 4733
Fsp4HI	GC!NGC	34	600; 618; 809; 860; 1004; 1121; 1302; 1575; 2094; 2116; 2130; 2568; 2707; 2759; 2770; 2860; 2865; 2902; 2943; 3030; 3036; 3272; 3368; 3409; 3423; 3537; 3876; 3891; 4102; 4308; 4311; 4376; 4519; 4674
GdiII	C!GGCCR	1	2704
GdiII	Y!GGCCG	4	637; 2704; 3269; 3296
GlaI	GC!GC	20	2063; 2071; 2097; 2119; 2128; 2141; 2172; 2791; 2799; 2863; 2900; 3166; 3426; 3602; 3688; 4091; 4200; 4374; 4474; 4541
GluI	GC!NGC	34	600; 618; 809; 860; 1004; 1121; 1302; 1575; 2094; 2116; 2130; 2568; 2707; 2759; 2770; 2860; 2865; 2902; 2943; 3030; 3036; 3272; 3368; 3409; 3423; 3537; 3876; 3891; 4102; 4308; 4311; 4376; 4519; 4674
GsaI	CCCAG!C	3	2345; 2417; 4416
GsaI	GCTGG!G	2	1085; 3306
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3638
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	978; 3581
HaeI	WGG!CCW	7	1089; 1320; 2619; 2880; 4242; 4694; 4705
HaeII	RGCGC!Y	4	2065; 2073; 2801; 4476
HaeIII	GG!CC	31	84; 277; 625; 634; 639; 811; 1054; 1089; 1123; 1146; 1168; 1278; 1320; 1428; 1764; 1906; 2561; 2567; 2576; 2619; 2706; 2880; 3271; 3298; 3807; 3864; 3897; 4242; 4676; 4694; 4705
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1473; 2994
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1439; 2960
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1472; 2993
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1441; 2962
HapII	C!CGG	21	646; 651; 1234; 1430; 1440; 2016; 2703; 2780; 2802; 2830; 2961; 3051; 3118; 3299; 3574; 3582; 3674; 4148; 4338; 4364; 4511
HgaI	GACGCNNNNN!	3	526; 3508; 3587
HgaI	!NNNNNNNNNNNGCGTC	4	1226; 2131; 4026; 4604

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	20	2064; 2072; 2098; 2120; 2129; 2142; 2173; 2792; 2800; 2864; 2901; 3167; 3427; 3603; 3689; 4092; 4201; 4375; 4475; 4542
Hin1I	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
Hin1III	CATG!	24	304; 364; 599; 665; 692; 698; 710; 788; 854; 934; 1145; 2228; 2368; 2440; 2531; 2672; 3017; 3203; 3234; 3260; 3616; 4000; 4720; 4771
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1472; 2993
Hin4I	!NNNNNNNNGABNNNNNRTC	3	1440; 2961; 2991
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1472; 2993; 3023
Hin4I	!NNNNNNNNGAYNNNNNVTC	2	1440; 2961
Hin6I	G!CGC	20	2062; 2070; 2096; 2118; 2127; 2140; 2171; 2790; 2798; 2862; 2899; 3165; 3425; 3601; 3687; 4090; 4199; 4373; 4473; 4540
HinP1I	G!CGC	20	2062; 2070; 2096; 2118; 2127; 2140; 2171; 2790; 2798; 2862; 2899; 3165; 3425; 3601; 3687; 4090; 4199; 4373; 4473; 4540
HincII	GTY!RAC	2	1414; 1561
HindII	GTY!RAC	2	1414; 1561
HindIII	A!AGCTT	1	1395
HinfI	G!ANTC	14	410; 790; 940; 1267; 1841; 1863; 2273; 3283; 3417; 3469; 3527; 3564; 4346; 4742
HpaI	GTT!AAC	1	1561
HpaII	C!CGG	21	646; 651; 1234; 1430; 1440; 2016; 2703; 2780; 2802; 2830; 2961; 3051; 3118; 3299; 3574; 3582; 3674; 4148; 4338; 4364; 4511
HphI	GGTGANNNNNNN!	5	376; 677; 1046; 3869; 3985
HphI	!NNNNNNNTCACC	3	935; 1915; 2976
Hpy8I	GTN!NAC	14	201; 539; 577; 722; 742; 1037; 1241; 1250; 1414; 1561; 1845; 1862; 1917; 4404
Hpy99I	CGWCG!	10	645; 1299; 1418; 2888; 2916; 3210; 3225; 3502; 3887; 4620
Hpy166II	GTN!NAC	14	201; 539; 577; 722; 742; 1037; 1241; 1250; 1414; 1561; 1845; 1862; 1917; 4404
Hpy188I	TCN!GA	13	585; 749; 1029; 1972; 2581; 2765; 3109; 3462; 3563; 4042; 4176; 4529; 4607
Hpy188III	TC!NNGA	23	1022; 1226; 1375; 1446; 2225; 2277; 2590; 2643; 2816; 3132; 3141; 3224; 3280; 3324; 3414; 3447; 3516; 3997; 4071; 4154; 4252; 4350; 4484
HpyAV	CCTTCNNNNNN!	6	830; 878; 923; 3443; 3550; 4229
HpyAV	!NNNNNGAAGG	9	750; 1122; 2031; 2926; 3655; 3671; 3854; 4171; 4481
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 719; 1418; 1889; 3178; 3294; 3402; 3725; 4216; 4686; 4757
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1018; 1294; 1858; 1870; 1913; 2023; 2914; 3101; 3882; 4015
HpyCH4V	TG!CA	21	692; 742; 1064; 1180; 1409; 1547; 1574; 1642; 2359; 2368; 2431; 2440; 2555; 2631; 2690; 2849; 3024; 3038; 4108; 4404; 4771
HpyF3I	C!TNAG	7	1216; 2278; 2580; 3461; 3910; 4033; 4442
HpyF10VI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 608; 631; 698; 1129; 1143; 1394; 2025; 2055; 2082; 2124; 2365; 2437; 2488; 2567; 2789; 2873; 2896; 3035; 3158; 3241; 3508; 3695; 3899; 4098; 4670
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 1237; 2798; 3500; 3579
Hsp92II	CATG!	24	304; 364; 599; 665; 692; 698; 710; 788; 854; 934; 1145; 2228; 2368; 2440; 2531; 2672; 3017; 3203; 3234; 3260; 3616; 4000; 4720; 4771
HspAI	G!CGC	20	2062; 2070; 2096; 2118; 2127; 2140; 2171; 2790; 2798; 2862; 2899; 3165; 3425; 3601; 3687; 4090; 4199; 4373; 4473; 4540
KasI	G!GCGCC	1	2797
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	1422
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	1425
Ksp22I	T!GATCA	1	1455
KspAI	GTT!AAC	1	1561
Kzo9I	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3142; 3352
LpnI	RGC!GCV	4	2063; 2071; 2799; 4474

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	CCDGNNNNNNNNNN!	61	102; 295; 648; 664; 792; 849; 897; 993; 1008; 1069; 1116; 1137; 1161; 1185; 1247; 1334; 1443; 1535; 1840; 2029; 2252; 2290; 2306; 2346; 2401; 2418; 2518; 2603; 2716; 2793; 2815; 2838; 2974; 2988; 3007; 3064; 3131; 3181; 3197; 3254; 3312; 3521; 3587; 3611; 3687; 3776; 3879; 3912; 4143; 4161; 4307; 4327; 4351; 4377; 4426; 4524; 4569; 4599; 4678; 4703; 4740
LpnPI	!NNNNNNNNNNNNNCHGG	55	75; 268; 552; 621; 822; 870; 966; 1067; 1110; 1219; 1245; 1332; 1360; 1415; 1881; 2001; 2058; 2121; 2319; 2331; 2391; 2403; 2635; 2680; 2723; 2765; 2787; 2815; 2862; 2924; 2946; 3036; 3103; 3126; 3170; 3265; 3284; 3309; 3458; 3559; 3602; 3659; 3749; 3852; 3879; 3897; 4133; 4170; 4323; 4349; 4489; 4507; 4542; 4623; 4676
Lsp1109I	GCAGCNNNNNNNN!	8	871; 1313; 1586; 2871; 2913; 3434; 3887; 4387
Lsp1109I	!NNNNNNNNNNNNNGCTGC	9	586; 604; 990; 2080; 2745; 2929; 3022; 4088; 4294
LweI	GCATCNNNNN!	7	898; 1614; 2377; 2449; 3097; 3161; 3436
LweI	!NNNNNNNNNNGATGC	7	357; 1051; 1219; 2756; 3011; 3227; 4619
MabI	A!CCWGGT	1	2387
MaeI	C!TAG	9	592; 1339; 1446; 1647; 2065; 2621; 3636; 3970; 4223
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1018; 1294; 1858; 1870; 1913; 2023; 2914; 3101; 3882; 4015
MaeIII	!GTNAC	13	61; 148; 497; 941; 1586; 2087; 2099; 2918; 3224; 3914; 4180; 4296; 4359
MalI	GA!TC	24	587; 1026; 1176; 1202; 1373; 1435; 1444; 1457; 2637; 2641; 2660; 2971; 3049; 3130; 3139; 3217; 3593; 3609; 3968; 3980; 4058; 4066; 4077; 4152
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2222; 3411
MbiI	GAG!CGG	2	2058; 3465
MboI	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
MboII	GAAGANNNNNNNN!	9	966; 1079; 1199; 1267; 2054; 2282; 3159; 3369; 3988
MboII	!NNNNNNNTCTTC	4	3449; 3616; 3816; 4059
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1548
MflI	R!GATCY	12	585; 1200; 1371; 1433; 1442; 2969; 3215; 3607; 3966; 3978; 4064; 4075
MhII	GDGCH!C	13	717; 744; 777; 1354; 1430; 1989; 2744; 2837; 2911; 3101; 3163; 3873; 4406
MisI	TGG!CCA	2	1320; 2880
MluI	A!CGCGT	1	1684
MluNI	TGG!CCA	2	1320; 2880
MlyI	GAGTCNNNNN!	3	949; 1850; 2282
MlyI	!NNNNNGACTC	4	404; 1857; 3463; 4340
Mly113I	GG!CGCC	1	2798
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	2	1072; 1891
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4323; 4507
MnII	CCTCNNNNNNN!	14	636; 823; 1002; 1017; 1100; 1233; 1344; 1517; 2581; 3399; 3605; 3919; 4289; 4613
MnII	!NNNNNNGAGG	23	541; 704; 743; 764; 797; 914; 1023; 1079; 1268; 1301; 1350; 1477; 1942; 2273; 2551; 2594; 2609; 2649; 2713; 2849; 3206; 3636; 4539
Mph1103I	ATGCA!T	3	2370; 2442; 4773
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	2015; 3298; 3581
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1320; 2880
MseI	T!TAA	17	7; 679; 904; 1499; 1560; 1681; 1702; 1713; 1725; 1736; 1753; 1851; 2122; 3941; 3955; 3960; 4012
MslI	CAYNN!NNRTG	5	365; 663; 693; 1357; 3235
MspI	C!CGG	21	646; 651; 1234; 1430; 1440; 2016; 2703; 2780; 2802; 2830; 2961; 3051; 3118; 3299; 3574; 3582; 3674; 4148; 4338; 4364; 4511
Msp20I	TGG!CCA	2	1320; 2880
MspA1I	CMG!CKG	6	1113; 1424; 2296; 2904; 4133; 4378

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspCI	C!TTAAG	0	
MspJI	CNNRRNNNNNNNNNN!	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; 620; 633; 647; 663; 683; 701; 719; 749; 767; 782; 797; 815; 848; 863; 891; 906; 930; 943; 959; 977; 991; 1007; 1020; 1034; 1055; 1068; 1089; 1108; 1122; 1136; 1150; 1167; 1184; 1205; 1224; 1238; 1265; 1283; 1303; 1317; 1333; 1350; 1365; 1387; 1413; 1435; 1452; 1466; 1481; 1505; 1522; 1535; 1576; 1590; 1603; 1621; 1659; 1674; 1692; 1733; 1757; 1777; 1795; 1816; 1839; 1871; 1886; 1908; 1926; 1939; 1960; 1977; 1990; 2003; 2019; 2032; 2062; 2077; 2102; 2120; 2133; 2148; 2172; 2186; 2210; 2235; 2251; 2289; 2305; 2344; 2358; 2372; 2400; 2416; 2430; 2444; 2473; 2486; 2507; 2516; 2538; 2568; 2584; 2602; 2632; 2655; 2679; 2703; 2722; 2750; 2776; 2792; 2805; 2828; 2842; 2862; 2875; 2889; 2908; 2922; 2935; 2951; 2966; 2979; 2995; 3010; 3026; 3051; 3070; 3086; 3099; 3112; 3130; 3144; 3158; 3174; 3196; 3212; 3231; 3253; 3269; 3292; 3311; 3325; 3341; 3355; 3375; 3391; 3404; 3426; 3459; 3473; 3493; 3506; 3520; 3574; 3587; 3610; 3623; 3642; 3659; 3686; 3722; 3755; 3774; 3799; 3820; 3847; 3860; 3877; 3891; 3906; 3922; 3982; 4007; 4023; 4045; 4058; 4072; 4103; 4117; 4142; 4160; 4175; 4188; 4207; 4220; 4235; 4264; 4283; 4301; 4326; 4341; 4360; 4376; 4395; 4413; 4429; 4443; 4462; 4489; 4512; 4534; 4553; 4568; 4581; 4598; 4618; 4645; 4658; 4677; 4702; 4725; 4739; 4752; 4769
MspJI	!NNNNNNNNNNNNNYNG	200	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 592; 616; 637; 657; 675; 693; 723; 747; 765; 789; 808; 830; 870; 891; 917; 937; 966; 1008; 1042; 1063; 1083; 1110; 1128; 1145; 1163; 1191; 1212; 1231; 1257; 1279; 1302; 1325; 1360; 1385; 1409; 1426; 1450; 1479; 1508; 1550; 1633; 1671; 1695; 1718; 1747; 1791; 1813; 1845; 1881; 1898; 1919; 1956; 1976; 1993; 2010; 2045; 2063; 2081; 2098; 2122; 2144; 2171; 2199; 2225; 2263; 2284; 2301; 2319; 2342; 2363; 2391; 2414; 2435; 2453; 2474; 2491; 2514; 2538; 2558; 2576; 2598; 2629; 2651; 2677; 2696; 2713; 2741; 2760; 2779; 2797; 2815; 2836; 2858; 2882; 2915; 2935; 2953; 2974; 3000; 3027; 3044; 3061; 3078; 3104; 3126; 3148; 3166; 3186; 3205; 3227; 3265; 3285; 3309; 3329; 3349; 3376; 3400; 3433; 3452; 3480; 3502; 3531; 3559; 3584; 3603; 3622; 3643; 3660; 3677; 3708; 3735; 3755; 3778; 3798; 3835; 3852; 3871; 3897; 3917; 3956; 3983; 4002; 4020; 4057; 4075; 4116; 4134; 4160; 4177; 4209; 4238; 4266; 4287; 4310; 4329; 4350; 4368; 4385; 4403; 4429; 4450; 4470; 4490; 4508; 4529; 4555; 4572; 4591; 4610; 4639; 4658; 4676; 4695; 4713; 4731; 4754
MspR9I	CC!NGG	24	90; 283; 636; 837; 885; 981; 996; 1125; 1234; 1430; 1431; 2334; 2389; 2406; 2802; 2962; 3185; 3575; 3764; 3867; 4339; 4557; 4570; 4691
MssI	GTTT!AAC	0	
MunI	C!AATTG	1	1548
MvaI	CC!WGG	17	90; 283; 636; 837; 885; 981; 996; 1125; 2334; 2389; 2406; 3185; 3764; 3867; 4557; 4570; 4691
Mva1269I	GAATGCN!	1	1549
Mva1269I	G!CATTC	1	1642
MvnI	CG!CG	16	60; 1424; 1686; 1722; 2098; 2118; 2142; 2173; 2864; 3165; 3603; 3687; 3750; 3819; 4092; 4673
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 608; 631; 698; 1129; 1143; 1394; 2025; 2055; 2082; 2124; 2365; 2437; 2488; 2567; 2789; 2873; 2896; 3035; 3158; 3241; 3508; 3695; 3899; 4098; 4670
NaeI	GCC!GGC	3	2017; 3300; 3583
NarI	GG!CGCC	1	2798
NciI	CC!SGG	7	1234; 1430; 1431; 2802; 2962; 3575; 4339
NcoI	C!CATGG	4	360; 661; 2527; 3230
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	781
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	817

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	2015; 3298; 3581
NheI	G!CTAGC	1	591
NlaIII	CATG!	24	304; 364; 599; 665; 692; 698; 710; 788; 854; 934; 1145; 2228; 2368; 2440; 2531; 2672; 3017; 3203; 3234; 3260; 3616; 4000; 4720; 4771
NlaIV	GGN!NCC	20	467; 716; 776; 1167; 1420; 1428; 1435; 1953; 1974; 1986; 2177; 2338; 2410; 2799; 2834; 3682; 3761; 3806; 4649; 4688
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1630; 1945; 3537
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1041; 4609
Nli3877I	CYCGR!G	2	922; 1433
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2587; 3023
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	3	601; 1057; 2552
NmeDI	RCCGGYNNNNNNN!	5	662; 2027; 3129; 3310; 3593
NmeDI	!NNNNNNNNNNNNRCCGGY	5	637; 2002; 3104; 3285; 3568
NmuCI	!GTSAC	4	941; 2087; 2918; 3224
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2900
NsiI	ATGCA!T	3	2370; 2442; 4773
NspI	RCATG!Y	6	599; 692; 2368; 2440; 3203; 4720
NspV	TT!CGAA	2	1400; 3480
OliI	CACNN!NNGTG	2	663; 1357
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 706; 856; 1108; 1421; 3105
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	4	599; 2368; 2440; 3203
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2224; 3996
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	884; 3763; 3866
PauI	G!CGCGC	0	
PceI	AGG!CCT	2	1089; 2619
PciI	A!CATGT	1	4716
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3142; 3352
PcsI	WCGNNNN!NNNCGW	8	637; 1303; 3092; 3169; 3412; 3486; 3879; 4397
PctI	GAATGCN!	1	1549
PctI	G!CATTC	1	1642
PdiI	GCC!GGC	3	2017; 3300; 3583
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	790; 1267; 3283; 3417; 3527; 3564; 4742
Pfi23II	C!GTACG	0	
PfifI	GACN!NNGTC	1	2916
PfIMI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	2	994; 3573
PhoI	GG!CC	31	84; 277; 625; 634; 639; 811; 1054; 1089; 1123; 1146; 1168; 1278; 1320; 1428; 1764; 1906; 2561; 2567; 2576; 2619; 2706; 2880; 3271; 3298; 3807; 3864; 3897; 4242; 4676; 4694; 4705
PinAI	A!CCGGT	1	650
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3179
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2744; 2999
PleI	GAGTCNNNN!	3	948; 1849; 2281
PleI	!NNNNNGACTC	4	404; 1857; 3463; 4340
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1880
PpiI	!NNNNNNNNNGAGNNNNNGTTC	1	4010
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4042
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1848
PpsI	GAGTCNNNN!	3	948; 1849; 2281
PpsI	!NNNNNGACTC	4	404; 1857; 3463; 4340
Ppu10I	A!TGCAT	3	2366; 2438; 4769
Ppu21I	YAC!GTR	3	340; 1914; 3102

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4716
PshAI	GACNN!NNGTC	1	1293
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1581; 1786
Psp03I	GGWC!C	3	651; 3317; 3762
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	17	88; 281; 634; 835; 883; 979; 994; 1123; 2332; 2387; 2404; 3183; 3762; 3865; 4555; 4568; 4689
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	17	88; 281; 634; 835; 883; 979; 994; 1123; 2332; 2387; 2404; 3183; 3762; 3865; 4555; 4568; 4689
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	20	467; 716; 776; 1167; 1420; 1428; 1435; 1953; 1974; 1986; 2177; 2338; 2410; 2799; 2834; 3682; 3761; 3806; 4649; 4688
PspOMI	G!GGCCC	1	1426
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	3	125; 2528; 3527
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2930
PspPI	G!GNCC	14	83; 276; 648; 810; 1053; 1145; 1166; 1427; 1905; 3314; 3759; 3805; 3863; 3896
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2351; 2423; 3929
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	3	1333; 2264; 3459
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3899
PstI	CTGCA!G	1	1411
PstNI	CAGNN!CTG	3	1327; 3899; 4307
PsuI	R!GATCY	12	585; 1200; 1371; 1433; 1442; 2969; 3215; 3607; 3966; 3978; 4064; 4075
PsyI	GACN!NNGTC	1	2916
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2296; 2904
RcaI	T!CATGA	2	2224; 3996
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	1	3313
RceI	!NNNNNNNNNNNNNNNNNGTCCGATG	0	
RgaI	GCGAT!CGC	0	
RgiI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1527
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	11	219; 244; 299; 332; 383; 540; 705; 855; 1107; 1420; 3104
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 704; 854; 1106; 1419; 3103
RseI	CAYNN!NNRTG	5	365; 663; 693; 1357; 3235
RsrII	CG!GWCCG	2	648; 3314
Rsr2I	CG!GWCCG	2	648; 3314
SacI	GAGCT!C	0	
SacII	CCGC!GG	1	1425
SalI	G!TCGAC	1	1412
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3142; 3352
SaqAI	T!TAA	17	7; 679; 904; 1499; 1560; 1681; 1702; 1713; 1725; 1736; 1753; 1851; 2122; 3941; 3955; 3960; 4012

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	34	600; 618; 809; 860; 1004; 1121; 1302; 1575; 2094; 2116; 2130; 2568; 2707; 2759; 2770; 2860; 2865; 2902; 2943; 3030; 3036; 3272; 3368; 3409; 3423; 3537; 3876; 3891; 4102; 4308; 4311; 4376; 4519; 4674
Sau96I	G!GNCC	14	83; 276; 648; 810; 1053; 1145; 1166; 1427; 1905; 3314; 3759; 3805; 3863; 3896
Sau3AI	!GATC	24	585; 1024; 1174; 1200; 1371; 1433; 1442; 1455; 2635; 2639; 2658; 2969; 3047; 3128; 3137; 3215; 3591; 3607; 3966; 3978; 4056; 4064; 4075; 4150
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	3	949; 1850; 2282
SchI	!NNNNNGACTC	4	404; 1857; 3463; 4340
SciI	CTC!GAG	0	
ScrFI	CC!NGG	24	90; 283; 636; 837; 885; 981; 996; 1125; 1234; 1430; 1431; 2334; 2389; 2406; 2802; 2962; 3185; 3575; 3764; 3867; 4339; 4557; 4570; 4691
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	6	1091; 1279; 2376; 2448; 2617; 4559
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2953; 3438
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	13	717; 744; 777; 1354; 1430; 1989; 2744; 2837; 2911; 3101; 3163; 3873; 4406
SelI	!CGCG	16	58; 1422; 1684; 1720; 2096; 2116; 2140; 2171; 2862; 3163; 3601; 3685; 3748; 3817; 4090; 4671
SetI	ASST!	65	125; 137; 178; 261; 308; 342; 447; 552; 568; 676; 703; 849; 870; 1021; 1156; 1174; 1225; 1293; 1297; 1312; 1336; 1361; 1370; 1390; 1399; 1488; 1509; 1518; 1530; 1579; 1746; 1861; 1873; 1916; 1953; 2003; 2026; 2150; 2298; 2393; 2586; 2699; 2827; 2906; 2917; 2989; 3060; 3104; 3364; 3510; 3554; 3885; 3916; 3975; 4018; 4161; 4182; 4281; 4418; 4433; 4452; 4464; 4508; 4554; 4605
SexAI	A!CCWGGT	1	2387
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	898; 1614; 2377; 2449; 3097; 3161; 3436
SfaNI	!NNNNNNNNNGATGC	7	357; 1051; 1219; 2756; 3011; 3227; 4619
SfcI	C!TRYAG	4	1407; 2133; 4260; 4451
SfiI	GGCCNNNN!NGGCC	2	631; 2573
SfoI	GGC!GCC	1	2799
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	1	1425
SfuI	TT!CGAA	2	1400; 3480
SgeI	CNNGNNNNNNNNN!	189	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 620; 633; 647; 663; 683; 701; 719; 749; 773; 791; 806; 848; 863; 896; 930; 943; 971; 992; 1007; 1034; 1068; 1089; 1109; 1122; 1136; 1154; 1167; 1184; 1217; 1238; 1272; 1310; 1333; 1351; 1387; 1435; 1452; 1505; 1534; 1576; 1659; 1697; 1733; 1817; 1839; 1871; 1908; 1926; 1945; 1960; 2002; 2019; 2036; 2071; 2085; 2102; 2124; 2148; 2172; 2237; 2251; 2289; 2305; 2345; 2358; 2377; 2400; 2417; 2430; 2449; 2479; 2500; 2517; 2540; 2575; 2602; 2633; 2655; 2681; 2703; 2722; 2750; 2786; 2805; 2828; 2842; 2862; 2875; 2889; 2908; 2922; 2941; 2973; 2987; 3000; 3026; 3057; 3070; 3087; 3104; 3118; 3135; 3153; 3168; 3196; 3212; 3231; 3253; 3269; 3292; 3311; 3336; 3355; 3375; 3402; 3426; 3459; 3478; 3506; 3520; 3586; 3610; 3625; 3648; 3669; 3686; 3734; 3761; 3775; 3804; 3828; 3861; 3878; 3898; 3911; 3924; 3982; 4009; 4028; 4058; 4083; 4103; 4117; 4142; 4160; 4197; 4235; 4264; 4292; 4306; 4326; 4341; 4362; 4376; 4395; 4413; 4429; 4469; 4489; 4516; 4534; 4555; 4568; 4581; 4598; 4622; 4645; 4677; 4702; 4729; 4751

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	165	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 607; 632; 657; 675; 693; 723; 747; 765; 789; 822; 870; 904; 945; 966; 1008; 1042; 1063; 1083; 1110; 1128; 1149; 1170; 1191; 1212; 1246; 1284; 1307; 1325; 1361; 1409; 1426; 1479; 1508; 1550; 1633; 1671; 1707; 1791; 1813; 1845; 1882; 1900; 1919; 1976; 1993; 2010; 2045; 2063; 2083; 2103; 2122; 2146; 2211; 2263; 2319; 2351; 2374; 2391; 2423; 2453; 2474; 2491; 2514; 2549; 2576; 2607; 2629; 2655; 2677; 2696; 2724; 2760; 2779; 2802; 2823; 2841; 2858; 2882; 2915; 2947; 2974; 3000; 3031; 3061; 3078; 3104; 3127; 3148; 3170; 3190; 3210; 3227; 3266; 3285; 3310; 3329; 3349; 3376; 3400; 3433; 3452; 3480; 3502; 3560; 3584; 3603; 3622; 3643; 3660; 3708; 3735; 3755; 3778; 3802; 3835; 3852; 3872; 3898; 3956; 3983; 4002; 4032; 4057; 4077; 4116; 4134; 4171; 4209; 4238; 4266; 4287; 4315; 4336; 4369; 4387; 4443; 4463; 4490; 4508; 4529; 4555; 4572; 4596; 4619; 4651; 4676; 4703; 4725; 4754
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	1425
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1945; 3732; 4525
SimI	!GACCC	5	106; 1099; 3226; 3794; 4042
SinI	G!GWCC	3	648; 3314; 3759
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	1	1431
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 663; 693; 1357; 3235
SmlI	C!TYRAG	5	1224; 3189; 4071; 4348; 4610
SmoI	C!TYRAG	5	1224; 3189; 4071; 4348; 4610
SmuI	CCCGCNNNN!	10	93; 119; 286; 1118; 1220; 2120; 2475; 2496; 3692; 3824
SmuI	!NNNNNNGCGGG	7	1155; 1417; 2051; 2921; 3458; 3596; 3743
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	4	599; 2368; 2440; 3203
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1402; 1548; 1612; 1690; 1716; 1727; 2374; 2446; 2538; 3956
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	2	1089; 2619
SsiI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 973; 1111; 1213; 1422; 2113; 2116; 2130; 2220; 2468; 2480; 2489; 2501; 2511; 2522; 2568; 2707; 2770; 3272; 3317; 3383; 3409; 3534; 3537; 3685; 3817; 4124; 4268; 4764
SsiI	G!CGG	28	370; 403; 528; 798; 808; 1120; 1162; 1424; 2058; 2085; 2173; 2283; 2864; 2928; 3029; 3032; 3312; 3367; 3465; 3603; 3750; 3890; 4133; 4378; 4499; 4518; 4645; 4673
SspI	AAT!ATT	2	1706; 2259
SspDI	G!GCGCC	1	2797
SspD5I	GGTGANNNNNNNN!	5	376; 677; 1046; 3869; 3985
SspD5I	!NNNNNNNNNTCACC	3	934; 1914; 2975
SstI	GAGCT!C	0	
SstII	CCGC!GG	1	1425
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	979
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	21	92; 118; 285; 901; 925; 1117; 1219; 1240; 1436; 1997; 2119; 2474; 2495; 2808; 3211; 3350; 3421; 3691; 3823; 4053; 4491
Sth132I	!NNNNNNNNNCGGG	21	15; 407; 470; 950; 1154; 1416; 1998; 2050; 2151; 2878; 2920; 2953; 3457; 3566; 3595; 3742; 3846; 3877; 4330; 4374; 4582
Sth302II	CC!GG	21	647; 652; 1235; 1431; 1441; 2017; 2704; 2781; 2803; 2831; 2962; 3052; 3119; 3300; 3575; 3583; 3675; 4149; 4339; 4365; 4512
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	4	2666; 3123; 3148; 3602
StsI	!NNNNNNNNNNNNNNCATCC	5	730; 818; 875; 1030; 2470
StuI	AGG!CCT	2	1089; 2619
StyI	C!CWWGG	6	360; 661; 2527; 2620; 3230; 3635

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	24	88; 281; 634; 835; 883; 979; 994; 1123; 1232; 1428; 1429; 2332; 2387; 2404; 2800; 2960; 3183; 3573; 3762; 3865; 4337; 4555; 4568; 4689
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 719; 1418; 1889; 3178; 3294; 3402; 3725; 4216; 4686; 4757
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1021; 1297; 1861; 1873; 1916; 2026; 2917; 3104; 3885; 4018
TaqI	T!CGA	16	802; 829; 1297; 1400; 1413; 1947; 2638; 2911; 3067; 3091; 3127; 3289; 3480; 3525; 3780; 4618
TaqII	GACCGANNNNNNNNNNN!	3	1818; 2835; 3503
TaqII	!NNNNNNNNNTCGGTC	1	3747
TaqII	CACCCANNNNNNNNNNN!	2	792; 897
TaqII	!NNNNNNNNNTGGGTG	3	172; 2702; 3294
TasI	!AATT	11	18; 1402; 1548; 1612; 1690; 1716; 1727; 2374; 2446; 2538; 3956
TatI	W!GTACW	5	217; 297; 330; 381; 703
TauI	GCSG!C	17	811; 1123; 2118; 2132; 2570; 2709; 2772; 2867; 3032; 3035; 3274; 3370; 3411; 3539; 3893; 4521; 4676
TfiI	G!AWTC	7	790; 1267; 3283; 3417; 3527; 3564; 4742
TliI	C!TCGAG	0	
TruII	T!TAA	17	7; 679; 904; 1499; 1560; 1681; 1702; 1713; 1725; 1736; 1753; 1851; 2122; 3941; 3955; 3960; 4012
Tru9I	T!TAA	17	7; 679; 904; 1499; 1560; 1681; 1702; 1713; 1725; 1736; 1753; 1851; 2122; 3941; 3955; 3960; 4012
TscAI	CASTGNN!	5	1644; 2927; 4037; 4308; 4321
TseI	G!CWGC	18	599; 617; 859; 1003; 1301; 1574; 2093; 2758; 2859; 2901; 2942; 3035; 3422; 3875; 4101; 4307; 4310; 4375
TsoI	TARCCANNNNNNNNNNN!	2	1770; 2117
TsoI	!NNNNNNNNNTGGYTA	3	828; 1575; 3327
Tsp45I	!GTSAC	4	941; 2087; 2918; 3224
Tsp509I	!AATT	11	18; 1402; 1548; 1612; 1690; 1716; 1727; 2374; 2446; 2538; 3956
TspDTI	ATGAANNNNNNNNNNN!	4	711; 1556; 2857; 3561
TspDTI	!NNNNNNNNNTTCAT	6	26; 839; 860; 3275; 3731; 3938
TspEI	!AATT	11	18; 1402; 1548; 1612; 1690; 1716; 1727; 2374; 2446; 2538; 3956
TspGWI	ACGGANNNNNNNNNNN!	1	3673
TspGWI	!NNNNNNNNNTCCGT	1	596
TspMI	C!CCGGG	1	1429
TspRI	CASTGNN!	5	1644; 2927; 4037; 4308; 4321
TstI	CACNNNNNTCCNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2916
Tth111II	CAARCANNNNNNNNNNN!	1	4125
Tth111II	!NNNNNNNNNTGYTTG	3	3233; 4093; 4132
UnbI	!GGNCC	14	82; 275; 647; 809; 1052; 1144; 1165; 1426; 1904; 3313; 3758; 3804; 3862; 3895
Van91I	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	2	740; 4402
VpaK11AI	!GGWCC	3	647; 3313; 3758
VpaK11BI	G!GWCC	3	648; 3314; 3759
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	1402; 1612; 1716; 1727
XbaI	T!CTAGA	1	1445
XceI	RCATG!Y	6	599; 692; 2368; 2440; 3203; 4720
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	12	585; 1200; 1371; 1433; 1442; 2969; 3215; 3607; 3966; 3978; 4064; 4075
XmaI	C!CCGGG	1	1429
XmaJI	C!CTAGG	2	2620; 3635

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XmiI	GT!MKAC	2	1240; 1413
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1339; 1446; 1647; 2065; 2621; 3636; 3970; 4223
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2370; 2442; 4773