

pTagRFP-mito vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1559; 1764
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1847; 2803; 4592
AatI	AGG!CCT	1	2597
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	1291
AccII	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2878
Acc36I	ACCTGCNNNN!	2	3044; 3494
Acc36I	!NNNNNNNNGCAGGT	1	2663
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	6	465; 765; 825; 1929; 2775; 2810
AccB7I	CCANNNN!NTGG	2	680; 1310
AccBSI	CCG!CTC	2	2200; 3389
AccBSI	GAG!CGG	3	1419; 2036; 3443
AceIII	CAGCTCNNNNNNN!	1	1732
AceIII	!NNNNNNNNNNGAGCTG	2	552; 711
AcI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1423; 2091; 2094; 2108; 2198; 2446; 2458; 2467; 2479; 2489; 2500; 2546; 2685; 2748; 3250; 3295; 3361; 3387; 3512; 3515; 3663; 3795; 4102; 4246; 4742
AcI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1419; 2036; 2063; 2151; 2261; 2842; 2906; 3007; 3010; 3290; 3345; 3443; 3581; 3728; 3868; 4111; 4356; 4477; 4496; 4623; 4651
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	8	694; 2644; 2955; 3201; 3593; 3952; 4050; 4136
AcIWI	!NNNNNGATCC	8	580; 665; 681; 1246; 3020; 3564; 3951; 4048
AcoI	Y!GGCCR	6	1369; 1420; 2682; 2856; 3247; 3274
AcsI	R!AATTY	3	1590; 1694; 1705
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1221; 2922; 3354
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4152
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
AdeI	CACNNN!GTG	2	1361; 1892
AfaI	GT!AC	10	219; 244; 299; 332; 383; 540; 756; 906; 1158; 3082
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1167; 1310; 1788; 2114; 2506; 2757; 3301; 3582; 3614; 3746; 3781; 3831; 3863; 4216; 4495; 4661; 4679
AfIII	C!TTAAG	1	1658
AfIII	A!CRYGT	1	4694
AgeI	A!CCGGT	1	692
AgsI	TTS!AA	7	788; 1238; 2187; 2231; 2241; 2654; 4230
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajnl	!CCWGG	16	88; 281; 886; 934; 1030; 1045; 1174; 2310; 2365; 2382; 3161; 3740; 3843; 4533; 4546; 4667
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	705
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2350; 2422
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2316; 2388
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1112; 1858
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	1080; 1826
AluI	AG!CT	16	566; 725; 752; 898; 1205; 1555; 1722; 1979; 2274; 2562; 2882; 3340; 4137; 4394; 4440; 4530
AluBI	AG!CT	16	566; 725; 752; 898; 1205; 1555; 1722; 1979; 2274; 2562; 2882; 3340; 4137; 4394; 4440; 4530
AlwI	GGATCNNNN!	8	694; 2644; 2955; 3201; 3593; 3952; 4050; 4136
AlwI	!NNNNNGATCC	8	580; 665; 681; 1246; 3020; 3564; 3951; 4048
Alw21I	GWGCW!C	4	795; 2889; 3079; 4384
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1332; 2200; 2618; 3637; 3765
Alw44I	G!TGCAC	2	791; 4380
AlwNI	CAGNN!CTG	3	1378; 3877; 4285
Ama87I	C!YCGRG	0	
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	2344; 2416; 3878
ApaLI	G!TGCAC	2	791; 4380
ApeKI	G!CWGC	19	614; 617; 620; 910; 1054; 1352; 1552; 2071; 2736; 2837; 2879; 2920; 3013; 3400; 3853; 4079; 4285; 4288; 4353
ApoI	R!AATTY	3	1590; 1694; 1705
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3291
ApyPI	!NNNNNNNNNNNNNNNNNNGTTCGAT	3	3085; 3738; 4576
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3175
AquII	!NNNNNNNNNNNNNNNNNNGTNCGGC	1	886
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2604
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3346
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	23	586; 671; 687; 1076; 1226; 1252; 1434; 2614; 2618; 2637; 2948; 3026; 3107; 3116; 3194; 3570; 3586; 3945; 3957; 4035; 4043; 4054; 4129
AsiGI	A!CCGGT	1	692
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2894
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2598; 3613
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	22	664; 666; 2042; 2050; 2076; 2098; 2107; 2120; 2151; 2770; 2778; 2842; 2879; 3145; 3405; 3581; 3667; 4070; 4179; 4353; 4453; 4520
AspS9I	G!GNCC	14	83; 276; 641; 861; 1104; 1196; 1217; 1301; 1883; 3292; 3737; 3783; 3841; 3874
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	3458
AsuC2I	CC!SGG	6	644; 1285; 2780; 2940; 3553; 4317
AsuHPI	GGTGANNNNNNNN!	4	376; 1097; 3847; 3963
AsuHPI	!NNNNNNNTCACC	3	986; 1893; 2954
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	0	
AvaII	G!GWCC	3	1301; 3292; 3737
AviII	TGC!GCA	1	2878
AvrII	C!CTAGG	2	2598; 3613

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AxyI	CC!TNAGG	3	970; 2256; 3888
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI!C	7	768; 795; 828; 1405; 2722; 2815; 4384
BalI	TGG!CCA	2	1371; 2858
BamHI	G!GATCC	1	686
BanI	G!GYRCC	6	465; 765; 825; 1929; 2775; 2810
BanII	GRGCY!C	3	1967; 3141; 3851
BanIII	AT!CGAT	1	2616
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	2	680; 1310
BauI	C!ACGAG	3	1356; 3494; 4521
BauI	C!TCGTG	2	1206; 3368
BbeI	GGCGC!C	1	2779
Bbr7I	GAAGACNNNNNNNN!	1	1017
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	1012
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2346; 2418; 3181
BbvI	GCAGCNNNNNNNN!	8	922; 1364; 1564; 2849; 2891; 3412; 3865; 4365
BbvI	!NNNNNNNNNNNGCTGC	8	601; 1041; 2058; 2723; 2907; 3000; 4066; 4272
Bbv12I	GWGCW!C	4	795; 2889; 3079; 4384
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1103; 1906; 2470; 2996; 3498
BccI	!NNNNNGATGG	3	1874; 2654; 3082
BceAI	ACGGCNNNNNNNNNNNN!	6	923; 1067; 1118; 1184; 3202; 3689
BceAI	!NNNNNNNNNNNNNGCCGT	3	1917; 2735; 4194
Bcefl	ACGGCNNNNNNNNNNNN!	6	923; 1067; 1118; 1184; 3202; 3689
Bcefl	!NNNNNNNNNNNNNGCCGT	3	1918; 2736; 4195
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2205; 2995; 4496
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	6	644; 1285; 2780; 2940; 3553; 4317
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNNN!	1	4629
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	4595
BfaI	C!TAG	9	592; 1390; 1431; 1625; 2043; 2599; 3614; 3948; 4201
BfiI	ACTGGGNNNNN!	2	1407; 2725
BfiI	!NNNNCCCAGT	3	289; 648; 2477
BfmI	C!TRYAG	3	2111; 4238; 4429
BfoI	RGCGC!Y	4	2043; 2051; 2779; 4454
BfrI	C!TTAAG	1	1658
BfuI	GTATCCNNNNNN!	3	2205; 2995; 4496
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	3044; 3494
BfuAI	!NNNNNNNNNGCAGGT	1	2663
BfuCI	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1180; 2551
BglII	A!GATCT	0	

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BisI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1423; 1553; 2072; 2094; 2108; 2546; 2685; 2737; 2748; 2838; 2843; 2880; 2921; 3008; 3014; 3250; 3346; 3387; 3401; 3515; 3854; 3869; 4080; 4286; 4289; 4354; 4497; 4652
BlnI	C!CTAGG	2	2598; 3613
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	39	613; 616; 619; 622; 649; 661; 861; 912; 1056; 1173; 1354; 1424; 1554; 2073; 2095; 2109; 2547; 2686; 2738; 2749; 2839; 2844; 2881; 2922; 3009; 3015; 3251; 3347; 3388; 3402; 3516; 3855; 3870; 4081; 4287; 4290; 4355; 4498; 4653
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	1301; 3292; 3737
Bme1390I	CC!NGG	22	90; 283; 644; 888; 936; 1032; 1047; 1176; 1285; 2312; 2367; 2384; 2780; 2940; 3163; 3553; 3742; 3845; 4317; 4535; 4548; 4669
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	0	
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	84; 277; 642; 862; 1105; 1197; 1218; 1302; 1884; 3293; 3738; 3784; 3842; 3875
BmiI	GGN!NCC	19	467; 651; 688; 767; 827; 1218; 1931; 1952; 1964; 2155; 2316; 2388; 2777; 2812; 3660; 3739; 3784; 4627; 4666
BmrI	ACTGGGNNNNN!	2	1407; 2725
BmrI	!NNNNCCCAGT	3	289; 648; 2477
BmrFI	CC!NGG	22	90; 283; 644; 888; 936; 1032; 1047; 1176; 1285; 2312; 2367; 2384; 2780; 2940; 3163; 3553; 3742; 3845; 4317; 4535; 4548; 4669
BmsI	GCATCNNNNN!	7	949; 1592; 2355; 2427; 3075; 3139; 3414
BmsI	!NNNNNNNNNGATGC	8	357; 1102; 1141; 1270; 2734; 2989; 3205; 4597
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1407; 2725
BmuI	!NNNNCCCAGT	3	289; 648; 2477
BoxI	GACNN!NNGTC	1	1344
BpiI	GAAGACNN!	1	1012
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2565; 3464
BpI	!NNNNNNNGAGNNNNNCTC	2	2533; 3432
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3616
BpmI	!NNNNNNNNNNNNNNCTCCAG	2	1029; 3559
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3458
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	1012
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4070; 4609
BpuEI	!NNNNNNNNNNNNNNCTCAAG	3	1260; 3152; 4311
BpuMI	CC!SGG	6	644; 1285; 2780; 2940; 3553; 4317
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1332; 3765
Bsa29I	AT!CGAT	1	2616
BsaAI	YAC!GTR	3	340; 1892; 3080
BsaBI	GATNN!NNATC	2	1438; 2635
BsaHI	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
BsaJI	C!CNNGG	20	360; 703; 799; 934; 935; 1030; 2310; 2382; 2505; 2540; 2549; 2598; 2939; 3208; 3613; 3740; 3741; 3843; 3844; 4534
BsaMI	GAATGCN!	1	1527
BsaMI	G!CATTC	1	1620
BsaWI	W!CCGGW	5	692; 2807; 3651; 4341; 4488
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1856
BsaXI	!NNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1826
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	1	1168

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BsbI	!NNNNNNNNNNNNNNNNNGTGTTG	2	1777; 3684
Bsc4I	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1167; 1310; 1788; 2114; 2506; 2757; 3301; 3582; 3614; 3746; 3781; 3831; 3863; 4216; 4495; 4661; 4679
BscAI	GCATCNNNN!	7	948; 1591; 2354; 2426; 3074; 3138; 3413
BscAI	!NNNNNNGATGC	8	360; 1105; 1144; 1273; 2737; 2992; 3208; 4600
BseI	ACTGGN!	5	1315; 1402; 2720; 2921; 4167
BseI	C!CAGT	6	295; 654; 1805; 2483; 4279; 4292
Bse8I	GATNN!NNATC	2	1438; 2635
Bse2II	CC!TNAGG	3	970; 2256; 3888
Bse118I	R!CCGGY	5	692; 1993; 3095; 3276; 3559
BseAI	T!CCGGA	0	
BseBI	CC!WGG	16	90; 283; 888; 936; 1032; 1047; 1176; 2312; 2367; 2384; 3163; 3742; 3845; 4535; 4548; 4669
BseCI	AT!CGAT	1	2616
BseDI	C!CNNGG	20	360; 703; 799; 934; 935; 1030; 2310; 2382; 2505; 2540; 2549; 2598; 2939; 3208; 3613; 3740; 3741; 3843; 3844; 4534
Bse3DI	GCAATGNN!	1	3009
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2636; 3093; 3118; 3572
BseGI	!CATCC	5	795; 883; 940; 1095; 2462
BseJI	GATNN!NNATC	2	1438; 2635
BseLI	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1167; 1310; 1788; 2114; 2506; 2757; 3301; 3582; 3614; 3746; 3781; 3831; 3863; 4216; 4495; 4661; 4679
BseMI	GCAATGNN!	1	3009
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3902
BseMII	!NNNNNNNNCTGAG	6	961; 2247; 2549; 3430; 4002; 4411
BseNI	ACTGGN!	5	1315; 1402; 2720; 2921; 4167
BseNI	C!CAGT	6	295; 654; 1805; 2483; 4279; 4292
BsePI	G!CGCGC	1	662
BseRI	GAGGAGNNNNNNNNNN!	1	2594
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	7	768; 795; 828; 1405; 2722; 2815; 4384
BseXI	GCAGCNNNNNNNN!	8	922; 1364; 1564; 2849; 2891; 3412; 3865; 4365
BseXI	!NNNNNNNNNNNGCTGC	8	601; 1041; 2058; 2723; 2907; 3000; 4066; 4272
BseX3I	C!GGCCG	2	1420; 2682
BseYI	C!CCAGC	3	2319; 2391; 4390
BseYI	G!CTGGG	2	1132; 3280
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
Bsh1285I	CGRY!CG	4	697; 1423; 2685; 4360
BshFI	GG!CC	29	84; 277; 642; 862; 1105; 1140; 1174; 1197; 1219; 1329; 1371; 1422; 1742; 1884; 2539; 2545; 2554; 2597; 2684; 2858; 3249; 3276; 3785; 3842; 3875; 4220; 4654; 4672; 4683
BshNI	G!GYRCC	6	465; 765; 825; 1929; 2775; 2810
BshTI	A!CCGGT	1	692
BshVI	AT!CGAT	1	2616
BsiEI	CGRY!CG	4	697; 1423; 2685; 4360
BsiHKAI	GWGCW!C	4	795; 2889; 3079; 4384
BsiHKCI	C!YCGRG	0	
BsiSI	C!CGG	19	644; 693; 1285; 1994; 2681; 2758; 2780; 2808; 2939; 3029; 3096; 3277; 3552; 3560; 3652; 4126; 4316; 4342; 4489
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1167; 1310; 1788; 2114; 2506; 2757; 3301; 3582; 3614; 3746; 3781; 3831; 3863; 4216; 4495; 4661; 4679
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2927; 3459; 3568
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2292; 2364; 2428; 3723
BsmI	GAATGCN!	1	1527
BsmI	G!CATTC	1	1620
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1332; 2200; 2618; 3637; 3765

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BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2927; 3459; 3568
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2292; 2364; 2428; 3723
BsnI	GG!CC	29	84; 277; 642; 862; 1105; 1140; 1174; 1197; 1219; 1329; 1371; 1422; 1742; 1884; 2539; 2545; 2554; 2597; 2684; 2858; 3249; 3276; 3785; 3842; 3875; 4220; 4654; 4672; 4683
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACG	2	1332; 3765
BsoBI	C!YCGRG	0	
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 703; 2505; 3208
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3579
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	4000; 4178
Bsp24I	CCANNNNNNGTCCNNNNNNNNNNNN!	2	4032; 4210
Bsp24I	!NNNNNNNGACNNNNNNNTGG	2	257; 3547
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3458
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
Bsp1286I	GDGCH!C	12	768; 795; 828; 1405; 1967; 2722; 2815; 2889; 3079; 3141; 3851; 4384
Bsp1407I	T!GTACA	1	754
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1423; 2091; 2094; 2108; 2198; 2446; 2458; 2467; 2479; 2489; 2500; 2546; 2685; 2748; 3250; 3295; 3361; 3387; 3512; 3515; 3663; 3795; 4102; 4246; 4742
BspACI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1419; 2036; 2063; 2151; 2261; 2842; 2906; 3007; 3010; 3290; 3345; 3443; 3581; 3728; 3868; 4111; 4356; 4477; 4496; 4623; 4651
BspCNI	CTCAGNNNNNNNN!	1	3901
BspCNI	!NNNNNNNCTGAG	6	962; 2248; 2550; 3431; 4003; 4412
BspDI	AT!CGAT	1	2616
BspD6I	GACTCNNNN!	5	418; 1435; 1849; 3455; 4332
BspD6I	!NNNNNNGAGTC	3	984; 1812; 2244
BspEI	T!CCGGA	0	
BspFNI	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
BspHI	T!CATGA	2	2202; 3974
BspLI	GGN!NCC	19	467; 651; 688; 767; 827; 1218; 1931; 1952; 1964; 2155; 2316; 2388; 2777; 2812; 3660; 3739; 3784; 4627; 4666
BspMI	ACCTGCNNNN!	2	3044; 3494
BspMI	!NNNNNNNGCAGGT	1	2663
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	694; 2644; 2955; 3201; 3593; 3952; 4050; 4136
BspPI	!NNNNNGATCC	8	580; 665; 681; 1246; 3020; 3564; 3951; 4048
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	3	715; 3120; 3330
BspTI	C!TTAAG	1	1658
BspT104I	TT!CGAA	1	3458
BspT107I	G!GYRCC	6	465; 765; 825; 1929; 2775; 2810
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1332; 3765
BsrI	ACTGGN!	5	1315; 1402; 2720; 2921; 4167
BsrI	C!CAGT	6	295; 654; 1805; 2483; 4279; 4292
BsrBI	CCG!CTC	2	2200; 3389
BsrBI	GAG!CGG	3	1419; 2036; 3443
BsrDI	GCAATGNN!	1	3009
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	692; 1993; 3095; 3276; 3559
BsrGI	T!GTACA	1	754
BsrSI	ACTGGN!	5	1315; 1402; 2720; 2921; 4167
BsrSI	C!CAGT	6	295; 654; 1805; 2483; 4279; 4292

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssAI	R!CCGGY	5	692; 1993; 3095; 3276; 3559
BssECI	C!CNNGG	20	360; 703; 799; 934; 935; 1030; 2310; 2382; 2505; 2540; 2549; 2598; 2939; 3208; 3613; 3740; 3741; 3843; 3844; 4534
BssHII	G!CGCGC	1	662
BssKI	!CCNGG	22	88; 281; 642; 886; 934; 1030; 1045; 1174; 1283; 2310; 2365; 2382; 2778; 2938; 3161; 3551; 3740; 3843; 4315; 4533; 4546; 4667
BssMI	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
BssNI	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1356; 3494; 4521
BssSI	C!TCGTG	2	1206; 3368
BssT1I	C!CWVGG	6	360; 703; 2505; 2598; 3208; 3613
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	4	715; 2243; 3120; 3330
Bst98I	C!TTAAG	1	1658
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
BstAFI	C!TTAAG	1	1658
BstAPI	GCANNNN!NTGC	3	2343; 2415; 3877
BstAUI	T!GTACA	1	754
BstBI	TT!CGAA	1	3458
Bst2BI	C!ACGAG	3	1356; 3494; 4521
Bst2BI	C!TCGTG	2	1206; 3368
BstBAI	YAC!GTR	3	340; 1892; 3080
Bst4CI	ACN!GT	14	76; 198; 269; 543; 581; 770; 1867; 3156; 3272; 3380; 3703; 4194; 4664; 4735
BstC8I	GCN!NGC	30	86; 279; 593; 664; 813; 1017; 1995; 2038; 2052; 2325; 2344; 2397; 2416; 2670; 2856; 3075; 3141; 3147; 3179; 3220; 3224; 3278; 3561; 3748; 3795; 3851; 3873; 4084; 4644; 4681
BstDEI	C!TNAG	9	712; 970; 1267; 2256; 2558; 3439; 3888; 4011; 4420
BstDSI	C!CRYGG	4	360; 703; 2505; 3208
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2636; 3093; 3118; 3572
BstF5I	!CATCC	5	795; 883; 940; 1095; 2462
BstFNI	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
BstH2I	RGCGC!Y	4	2043; 2051; 2779; 4454
BstHHI	GCG!C	22	664; 666; 2042; 2050; 2076; 2098; 2107; 2120; 2151; 2770; 2778; 2842; 2879; 3145; 3405; 3581; 3667; 4070; 4179; 4353; 4453; 4520
BstKTI	GAT!C	23	588; 673; 689; 1078; 1228; 1254; 1436; 2616; 2620; 2639; 2950; 3028; 3109; 3118; 3196; 3572; 3588; 3947; 3959; 4037; 4045; 4056; 4131
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1332; 2200; 2618; 3637; 3765
BstMBI	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
BstMCI	CGRY!CG	4	697; 1423; 2685; 4360
BstMWI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 749; 1180; 2003; 2033; 2060; 2102; 2343; 2415; 2466; 2545; 2767; 2851; 2874; 3013; 3136; 3219; 3486; 3673; 3877; 4076; 4648
BstNI	CC!WGG	16	90; 283; 888; 936; 1032; 1047; 1176; 2312; 2367; 2384; 3163; 3742; 3845; 4535; 4548; 4669
BstNSI	RCATG!Y	6	599; 743; 2346; 2418; 3181; 4698
BstOI	CC!WGG	16	90; 283; 888; 936; 1032; 1047; 1176; 2312; 2367; 2384; 3163; 3742; 3845; 4535; 4548; 4669
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1344
BstSCI	!CCNGG	22	88; 281; 642; 886; 934; 1030; 1045; 1174; 1283; 2310; 2365; 2382; 2778; 2938; 3161; 3551; 3740; 3843; 4315; 4533; 4546; 4667
BstSFI	C!TRYAG	3	2111; 4238; 4429

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSLI	GKGC!C	7	768; 795; 828; 1405; 2722; 2815; 4384
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
Bst2UI	CC!WGG	16	90; 283; 888; 936; 1032; 1047; 1176; 2312; 2367; 2384; 3163; 3742; 3845; 4535; 4548; 4669
BstV1I	GCAGC!NNNNNNNN!	8	922; 1364; 1564; 2849; 2891; 3412; 3865; 4365
BstV1I	!NNNNNNNNNNNGCTGC	8	601; 1041; 2058; 2723; 2907; 3000; 4066; 4272
BstV2I	GAAGAC!NN!	1	1012
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 670; 686; 1251; 2947; 3193; 3585; 3944; 3956; 4042; 4053
BstYI	R!GATCY	11	585; 670; 686; 1251; 2947; 3193; 3585; 3944; 3956; 4042; 4053
BstZI	C!GGCCG	2	1420; 2682
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2205; 2995; 4496
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2616
Bsu36I	CC!TNAGG	3	970; 2256; 3888
BsuRI	GG!CC	29	84; 277; 642; 862; 1105; 1140; 1174; 1197; 1219; 1329; 1371; 1422; 1742; 1884; 2539; 2545; 2554; 2597; 2684; 2858; 3249; 3276; 3785; 3842; 3875; 4220; 4654; 4672; 4683
BsuTUI	AT!CGAT	1	2616
BtgI	C!CRYGG	4	360; 703; 2505; 3208
BtgZI	GCGATGNNNNNNNNNN!	2	1893; 3228
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3047; 3391
BthCI	GCNG!C	39	614; 617; 620; 623; 650; 662; 862; 913; 1057; 1174; 1355; 1425; 1555; 2074; 2096; 2110; 2548; 2687; 2739; 2750; 2840; 2845; 2882; 2923; 3010; 3016; 3252; 3348; 3389; 3403; 3517; 3856; 3871; 4082; 4288; 4291; 4356; 4499; 4654
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTG!NN!	0	
BtsI	!CACTGC	1	1615
BtsCI	GGATG!NN!	4	2636; 3093; 3118; 3572
BtsCI	!CATCC	5	795; 883; 940; 1095; 2462
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3044; 3494
BveI	!NNNNNNNNNGCAGGT	1	2663
Cac8I	GCN!NGC	30	86; 279; 593; 664; 813; 1017; 1995; 2038; 2052; 2325; 2344; 2397; 2416; 2670; 2856; 3075; 3141; 3147; 3179; 3220; 3224; 3278; 3561; 3748; 3795; 3851; 3873; 4084; 4644; 4681
CaiI	CAGNNN!CTG	3	1378; 3877; 4285
CciI	T!CATGA	2	2202; 3974
CciNI	GC!GGCCGC	1	1420
CdiI	CATC!G	5	352; 3065; 3070; 3268; 3409
CdiI	C!GATG	2	1879; 3214
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	4648
CdpI	!NNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2437; 2479
CelII	GC!TNAGC	0	
CfoI	GCG!C	22	664; 666; 2042; 2050; 2076; 2098; 2107; 2120; 2151; 2770; 2778; 2842; 2879; 3145; 3405; 3581; 3667; 4070; 4179; 4353; 4453; 4520
CfrI	Y!GGCCR	6	1369; 1420; 2682; 2856; 3247; 3274
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	5	692; 1993; 3095; 3276; 3559
Cfr13I	G!GNCC	14	83; 276; 641; 861; 1104; 1196; 1217; 1301; 1883; 3292; 3737; 3783; 3841; 3874
Cfr42I	CCGC!GG	0	
ChaI	GATC!	23	589; 674; 690; 1079; 1229; 1255; 1437; 2617; 2621; 2640; 2951; 3029; 3110; 3119; 3197; 3573; 3589; 3948; 3960; 4038; 4046; 4057; 4132
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	807; 2593; 4033; 4133; 4211
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2260; 2355; 3547; 4097; 4652
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2294; 2389; 3581; 4131; 4686
CjeI	!NNNNNNNNCCANNNNNNGT	5	773; 2559; 3999; 4099; 4177

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	2	4033; 4211
CjePI	!NNNNNNNGANNNNNNNTGG	5	257; 832; 1177; 3547; 4146
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	5	290; 865; 1210; 3580; 4179
CjePI	!NNNNNNCCANNNNNNNTC	2	4000; 4178
Clal	AT!CGAT	1	2616
CpoI	CG!GWCCG	1	3292
CseI	GACGCNNNNN!	4	526; 617; 3486; 3565
CseI	!NNNNNNNNNGCGTC	4	1277; 2109; 4004; 4582
CsiI	A!CCWGGT	1	2365
CspI	CG!GWCCG	1	3292
Csp6I	G!TAC	10	218; 243; 298; 331; 382; 539; 755; 905; 1157; 3081
Csp45I	TT!CGAA	1	3458
CspAI	A!CCGGT	1	692
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	757; 1348; 2056; 3665
CstMI	!NNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	24	301; 361; 596; 704; 740; 746; 758; 836; 902; 982; 1193; 2203; 2343; 2415; 2506; 2647; 2992; 3178; 3209; 3235; 3591; 3975; 4695; 4746
CviJI	RG!CY	95	42; 84; 93; 277; 566; 628; 637; 642; 650; 725; 752; 815; 862; 891; 898; 976; 1042; 1054; 1105; 1132; 1140; 1174; 1197; 1205; 1219; 1329; 1365; 1371; 1422; 1445; 1555; 1722; 1742; 1884; 1965; 1979; 1993; 2274; 2315; 2387; 2510; 2539; 2545; 2554; 2562; 2585; 2597; 2603; 2684; 2701; 2709; 2736; 2761; 2845; 2854; 2858; 2882; 2920; 2996; 3013; 3032; 3095; 3139; 3149; 3166; 3249; 3276; 3280; 3317; 3340; 3356; 3536; 3563; 3624; 3746; 3785; 3842; 3849; 3856; 3875; 3886; 4137; 4166; 4209; 4220; 4285; 4364; 4389; 4394; 4440; 4530; 4628; 4654; 4672; 4683
CviKI-1	RG!CY	95	42; 84; 93; 277; 566; 628; 637; 642; 650; 725; 752; 815; 862; 891; 898; 976; 1042; 1054; 1105; 1132; 1140; 1174; 1197; 1205; 1219; 1329; 1365; 1371; 1422; 1445; 1555; 1722; 1742; 1884; 1965; 1979; 1993; 2274; 2315; 2387; 2510; 2539; 2545; 2554; 2562; 2585; 2597; 2603; 2684; 2701; 2709; 2736; 2761; 2845; 2854; 2858; 2882; 2920; 2996; 3013; 3032; 3095; 3139; 3149; 3166; 3249; 3276; 3280; 3317; 3340; 3356; 3536; 3563; 3624; 3746; 3785; 3842; 3849; 3856; 3875; 3886; 4137; 4166; 4209; 4220; 4285; 4364; 4389; 4394; 4440; 4530; 4628; 4654; 4672; 4683
CviQI	G!TAC	10	218; 243; 298; 331; 382; 539; 755; 905; 1157; 3081
DdeI	C!TNAG	9	712; 970; 1267; 2256; 2558; 3439; 3888; 4011; 4420
DinI	GGC!GCC	1	2777
DpnI	GA!TC	23	587; 672; 688; 1077; 1227; 1253; 1435; 2615; 2619; 2638; 2949; 3027; 3108; 3117; 3195; 3571; 3587; 3946; 3958; 4036; 4044; 4055; 4130
DpnII	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
DraI	TTT!AAA	3	1478; 3920; 3939
DraII	RG!GNCCY	1	3874
DraIII	CACNN!GTG	2	1361; 1892
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4256
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1847; 2803; 4592
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1847; 2803; 4592
EaeI	Y!GGCCR	6	1369; 1420; 2682; 2856; 3247; 3274
EagI	C!GGCCG	2	1420; 2682
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	4	715; 2243; 3120; 3330
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	4	715; 2243; 3120; 3330

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EciI	GGCGGANNNNNNNNNN!	4	2276; 3305; 4492; 4638
EciI	!NNNNNNNNNTCCGCC	4	496; 2447; 2468; 2489
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	1420; 2682
Eco24I	GRGCY!C	3	1967; 3141; 3851
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1332; 3765
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1301; 3292; 3737
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	2	1420; 2682
Eco57I	CTGAAGNNNNNNNNNNNNNN!	3	1221; 2922; 3354
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4152
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	970; 2256; 3888
Eco88I	C!YCGRG	0	
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 703; 2505; 2598; 3208; 3613
Eco147I	AGG!CCT	1	2597
EcoHI	!CCSGG	6	642; 1283; 2778; 2938; 3551; 4315
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	4	1221; 2922; 3354; 3616
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	1029; 3559; 4152
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3874
EcoRI	G!AATC	0	
EcoRII	!CCWGG	16	88; 281; 886; 934; 1030; 1045; 1174; 2310; 2365; 2382; 3161; 3740; 3843; 4533; 4546; 4667
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 703; 2505; 2598; 3208; 3613
EcoT22I	ATGCA!T	3	2348; 2420; 4751
EcoT38I	GRGCY!C	3	1967; 3141; 3851
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2777
EheI	GGC!GCC	1	2777
ErhI	C!CWWGG	6	360; 703; 2505; 2598; 3208; 3613
EsaBC3I	TC!GA	14	854; 881; 1349; 1926; 2617; 2890; 3046; 3070; 3106; 3268; 3459; 3504; 3759; 4597
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1196; 2206; 2346; 2418; 2509; 2650; 2995; 3181; 3212; 3238; 3594; 3978; 4698; 4749
Fail	YA!TR	63	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 705; 741; 747; 759; 837; 903; 983; 1001; 1194; 1247; 1297; 1438; 1448; 1514; 1559; 1764; 2192; 2204; 2335; 2344; 2407; 2416; 2440; 2507; 2531; 2648; 2712; 2993; 3018; 3179; 3210; 3236; 3308; 3524; 3592; 3670; 3722; 3883; 3900; 3902; 3904; 3976; 4254; 4443; 4559; 4632; 4696; 4747
FaII	AAGNNNNCTTNNNNNNNNNN!	2	980; 3116
FaII	!NNNNNNNNAAGNNNNCTT	2	948; 3084
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2927; 3459; 3568
FaqI	!NNNNNNNNNNNNNGTCCC	4	2292; 2364; 2428; 3723
FatI	!CATG	24	300; 360; 595; 703; 739; 745; 757; 835; 901; 981; 1192; 2202; 2342; 2414; 2505; 2646; 2991; 3177; 3208; 3234; 3590; 3974; 4694; 4745
FauI	CCCGCNNNN!	10	93; 119; 286; 1169; 1271; 2098; 2453; 2474; 3670; 3802
FauI	!NNNNNGCGGG	7	616; 1206; 2029; 2899; 3436; 3574; 3721
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FbII	GT!MKAC	1	1291
FmuI	GGNC!C	14	86; 279; 644; 864; 1107; 1199; 1220; 1304; 1886; 3295; 3740; 3786; 3844; 3877

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1423; 1553; 2072; 2094; 2108; 2546; 2685; 2737; 2748; 2838; 2843; 2880; 2921; 3008; 3014; 3250; 3346; 3387; 3401; 3515; 3854; 3869; 4080; 4286; 4289; 4354; 4497; 4652
FokI	GGATGNNNNNNNNN!	4	2643; 3100; 3125; 3579
FokI	!NNNNNNNNNNNNNNCATCC	5	782; 870; 927; 1082; 2449
FriOI	GRGCY!C	3	1967; 3141; 3851
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2878
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1390; 1431; 1625; 2043; 2599; 3614; 3948; 4201
FspEI	CCNNNNNNNNNNNN!	159	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 673; 687; 703; 782; 812; 829; 843; 876; 890; 908; 932; 947; 977; 1010; 1037; 1052; 1071; 1107; 1154; 1173; 1188; 1211; 1233; 1256; 1276; 1297; 1317; 1343; 1385; 1401; 1436; 1459; 1498; 1512; 1653; 1748; 1772; 1795; 1818; 1836; 1858; 1879; 1898; 1917; 1946; 1967; 1981; 2007; 2095; 2121; 2170; 2211; 2229; 2268; 2284; 2322; 2379; 2394; 2451; 2471; 2485; 2502; 2516; 2553; 2568; 2611; 2694; 2761; 2792; 2812; 2827; 2872; 2886; 2952; 2966; 2985; 3001; 3042; 3062; 3109; 3159; 3175; 3195; 3220; 3240; 3263; 3290; 3308; 3334; 3374; 3400; 3424; 3480; 3494; 3522; 3565; 3586; 3621; 3665; 3753; 3777; 3799; 3819; 3835; 3856; 3870; 3889; 3973; 3993; 4021; 4036; 4070; 4112; 4139; 4154; 4199; 4223; 4237; 4259; 4285; 4305; 4329; 4355; 4403; 4422; 4441; 4467; 4502; 4547; 4577; 4591; 4642; 4656; 4681; 4697; 4718; 4747
FspEI	!NNNNNNNNNNNNNNNGG	130	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 690; 717; 744; 786; 807; 831; 873; 892; 921; 957; 994; 1017; 1036; 1066; 1087; 1114; 1153; 1179; 1198; 1270; 1296; 1344; 1383; 1404; 1447; 1547; 1616; 1646; 1724; 1773; 1795; 1823; 1859; 1904; 1933; 1969; 1988; 2016; 2036; 2099; 2122; 2230; 2262; 2280; 2309; 2352; 2381; 2492; 2521; 2564; 2585; 2613; 2646; 2666; 2691; 2718; 2743; 2765; 2793; 2819; 2840; 2891; 2912; 2930; 2978; 3014; 3070; 3095; 3119; 3148; 3171; 3195; 3221; 3243; 3262; 3287; 3327; 3363; 3428; 3513; 3537; 3566; 3600; 3621; 3641; 3686; 3713; 3732; 3765; 3817; 3848; 3875; 3927; 4025; 4096; 4141; 4202; 4267; 4301; 4327; 4345; 4381; 4451; 4474; 4496; 4520; 4553; 4601; 4636; 4654; 4711
Fsp4HI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1423; 1553; 2072; 2094; 2108; 2546; 2685; 2737; 2748; 2838; 2843; 2880; 2921; 3008; 3014; 3250; 3346; 3387; 3401; 3515; 3854; 3869; 4080; 4286; 4289; 4354; 4497; 4652
GdiII	C!GGCCR	2	1420; 2682
GdiII	Y!GGCCG	4	1420; 2682; 3247; 3274
GlaI	GC!GC	22	663; 665; 2041; 2049; 2075; 2097; 2106; 2119; 2150; 2769; 2777; 2841; 2878; 3144; 3404; 3580; 3666; 4069; 4178; 4352; 4452; 4519
GluI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1423; 1553; 2072; 2094; 2108; 2546; 2685; 2737; 2748; 2838; 2843; 2880; 2921; 3008; 3014; 3250; 3346; 3387; 3401; 3515; 3854; 3869; 4080; 4286; 4289; 4354; 4497; 4652
GsaI	CCCAG!C	3	2323; 2395; 4394
GsaI	GCTGG!G	2	1136; 3284
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3616
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	1029; 3559
HaeI	WGG!CCW	7	1140; 1371; 2597; 2858; 4220; 4672; 4683
HaeII	RGCGC!Y	4	2043; 2051; 2779; 4454
HaeIII	GG!CC	29	84; 277; 642; 862; 1105; 1140; 1174; 1197; 1219; 1329; 1371; 1422; 1742; 1884; 2539; 2545; 2554; 2597; 2684; 2858; 3249; 3276; 3785; 3842; 3875; 4220; 4654; 4672; 4683
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1451; 2972
HaeIV	!NNNNNNNNNGAYNNNNNNRTCC	2	1417; 2938
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1450; 2971
HaeIV	!NNNNNNNNNGAYNNNNNNRTCC	2	1419; 2940
HapII	C!CGG	19	644; 693; 1285; 1994; 2681; 2758; 2780; 2808; 2939; 3029; 3096; 3277; 3552; 3560; 3652; 4126; 4316; 4342; 4489
HgaI	GACGCNNNNN!	4	526; 617; 3486; 3565
HgaI	!NNNNNNNNNNNGCGTC	4	1277; 2109; 4004; 4582

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	22	664; 666; 2042; 2050; 2076; 2098; 2107; 2120; 2151; 2770; 2778; 2842; 2879; 3145; 3405; 3581; 3667; 4070; 4179; 4353; 4453; 4520
Hin1I	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
Hin1II	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1196; 2206; 2346; 2418; 2509; 2650; 2995; 3181; 3212; 3238; 3594; 3978; 4698; 4749
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1450; 2971
Hin4I	!NNNNNNNGABNNNNNRTC	3	1418; 2939; 2969
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1450; 2971; 3001
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1418; 2939
Hin6I	G!CGC	22	662; 664; 2040; 2048; 2074; 2096; 2105; 2118; 2149; 2768; 2776; 2840; 2877; 3143; 3403; 3579; 3665; 4068; 4177; 4351; 4451; 4518
HinP1I	G!CGC	22	662; 664; 2040; 2048; 2074; 2096; 2105; 2118; 2149; 2768; 2776; 2840; 2877; 3143; 3403; 3579; 3665; 4068; 4177; 4351; 4451; 4518
HincII	GTY!RAC	1	1539
HindII	GTY!RAC	1	1539
HindIII	A!AGCTT	0	
HinfI	G!ANTC	15	410; 841; 991; 1318; 1427; 1819; 1841; 2251; 3261; 3395; 3447; 3505; 3542; 4324; 4720
HpaI	GTT!AAC	1	1539
HpaII	C!CGG	19	644; 693; 1285; 1994; 2681; 2758; 2780; 2808; 2939; 3029; 3096; 3277; 3552; 3560; 3652; 4126; 4316; 4342; 4489
HphI	GGTGANNNNNNNN!	4	376; 1097; 3847; 3963
HphI	!NNNNNNNTCACC	3	986; 1893; 2954
Hpy8I	GTN!NAC	13	201; 539; 577; 773; 793; 1088; 1292; 1301; 1539; 1823; 1840; 1895; 4382
Hpy99I	CGWCG!	8	1350; 2866; 2894; 3188; 3203; 3480; 3865; 4598
Hpy166II	GTN!NAC	13	201; 539; 577; 773; 793; 1088; 1292; 1301; 1539; 1823; 1840; 1895; 4382
Hpy188I	TCN!GA	13	585; 800; 1080; 1950; 2559; 2743; 3087; 3440; 3541; 4020; 4154; 4507; 4585
Hpy188III	TC!NNGA	24	605; 1073; 1238; 1277; 1431; 2203; 2255; 2568; 2621; 2794; 3110; 3119; 3202; 3258; 3302; 3392; 3425; 3494; 3975; 4049; 4132; 4230; 4328; 4462
HpyAV	CCTTCNNNNNN!	6	881; 929; 974; 3421; 3528; 4207
HpyAV	!NNNNNGAAGG	9	801; 1173; 2009; 2904; 3633; 3649; 3832; 4149; 4459
HpyCH4III	ACN!GT	14	76; 198; 269; 543; 581; 770; 1867; 3156; 3272; 3380; 3703; 4194; 4664; 4735
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1069; 1345; 1836; 1848; 1891; 2001; 2892; 3079; 3860; 3993
HpyCH4V	TG!CA	20	743; 793; 1115; 1231; 1525; 1552; 1620; 2337; 2346; 2409; 2418; 2533; 2609; 2668; 2827; 3002; 3016; 4086; 4382; 4749
HpyF3I	C!TNAG	9	712; 970; 1267; 2256; 2558; 3439; 3888; 4011; 4420
HpyF10VI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 749; 1180; 2003; 2033; 2060; 2102; 2343; 2415; 2466; 2545; 2767; 2851; 2874; 3013; 3136; 3219; 3486; 3673; 3877; 4076; 4648
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 609; 1288; 2776; 3478; 3557
Hsp92II	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1196; 2206; 2346; 2418; 2509; 2650; 2995; 3181; 3212; 3238; 3594; 3978; 4698; 4749
HspAI	G!CGC	22	662; 664; 2040; 2048; 2074; 2096; 2105; 2118; 2149; 2768; 2776; 2840; 2877; 3143; 3403; 3579; 3665; 4068; 4177; 4351; 4451; 4518
KasI	G!GCGCC	1	2775
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	0	
Ksp2I	T!GATCA	0	
KspAI	GTT!AAC	1	1539
Kzo9I	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	3	715; 3120; 3330

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnI	RGC!GCGY	4	2041; 2049; 2777; 4452
LpnPI	CCDGNNNNNNNNN!	61	102; 295; 618; 657; 706; 843; 900; 948; 982; 1044; 1059; 1120; 1188; 1212; 1236; 1298; 1385; 1513; 1818; 2007; 2230; 2268; 2284; 2324; 2379; 2396; 2496; 2581; 2694; 2771; 2793; 2816; 2952; 2966; 2985; 3042; 3109; 3159; 3175; 3232; 3290; 3499; 3565; 3589; 3665; 3754; 3857; 3890; 4121; 4139; 4285; 4305; 4329; 4355; 4404; 4502; 4547; 4577; 4656; 4681; 4718
LpnPI	!NNNNNNNNNNNNNCHGG	54	75; 268; 552; 619; 678; 873; 921; 1017; 1118; 1161; 1270; 1296; 1383; 1859; 1979; 2036; 2099; 2297; 2309; 2369; 2381; 2613; 2658; 2701; 2743; 2765; 2793; 2840; 2902; 2924; 3014; 3081; 3104; 3148; 3243; 3262; 3287; 3436; 3537; 3580; 3637; 3727; 3830; 3857; 3875; 4111; 4148; 4301; 4327; 4467; 4485; 4520; 4601; 4654
Lsp1109I	GCAGCNNNNNNNN!	8	922; 1364; 1564; 2849; 2891; 3412; 3865; 4365
Lsp1109I	!NNNNNNNNNNNGCTGC	8	601; 1041; 2058; 2723; 2907; 3000; 4066; 4272
LweI	GCATCNNNNN!	7	949; 1592; 2355; 2427; 3075; 3139; 3414
LweI	!NNNNNNNNNGATGC	8	357; 1102; 1141; 1270; 2734; 2989; 3205; 4597
MabI	A!CCWGGT	1	2365
MaeI	C!TAG	9	592; 1390; 1431; 1625; 2043; 2599; 3614; 3948; 4201
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1069; 1345; 1836; 1848; 1891; 2001; 2892; 3079; 3860; 3993
MaeIII	!GTNAC	13	61; 148; 497; 992; 1564; 2065; 2077; 2896; 3202; 3892; 4158; 4274; 4337
MalI	GA!TC	23	587; 672; 688; 1077; 1227; 1253; 1435; 2615; 2619; 2638; 2949; 3027; 3108; 3117; 3195; 3571; 3587; 3946; 3958; 4036; 4044; 4055; 4130
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2200; 3389
MbiI	GAG!CGG	3	1419; 2036; 3443
MboI	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
MboII	GAAGANNNNNNNN!	8	732; 1017; 1130; 2032; 2260; 3137; 3347; 3966
MboII	!NNNNNNNTCTTC	4	3427; 3594; 3794; 4037
McaTI	GCGC!GC	1	665
MfeI	C!AATTG	1	1526
MfiI	R!GATCY	11	585; 670; 686; 1251; 2947; 3193; 3585; 3944; 3956; 4042; 4053
MhII	GDGCH!C	12	768; 795; 828; 1405; 1967; 2722; 2815; 2889; 3079; 3141; 3851; 4384
MisI	TGG!CCA	2	1371; 2858
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	1371; 2858
MlyI	GAGTCNNNNN!	3	1000; 1828; 2260
MlyI	!NNNNNGACTC	5	404; 1421; 1835; 3441; 4318
Mly113I	GG!CGCC	1	2776
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	2	1123; 1869
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4301; 4485
MnII	CCTCNNNNNNN!	12	874; 1053; 1068; 1284; 1395; 1495; 2559; 3377; 3583; 3897; 4267; 4591
MnII	!NNNNNGAGG	22	541; 755; 794; 815; 848; 965; 1074; 1130; 1319; 1352; 1455; 1920; 2251; 2529; 2572; 2587; 2627; 2691; 2827; 3184; 3614; 4517
Mph1103I	ATGCA!T	3	2348; 2420; 4751
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1993; 3276; 3559
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1371; 2858
MseI	T!TAA	18	7; 730; 955; 1411; 1477; 1538; 1659; 1680; 1691; 1703; 1714; 1731; 1829; 2100; 3919; 3933; 3938; 3990
MslI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3213
MspI	C!CGG	19	644; 693; 1285; 1994; 2681; 2758; 2780; 2808; 2939; 3029; 3096; 3277; 3552; 3560; 3652; 4126; 4316; 4342; 4489
Msp20I	TGG!CCA	2	1371; 2858
MspA1I	CMG!CKG	6	614; 1164; 2274; 2882; 4111; 4356

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspCI	C!TTAAG	1	1658
MspJI	CNNRNNNNNNNNNN!	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; 617; 636; 650; 665; 679; 705; 724; 738; 752; 770; 800; 818; 833; 848; 866; 899; 914; 942; 957; 981; 994; 1010; 1028; 1042; 1058; 1071; 1085; 1106; 1119; 1140; 1153; 1173; 1187; 1205; 1218; 1235; 1250; 1267; 1287; 1317; 1334; 1354; 1368; 1384; 1401; 1416; 1436; 1449; 1464; 1483; 1500; 1513; 1554; 1568; 1581; 1599; 1637; 1652; 1670; 1711; 1735; 1755; 1773; 1794; 1817; 1849; 1864; 1886; 1904; 1917; 1938; 1955; 1968; 1981; 1997; 2010; 2040; 2055; 2080; 2098; 2111; 2126; 2150; 2164; 2188; 2213; 2229; 2267; 2283; 2322; 2336; 2350; 2378; 2394; 2408; 2422; 2451; 2464; 2485; 2494; 2516; 2546; 2562; 2580; 2610; 2633; 2657; 2681; 2700; 2728; 2754; 2770; 2783; 2806; 2820; 2840; 2853; 2867; 2886; 2900; 2913; 2929; 2944; 2957; 2973; 2988; 3004; 3029; 3048; 3064; 3077; 3090; 3108; 3122; 3136; 3152; 3174; 3190; 3209; 3231; 3247; 3270; 3289; 3303; 3319; 3333; 3353; 3369; 3382; 3404; 3437; 3451; 3471; 3484; 3498; 3552; 3565; 3588; 3601; 3620; 3637; 3664; 3700; 3733; 3752; 3777; 3798; 3825; 3838; 3855; 3869; 3884; 3900; 3960; 3985; 4001; 4023; 4036; 4050; 4081; 4095; 4120; 4138; 4153; 4166; 4185; 4198; 4213; 4242; 4261; 4279; 4304; 4319; 4338; 4354; 4373; 4391; 4407; 4421; 4440; 4467; 4490; 4512; 4531; 4546; 4559; 4576; 4596; 4623; 4636; 4655; 4680; 4703; 4717; 4730; 4747
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; 591; 608; 625; 647; 667; 690; 717; 744; 774; 798; 816; 840; 859; 881; 921; 942; 968; 988; 1017; 1059; 1093; 1114; 1134; 1161; 1179; 1196; 1214; 1242; 1263; 1282; 1308; 1330; 1353; 1376; 1402; 1428; 1457; 1486; 1528; 1611; 1646; 1673; 1696; 1725; 1769; 1791; 1823; 1859; 1876; 1897; 1934; 1954; 1971; 1988; 2023; 2041; 2059; 2076; 2100; 2122; 2149; 2177; 2203; 2241; 2262; 2279; 2297; 2320; 2341; 2369; 2392; 2413; 2431; 2452; 2469; 2492; 2516; 2536; 2554; 2576; 2607; 2629; 2655; 2674; 2691; 2719; 2738; 2757; 2775; 2793; 2814; 2836; 2860; 2893; 2913; 2931; 2952; 2978; 3005; 3022; 3039; 3056; 3082; 3104; 3126; 3144; 3164; 3183; 3205; 3243; 3263; 3287; 3307; 3327; 3354; 3378; 3411; 3430; 3458; 3480; 3509; 3537; 3562; 3581; 3600; 3621; 3638; 3655; 3686; 3713; 3733; 3756; 3776; 3813; 3830; 3849; 3875; 3895; 3934; 3961; 3980; 3998; 4035; 4053; 4094; 4112; 4138; 4155; 4187; 4216; 4244; 4265; 4288; 4307; 4328; 4346; 4363; 4381; 4407; 4428; 4448; 4468; 4486; 4507; 4533; 4550; 4569; 4588; 4617; 4636; 4654; 4673; 4691; 4709; 4732
MspR9I	CC!NGG	22	90; 283; 644; 888; 936; 1032; 1047; 1176; 1285; 2312; 2367; 2384; 2780; 2940; 3163; 3553; 3742; 3845; 4317; 4535; 4548; 4669
MssI	GTTT!AAC	0	
MunI	C!AATTG	1	1526
MvaI	CC!WGG	16	90; 283; 888; 936; 1032; 1047; 1176; 2312; 2367; 2384; 3163; 3742; 3845; 4535; 4548; 4669
Mva1269I	GAATGCN!	1	1527
Mva1269I	G!CATTC	1	1620
MvnI	CG!CG	17	60; 662; 664; 1425; 1700; 2076; 2096; 2120; 2151; 2842; 3143; 3581; 3665; 3728; 3797; 4070; 4651
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 749; 1180; 2003; 2033; 2060; 2102; 2343; 2415; 2466; 2545; 2767; 2851; 2874; 3013; 3136; 3219; 3486; 3673; 3877; 4076; 4648
NaeI	GCC!GGC	3	1995; 3278; 3561
NarI	GG!CGCC	1	2776
NciI	CC!SGG	6	644; 1285; 2780; 2940; 3553; 4317
NcoI	C!CATGG	4	360; 703; 2505; 3208
NdeI	CA!TATG	1	234
NdeII	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	832
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	868

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1993; 3276; 3559
NheI	G!CTAGC	1	591
NlaIII	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1196; 2206; 2346; 2418; 2509; 2650; 2995; 3181; 3212; 3238; 3594; 3978; 4698; 4749
NlaIV	GGN!NCC	19	467; 651; 688; 767; 827; 1218; 1931; 1952; 1964; 2155; 2316; 2388; 2777; 2812; 3660; 3739; 3784; 4627; 4666
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1608; 1923; 3515
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1092; 4587
Nli3877I	CYCGR!G	0	
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2565; 3001
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	3	618; 1108; 2530
NmeDI	RCCGGYNNNNNN!	5	704; 2005; 3107; 3288; 3571
NmeDI	!NNNNNNNNNNNNRCCGGY	5	679; 1980; 3082; 3263; 3546
NmuCI	!GTSAC	4	992; 2065; 2896; 3202
NotI	GC!GGCCGC	1	1420
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2878
NsiI	ATGCA!T	3	2348; 2420; 4751
NspI	RCATG!Y	6	599; 743; 2346; 2418; 3181; 4698
NspV	TT!CGAA	1	3458
OliI	CACNN!NNGTG	1	705
PabI	GTA!C	10	220; 245; 300; 333; 384; 541; 757; 907; 1159; 3083
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2346; 2418; 3181
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2202; 3974
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	935; 3741; 3844
PauI	G!CGCGC	1	662
PceI	AGG!CCT	1	2597
PciI	A!CATGT	1	4694
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	3	715; 3120; 3330
PcsI	WCGNNNN!NNNCGW	7	1354; 3070; 3147; 3390; 3464; 3857; 4375
PctI	GAATGCN!	1	1527
PctI	G!CATTC	1	1620
PdiI	GCC!GGC	3	1995; 3278; 3561
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	841; 1318; 3261; 3395; 3505; 3542; 4720
Pfi23II	C!GTACG	0	
PfifI	GACN!NNGTC	1	2894
PfIMI	CCANNNN!NTGG	2	680; 1310
PfoI	T!CCNGGA	2	1045; 3551
PhoI	GG!CC	29	84; 277; 642; 862; 1105; 1140; 1174; 1197; 1219; 1329; 1371; 1422; 1742; 1884; 2539; 2545; 2554; 2597; 2684; 2858; 3249; 3276; 3785; 3842; 3875; 4220; 4654; 4672; 4683
PinAI	A!CCGGT	1	692
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3157
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2722; 2977
PleI	GAGTCNNNN!	3	999; 1827; 2259
PleI	!NNNNNGACTC	5	404; 1421; 1835; 3441; 4318
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1858
PpiI	!NNNNNNNNNGAGNNNNNGTTC	1	3988
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4020
PpiI	!NNNNNNNGAACNNNNNCTC	1	1826
PpsI	GAGTCNNNN!	3	999; 1827; 2259
PpsI	!NNNNNGACTC	5	404; 1421; 1835; 3441; 4318
Ppu10I	A!TGCAT	3	2344; 2416; 4747
Ppu21I	YAC!GTR	3	340; 1892; 3080

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpuMI	RG!GWCCY	0	
Psci	A!CATGT	1	4694
PshAI	GACNN!NNGTC	1	1344
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1559; 1764
Psp03I	GGWC!C	3	1304; 3295; 3740
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	16	88; 281; 886; 934; 1030; 1045; 1174; 2310; 2365; 2382; 3161; 3740; 3843; 4533; 4546; 4667
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	16	88; 281; 886; 934; 1030; 1045; 1174; 2310; 2365; 2382; 3161; 3740; 3843; 4533; 4546; 4667
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	19	467; 651; 688; 767; 827; 1218; 1931; 1952; 1964; 2155; 2316; 2388; 2777; 2812; 3660; 3739; 3784; 4627; 4666
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	3	125; 2506; 3505
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2908
PspPI	G!GNCC	14	83; 276; 641; 861; 1104; 1196; 1217; 1301; 1883; 3292; 3737; 3783; 3841; 3874
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2329; 2401; 3907
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	956; 1384; 2242; 3437
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGNC!CY	1	3877
PstI	CTGCA!G	0	
PstNI	CAGNN!CTG	3	1378; 3877; 4285
PsuI	R!GATCY	11	585; 670; 686; 1251; 2947; 3193; 3585; 3944; 3956; 4042; 4053
PsyI	GACN!NNGTC	1	2894
PteI	G!CGCGC	1	662
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2274; 2882
RcaI	T!CATGA	2	2202; 3974
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3291
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	1	1505
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	1	602
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	10	219; 244; 299; 332; 383; 540; 756; 906; 1158; 3082
RsaNI	G!TAC	10	218; 243; 298; 331; 382; 539; 755; 905; 1157; 3081
RseI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3213
RsrII	CG!GWCCG	1	3292
Rsr2I	CG!GWCCG	1	3292
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	3	715; 3120; 3330
SaqAI	T!TAA	18	7; 730; 955; 1411; 1477; 1538; 1659; 1680; 1691; 1703; 1714; 1731; 1829; 2100; 3919; 3933; 3938; 3990

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1423; 1553; 2072; 2094; 2108; 2546; 2685; 2737; 2748; 2838; 2843; 2880; 2921; 3008; 3014; 3250; 3346; 3387; 3401; 3515; 3854; 3869; 4080; 4286; 4289; 4354; 4497; 4652
Sau96I	G!GNCC	14	83; 276; 641; 861; 1104; 1196; 1217; 1301; 1883; 3292; 3737; 3783; 3841; 3874
Sau3AI	!GATC	23	585; 670; 686; 1075; 1225; 1251; 1433; 2613; 2617; 2636; 2947; 3025; 3106; 3115; 3193; 3569; 3585; 3944; 3956; 4034; 4042; 4053; 4128
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	3	1000; 1828; 2260
SchI	!NNNNNGACTC	5	404; 1421; 1835; 3441; 4318
SciI	CTC!GAG	0	
ScrFI	CC!NGG	22	90; 283; 644; 888; 936; 1032; 1047; 1176; 1285; 2312; 2367; 2384; 2780; 2940; 3163; 3553; 3742; 3845; 4317; 4535; 4548; 4669
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	6	1142; 1210; 2354; 2426; 2595; 4537
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2931; 3416
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	12	768; 795; 828; 1405; 1967; 2722; 2815; 2889; 3079; 3141; 3851; 4384
SelI	!CGCG	17	58; 660; 662; 1423; 1698; 2074; 2094; 2118; 2149; 2840; 3141; 3579; 3663; 3726; 3795; 4068; 4649
SetI	ASST!	62	125; 137; 178; 261; 308; 342; 447; 552; 568; 727; 754; 850; 900; 921; 1072; 1207; 1225; 1276; 1344; 1348; 1363; 1387; 1466; 1487; 1496; 1508; 1557; 1724; 1839; 1851; 1894; 1931; 1981; 2004; 2128; 2276; 2371; 2564; 2677; 2805; 2884; 2895; 2967; 3038; 3082; 3342; 3488; 3532; 3863; 3894; 3953; 3996; 4139; 4160; 4259; 4396; 4411; 4430; 4442; 4486; 4532; 4583
SexAI	A!CCWGGT	1	2365
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	949; 1592; 2355; 2427; 3075; 3139; 3414
SfaNI	!NNNNNNNNNGATGC	8	357; 1102; 1141; 1270; 2734; 2989; 3205; 4597
SfcI	C!TRYAG	3	2111; 4238; 4429
SfiI	GGCCNNNN!NGGCC	1	2551
SfoI	GGC!GCC	1	2777
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3458
SgeI	CNNGNNNNNNNNN!	188	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 705; 752; 770; 800; 824; 842; 857; 899; 914; 947; 981; 994; 1022; 1043; 1058; 1085; 1119; 1140; 1160; 1173; 1187; 1205; 1218; 1235; 1250; 1268; 1289; 1323; 1361; 1384; 1402; 1436; 1483; 1512; 1554; 1637; 1711; 1795; 1817; 1849; 1886; 1904; 1923; 1938; 1980; 1997; 2014; 2049; 2063; 2080; 2102; 2126; 2150; 2215; 2229; 2267; 2283; 2323; 2336; 2355; 2378; 2395; 2408; 2427; 2457; 2478; 2495; 2518; 2553; 2580; 2611; 2633; 2659; 2681; 2700; 2728; 2764; 2783; 2806; 2820; 2840; 2853; 2867; 2886; 2900; 2919; 2951; 2965; 2978; 3004; 3035; 3048; 3065; 3082; 3096; 3113; 3131; 3146; 3174; 3190; 3209; 3231; 3247; 3270; 3289; 3314; 3333; 3353; 3380; 3404; 3437; 3456; 3484; 3498; 3564; 3588; 3603; 3626; 3647; 3664; 3712; 3739; 3753; 3782; 3806; 3839; 3856; 3876; 3889; 3902; 3960; 3987; 4006; 4036; 4061; 4081; 4095; 4120; 4138; 4175; 4213; 4242; 4270; 4284; 4304; 4319; 4340; 4354; 4373; 4391; 4407; 4447; 4467; 4494; 4512; 4533; 4546; 4559; 4576; 4600; 4623; 4655; 4680; 4707; 4729

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	163	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 679; 726; 744; 774; 798; 816; 840; 873; 921; 955; 996; 1017; 1059; 1093; 1114; 1134; 1161; 1179; 1200; 1224; 1242; 1263; 1297; 1335; 1358; 1376; 1410; 1457; 1486; 1528; 1611; 1685; 1769; 1791; 1823; 1860; 1878; 1897; 1954; 1971; 1988; 2023; 2041; 2061; 2081; 2100; 2124; 2189; 2241; 2297; 2329; 2352; 2369; 2401; 2431; 2452; 2469; 2492; 2527; 2554; 2585; 2607; 2633; 2655; 2674; 2702; 2738; 2757; 2780; 2801; 2819; 2836; 2860; 2893; 2925; 2952; 2978; 3009; 3039; 3056; 3082; 3105; 3126; 3148; 3168; 3188; 3205; 3244; 3263; 3288; 3307; 3327; 3354; 3378; 3411; 3430; 3458; 3480; 3538; 3562; 3581; 3600; 3621; 3638; 3686; 3713; 3733; 3756; 3780; 3813; 3830; 3850; 3876; 3934; 3961; 3980; 4010; 4035; 4055; 4094; 4112; 4149; 4187; 4216; 4244; 4265; 4293; 4314; 4347; 4365; 4421; 4441; 4468; 4486; 4507; 4533; 4550; 4574; 4597; 4629; 4654; 4681; 4703; 4732
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1923; 3710; 4503
SimI	!GACCC	4	106; 3204; 3772; 4020
SinI	G!GWCC	3	1301; 3292; 3737
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3213
SmlI	C!TYRAG	6	1275; 1658; 3167; 4049; 4326; 4588
SmoI	C!TYRAG	6	1275; 1658; 3167; 4049; 4326; 4588
SmuI	CCCGCNNNN!	10	93; 119; 286; 1169; 1271; 2098; 2453; 2474; 3670; 3802
SmuI	!NNNNNNGCGGG	7	616; 1206; 2029; 2899; 3436; 3574; 3721
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2346; 2418; 3181
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1412; 1526; 1590; 1668; 1694; 1705; 2352; 2424; 2516; 3934
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2597
SsiI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1423; 2091; 2094; 2108; 2198; 2446; 2458; 2467; 2479; 2489; 2500; 2546; 2685; 2748; 3250; 3295; 3361; 3387; 3512; 3515; 3663; 3795; 4102; 4246; 4742
SsiI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1419; 2036; 2063; 2151; 2261; 2842; 2906; 3007; 3010; 3290; 3345; 3443; 3581; 3728; 3868; 4111; 4356; 4477; 4496; 4623; 4651
SspI	AAT!ATT	2	1684; 2237
SspDI	G!CGGCC	1	2775
SspD5I	GGTGANNNNNNNN!	4	376; 1097; 3847; 3963
SspD5I	!NNNNNNNNNTCACC	3	985; 1892; 2953
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	1	1030
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 650; 952; 1168; 1270; 1291; 1975; 2097; 2452; 2473; 2786; 3189; 3328; 3399; 3669; 3801; 4031; 4469
Sth132I	!NNNNNNNNNCGGG	21	15; 407; 470; 615; 1001; 1205; 1976; 2028; 2129; 2856; 2898; 2931; 3435; 3544; 3573; 3720; 3824; 3855; 4308; 4352; 4560
Sth302II	CC!GG	19	645; 694; 1286; 1995; 2682; 2759; 2781; 2809; 2940; 3030; 3097; 3278; 3553; 3561; 3653; 4127; 4317; 4343; 4490
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	4	2644; 3101; 3126; 3580
StsI	!NNNNNNNNNNNNNNCATCC	5	781; 869; 926; 1081; 2448
StuI	AGG!CCT	1	2597
StyI	C!CWWGG	6	360; 703; 2505; 2598; 3208; 3613

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	22	88; 281; 642; 886; 934; 1030; 1045; 1174; 1283; 2310; 2365; 2382; 2778; 2938; 3161; 3551; 3740; 3843; 4315; 4533; 4546; 4667
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	14	76; 198; 269; 543; 581; 770; 1867; 3156; 3272; 3380; 3703; 4194; 4664; 4735
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1072; 1348; 1839; 1851; 1894; 2004; 2895; 3082; 3863; 3996
TaqI	T!CGA	14	853; 880; 1348; 1925; 2616; 2889; 3045; 3069; 3105; 3267; 3458; 3503; 3758; 4596
TaqII	GACCGANNNNNNNNNN!	3	1796; 2813; 3481
TaqII	!NNNNNNNNNTCGGTC	1	3725
TaqII	CACCCANNNNNNNNNN!	2	843; 948
TaqII	!NNNNNNNNNTGGGTG	3	172; 2680; 3272
TasI	!AATT	11	18; 1412; 1526; 1590; 1668; 1694; 1705; 2352; 2424; 2516; 3934
TatI	W!GTACW	5	217; 297; 330; 381; 754
TauI	GCSG!C	21	614; 650; 662; 862; 1174; 1425; 2096; 2110; 2548; 2687; 2750; 2845; 3010; 3013; 3252; 3348; 3389; 3517; 3871; 4499; 4654
TfiI	G!AWTC	7	841; 1318; 3261; 3395; 3505; 3542; 4720
TliI	C!TCGAG	0	
TruII	T!TAA	18	7; 730; 955; 1411; 1477; 1538; 1659; 1680; 1691; 1703; 1714; 1731; 1829; 2100; 3919; 3933; 3938; 3990
Tru9I	T!TAA	18	7; 730; 955; 1411; 1477; 1538; 1659; 1680; 1691; 1703; 1714; 1731; 1829; 2100; 3919; 3933; 3938; 3990
TscAI	CASTGNN!	6	661; 1622; 2905; 4015; 4286; 4299
TseI	G!CWGC	19	614; 617; 620; 910; 1054; 1352; 1552; 2071; 2736; 2837; 2879; 2920; 3013; 3400; 3853; 4079; 4285; 4288; 4353
TsoI	TARCCANNNNNNNNNN!	2	1748; 2095
TsoI	!NNNNNNNNNTGGYTA	3	879; 1553; 3305
Tsp45I	!GTSAC	4	992; 2065; 2896; 3202
Tsp509I	!AATT	11	18; 1412; 1526; 1590; 1668; 1694; 1705; 2352; 2424; 2516; 3934
TspDTI	ATGAANNNNNNNNNN!	4	762; 1534; 2835; 3539
TspDTI	!NNNNNNNNNTTCAT	6	26; 890; 911; 3253; 3709; 3916
TspEI	!AATT	11	18; 1412; 1526; 1590; 1668; 1694; 1705; 2352; 2424; 2516; 3934
TspGWI	ACGGANNNNNNNNNN!	1	3651
TspGWI	!NNNNNNNNNTCCGT	1	590
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	6	661; 1622; 2905; 4015; 4286; 4299
TstI	CACNNNNNTCCNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNCCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2894
Tth111II	CAARCAANNNNNNNNNN!	1	4103
Tth111III	!NNNNNNNNNTGYTTG	3	3211; 4071; 4110
UnbI	!GGNCC	14	82; 275; 640; 860; 1103; 1195; 1216; 1300; 1882; 3291; 3736; 3782; 3840; 3873
Van91I	CCANNNN!NTGG	2	680; 1310
Vha464I	C!TTAAG	1	1658
VneI	G!TGCAC	2	791; 4380
VpaK11AI	!GGWCC	3	1300; 3291; 3736
VpaK11BI	G!GWCC	3	1301; 3292; 3737
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	1590; 1694; 1705
XbaI	T!CTAGA	1	1430
XceI	RCATG!Y	6	599; 743; 2346; 2418; 3181; 4698
XcmI	CCANNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	11	585; 670; 686; 1251; 2947; 3193; 3585; 3944; 3956; 4042; 4053
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2598; 3613
XmiI	GT!MKAC	1	1291

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1390; 1431; 1625; 2043; 2599; 3614; 3948; 4201
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2348; 2420; 4751