

pCop-Green-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	1565; 1770
AarI	CACCTGCNNNN!	1	1135
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1853; 2809; 4598
AatI	AGG!CCT	1	2603
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2884
Acc36I	ACCTGCNNNN!	4	862; 1135; 3050; 3500
Acc36I	!NNNNNNNNGCAGGT	1	2669
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	9	465; 738; 783; 831; 894; 1056; 1935; 2781; 2816
AccB7I	CCANNNN!NTGG	2	680; 869
AccBSI	CCG!CTC	2	2206; 3395
AccBSI	GAG!CGG	2	2042; 3449
AceIII	CAGCTCNNNNNNN!	1	1738
AceIII	!NNNNNNNNNNGAGCTG	4	552; 750; 1287; 1305
AciI	C!CGC	45	58; 86; 98; 112; 279; 507; 589; 612; 660; 709; 728; 800; 962; 1013; 1028; 1103; 1169; 1286; 1289; 1396; 1429; 2097; 2100; 2114; 2204; 2452; 2464; 2473; 2485; 2495; 2506; 2552; 2691; 2754; 3256; 3301; 3367; 3393; 3518; 3521; 3669; 3801; 4108; 4252; 4748
AciI	G!CGG	31	370; 403; 528; 623; 647; 772; 775; 907; 946; 985; 1192; 2042; 2069; 2157; 2267; 2848; 2912; 3013; 3016; 3296; 3351; 3449; 3587; 3734; 3874; 4117; 4362; 4483; 4502; 4629; 4657
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	9	694; 1430; 2650; 2961; 3207; 3599; 3958; 4056; 4142
AclWI	!NNNNNGATCC	8	580; 665; 681; 1366; 3026; 3570; 3957; 4054
AcoI	Y!GGCCR	6	1025; 1426; 2688; 2862; 3253; 3280
AcsI	R!AATY	3	1596; 1700; 1711
AcuI	CTGAAGNNNNNNNNNNNNNNN!	2	2928; 3360
AcuI	!NNNNNNNNNNNNNNCTTCAG	4	827; 989; 1160; 4158
AcvI	CAC!GTG	2	866; 998
AcyI	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
AdeI	CACNNN!GTG	1	1898
AfaI	GT!AC	9	219; 244; 299; 332; 383; 540; 975; 1335; 3088
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	21	49; 680; 794; 869; 1019; 1292; 1794; 2120; 2512; 2763; 3307; 3588; 3620; 3752; 3787; 3837; 3869; 4222; 4501; 4667; 4685
AfII	C!TTAAG	1	1664
AfIII	A!CRYGT	1	4700
AgeI	A!CCGGT	1	692
AgsI	TTS!AA	8	1046; 1232; 1349; 2193; 2237; 2247; 2660; 4236
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajni	!CCWGG	12	88; 281; 1381; 2316; 2371; 2388; 3167; 3746; 3849; 4539; 4552; 4673
AjuI	GAANNNNNNNTTGNNNNNNNNNNN!	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	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2356; 2428
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2322; 2394
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1864
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1832
AluI	AG!CT	19	566; 764; 1003; 1009; 1162; 1204; 1301; 1319; 1561; 1728; 1985; 2280; 2568; 2888; 3346; 4143; 4400; 4446; 4536
AluBI	AG!CT	19	566; 764; 1003; 1009; 1162; 1204; 1301; 1319; 1561; 1728; 1985; 2280; 2568; 2888; 3346; 4143; 4400; 4446; 4536
AlwI	GGATCNNNN!	9	694; 1430; 2650; 2961; 3207; 3599; 3958; 4056; 4142
AlwI	!NNNNNGATCC	8	580; 665; 681; 1366; 3026; 3570; 3957; 4054
Alw21I	GWGCW!C	5	825; 1126; 2895; 3085; 4390
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	4	2206; 2624; 3643; 3771
Alw44I	G!TGCAC	1	4386
AlwNI	CAGNNN!CTG	2	3883; 4291
Ama87I	C!YCGRG	2	789; 1068
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	1	1272
ApaBI	GCANNNNN!TGC	3	2350; 2422; 3884
ApaLI	G!TGCAC	1	4386
ApeKI	G!CWGC	20	614; 617; 620; 992; 1105; 1159; 1301; 1558; 2077; 2742; 2843; 2885; 2926; 3019; 3406; 3859; 4085; 4291; 4294; 4359
ApoI	R!AATTY	3	1596; 1700; 1711
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3297
ApyPI	!NNNNNNNNNNNNNNNNNNGTTCGAT	3	3091; 3744; 4582
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	2	1439; 3181
AquII	!NNNNNNNNNNNNNNNNNNGTNCGGC	0	
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	2	1321; 2610
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	2	1046; 3352
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	27	586; 671; 687; 719; 1034; 1082; 1097; 1358; 1372; 1423; 1440; 2620; 2624; 2643; 2954; 3032; 3113; 3122; 3200; 3576; 3592; 3951; 3963; 4041; 4049; 4060; 4135
AsiGI	A!CCGGT	1	692
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2900
Asp700I	GAANN!NNTTC	1	921
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2604; 3619
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	25	664; 666; 834; 1186; 1239; 2048; 2056; 2082; 2104; 2113; 2126; 2157; 2776; 2784; 2848; 2885; 3151; 3411; 3587; 3673; 4076; 4185; 4359; 4459; 4526
AspS9I	G!GNCC	12	83; 276; 641; 797; 1269; 1416; 1889; 3298; 3743; 3789; 3847; 3880
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	3464
AsuC2I	CC!SGG	6	644; 1420; 2786; 2946; 3559; 4323
AsuHPI	GGTGANNNNNNNN!	3	376; 3853; 3969
AsuHPI	!NNNNNNNTCACC	4	725; 1079; 1899; 2960
AsuNHl	G!CTAGC	1	591
AvaI	C!YCGRG	2	789; 1068
AvaII	G!GWCC	3	1416; 3298; 3743
AviII	TGC!GCA	1	2884
AvrII	C!CTAGG	2	2604; 3619

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	2	2262; 3894
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	6	786; 1059; 1272; 2728; 2821; 4390
BalI	TGG!CCA	1	2864
BamHI	G!GATCC	1	686
BanI	G!GYRCC	9	465; 738; 783; 831; 894; 1056; 1935; 2781; 2816
BanII	GRGCY!C	5	1272; 1382; 1973; 3147; 3857
BanIII	AT!CGAT	1	2622
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	2	680; 869
BauI	C!ACGAG	2	3500; 4527
BauI	C!TCGTG	1	3374
BbeI	GGCGC!C	2	835; 2785
Bbr7I	GAAGACNNNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	2	866; 998
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2352; 2424; 3187
BbvI	GCAGCNNNNNNNN!	8	1117; 1171; 1570; 2855; 2897; 3418; 3871; 4371
BbvI	!NNNNNNNNNNNGCTGC	9	601; 979; 1288; 2064; 2729; 2913; 3006; 4072; 4278
Bbv12I	GWGCW!C	5	825; 1126; 2895; 3085; 4390
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	6	942; 1248; 1912; 2476; 3002; 3504
BccI	!NNNNNGATGG	5	863; 1398; 1880; 2660; 3088
BceAI	ACGGCNNNNNNNNNNNN!	7	764; 893; 959; 998; 1205; 3208; 3695
BceAI	!NNNNNNNNNNNNNGCCGT	4	1383; 1923; 2741; 4200
BceFI	ACGGCNNNNNNNNNNNN!	7	764; 893; 959; 998; 1205; 3208; 3695
BceFI	!NNNNNNNNNNNNNGCCGT	4	1384; 1924; 2742; 4201
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2211; 3001; 4502
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	6	644; 1420; 2786; 2946; 3559; 4323
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNNN!	1	4635
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	4601
BfaI	C!TAG	8	592; 1437; 1631; 2049; 2605; 3620; 3954; 4207
BfiI	ACTGGGNNNNN!	1	2731
BfiI	!NNNCCCAGT	3	289; 648; 2483
BfmI	C!TRYAG	5	1199; 1257; 2117; 4244; 4435
BfoI	RGCGC!Y	6	835; 1240; 2049; 2057; 2785; 4460
BfrI	C!TTAAG	1	1664
BfuI	GTATCCNNNNNN!	3	2211; 3001; 4502
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	4	862; 1135; 3050; 3500
BfuAI	!NNNNNNNNNGCAGGT	1	2669
BfuCI	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2557
BglII	A!GATCT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BisI	GC!NGC	47	612; 615; 618; 621; 648; 660; 728; 773; 800; 908; 947; 986; 993; 1028; 1106; 1160; 1193; 1289; 1302; 1429; 1559; 2078; 2100; 2114; 2552; 2691; 2743; 2754; 2844; 2849; 2886; 2927; 3014; 3020; 3256; 3352; 3393; 3407; 3521; 3860; 3875; 4086; 4292; 4295; 4360; 4503; 4658
BlnI	C!CTAGG	2	2604; 3619
BlpI	GC!TNAGC	1	858
BlsI	GCN!GC	47	613; 616; 619; 622; 649; 661; 729; 774; 801; 909; 948; 987; 994; 1029; 1107; 1161; 1194; 1290; 1303; 1430; 1560; 2079; 2101; 2115; 2553; 2692; 2744; 2755; 2845; 2850; 2887; 2928; 3015; 3021; 3257; 3353; 3394; 3408; 3522; 3861; 3876; 4087; 4293; 4296; 4361; 4504; 4659
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	1416; 3298; 3743
Bme1390I	CC!NGG	18	90; 283; 644; 1383; 1420; 2318; 2373; 2390; 2786; 2946; 3169; 3559; 3748; 3851; 4323; 4541; 4554; 4675
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	789; 1068
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	12	84; 277; 642; 798; 1270; 1417; 1890; 3299; 3744; 3790; 3848; 3881
BmiI	GGN!NCC	22	467; 651; 688; 740; 785; 833; 896; 1058; 1269; 1937; 1958; 1970; 2161; 2322; 2394; 2783; 2818; 3666; 3745; 3790; 4633; 4672
BmrI	ACTGGGNNNNN!	1	2731
BmrI	!NNNNCCCAGT	3	289; 648; 2483
BmrFI	CC!NGG	18	90; 283; 644; 1383; 1420; 2318; 2373; 2390; 2786; 2946; 3169; 3559; 3748; 3851; 4323; 4541; 4554; 4675
BmsI	GCATCNNNNN!	10	739; 973; 1261; 1333; 1598; 2361; 2433; 3081; 3145; 3420
BmsI	!NNNNNNNNNGATGC	5	357; 2740; 2995; 3211; 4603
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2731
BmuI	!NNNNCCCAGT	3	289; 648; 2483
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2571; 3470
BpI	!NNNNNNNNNGAGNNNNNCTC	2	2539; 3438
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3622
BpmI	!NNNNNNNNNNNNNNNCTCCAG	1	3565
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3464
Bpu1102I	GC!TNAGC	1	858
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4076; 4615
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	2	3158; 4317
BpuMI	CC!SGG	6	644; 1420; 2786; 2946; 3559; 4323
BpvUI	CGAT!CG	1	1360
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	3771
Bsa29I	AT!CGAT	1	2622
BsaAI	YAC!GTR	5	340; 866; 998; 1898; 3086
BsaBI	GATNN!NNATC	2	1444; 2641
BsaHI	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
BsaJI	C!CNNGG	21	360; 826; 1069; 1117; 1135; 1381; 1399; 2316; 2388; 2511; 2546; 2555; 2604; 2945; 3214; 3619; 3746; 3747; 3849; 3850; 4540
BsaMI	GAATGCN!	1	1533
BsaMI	G!CATTC	2	1362; 1626
BsaWI	W!CCGGW	5	692; 2813; 3657; 4347; 4494
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1862
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1832

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	2	982; 1336
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1783; 3690
Bsc4I	CCNNNNN!NNGG	21	49; 680; 794; 869; 1019; 1292; 1794; 2120; 2512; 2763; 3307; 3588; 3620; 3752; 3787; 3837; 3869; 4222; 4501; 4667; 4685
BscAI	GCATCNNNN!	10	738; 972; 1260; 1332; 1597; 2360; 2432; 3080; 3144; 3419
BscAI	!NNNNNNGATGC	5	360; 2743; 2998; 3214; 4606
Bse1I	ACTGGN!	3	2726; 2927; 4173
Bse1I	C!CAGT	6	295; 654; 1811; 2489; 4285; 4298
Bse8I	GATNN!NNATC	2	1444; 2641
Bse21I	CC!TNAGG	2	2262; 3894
Bse118I	R!CCGGY	8	692; 735; 1023; 1059; 1999; 3101; 3282; 3565
BseAI	T!CCGGA	0	
BseBI	CC!WGG	12	90; 283; 1383; 2318; 2373; 2390; 3169; 3748; 3851; 4541; 4554; 4675
BseCI	AT!CGAT	1	2622
BseDI	C!CNNGG	21	360; 826; 1069; 1117; 1135; 1381; 1399; 2316; 2388; 2511; 2546; 2555; 2604; 2945; 3214; 3619; 3746; 3747; 3849; 3850; 4540
Bse3DI	GCAATGNN!	1	3015
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	5	1409; 2642; 3099; 3124; 3578
BseGI	!CATCC	4	1099; 1240; 1252; 2468
BseJI	GATNN!NNATC	2	1444; 2641
BseLI	CCNNNNN!NNGG	21	49; 680; 794; 869; 1019; 1292; 1794; 2120; 2512; 2763; 3307; 3588; 3620; 3752; 3787; 3837; 3869; 4222; 4501; 4667; 4685
BseMI	GCAATGNN!	1	3015
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3908
BseMII	!NNNNNNNNCTGAG	6	849; 2253; 2555; 3436; 4008; 4417
BseNI	ACTGGN!	3	2726; 2927; 4173
BseNI	C!CAGT	6	295; 654; 1811; 2489; 4285; 4298
BsePI	G!CGCGC	1	662
BseRI	GAGGAGNNNNNNNNNN!	2	1311; 2600
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!	6	786; 1059; 1272; 2728; 2821; 4390
BseXI	GCAGCNNNNNNNN!	8	1117; 1171; 1570; 2855; 2897; 3418; 3871; 4371
BseXI	!NNNNNNNNNNNGTCTG	9	601; 979; 1288; 2064; 2729; 2913; 3006; 4072; 4278
BseX3I	C!GGCCG	3	1025; 1426; 2688
BseYI	C!CCAGC	5	903; 1248; 2325; 2397; 4396
BseYI	G!CTGGG	2	1319; 3286
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNNNCTGCAC	4	912; 978; 1113; 1287
Bsh1236I	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
Bsh1285I	CGRY!CG	6	697; 1028; 1360; 1429; 2691; 4366
BshFI	GG!CC	26	84; 277; 642; 799; 1023; 1027; 1270; 1386; 1428; 1748; 1890; 2545; 2551; 2560; 2603; 2690; 2864; 3255; 3282; 3791; 3848; 3881; 4226; 4660; 4678; 4689
BshNI	G!GYRCC	9	465; 738; 783; 831; 894; 1056; 1935; 2781; 2816
BshTI	A!CCGGT	1	692
BshVI	AT!CGAT	1	2622
BsiEI	CGRY!CG	6	697; 1028; 1360; 1429; 2691; 4366
BsiHKAI	GWGCW!C	5	825; 1126; 2895; 3085; 4390
BsiHKCI	C!YCGRG	2	789; 1068
BsiSI	C!CGG	23	644; 693; 736; 1024; 1060; 1414; 1419; 2000; 2687; 2764; 2786; 2814; 2945; 3035; 3102; 3283; 3558; 3566; 3658; 4132; 4322; 4348; 4495
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	21	49; 680; 794; 869; 1019; 1292; 1794; 2120; 2512; 2763; 3307; 3588; 3620; 3752; 3787; 3837; 3869; 4222; 4501; 4667; 4685
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2933; 3465; 3574
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2298; 2370; 2434; 3729
BsmI	GAATGCN!	1	1533
BsmI	G!CATTC	2	1362; 1626
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	4	2206; 2624; 3643; 3771

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2933; 3465; 3574
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2298; 2370; 2434; 3729
BsnI	GG!CC	26	84; 277; 642; 799; 1023; 1027; 1270; 1386; 1428; 1748; 1890; 2545; 2551; 2560; 2603; 2690; 2864; 3255; 3282; 3791; 3848; 3881; 4226; 4660; 4678; 4689
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACG	1	3771
BsoBI	C!YCGRG	2	789; 1068
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 1135; 2511; 3214
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3585
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	4006; 4184
Bsp24I	CCANNNNNNGTCCNNNNNNNNNN!	2	4038; 4216
Bsp24I	!NNNNNNNGACNNNNNNNTGG	2	257; 3553
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3464
Bsp120I	G!GGCCC	1	1268
Bsp143I	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
Bsp1286I	GDGCH!C	14	786; 825; 1059; 1126; 1272; 1382; 1973; 2728; 2821; 2895; 3085; 3147; 3857; 4390
Bsp1407I	T!GTACA	0	
Bsp1720I	GC!TNAGC	1	858
BspACI	C!CGC	45	58; 86; 98; 112; 279; 507; 589; 612; 660; 709; 728; 800; 962; 1013; 1028; 1103; 1169; 1286; 1289; 1396; 1429; 2097; 2100; 2114; 2204; 2452; 2464; 2473; 2485; 2495; 2506; 2552; 2691; 2754; 3256; 3301; 3367; 3393; 3518; 3521; 3669; 3801; 4108; 4252; 4748
BspACI	G!CGG	31	370; 403; 528; 623; 647; 772; 775; 907; 946; 985; 1192; 2042; 2069; 2157; 2267; 2848; 2912; 3013; 3016; 3296; 3351; 3449; 3587; 3734; 3874; 4117; 4362; 4483; 4502; 4629; 4657
BspCNI	CTCAGNNNNNNNN!	1	3907
BspCNI	!NNNNNNNCTGAG	6	850; 2254; 2556; 3437; 4009; 4418
BspDI	AT!CGAT	1	2622
BspD6I	GACTCNNNN!	5	418; 1441; 1855; 3461; 4338
BspD6I	!NNNNNGAGTC	2	1818; 2250
BspEI	T!CCGGA	0	
BspFNI	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
BspHI	T!CATGA	2	2208; 3980
BspLI	GGN!NCC	22	467; 651; 688; 740; 785; 833; 896; 1058; 1269; 1937; 1958; 1970; 2161; 2322; 2394; 2783; 2818; 3666; 3745; 3790; 4633; 4672
BspMI	ACCTGCNNNN!	4	862; 1135; 3050; 3500
BspMI	!NNNNNNNGCAGGT	1	2669
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	694; 1430; 2650; 2961; 3207; 3599; 3958; 4056; 4142
BspPI	!NNNNNGATCC	8	580; 665; 681; 1366; 3026; 3570; 3957; 4054
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	3	813; 3126; 3336
BspTI	C!TTAAG	1	1664
BspT104I	TT!CGAA	1	3464
BspT107I	G!GYRCC	9	465; 738; 783; 831; 894; 1056; 1935; 2781; 2816
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACG	1	3771
BsrI	ACTGGN!	3	2726; 2927; 4173
BsrI	C!CAGT	6	295; 654; 1811; 2489; 4285; 4298
BsrBI	CCG!CTC	2	2206; 3395
BsrBI	GAG!CGG	2	2042; 3449
BsrDI	GCAATGNN!	1	3015
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	8	692; 735; 1023; 1059; 1999; 3101; 3282; 3565
BsrGI	T!GTACA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsrSI	ACTGGN!	3	2726; 2927; 4173
BsrSI	C!CAGT	6	295; 654; 1811; 2489; 4285; 4298
BssAI	R!CCGGY	8	692; 735; 1023; 1059; 1999; 3101; 3282; 3565
BssECI	C!CNNGG	21	360; 826; 1069; 1117; 1135; 1381; 1399; 2316; 2388; 2511; 2546; 2555; 2604; 2945; 3214; 3619; 3746; 3747; 3849; 3850; 4540
BssHII	G!CGCGC	1	662
BssKI	!CCNGG	18	88; 281; 642; 1381; 1418; 2316; 2371; 2388; 2784; 2944; 3167; 3557; 3746; 3849; 4321; 4539; 4552; 4673
BssMI	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
BssNI	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	3500; 4527
BssSI	C!TCGTG	1	3374
BssTII	C!CWWGG	7	360; 826; 1135; 2511; 2604; 3214; 3619
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	4	813; 2249; 3126; 3336
Bst98I	C!TTAAG	1	1664
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
BstAFI	C!TTAAG	1	1664
BstAPI	GCANNNN!NTGC	3	2349; 2421; 3883
BstAUI	T!GTACA	0	
BstBI	TT!CGAA	1	3464
Bst2BI	C!ACGAG	2	3500; 4527
Bst2BI	C!TCGTG	1	3374
BstBAI	YAC!GTR	5	340; 866; 998; 1898; 3086
Bst4CI	ACN!GT	14	76; 198; 269; 543; 581; 1118; 1873; 3162; 3278; 3386; 3709; 4200; 4670; 4741
BstC8I	GCN!NGC	36	86; 279; 593; 664; 709; 931; 990; 1025; 1169; 1182; 1342; 1388; 2001; 2044; 2058; 2331; 2350; 2403; 2422; 2676; 2862; 3081; 3147; 3153; 3185; 3226; 3230; 3284; 3567; 3754; 3801; 3857; 3879; 4090; 4650; 4687
BstDEI	C!TNAG	7	858; 2262; 2564; 3445; 3894; 4017; 4426
BstDSI	C!CRYGG	6	360; 1117; 1135; 1399; 2511; 3214
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	5	1409; 2642; 3099; 3124; 3578
BstF5I	!CATCC	4	1099; 1240; 1252; 2468
BstFNI	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
BstH2I	RGCGC!Y	6	835; 1240; 2049; 2057; 2785; 4460
BstHHI	GCG!C	25	664; 666; 834; 1186; 1239; 2048; 2056; 2082; 2104; 2113; 2126; 2157; 2776; 2784; 2848; 2885; 3151; 3411; 3587; 3673; 4076; 4185; 4359; 4459; 4526
BstKTI	GAT!C	27	588; 673; 689; 721; 1036; 1084; 1099; 1360; 1374; 1425; 1442; 2622; 2626; 2645; 2956; 3034; 3115; 3124; 3202; 3578; 3594; 3953; 3965; 4043; 4051; 4062; 4137
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	4	2206; 2624; 3643; 3771
BstMBI	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
BstMCI	CGRY!CG	6	697; 1028; 1360; 1429; 2691; 4366
BstMWI	GCNNNNN!NNGC	34	90; 212; 244; 283; 376; 400; 617; 634; 656; 736; 781; 829; 1036; 1168; 1192; 2009; 2039; 2066; 2108; 2349; 2421; 2472; 2551; 2773; 2857; 2880; 3019; 3142; 3225; 3492; 3679; 3883; 4082; 4654
BstNI	CC!WGG	12	90; 283; 1383; 2318; 2373; 2390; 3169; 3748; 3851; 4541; 4554; 4675
BstNSI	RCATG!Y	6	599; 1226; 2352; 2424; 3187; 4704
BstOI	CC!WGG	12	90; 283; 1383; 2318; 2373; 2390; 3169; 3748; 3851; 4541; 4554; 4675
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSCI	!CCNGG	18	88; 281; 642; 1381; 1418; 2316; 2371; 2388; 2784; 2944; 3167; 3557; 3746; 3849; 4321; 4539; 4552; 4673
BstSFI	C!TRYAG	5	1199; 1257; 2117; 4244; 4435
BstSLI	GKGCMI!C	6	786; 1059; 1272; 2728; 2821; 4390
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
Bst2UI	CC!WGG	12	90; 283; 1383; 2318; 2373; 2390; 3169; 3748; 3851; 4541; 4554; 4675
BstV1I	GCAGCNNNNNNNN!	8	1117; 1171; 1570; 2855; 2897; 3418; 3871; 4371
BstV1I	!NNNNNNNNNNNGCTGC	9	601; 979; 1288; 2064; 2729; 2913; 3006; 4072; 4278
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 670; 686; 1371; 2953; 3199; 3591; 3950; 3962; 4048; 4059
BstYI	R!GATCY	11	585; 670; 686; 1371; 2953; 3199; 3591; 3950; 3962; 4048; 4059
BstZI	C!GGCCG	3	1025; 1426; 2688
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2211; 3001; 4502
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2622
Bsu36I	CC!TNAGG	2	2262; 3894
BsuRI	GG!CC	26	84; 277; 642; 799; 1023; 1027; 1270; 1386; 1428; 1748; 1890; 2545; 2551; 2560; 2603; 2690; 2864; 3255; 3282; 3791; 3848; 3881; 4226; 4660; 4678; 4689
BsuTUI	AT!CGAT	1	2622
BtgI	C!CRYGG	6	360; 1117; 1135; 1399; 2511; 3214
BtgZI	GCGATGNNNNNNNNNN!	2	1899; 3234
BtgZI	!NNNNNNNNNNNNNNNNCATCGC	3	334; 3053; 3397
BthCI	GCNG!C	47	614; 617; 620; 623; 650; 662; 730; 775; 802; 910; 949; 988; 995; 1030; 1108; 1162; 1195; 1291; 1304; 1431; 1561; 2080; 2102; 2116; 2554; 2693; 2745; 2756; 2846; 2851; 2888; 2929; 3016; 3022; 3258; 3354; 3395; 3409; 3523; 3862; 3877; 4088; 4294; 4297; 4362; 4505; 4660
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1621
BtsCI	GGATGNN!	5	1409; 2642; 3099; 3124; 3578
BtsCI	!CATCC	4	1099; 1240; 1252; 2468
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	4	862; 1135; 3050; 3500
BveI	!NNNNNNNNNGCAGGT	1	2669
Cac8I	GCN!NGC	36	86; 279; 593; 664; 709; 931; 990; 1025; 1169; 1182; 1342; 1388; 2001; 2044; 2058; 2331; 2350; 2403; 2422; 2676; 2862; 3081; 3147; 3153; 3185; 3226; 3230; 3284; 3567; 3754; 3801; 3857; 3879; 4090; 4650; 4687
CaiI	CAGNNN!CTG	2	3883; 4291
CciI	T!CATGA	2	2208; 3980
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	7	352; 968; 1328; 3071; 3076; 3274; 3415
CdiI	C!GATG	2	1885; 3220
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	2	800; 4654
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	4	486; 1375; 2443; 2485
CelII	GC!TNAGC	1	858
CfoI	GCG!C	25	664; 666; 834; 1186; 1239; 2048; 2056; 2082; 2104; 2113; 2126; 2157; 2776; 2784; 2848; 2885; 3151; 3411; 3587; 3673; 4076; 4185; 4359; 4459; 4526
CfrI	Y!GGCCR	6	1025; 1426; 2688; 2862; 3253; 3280
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	8	692; 735; 1023; 1059; 1999; 3101; 3282; 3565
Cfr13I	G!GNCC	12	83; 276; 641; 797; 1269; 1416; 1889; 3298; 3743; 3789; 3847; 3880
Cfr42I	CCG!GG	0	
ChaI	GATC!	27	589; 674; 690; 722; 1037; 1085; 1100; 1361; 1375; 1426; 1443; 2623; 2627; 2646; 2957; 3035; 3116; 3125; 3203; 3579; 3595; 3954; 3966; 4044; 4052; 4063; 4138

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	4	2599; 4039; 4139; 4217
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2266; 2361; 3553; 4103; 4658
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2300; 2395; 3587; 4137; 4692
CjeI	!NNNNNNNNCCANNNNNNNGT	4	2565; 4005; 4105; 4183
CjePI	CCANNNNNNTCANNNNNNNNNNNN!	2	4039; 4217
CjePI	!NNNNNNNNNGANNNNNNNNNTGG	3	257; 3553; 4152
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	3	290; 3586; 4185
CjePI	!NNNNNNNNCCANNNNNNNNTC	2	4006; 4184
Clai	AT!CGAT	1	2622
CpoI	CG!GWCCG	2	1416; 3298
CseI	GACGCNNNNN!	4	526; 617; 3492; 3571
CseI	!NNNNNNNNNNGCGTC	3	2115; 4010; 4588
CsiI	A!CCWGGT	1	2371
CspI	CG!GWCCG	2	1416; 3298
Csp6I	G!TAC	9	218; 243; 298; 331; 382; 539; 974; 1334; 3087
Csp45I	TT!CGAA	1	3464
CspAI	A!CCGGT	1	692
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2062; 3671
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	22	301; 361; 596; 704; 713; 803; 1136; 1223; 1274; 2209; 2349; 2421; 2512; 2653; 2998; 3184; 3215; 3241; 3597; 3981; 4701; 4752
CviJI	RG!CY	100	42; 84; 93; 277; 566; 628; 637; 642; 650; 764; 799; 847; 862; 874; 880; 910; 949; 1003; 1009; 1023; 1027; 1063; 1162; 1180; 1195; 1204; 1219; 1270; 1301; 1319; 1380; 1386; 1413; 1428; 1451; 1561; 1728; 1748; 1890; 1971; 1985; 1999; 2280; 2321; 2393; 2516; 2545; 2551; 2560; 2568; 2591; 2603; 2609; 2690; 2707; 2715; 2742; 2767; 2851; 2860; 2864; 2888; 2926; 3002; 3019; 3038; 3101; 3145; 3155; 3172; 3255; 3282; 3286; 3323; 3346; 3362; 3542; 3569; 3630; 3752; 3791; 3848; 3855; 3862; 3881; 3892; 4143; 4172; 4215; 4226; 4291; 4370; 4395; 4400; 4446; 4536; 4634; 4660; 4678; 4689
CviKI-1	RG!CY	100	42; 84; 93; 277; 566; 628; 637; 642; 650; 764; 799; 847; 862; 874; 880; 910; 949; 1003; 1009; 1023; 1027; 1063; 1162; 1180; 1195; 1204; 1219; 1270; 1301; 1319; 1380; 1386; 1413; 1428; 1451; 1561; 1728; 1748; 1890; 1971; 1985; 1999; 2280; 2321; 2393; 2516; 2545; 2551; 2560; 2568; 2591; 2603; 2609; 2690; 2707; 2715; 2742; 2767; 2851; 2860; 2864; 2888; 2926; 3002; 3019; 3038; 3101; 3145; 3155; 3172; 3255; 3282; 3286; 3323; 3346; 3362; 3542; 3569; 3630; 3752; 3791; 3848; 3855; 3862; 3881; 3892; 4143; 4172; 4215; 4226; 4291; 4370; 4395; 4400; 4446; 4536; 4634; 4660; 4678; 4689
CviQI	G!TAC	9	218; 243; 298; 331; 382; 539; 974; 1334; 3087
DdeI	C!TNAG	7	858; 2262; 2564; 3445; 3894; 4017; 4426
DinI	GGC!GCC	2	833; 2783
DpnI	GA!TC	27	587; 672; 688; 720; 1035; 1083; 1098; 1359; 1373; 1424; 1441; 2621; 2625; 2644; 2955; 3033; 3114; 3123; 3201; 3577; 3593; 3952; 3964; 4042; 4050; 4061; 4136
DpnII	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
DraI	TTT!AAA	3	1484; 3926; 3945
DraII	RG!GNCCY	2	1268; 3880
DraIII	CACNNN!GTG	1	1898
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4262
DraRI	!NNNNNNNNNNNNNNNNNGTCTTG	0	
DrdI	GACNNN!NNGTC	3	1853; 2809; 4598
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1853; 2809; 4598
EaeI	Y!GGCCR	6	1025; 1426; 2688; 2862; 3253; 3280
EagI	C!GGCCG	3	1025; 1426; 2688
Eam1104I	CTCTTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eam1104I	!NNNNGAAGAG	4	813; 2249; 3126; 3336
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	4	813; 2249; 3126; 3336
EciI	GGCGANNNNNNNNNN!	5	790; 2282; 3311; 4498; 4644
EciI	!NNNNNNNNNTCCGCC	6	496; 1275; 1385; 2453; 2474; 2495
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	3	1025; 1426; 2688
Eco24I	GRGCY!C	5	1272; 1382; 1973; 3147; 3857
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	1	3771
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1416; 3298; 3743
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	3	1025; 1426; 2688
Eco57I	CTGAAGNNNNNNNNNNNNNN!	2	2928; 3360
Eco57I	!NNNNNNNNNNNNNNCTTCAG	4	827; 989; 1160; 4158
Eco72I	CAC!GTG	2	866; 998
Eco81I	CC!TNAGG	2	2262; 3894
Eco88I	C!YCGRG	2	789; 1068
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	7	360; 826; 1135; 2511; 2604; 3214; 3619
Eco147I	AGG!CCT	1	2603
EcoHI	!CCSGG	6	642; 1418; 2784; 2944; 3557; 4321
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	3	2928; 3360; 3622
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	5	827; 989; 1160; 3565; 4158
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	2	1268; 3880
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	12	88; 281; 1381; 2316; 2371; 2388; 3167; 3746; 3849; 4539; 4552; 4673
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	7	360; 826; 1135; 2511; 2604; 3214; 3619
EcoT22I	ATGCA!T	3	2354; 2426; 4757
EcoT38I	GRGCY!C	5	1272; 1382; 1973; 3147; 3857
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	2	833; 2783
EheI	GGC!GCC	2	833; 2783
ErhI	C!CWWGG	7	360; 826; 1135; 2511; 2604; 3214; 3619
EsaBC3I	TC!GA	14	722; 761; 968; 1932; 2623; 2896; 3052; 3076; 3112; 3274; 3465; 3510; 3765; 4603
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	22	304; 364; 599; 707; 716; 806; 1139; 1226; 1277; 2212; 2352; 2424; 2515; 2656; 3001; 3187; 3218; 3244; 3600; 3984; 4704; 4755
Fail	YA!TR	58	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 705; 714; 804; 1137; 1224; 1275; 1444; 1454; 1520; 1565; 1770; 2198; 2210; 2341; 2350; 2413; 2422; 2446; 2513; 2537; 2654; 2718; 2999; 3024; 3185; 3216; 3242; 3314; 3530; 3598; 3676; 3728; 3889; 3906; 3908; 3910; 3982; 4260; 4449; 4565; 4638; 4702; 4753
FalI	AAGNNNNNCTTNNNNNNNNNNNN!	1	3122
FalI	!NNNNNNNNAAGNNNNNCTT	1	3090
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2933; 3465; 3574
FaqI	!NNNNNNNNNNNNNGTCCC	4	2298; 2370; 2434; 3729
FatI	!CATG	22	300; 360; 595; 703; 712; 802; 1135; 1222; 1273; 2208; 2348; 2420; 2511; 2652; 2997; 3183; 3214; 3240; 3596; 3980; 4700; 4751
FauI	CCCGCNNNN!	11	93; 119; 286; 716; 969; 1176; 2104; 2459; 2480; 3676; 3808
FauI	!NNNNNNGCGGG	6	616; 2035; 2905; 3442; 3580; 3727
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FblI	GT!MKAC	0	
FmuI	GGNC!C	12	86; 279; 644; 800; 1272; 1419; 1892; 3301; 3746; 3792; 3850; 3883
Fnu4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 728; 773; 800; 908; 947; 986; 993; 1028; 1106; 1160; 1193; 1289; 1302; 1429; 1559; 2078; 2100; 2114; 2552; 2691; 2743; 2754; 2844; 2849; 2886; 2927; 3014; 3020; 3256; 3352; 3393; 3407; 3521; 3860; 3875; 4086; 4292; 4295; 4360; 4503; 4658
FokI	GGATGNNNNNNNNNN!	5	1416; 2649; 3106; 3131; 3585
FokI	!NNNNNNNNNNNNNNCATCC	3	1086; 1227; 2455
FriOI	GRGCY!C	5	1272; 1382; 1973; 3147; 3857
FseI	GGCCGG!CC	1	1027
FspI	TGC!GCA	1	2884
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1437; 1631; 2049; 2605; 3620; 3954; 4207
FspEI	CCNNNNNNNNNNNN!	163	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; 721; 741; 755; 800; 821; 839; 854; 876; 900; 915; 933; 947; 968; 1026; 1041; 1073; 1103; 1127; 1146; 1181; 1233; 1253; 1269; 1284; 1299; 1328; 1350; 1367; 1382; 1400; 1427; 1442; 1465; 1504; 1518; 1659; 1754; 1778; 1801; 1824; 1842; 1864; 1885; 1904; 1923; 1952; 1973; 1987; 2013; 2101; 2127; 2176; 2217; 2235; 2274; 2290; 2328; 2385; 2400; 2457; 2477; 2491; 2508; 2522; 2559; 2574; 2617; 2700; 2767; 2798; 2818; 2833; 2878; 2892; 2958; 2972; 2991; 3007; 3048; 3068; 3115; 3165; 3181; 3201; 3226; 3246; 3269; 3296; 3314; 3340; 3380; 3406; 3430; 3486; 3500; 3528; 3571; 3592; 3627; 3671; 3759; 3783; 3805; 3825; 3841; 3862; 3876; 3895; 3979; 3999; 4027; 4042; 4076; 4118; 4145; 4160; 4205; 4229; 4243; 4265; 4291; 4311; 4335; 4361; 4409; 4428; 4447; 4473; 4508; 4553; 4583; 4597; 4648; 4662; 4687; 4703; 4724; 4753
FspEI	!NNNNNNNNNNNNNNNGG	128	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 721; 750; 780; 813; 855; 877; 928; 963; 1005; 1032; 1056; 1104; 1122; 1140; 1174; 1194; 1249; 1278; 1305; 1368; 1386; 1404; 1453; 1553; 1622; 1652; 1730; 1779; 1801; 1829; 1865; 1910; 1939; 1975; 1994; 2022; 2042; 2105; 2128; 2236; 2268; 2286; 2315; 2358; 2387; 2498; 2527; 2570; 2591; 2619; 2652; 2672; 2697; 2724; 2749; 2771; 2799; 2825; 2846; 2897; 2918; 2936; 2984; 3020; 3076; 3101; 3125; 3154; 3177; 3201; 3227; 3249; 3268; 3293; 3333; 3369; 3434; 3519; 3543; 3572; 3606; 3627; 3647; 3692; 3719; 3738; 3771; 3823; 3854; 3881; 3933; 4031; 4102; 4147; 4208; 4273; 4307; 4333; 4351; 4387; 4457; 4480; 4502; 4526; 4559; 4607; 4642; 4660; 4717
Fsp4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 728; 773; 800; 908; 947; 986; 993; 1028; 1106; 1160; 1193; 1289; 1302; 1429; 1559; 2078; 2100; 2114; 2552; 2691; 2743; 2754; 2844; 2849; 2886; 2927; 3014; 3020; 3256; 3352; 3393; 3407; 3521; 3860; 3875; 4086; 4292; 4295; 4360; 4503; 4658
GdiII	C!GGCCR	3	1025; 1426; 2688
GdiII	Y!GGCCG	5	1025; 1426; 2688; 3253; 3280
GlaI	GC!GC	25	663; 665; 833; 1185; 1238; 2047; 2055; 2081; 2103; 2112; 2125; 2156; 2775; 2783; 2847; 2884; 3150; 3410; 3586; 3672; 4075; 4184; 4358; 4458; 4525
GluI	GC!NGC	47	612; 615; 618; 621; 648; 660; 728; 773; 800; 908; 947; 986; 993; 1028; 1106; 1160; 1193; 1289; 1302; 1429; 1559; 2078; 2100; 2114; 2552; 2691; 2743; 2754; 2844; 2849; 2886; 2927; 3014; 3020; 3256; 3352; 3393; 3407; 3521; 3860; 3875; 4086; 4292; 4295; 4360; 4503; 4658
GsaI	CCCAG!C	5	907; 1252; 2329; 2401; 4400
GsaI	GCTGG!G	2	1323; 3290
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3622
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3565
HaeI	WGG!CCW	6	1386; 2603; 2864; 4226; 4678; 4689
HaeII	RGCGC!Y	6	835; 1240; 2049; 2057; 2785; 4460
HaeIII	GG!CC	26	84; 277; 642; 799; 1023; 1027; 1270; 1386; 1428; 1748; 1890; 2545; 2551; 2560; 2603; 2690; 2864; 3255; 3282; 3791; 3848; 3881; 4226; 4660; 4678; 4689
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1457; 2978
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1423; 2944

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNN!	2	1456; 2977
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1425; 2946
HapII	C!CGG	23	644; 693; 736; 1024; 1060; 1414; 1419; 2000; 2687; 2764; 2786; 2814; 2945; 3035; 3102; 3283; 3558; 3566; 3658; 4132; 4322; 4348; 4495
HgaI	GACGCNNNNN!	4	526; 617; 3492; 3571
HgaI	!NNNNNNNNNNGCGTC	3	2115; 4010; 4588
HhaI	GCG!C	25	664; 666; 834; 1186; 1239; 2048; 2056; 2082; 2104; 2113; 2126; 2157; 2776; 2784; 2848; 2885; 3151; 3411; 3587; 3673; 4076; 4185; 4359; 4459; 4526
HinI	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
HinIII	CATG!	22	304; 364; 599; 707; 716; 806; 1139; 1226; 1277; 2212; 2352; 2424; 2515; 2656; 3001; 3187; 3218; 3244; 3600; 3984; 4704; 4755
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1456; 2977
Hin4I	!NNNNNNNNNGABNNNNNNRTC	3	1424; 2945; 2975
Hin4I	GABNNNNNRTCNNNNNNNNNNNNN!	3	1456; 2977; 3007
Hin4I	!NNNNNNNNNGAYNNNNNVTC	2	1424; 2945
Hin6I	G!CGC	25	662; 664; 832; 1184; 1237; 2046; 2054; 2080; 2102; 2111; 2124; 2155; 2774; 2782; 2846; 2883; 3149; 3409; 3585; 3671; 4074; 4183; 4357; 4457; 4524
HinPII	G!CGC	25	662; 664; 832; 1184; 1237; 2046; 2054; 2080; 2102; 2111; 2124; 2155; 2774; 2782; 2846; 2883; 3149; 3409; 3585; 3671; 4074; 4183; 4357; 4457; 4524
HincII	GTY!RAC	1	1545
HindII	GTY!RAC	1	1545
HindIII	A!AGCTT	0	
HinfI	G!ANTC	12	410; 1433; 1825; 1847; 2257; 3267; 3401; 3453; 3511; 3548; 4330; 4726
HpaI	GTT!AAC	1	1545
HpaII	C!CGG	23	644; 693; 736; 1024; 1060; 1414; 1419; 2000; 2687; 2764; 2786; 2814; 2945; 3035; 3102; 3283; 3558; 3566; 3658; 4132; 4322; 4348; 4495
HphI	GGTGANNNNNNNN!	3	376; 3853; 3969
HphI	!NNNNNNNTCACC	4	725; 1079; 1899; 2960
Hpy8I	GTN!NAC	9	201; 539; 577; 1214; 1545; 1829; 1846; 1901; 4388
Hpy99I	CGWCG!	8	1191; 2872; 2900; 3194; 3209; 3486; 3871; 4604
Hpy166II	GTN!NAC	9	201; 539; 577; 1214; 1545; 1829; 1846; 1901; 4388
Hpy188I	TCN!GA	11	585; 1956; 2565; 2749; 3093; 3446; 3547; 4026; 4160; 4513; 4591
Hpy188III	TC!NNGA	25	605; 968; 1232; 1349; 1375; 1437; 2209; 2261; 2574; 2627; 2800; 3116; 3125; 3208; 3264; 3308; 3398; 3431; 3500; 3981; 4055; 4138; 4236; 4334; 4468
HpyAV	CCTTCNNNNNN!	8	851; 932; 1184; 1292; 1355; 3427; 3534; 4213
HpyAV	!NNNNNGAAGG	7	2015; 2910; 3639; 3655; 3838; 4155; 4465
HpyCH4III	ACN!GT	14	76; 198; 269; 543; 581; 1118; 1873; 3162; 3278; 3386; 3709; 4200; 4670; 4741
HpyCH4IV	A!CGT	17	122; 134; 175; 258; 339; 444; 865; 997; 1147; 1842; 1854; 1897; 2007; 2898; 3085; 3866; 3999
HpyCH4V	TG!CA	22	929; 995; 1130; 1226; 1259; 1304; 1531; 1558; 1626; 2343; 2352; 2415; 2424; 2539; 2615; 2674; 2833; 3008; 3022; 4092; 4388; 4755
HpyF3I	C!TNAG	7	858; 2262; 2564; 3445; 3894; 4017; 4426
HpyF10VI	GCNNNNN!NNGC	34	90; 212; 244; 283; 376; 400; 617; 634; 656; 736; 781; 829; 1036; 1168; 1192; 2009; 2039; 2066; 2108; 2349; 2421; 2472; 2551; 2773; 2857; 2880; 3019; 3142; 3225; 3492; 3679; 3883; 4082; 4654
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 609; 832; 2782; 3484; 3563
Hsp92II	CATG!	22	304; 364; 599; 707; 716; 806; 1139; 1226; 1277; 2212; 2352; 2424; 2515; 2656; 3001; 3187; 3218; 3244; 3600; 3984; 4704; 4755
HspAI	G!CGC	25	662; 664; 832; 1184; 1237; 2046; 2054; 2080; 2102; 2111; 2124; 2155; 2774; 2782; 2846; 2883; 3149; 3409; 3585; 3671; 4074; 4183; 4357; 4457; 4524
KasI	G!GCGCC	2	831; 2781
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	1545
Kzo9I	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	3	813; 3126; 3336
LpnI	RGC!GCGY	6	833; 1238; 2047; 2055; 2783; 4458
LpnPI	CCDGNNNNNNNNN!	63	102; 295; 618; 657; 706; 749; 849; 867; 917; 939; 1037; 1073; 1140; 1194; 1262; 1350; 1382; 1400; 1427; 1519; 1824; 2013; 2236; 2274; 2290; 2330; 2385; 2402; 2502; 2587; 2700; 2777; 2799; 2822; 2958; 2972; 2991; 3048; 3115; 3165; 3181; 3238; 3296; 3505; 3571; 3595; 3671; 3760; 3863; 3896; 4127; 4145; 4291; 4311; 4335; 4361; 4410; 4508; 4553; 4583; 4662; 4687; 4724
LpnPI	!NNNNNNNNNNNNNNCHGG	55	75; 268; 552; 619; 678; 721; 750; 780; 1009; 1045; 1137; 1305; 1368; 1399; 1865; 1985; 2042; 2105; 2303; 2315; 2375; 2387; 2619; 2664; 2707; 2749; 2771; 2799; 2846; 2908; 2930; 3020; 3087; 3110; 3154; 3249; 3268; 3293; 3442; 3543; 3586; 3643; 3733; 3836; 3863; 3881; 4117; 4154; 4307; 4333; 4473; 4491; 4526; 4607; 4660
Lsp1109I	GCAGCNNNNNNNN!	8	1117; 1171; 1570; 2855; 2897; 3418; 3871; 4371
Lsp1109I	!NNNNNNNNNNNNNGCTGC	9	601; 979; 1288; 2064; 2729; 2913; 3006; 4072; 4278
LweI	GCATCNNNNNN!	10	739; 973; 1261; 1333; 1598; 2361; 2433; 3081; 3145; 3420
LweI	!NNNNNNNNNNNGATGC	5	357; 2740; 2995; 3211; 4603
MabI	A!CCWGGT	1	2371
MaeI	C!TAG	8	592; 1437; 1631; 2049; 2605; 3620; 3954; 4207
MaeII	A!CGT	17	122; 134; 175; 258; 339; 444; 865; 997; 1147; 1842; 1854; 1897; 2007; 2898; 3085; 3866; 3999
MaeIII	!GTNAC	12	61; 148; 497; 1570; 2071; 2083; 2902; 3208; 3898; 4164; 4280; 4343
MalI	GA!TC	27	587; 672; 688; 720; 1035; 1083; 1098; 1359; 1373; 1424; 1441; 2621; 2625; 2644; 2955; 3033; 3114; 3123; 3201; 3577; 3593; 3952; 3964; 4042; 4050; 4061; 4136
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2206; 3395
MbiI	GAG!CGG	2	2042; 3449
MboI	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
MboII	GAAGANNNNNNNN!	7	728; 830; 2038; 2266; 3143; 3353; 3972
MboII	!NNNNNNNTCTTC	5	1076; 3433; 3600; 3800; 4043
McaTI	GCGC!GC	1	665
MfeI	C!AATTG	1	1532
MflI	R!GATCY	11	585; 670; 686; 1371; 2953; 3199; 3591; 3950; 3962; 4048; 4059
MhlI	GDGCH!C	14	786; 825; 1059; 1126; 1272; 1382; 1973; 2728; 2821; 2895; 3085; 3147; 3857; 4390
MlsI	TGG!CCA	1	2864
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	2864
MlyI	GAGTCNNNNNN!	2	1834; 2266
MlyI	!NNNNNGACTC	5	404; 1427; 1841; 3447; 4324
Mly113I	GG!CGCC	2	832; 2782
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	1875
MmeI	!NNNNNNNNNNNNNNNNNNNNNGTYGGA	2	4307; 4491
MnlI	CCTCNNNNNNNN!	7	1501; 2565; 3383; 3589; 3903; 4273; 4597
MnlI	!NNNNNNNGAGG	18	541; 773; 971; 1013; 1064; 1289; 1461; 1926; 2257; 2535; 2578; 2593; 2633; 2697; 2833; 3190; 3620; 4523
Mph1103I	ATGCA!T	3	2354; 2426; 4757
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	4	1023; 1999; 3282; 3565
MroXI	GAANN!NNTTC	1	921
MscI	TGG!CCA	1	2864

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MseI	T!TAA	15	7; 1483; 1544; 1665; 1686; 1697; 1709; 1720; 1737; 1835; 2106; 3925; 3939; 3944; 3996
MslI	CAYNN!NNRTG	2	365; 3219
MspI	C!CGG	23	644; 693; 736; 1024; 1060; 1414; 1419; 2000; 2687; 2764; 2786; 2814; 2945; 3035; 3102; 3283; 3558; 3566; 3658; 4132; 4322; 4348; 4495
Msp20I	TGG!CCA	1	2864
MspA1I	CMG!CKG	6	614; 907; 2280; 2888; 4117; 4362
MspCI	C!TTAAG	1	1664
MspJI	CNNRNNNNNNNN!	241	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; 720; 734; 748; 764; 777; 801; 815; 838; 862; 876; 910; 926; 942; 967; 980; 1001; 1031; 1058; 1072; 1091; 1106; 1130; 1146; 1160; 1180; 1193; 1220; 1233; 1260; 1277; 1302; 1317; 1332; 1349; 1367; 1381; 1394; 1412; 1426; 1442; 1455; 1470; 1489; 1506; 1519; 1560; 1574; 1587; 1605; 1643; 1658; 1676; 1717; 1741; 1761; 1779; 1800; 1823; 1855; 1870; 1892; 1910; 1923; 1944; 1961; 1974; 1987; 2003; 2016; 2046; 2061; 2086; 2104; 2117; 2132; 2156; 2170; 2194; 2219; 2235; 2273; 2289; 2328; 2342; 2356; 2384; 2400; 2414; 2428; 2457; 2470; 2491; 2500; 2522; 2552; 2568; 2586; 2616; 2639; 2663; 2687; 2706; 2734; 2760; 2776; 2789; 2812; 2826; 2846; 2859; 2873; 2892; 2906; 2919; 2935; 2950; 2963; 2979; 2994; 3010; 3035; 3054; 3070; 3083; 3096; 3114; 3128; 3142; 3158; 3180; 3196; 3215; 3237; 3253; 3276; 3295; 3309; 3325; 3339; 3359; 3375; 3388; 3410; 3443; 3457; 3477; 3490; 3504; 3558; 3571; 3594; 3607; 3626; 3643; 3670; 3706; 3739; 3758; 3783; 3804; 3831; 3844; 3861; 3875; 3890; 3906; 3966; 3991; 4007; 4029; 4042; 4056; 4087; 4101; 4126; 4144; 4159; 4172; 4191; 4204; 4219; 4248; 4267; 4285; 4310; 4325; 4344; 4360; 4379; 4397; 4413; 4427; 4446; 4473; 4496; 4518; 4537; 4552; 4565; 4582; 4602; 4629; 4642; 4661; 4686; 4709; 4723; 4736; 4753
MspJI	!NNNNNNNNNNNNYNG	203	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; 708; 729; 747; 775; 798; 822; 840; 857; 877; 898; 916; 947; 975; 992; 1010; 1032; 1054; 1080; 1104; 1122; 1142; 1163; 1192; 1209; 1235; 1260; 1278; 1302; 1323; 1341; 1361; 1381; 1400; 1423; 1448; 1492; 1534; 1617; 1652; 1679; 1702; 1731; 1775; 1797; 1829; 1865; 1882; 1903; 1940; 1960; 1977; 1994; 2029; 2047; 2065; 2082; 2106; 2128; 2155; 2183; 2209; 2247; 2268; 2285; 2303; 2326; 2347; 2375; 2398; 2419; 2437; 2458; 2475; 2498; 2522; 2542; 2560; 2582; 2613; 2635; 2661; 2680; 2697; 2725; 2744; 2763; 2781; 2799; 2820; 2842; 2866; 2899; 2919; 2937; 2958; 2984; 3011; 3028; 3045; 3062; 3088; 3110; 3132; 3150; 3170; 3189; 3211; 3249; 3269; 3293; 3313; 3333; 3360; 3384; 3417; 3436; 3464; 3486; 3515; 3543; 3568; 3587; 3606; 3627; 3644; 3661; 3692; 3719; 3739; 3762; 3782; 3819; 3836; 3855; 3881; 3901; 3940; 3967; 3986; 4004; 4041; 4059; 4100; 4118; 4144; 4161; 4193; 4222; 4250; 4271; 4294; 4313; 4334; 4352; 4369; 4387; 4413; 4434; 4454; 4474; 4492; 4513; 4539; 4556; 4575; 4594; 4623; 4642; 4660; 4679; 4697; 4715; 4738
MspR9I	CC!NGG	18	90; 283; 644; 1383; 1420; 2318; 2373; 2390; 2786; 2946; 3169; 3559; 3748; 3851; 4323; 4541; 4554; 4675
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1532
MvaI	CC!WGG	12	90; 283; 1383; 2318; 2373; 2390; 3169; 3748; 3851; 4541; 4554; 4675
Mva1269I	GAATGCN!	1	1533
Mva1269I	G!CATTC	2	1362; 1626
MvnI	CG!CG	20	60; 662; 664; 1030; 1186; 1291; 1431; 1706; 2082; 2102; 2126; 2157; 2848; 3149; 3587; 3671; 3734; 3803; 4076; 4657
MvrI	CGAT!CG	1	1360
MwoI	GCNNNNN!NNGC	34	90; 212; 244; 283; 376; 400; 617; 634; 656; 736; 781; 829; 1036; 1168; 1192; 2009; 2039; 2066; 2108; 2349; 2421; 2472; 2551; 2773; 2857; 2880; 3019; 3142; 3225; 3492; 3679; 3883; 4082; 4654
NaeI	GCC!GGC	4	1025; 2001; 3284; 3567
NarI	GG!CGCC	2	832; 2782
NciI	CC!SGG	6	644; 1420; 2786; 2946; 3559; 4323

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NcoI	C!CATGG	4	360; 1135; 2511; 3214
NdeI	CA!TATG	1	234
NdeII	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	4	1023; 1999; 3282; 3565
NheI	G!CTAGC	1	591
NlaIII	CATG!	22	304; 364; 599; 707; 716; 806; 1139; 1226; 1277; 2212; 2352; 2424; 2515; 2656; 3001; 3187; 3218; 3244; 3600; 3984; 4704; 4755
NlaIV	GGN!NCC	22	467; 651; 688; 740; 785; 833; 896; 1058; 1269; 1937; 1958; 1970; 2161; 2322; 2394; 2783; 2818; 3666; 3745; 3790; 4633; 4672
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	4	755; 1614; 1929; 3521
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 849; 4593
Nli3877I	CYCGR!G	2	793; 1072
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2571; 3007
NmeAIII	!NNNNNNNNNNNNNNNNNCTCGGC	2	618; 2536
NmeDI	RCCGGYNNNNNNN!	8	704; 747; 1035; 1071; 2011; 3113; 3294; 3577
NmeDI	!NNNNNNNNNNNNRCCGGY	8	679; 722; 1010; 1046; 1986; 3088; 3269; 3552
NmuCI	!GTSAC	3	2071; 2902; 3208
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2884
NsiI	ATGCA!T	3	2354; 2426; 4757
NspI	RCATG!Y	6	599; 1226; 2352; 2424; 3187; 4704
NspV	TT!CGAA	1	3464
OliI	CACNN!NNGTG	0	
PabI	GTA!C	9	220; 245; 300; 333; 384; 541; 976; 1336; 3089
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2352; 2424; 3187
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2208; 3980
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3747; 3850
PauI	G!CGCGC	1	662
PceI	AGG!CCT	1	2603
PciI	A!CATGT	1	4700
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	3	813; 3126; 3336
PcsI	WCGNNNN!NNNCGW	7	973; 3076; 3153; 3396; 3470; 3863; 4381
PctI	GAATGCN!	1	1533
PctI	G!CATTC	2	1362; 1626
PdiI	GCC!GGC	4	1025; 2001; 3284; 3567
PdmI	GAANN!NNTTC	1	921
PfeI	G!AWTC	5	3267; 3401; 3511; 3548; 4726
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2900
PfIMI	CCANNNN!NTGG	2	680; 869
PfoI	T!CCNGGA	1	3557
PhoI	GG!CC	26	84; 277; 642; 799; 1023; 1027; 1270; 1386; 1428; 1748; 1890; 2545; 2551; 2560; 2603; 2690; 2864; 3255; 3282; 3791; 3848; 3881; 4226; 4660; 4678; 4689
PinAI	A!CCGGT	1	692
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3163
PlaDI	!NNNNNNNNNNNNNNNNNCTGATG	2	2728; 2983
PleI	GAGTCNNNN!	2	1833; 2265
PleI	!NNNNNNGACTC	5	404; 1427; 1841; 3447; 4324
Ple19I	CGAT!CG	1	1360
PmaCI	CAC!GTG	2	866; 998
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	2	866; 998

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpiI	GAACNNNNNCTCNNNNNNNNNNNNNN!	1	1864
PpiI	!NNNNNNNNNGAGNNNNNGTTC	1	3994
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4026
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1832
PpsI	GAGTCNNNN!	2	1833; 2265
PpsI	!NNNNNGACTC	5	404; 1427; 1841; 3447; 4324
Ppu10I	A!TGCAT	3	2350; 2422; 4753
Ppu21I	YAC!GTR	5	340; 866; 998; 1898; 3086
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4700
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1565; 1770
Psp03I	GGWC!C	3	1419; 3301; 3746
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	12	88; 281; 1381; 2316; 2371; 2388; 3167; 3746; 3849; 4539; 4552; 4673
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	2	866; 998
PspEI	G!GTNACC	0	
PspGI	!CCWGG	12	88; 281; 1381; 2316; 2371; 2388; 3167; 3746; 3849; 4539; 4552; 4673
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	22	467; 651; 688; 740; 785; 833; 896; 1058; 1269; 1937; 1958; 1970; 2161; 2322; 2394; 2783; 2818; 3666; 3745; 3790; 4633; 4672
PspOMI	G!GGCCC	1	1268
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNN!	3	125; 2512; 3511
PspOMII	!NNNNNNNNNNNNNNNNNYTGGGCG	1	2914
PspPI	G!GNCC	12	83; 276; 641; 797; 1269; 1416; 1889; 3298; 3743; 3789; 3847; 3880
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	5	922; 1267; 2335; 2407; 3913
PspPRI	!NNNNNNNNNNNNNCTGRGG	2	2248; 3443
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	2	1271; 3883
PstI	CTGCA!G	1	1261
PstNI	CAGNNN!CTG	2	3883; 4291
PsuI	R!GATCY	11	585; 670; 686; 1371; 2953; 3199; 3591; 3950; 3962; 4048; 4059
PsyI	GACN!NNGTC	1	2900
PteI	G!CGCGC	1	662
PvuI	CGAT!CG	1	1360
PvuII	CAG!CTG	2	2280; 2888
RcaI	T!CATGA	2	2208; 3980
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3297
RceI	!NNNNNNNNNNNNNNNNNGTTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	1	1027
RleAI	CCCACANNNNNNNNNNNN!	1	1511
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNCTGCGGG	1	602
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNN!	2	1003; 1096
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	9	219; 244; 299; 332; 383; 540; 975; 1335; 3088
RsaNI	G!TAC	9	218; 243; 298; 331; 382; 539; 974; 1334; 3087
RseI	CAYNN!NNRTG	2	365; 3219
RsrII	CG!GWCCG	2	1416; 3298
Rsr2I	CG!GWCCG	2	1416; 3298

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	3	813; 3126; 3336
SaqAI	T!TAA	15	7; 1483; 1544; 1665; 1686; 1697; 1709; 1720; 1737; 1835; 2106; 3925; 3939; 3944; 3996
SatI	GC!NGC	47	612; 615; 618; 621; 648; 660; 728; 773; 800; 908; 947; 986; 993; 1028; 1106; 1160; 1193; 1289; 1302; 1429; 1559; 2078; 2100; 2114; 2552; 2691; 2743; 2754; 2844; 2849; 2886; 2927; 3014; 3020; 3256; 3352; 3393; 3407; 3521; 3860; 3875; 4086; 4292; 4295; 4360; 4503; 4658
Sau96I	G!GNCC	12	83; 276; 641; 797; 1269; 1416; 1889; 3298; 3743; 3789; 3847; 3880
Sau3AI	!GATC	27	585; 670; 686; 718; 1033; 1081; 1096; 1357; 1371; 1422; 1439; 2619; 2623; 2642; 2953; 3031; 3112; 3121; 3199; 3575; 3591; 3950; 3962; 4040; 4048; 4059; 4134
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1834; 2266
SchI	!NNNNGACTC	5	404; 1427; 1841; 3447; 4324
SciI	CTC!GAG	0	
ScrFI	CC!NGG	18	90; 283; 644; 1383; 1420; 2318; 2373; 2390; 2786; 2946; 3169; 3559; 3748; 3851; 4323; 4541; 4554; 4675
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	4	2360; 2432; 2601; 4543
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2937; 3422
SdeOSI	GACNNNNRTGANNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	14	786; 825; 1059; 1126; 1272; 1382; 1973; 2728; 2821; 2895; 3085; 3147; 3857; 4390
SeI	!CGCG	20	58; 660; 662; 1028; 1184; 1289; 1429; 1704; 2080; 2100; 2124; 2155; 2846; 3147; 3585; 3669; 3732; 3801; 4074; 4655
SetI	ASST!	65	125; 137; 178; 261; 308; 342; 447; 552; 568; 766; 843; 856; 868; 900; 1000; 1005; 1011; 1051; 1129; 1150; 1164; 1176; 1206; 1303; 1321; 1472; 1493; 1502; 1514; 1563; 1730; 1845; 1857; 1900; 1937; 1987; 2010; 2134; 2282; 2377; 2570; 2683; 2811; 2890; 2901; 2973; 3044; 3088; 3348; 3494; 3538; 3869; 3900; 3959; 4002; 4145; 4166; 4265; 4402; 4417; 4436; 4448; 4492; 4538; 4589
SexAI	A!CCWGGT	1	2371
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	739; 973; 1261; 1333; 1598; 2361; 2433; 3081; 3145; 3420
SfaNI	!NNNNNNNNNGATGC	5	357; 2740; 2995; 3211; 4603
SfcI	C!TRYAG	5	1199; 1257; 2117; 4244; 4435
SfiI	GGCCNNNN!NGGCC	1	2557
SfoI	GGC!GCC	2	833; 2783
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3464

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	CNNGNNNNNNNNNN!	194	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 705; 720; 734; 748; 764; 777; 801; 815; 839; 866; 916; 938; 973; 989; 1008; 1031; 1058; 1072; 1091; 1106; 1130; 1148; 1164; 1180; 1193; 1220; 1235; 1261; 1277; 1302; 1328; 1349; 1367; 1381; 1394; 1412; 1426; 1442; 1489; 1518; 1560; 1643; 1717; 1801; 1823; 1855; 1892; 1910; 1929; 1944; 1986; 2003; 2020; 2055; 2069; 2086; 2108; 2132; 2156; 2221; 2235; 2273; 2289; 2329; 2342; 2361; 2384; 2401; 2414; 2433; 2463; 2484; 2501; 2524; 2559; 2586; 2617; 2639; 2665; 2687; 2706; 2734; 2770; 2789; 2812; 2826; 2846; 2859; 2873; 2892; 2906; 2925; 2957; 2971; 2984; 3010; 3041; 3054; 3071; 3088; 3102; 3119; 3137; 3152; 3180; 3196; 3215; 3237; 3253; 3276; 3295; 3320; 3339; 3359; 3386; 3410; 3443; 3462; 3490; 3504; 3570; 3594; 3609; 3632; 3653; 3670; 3718; 3745; 3759; 3788; 3812; 3845; 3862; 3882; 3895; 3908; 3966; 3993; 4012; 4042; 4067; 4087; 4101; 4126; 4144; 4181; 4219; 4248; 4276; 4290; 4310; 4325; 4346; 4360; 4379; 4397; 4413; 4453; 4473; 4500; 4518; 4539; 4552; 4565; 4582; 4606; 4629; 4661; 4686; 4713; 4735
SgeI	!NNNNNNNNNNNNCNG	168	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 679; 699; 722; 747; 775; 798; 822; 840; 890; 912; 947; 975; 1005; 1032; 1054; 1080; 1104; 1122; 1154; 1171; 1194; 1218; 1235; 1260; 1278; 1302; 1323; 1341; 1361; 1386; 1405; 1423; 1463; 1492; 1534; 1617; 1691; 1775; 1797; 1829; 1866; 1884; 1903; 1960; 1977; 1994; 2029; 2047; 2067; 2087; 2106; 2130; 2195; 2247; 2303; 2335; 2358; 2375; 2407; 2437; 2458; 2475; 2498; 2533; 2560; 2591; 2613; 2639; 2661; 2680; 2708; 2744; 2763; 2786; 2807; 2825; 2842; 2866; 2899; 2931; 2958; 2984; 3015; 3045; 3062; 3088; 3111; 3132; 3154; 3174; 3194; 3211; 3250; 3269; 3294; 3313; 3333; 3360; 3384; 3417; 3436; 3464; 3486; 3544; 3568; 3587; 3606; 3627; 3644; 3692; 3719; 3739; 3762; 3786; 3819; 3836; 3856; 3882; 3940; 3967; 3986; 4016; 4041; 4061; 4100; 4118; 4155; 4193; 4222; 4250; 4271; 4299; 4320; 4353; 4371; 4427; 4447; 4474; 4492; 4513; 4539; 4556; 4580; 4603; 4635; 4660; 4687; 4709; 4738
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; 1929; 3716; 4509
SimI	!GACCC	5	106; 1351; 3210; 3778; 4026
SinI	G!GWCC	3	1416; 3298; 3743
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	2	365; 3219
SmlI	C!TYRAG	5	1664; 3173; 4055; 4332; 4594
SmoI	C!TYRAG	5	1664; 3173; 4055; 4332; 4594
SmuI	CCCGNNNN!	11	93; 119; 286; 716; 969; 1176; 2104; 2459; 2480; 3676; 3808
SmuI	!NNNNNNGCGGG	6	616; 2035; 2905; 3442; 3580; 3727
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2352; 2424; 3187
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 1532; 1596; 1674; 1700; 1711; 2358; 2430; 2522; 3940
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	1	2603
SsiI	C!CGC	45	58; 86; 98; 112; 279; 507; 589; 612; 660; 709; 728; 800; 962; 1013; 1028; 1103; 1169; 1286; 1289; 1396; 1429; 2097; 2100; 2114; 2204; 2452; 2464; 2473; 2485; 2495; 2506; 2552; 2691; 2754; 3256; 3301; 3367; 3393; 3518; 3521; 3669; 3801; 4108; 4252; 4748
SsiI	G!CGG	31	370; 403; 528; 623; 647; 772; 775; 907; 946; 985; 1192; 2042; 2069; 2157; 2267; 2848; 2912; 3013; 3016; 3296; 3351; 3449; 3587; 3734; 3874; 4117; 4362; 4483; 4502; 4629; 4657
SspI	AAT!ATT	2	1690; 2243
SspDI	G!GCGCC	2	831; 2781

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SspD5I	GGTGANNNNNNNN!	3	376; 3853; 3969
SspD5I	!NNNNNNNNTCACC	4	724; 1078; 1898; 2959
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	22	92; 118; 285; 650; 715; 796; 968; 1075; 1175; 1362; 1981; 2103; 2458; 2479; 2792; 3195; 3334; 3405; 3675; 3807; 4037; 4475
Sth132I	!NNNNNNNNCCGGG	21	15; 407; 470; 615; 1256; 1411; 1982; 2034; 2135; 2862; 2904; 2937; 3441; 3550; 3579; 3726; 3830; 3861; 4314; 4358; 4566
Sth302II	CC!GG	23	645; 694; 737; 1025; 1061; 1415; 1420; 2001; 2688; 2765; 2787; 2815; 2946; 3036; 3103; 3284; 3559; 3567; 3659; 4133; 4323; 4349; 4496
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	5	1417; 2650; 3107; 3132; 3586
StsI	!NNNNNNNNNNNNNNCATCC	3	1085; 1226; 2454
StuI	AGG!CCT	1	2603
StyI	C!CWGGG	7	360; 826; 1135; 2511; 2604; 3214; 3619
StyD4I	!CCNGG	18	88; 281; 642; 1381; 1418; 2316; 2371; 2388; 2784; 2944; 3167; 3557; 3746; 3849; 4321; 4539; 4552; 4673
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	14	76; 198; 269; 543; 581; 1118; 1873; 3162; 3278; 3386; 3709; 4200; 4670; 4741
TaiI	ACGT!	17	125; 137; 178; 261; 342; 447; 868; 1000; 1150; 1845; 1857; 1900; 2010; 2901; 3088; 3869; 4002
TaqI	T!CGA	14	721; 760; 967; 1931; 2622; 2895; 3051; 3075; 3111; 3273; 3464; 3509; 3764; 4602
TaqII	GACCGANNNNNNNNNNN!	3	1802; 2819; 3487
TaqII	!NNNNNNNNTCGGTC	1	3731
TaqII	CACCCANNNNNNNNNNN!	0	
TaqII	!NNNNNNNNTGGGTG	3	172; 2686; 3278
TasI	!AATT	10	18; 1532; 1596; 1674; 1700; 1711; 2358; 2430; 2522; 3940
TatI	W!GTACW	4	217; 297; 330; 381
TauI	GCSG!C	28	614; 650; 662; 730; 775; 802; 910; 949; 988; 1030; 1195; 1291; 1431; 2102; 2116; 2554; 2693; 2756; 2851; 3016; 3019; 3258; 3354; 3395; 3523; 3877; 4505; 4660
TfiI	G!AWTC	5	3267; 3401; 3511; 3548; 4726
TliI	C!TCGAG	0	
TruII	T!TAA	15	7; 1483; 1544; 1665; 1686; 1697; 1709; 1720; 1737; 1835; 2106; 3925; 3939; 3944; 3996
Tru9I	T!TAA	15	7; 1483; 1544; 1665; 1686; 1697; 1709; 1720; 1737; 1835; 2106; 3925; 3939; 3944; 3996
TscAI	CASTGNN!	6	661; 1628; 2911; 4021; 4292; 4305
TseI	G!CWGC	20	614; 617; 620; 992; 1105; 1159; 1301; 1558; 2077; 2742; 2843; 2885; 2926; 3019; 3406; 3859; 4085; 4291; 4294; 4359
TsoI	TARCCANNNNNNNNNNN!	2	1754; 2101
TsoI	!NNNNNNNNTGGYTA	2	1559; 3311
Tsp45I	!GTSAC	3	2071; 2902; 3208
Tsp509I	!AATT	10	18; 1532; 1596; 1674; 1700; 1711; 2358; 2430; 2522; 3940
TspDTI	ATGAANNNNNNNNNNN!	5	729; 831; 1540; 2841; 3545
TspDTI	!NNNNNNNNTTCAT	4	26; 3259; 3715; 3922
TspEI	!AATT	10	18; 1532; 1596; 1674; 1700; 1711; 2358; 2430; 2522; 3940
TspGWI	ACGGANNNNNNNNNNN!	1	3657
TspGWI	!NNNNNNNNTCCGT	1	590
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	6	661; 1628; 2911; 4021; 4292; 4305
TstI	CACNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2900
Tth111II	CAARCANNNNNNNNNNN!	1	4109
Tth111III	!NNNNNNNNTGYTTG	3	3217; 4077; 4116
UnbI	!GGNCC	12	82; 275; 640; 796; 1268; 1415; 1888; 3297; 3742; 3788; 3846; 3879
Van91I	CCANNNN!NTGG	2	680; 869

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Vha464I	C!TTAAG	1	1664
VneI	G!TGCAC	1	4386
VpaK11AI	!GGWCC	3	1415; 3297; 3742
VpaK11BI	G!GWCC	3	1416; 3298; 3743
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	1596; 1700; 1711
XbaI	T!CTAGA	1	1436
XceI	RCATG!Y	6	599; 1226; 2352; 2424; 3187; 4704
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	11	585; 670; 686; 1371; 2953; 3199; 3591; 3950; 3962; 4048; 4059
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2604; 3619
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	1	921
XspI	C!TAG	8	592; 1437; 1631; 2049; 2605; 3620; 3954; 4207
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2354; 2426; 4757