

pTurboRFP-N vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1516; 1721
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1804; 2760; 4549
AatI	AGG!CCT	1	2554
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	640
AccII	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2835
Acc36I	ACCTGCNNNN!	3	1193; 3001; 3451
Acc36I	!NNNNNNNNGCAGGT	1	2620
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	7	465; 645; 727; 787; 1886; 2732; 2767
AccB7I	CCANNNN!NTGG	2	1260; 1272
AccBSI	CCG!CTC	2	2157; 3346
AccBSI	GAG!CGG	2	1993; 3400
AceIII	CAGCTCNNNNNNN!	1	1689
AceIII	!NNNNNNNNNNNGAGCTG	2	552; 673
AciI	C!CGC	36	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1380; 2048; 2051; 2065; 2155; 2403; 2415; 2424; 2436; 2446; 2457; 2503; 2642; 2705; 3207; 3252; 3318; 3344; 3469; 3472; 3620; 3752; 4059; 4203; 4699
AciI	G!CGG	29	370; 403; 528; 651; 821; 1091; 1133; 1175; 1376; 1993; 2020; 2108; 2218; 2799; 2863; 2964; 2967; 3247; 3302; 3400; 3538; 3685; 3825; 4068; 4313; 4434; 4453; 4580; 4608
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	8	668; 2601; 2912; 3158; 3550; 3909; 4007; 4093
AclWI	!NNNNNGATCC	7	580; 655; 1208; 2977; 3521; 3908; 4005
AcoI	Y!GGCCR	6	1331; 1377; 2639; 2813; 3204; 3231
AcsI	R!AATY	4	629; 1547; 1651; 1662
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	3	1183; 2879; 3311
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4109
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
AdeI	CACNNN!GTG	2	1260; 1849
AfaI	GT!AC	12	219; 244; 299; 332; 383; 540; 647; 718; 868; 1120; 1339; 3039
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	22	49; 784; 897; 1063; 1129; 1260; 1272; 1745; 2071; 2463; 2714; 3258; 3539; 3571; 3703; 3738; 3788; 3820; 4173; 4452; 4618; 4636
AfIII	C!TTAAG	1	1615
AfIII	A!CRYGT	1	4651
AgeI	A!CCGGT	1	666
AgsI	TTS!AA	7	750; 1200; 2144; 2188; 2198; 2611; 4187
AhdI	GACNNN!NNGTC	0	
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	14	88; 281; 848; 896; 992; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	
AleI	CACNN!NNGTG	0	
AlfI	GCANNNNNTGCNNNNNNNNNNNN!	2	2307; 2379
AlfI	!NNNNNNNNNNNGCANNNNNTGC	2	2273; 2345
AloI	GAACNNNNNTCCNNNNNNNNNNNN!	2	1074; 1815
AloI	!NNNNNNNGGANNNNNGTTC	0	
AloI	GGANNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNTCC	2	1042; 1783
AluI	AG!CT	19	566; 618; 624; 687; 714; 860; 1004; 1167; 1512; 1679; 1936; 2231; 2519; 2839; 3297; 4094; 4351; 4397; 4487
AluBI	AG!CT	19	566; 618; 624; 687; 714; 860; 1004; 1167; 1512; 1679; 1936; 2231; 2519; 2839; 3297; 4094; 4351; 4397; 4487
AlwI	GGATCNNNN!	8	668; 2601; 2912; 3158; 3550; 3909; 4007; 4093
AlwI	!NNNNNGATCC	7	580; 655; 1208; 2977; 3521; 3908; 4005
Alw21I	GWGCW!C	5	620; 757; 2846; 3036; 4341
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1294; 2157; 2575; 3594; 3722
Alw44I	G!TGCAC	2	753; 4337
AlwNI	CAGNNN!CTG	2	3834; 4242
Ama87I	C!YCGRG	2	613; 656
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	1	596
ApaI	GGGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2301; 2373; 3835
ApaLI	G!TGCAC	2	753; 4337
ApeKI	G!CWGC	16	872; 1016; 1314; 1509; 2028; 2693; 2794; 2836; 2877; 2970; 3357; 3810; 4036; 4242; 4245; 4310
ApoI	R!AATTY	4	629; 1547; 1651; 1662
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3248
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3042; 3695; 4533
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3132
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	848
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2561
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3303
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNGTC	0	
ArsI	CRAANNNNNGTCNNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 610; 661; 690; 804; 1038; 1214; 1391; 2571; 2575; 2594; 2905; 2983; 3064; 3073; 3151; 3527; 3543; 3902; 3914; 3992; 4000; 4011; 4086
AsiGI	A!CCGGT	1	666
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2851
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	2555; 3570
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	21	597; 1999; 2007; 2033; 2055; 2064; 2077; 2108; 2727; 2735; 2799; 2836; 3102; 3362; 3538; 3624; 4027; 4136; 4310; 4410; 4477
AspS9I	G!GNCC	13	83; 276; 654; 823; 1066; 1158; 1263; 1840; 3249; 3694; 3740; 3798; 3831
AssI	AGT!ACT	1	1339
AsuII	TT!CGAA	2	627; 3415
AsuC2I	CC!SGG	7	657; 658; 1247; 2737; 2897; 3510; 4274
AsuHPI	GGTGANNNNNNNN!	4	376; 1059; 3804; 3920
AsuHPI	!NNNNNNNTCACC	3	948; 1850; 2911
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	613; 656
AvaII	G!GWCC	3	1263; 3249; 3694
AviII	TGC!GCA	1	2835

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AvrII	C!CTAGG	2	2555; 3570
AxyI	CC!TNAGG	3	932; 2213; 3845
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCMI!C	8	657; 730; 757; 790; 1367; 2679; 2772; 4341
BalI	TGG!CCA	2	1333; 2815
BamHI	G!GATCC	1	660
BanI	G!GYRCC	7	465; 645; 727; 787; 1886; 2732; 2767
BanII	GRGCY!C	5	620; 657; 1924; 3098; 3808
BanIII	AT!CGAT	1	2573
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	2	1260; 1272
BauI	C!ACGAG	3	1318; 3451; 4478
BauI	C!TCGTG	2	1168; 3325
BbeI	GGCGC!C	1	2736
Bbr7I	GAAGACNNNNNN!	1	979
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	974
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2303; 2375; 3138
BbvI	GCAGCNNNNNNNN!	8	884; 1326; 1521; 2806; 2848; 3369; 3822; 4322
BbvI	!NNNNNNNNNNNGCTGC	7	1003; 2015; 2680; 2864; 2957; 4023; 4229
Bbv12I	GWGCW!C	5	620; 757; 2846; 3036; 4341
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1065; 1863; 2427; 2953; 3455
BccI	!NNNNNGATGG	5	1149; 1317; 1831; 2611; 3039
BceAI	ACGGCNNNNNNNNNNNN!	6	885; 1029; 1080; 1146; 3159; 3646
BceAI	!NNNNNNNNNNNNNGCCGT	3	1874; 2692; 4151
BceFI	ACGGCNNNNNNNNNNNN!	6	885; 1029; 1080; 1146; 3159; 3646
BceFI	!NNNNNNNNNNNNNGCCGT	3	1875; 2693; 4152
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2162; 2952; 4453
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	689
BcnI	CC!SGG	7	657; 658; 1247; 2737; 2897; 3510; 4274
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNNTCANNNNNNNNNNN!	1	4586
BdaI	!NNNNNNNNNNNTGANNNNNNNTCA	1	4552
BfaI	C!TAG	9	592; 1352; 1388; 1582; 2000; 2556; 3571; 3905; 4158
BfiI	ACTGGGNNNNN!	2	1369; 2682
BfiI	!NNNNCCAGT	2	289; 2434
BfmI	C!TRYAG	4	634; 2068; 4195; 4386
BfoI	RGCGC!Y	5	598; 2000; 2008; 2736; 4411
BfrI	C!TTAAG	1	1615
BfuI	GTATCCNNNNNN!	3	2162; 2952; 4453
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1193; 3001; 3451
BfuAI	!NNNNNNNNNGCAGGT	1	2620
BfuCI	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1142; 2508
BglII	A!GATCT	1	609

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BisI	GC!NGC	36	822; 873; 1017; 1092; 1134; 1315; 1377; 1380; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2968; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609
BlnI	C!CTAGG	2	2555; 3570
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	36	823; 874; 1018; 1093; 1135; 1316; 1378; 1381; 1511; 2030; 2052; 2066; 2504; 2643; 2695; 2706; 2796; 2801; 2838; 2879; 2966; 2969; 2972; 3208; 3304; 3345; 3359; 3473; 3812; 3827; 4038; 4244; 4247; 4312; 4455; 4610
BmcAI	AGT!ACT	1	1339
Bme18I	G!GWCC	3	1263; 3249; 3694
Bme1390I	CC!NGG	21	90; 283; 657; 658; 850; 898; 994; 1247; 2269; 2324; 2341; 2737; 2897; 3120; 3510; 3699; 3802; 4274; 4492; 4505; 4626
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	613; 656
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	13	84; 277; 655; 824; 1067; 1159; 1264; 1841; 3250; 3695; 3741; 3799; 3832
BmiI	GGN!NCC	19	467; 647; 655; 662; 729; 789; 1888; 1909; 1921; 2112; 2273; 2345; 2734; 2769; 3617; 3696; 3741; 4584; 4623
BmrI	ACTGGGNNNNN!	2	1369; 2682
BmrI	!NNNNCCCCAGT	2	289; 2434
BmrFI	CC!NGG	21	90; 283; 657; 658; 850; 898; 994; 1247; 2269; 2324; 2341; 2737; 2897; 3120; 3510; 3699; 3802; 4274; 4492; 4505; 4626
BmsI	GCATCNNNNN!	8	911; 1028; 1549; 2312; 2384; 3032; 3096; 3371
BmsI	!NNNNNNNNNGATGC	9	357; 1064; 1103; 1232; 1363; 2691; 2946; 3162; 4554
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1369; 2682
BmuI	!NNNNCCCCAGT	2	289; 2434
BoxI	GACNN!NNGTC	1	1306
BpiI	GAAGACNN!	1	974
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2522; 3421
BpI	!NNNNNNNNGAGNNNNNNCTC	2	2490; 3389
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3573
BpmI	!NNNNNNNNNNNNNNNNCTCCAG	1	3516
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 3415
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	974
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4027; 4566
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	4	604; 1222; 3109; 4268
BpuMI	CC!SGG	7	657; 658; 1247; 2737; 2897; 3510; 4274
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1294; 3722
Bsa29I	AT!CGAT	1	2573
BsaAI	YAC!GTR	3	340; 1849; 3037
BsaBI	GATNN!NNATC	2	1395; 2592
BsaHI	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
BsaJI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2267; 2339; 2462; 2497; 2506; 2555; 2896; 3165; 3570; 3697; 3698; 3800; 3801; 4491
BsaMI	GAATGCN!	1	1484
BsaMI	G!CATTC	1	1577
BsaWI	W!CCGGW	6	600; 666; 2764; 3608; 4298; 4445
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1813
BsaXI	!NNNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNNCTCC	1	1783
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	1	1130
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	2	1734; 3641

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bsc4I	CCNNNNN!NNGG	22	49; 784; 897; 1063; 1129; 1260; 1272; 1745; 2071; 2463; 2714; 3258; 3539; 3571; 3703; 3738; 3788; 3820; 4173; 4452; 4618; 4636
BscAI	GCATCNNNN!	8	910; 1027; 1548; 2311; 2383; 3031; 3095; 3370
BscAI	!NNNNNNGATGC	9	360; 1067; 1106; 1235; 1366; 2694; 2949; 3165; 4557
BseI	ACTGGN!	5	1277; 1364; 2677; 2878; 4124
BseI	C!CAGT	5	295; 1762; 2440; 4236; 4249
Bse8I	GATNN!NNATC	2	1395; 2592
Bse21I	CC!TNAGG	3	932; 2213; 3845
Bse118I	R!CCGGY	5	666; 1950; 3052; 3233; 3516
BseAI	T!CCGGA	0	
BseBI	CC!WGG	14	90; 283; 850; 898; 994; 2269; 2324; 2341; 3120; 3699; 3802; 4492; 4505; 4626
BseCI	AT!CGAT	1	2573
BseDI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2267; 2339; 2462; 2497; 2506; 2555; 2896; 3165; 3570; 3697; 3698; 3800; 3801; 4491
Bse3DI	GCAATGNN!	1	2966
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2593; 3050; 3075; 3529
BseGI	!CATCC	5	757; 845; 902; 1057; 2419
BseJ	GATNN!NNATC	2	1395; 2592
BseLI	CCNNNNN!NNGG	22	49; 784; 897; 1063; 1129; 1260; 1272; 1745; 2071; 2463; 2714; 3258; 3539; 3571; 3703; 3738; 3788; 3820; 4173; 4452; 4618; 4636
BseMI	GCAATGNN!	1	2966
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 3859
BseMII	!NNNNNNNNNCTGAG	7	923; 1129; 2204; 2506; 3387; 3959; 4368
BseNI	ACTGGN!	5	1277; 1364; 2677; 2878; 4124
BseNI	C!CAGT	5	295; 1762; 2440; 4236; 4249
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2551
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGCMI!	8	657; 730; 757; 790; 1367; 2679; 2772; 4341
BseXI	GCAGCNNNNNNNN!	8	884; 1326; 1521; 2806; 2848; 3369; 3822; 4322
BseXI	!NNNNNNNNNNNGCTGC	7	1003; 2015; 2680; 2864; 2957; 4023; 4229
BseX3I	C!GGCCG	2	1377; 2639
BseYI	C!CCAGC	3	2276; 2348; 4347
BseYI	G!CTGGG	2	1094; 3237
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNNCTGCAC	1	1171
Bsh1236I	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
Bsh1285I	CGRY!CG	4	671; 1380; 2642; 4317
BshFI	GG!CC	29	84; 277; 655; 824; 1067; 1102; 1136; 1145; 1159; 1291; 1333; 1379; 1699; 1841; 2496; 2502; 2511; 2554; 2641; 2815; 3206; 3233; 3742; 3799; 3832; 4177; 4611; 4629; 4640
BshNI	G!GYRCC	7	465; 645; 727; 787; 1886; 2732; 2767
BshTI	A!CCGGT	1	666
BshVI	AT!CGAT	1	2573
BsiEI	CGRY!CG	4	671; 1380; 2642; 4317
BsiHKAI	GWGCW!C	5	620; 757; 2846; 3036; 4341
BsiHKCI	C!YCGRG	2	613; 656
BsiSI	C!CGG	20	601; 657; 667; 1247; 1951; 2638; 2715; 2737; 2765; 2896; 2986; 3053; 3234; 3509; 3517; 3609; 4083; 4273; 4299; 4446
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	22	49; 784; 897; 1063; 1129; 1260; 1272; 1745; 2071; 2463; 2714; 3258; 3539; 3571; 3703; 3738; 3788; 3820; 4173; 4452; 4618; 4636
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2884; 3416; 3525
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2249; 2321; 2385; 3680
BsmI	GAATGCN!	1	1484
BsmI	G!CATTC	1	1577
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1294; 2157; 2575; 3594; 3722
BsmBI	CGTCTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2884; 3416; 3525
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2249; 2321; 2385; 3680
BsnI	GG!CC	29	84; 277; 655; 824; 1067; 1102; 1136; 1145; 1159; 1291; 1333; 1379; 1699; 1841; 2496; 2502; 2511; 2554; 2641; 2815; 3206; 3233; 3742; 3799; 3832; 4177; 4611; 4629; 4640
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	1294; 3722
BsoBI	C!YCGRG	2	613; 656
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	3	360; 2462; 3165
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3536
Bsp24I	!NNNNNNCCANNNNNGTC	2	3957; 4135
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	3989; 4167
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3504
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 3415
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
Bsp1286I	GDGCH!C	14	620; 657; 730; 757; 790; 1367; 1924; 2679; 2772; 2846; 3036; 3098; 3808; 4341
Bsp1407I	T!GTACA	1	716
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	36	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1380; 2048; 2051; 2065; 2155; 2403; 2415; 2424; 2436; 2446; 2457; 2503; 2642; 2705; 3207; 3252; 3318; 3344; 3469; 3472; 3620; 3752; 4059; 4203; 4699
BspACI	G!CGG	29	370; 403; 528; 651; 821; 1091; 1133; 1175; 1376; 1993; 2020; 2108; 2218; 2799; 2863; 2964; 2967; 3247; 3302; 3400; 3538; 3685; 3825; 4068; 4313; 4434; 4453; 4580; 4608
BspCNI	CTCAGNNNNNNNN!	2	619; 3858
BspCNI	!NNNNNNNCTGAG	7	924; 1130; 2205; 2507; 3388; 3960; 4369
BspDI	AT!CGAT	1	2573
BspD6I	GACTCNNNN!	6	418; 612; 1392; 1806; 3412; 4289
BspD6I	!NNNNNGAGTC	2	1769; 2201
BspEI	T!CCGGA	0	
BspFNI	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
BspHI	T!CATGA	2	2159; 3931
BspLI	GGN!NCC	19	467; 647; 655; 662; 729; 789; 1888; 1909; 1921; 2112; 2273; 2345; 2734; 2769; 3617; 3696; 3741; 4584; 4623
BspMI	ACCTGCNNNN!	3	1193; 3001; 3451
BspMI	!NNNNNNNGCAGGT	1	2620
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	668; 2601; 2912; 3158; 3550; 3909; 4007; 4093
BspPI	!NNNNNGATCC	7	580; 655; 1208; 2977; 3521; 3908; 4005
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3077; 3287
BspTI	C!TTAAG	1	1615
BspT104I	TT!CGAA	2	627; 3415
BspT107I	G!GYRCC	7	465; 645; 727; 787; 1886; 2732; 2767
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1294; 3722
BsrI	ACTGGN!	5	1277; 1364; 2677; 2878; 4124
BsrI	C!CAGT	5	295; 1762; 2440; 4236; 4249
BsrBI	CCG!CTC	2	2157; 3346
BsrBI	GAG!CGG	2	1993; 3400
BsrDI	GCAATGNN!	1	2966
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	666; 1950; 3052; 3233; 3516
BsrGI	T!GTACA	1	716
BsrSI	ACTGGN!	5	1277; 1364; 2677; 2878; 4124
BsrSI	C!CAGT	5	295; 1762; 2440; 4236; 4249
BssAI	R!CCGGY	5	666; 1950; 3052; 3233; 3516

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2267; 2339; 2462; 2497; 2506; 2555; 2896; 3165; 3570; 3697; 3698; 3800; 3801; 4491
BssHII	G!CGCGC	0	
BssKI	!CCNGG	21	88; 281; 655; 656; 848; 896; 992; 1245; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624
BssMI	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
BssNI	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1318; 3451; 4478
BssSI	C!TCGTG	2	1168; 3325
BssTII	C!CWVGG	5	360; 2462; 2555; 3165; 3570
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	2200; 3077; 3287
Bst98I	C!TTAAG	1	1615
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
BstAFI	C!TTAAG	1	1615
BstAPI	GCANNNN!NTGC	3	2300; 2372; 3834
BstAUI	T!GTACA	1	716
BstBI	TT!CGAA	2	627; 3415
Bst2BI	C!ACGAG	3	1318; 3451; 4478
Bst2BI	C!TCGTG	2	1168; 3325
BstBAI	YAC!GTR	3	340; 1849; 3037
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1824; 3113; 3229; 3337; 3660; 4151; 4621; 4692
BstC8I	GCN!NGC	32	86; 279; 593; 653; 685; 775; 979; 1952; 1995; 2009; 2282; 2301; 2354; 2373; 2627; 2813; 3032; 3098; 3104; 3132; 3136; 3177; 3181; 3235; 3518; 3705; 3752; 3808; 3830; 4041; 4601; 4638
BstDEI	C!TNAG	10	606; 932; 1138; 1229; 2213; 2515; 3396; 3845; 3968; 4377
BstDSI	C!CRYGG	4	360; 649; 2462; 3165
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2593; 3050; 3075; 3529
BstF5I	!CATCC	5	757; 845; 902; 1057; 2419
BstFNI	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
BstH2I	RGCGC!Y	5	598; 2000; 2008; 2736; 4411
BstHHI	GCG!C	21	597; 1999; 2007; 2033; 2055; 2064; 2077; 2108; 2727; 2735; 2799; 2836; 3102; 3362; 3538; 3624; 4027; 4136; 4310; 4410; 4477
BstKTI	GAT!C	24	588; 612; 663; 692; 806; 1040; 1216; 1393; 2573; 2577; 2596; 2907; 2985; 3066; 3075; 3153; 3529; 3545; 3904; 3916; 3994; 4002; 4013; 4088
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1294; 2157; 2575; 3594; 3722
BstMBI	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
BstMCI	CGRY!CG	4	671; 1380; 2642; 4317
BstMWI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1960; 1990; 2017; 2059; 2300; 2372; 2423; 2502; 2724; 2808; 2831; 2970; 3093; 3176; 3443; 3630; 3834; 4033; 4605
BstNI	CC!WGG	14	90; 283; 850; 898; 994; 2269; 2324; 2341; 3120; 3699; 3802; 4492; 4505; 4626
BstNSI	RCATG!Y	5	705; 2303; 2375; 3138; 4655
BstOI	CC!WGG	14	90; 283; 850; 898; 994; 2269; 2324; 2341; 3120; 3699; 3802; 4492; 4505; 4626
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1306
BstSCI	!CCNGG	21	88; 281; 655; 656; 848; 896; 992; 1245; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624
BstSFI	C!TRYAG	4	634; 2068; 4195; 4386
BstSLI	GKGC!C	8	657; 730; 757; 790; 1367; 2679; 2772; 4341
BstSNI	TAC!GTA	1	340

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstUI	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
Bst2UI	CC!WGG	14	90; 283; 850; 898; 994; 2269; 2324; 2341; 3120; 3699; 3802; 4492; 4505; 4626
BstV1I	GCAGCNNNNNNNN!	8	884; 1326; 1521; 2806; 2848; 3369; 3822; 4322
BstV1I	!NNNNNNNNNNNGCTGC	7	1003; 2015; 2680; 2864; 2957; 4023; 4229
BstV2I	GAAGACNN!	1	974
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 609; 660; 1213; 2904; 3150; 3542; 3901; 3913; 3999; 4010
BstYI	R!GATCY	11	585; 609; 660; 1213; 2904; 3150; 3542; 3901; 3913; 3999; 4010
BstZI	C!GGCCG	2	1377; 2639
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2162; 2952; 4453
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2573
Bsu36I	CC!TNAGG	3	932; 2213; 3845
BsuRI	GG!CC	29	84; 277; 655; 824; 1067; 1102; 1136; 1145; 1159; 1291; 1333; 1379; 1699; 1841; 2496; 2502; 2511; 2554; 2641; 2815; 3206; 3233; 3742; 3799; 3832; 4177; 4611; 4629; 4640
BsuTUI	AT!CGAT	1	2573
BtgI	C!CRYGG	4	360; 649; 2462; 3165
BtgZI	GCGATGNNNNNNNNNN!	2	1850; 3185
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3004; 3348
BthCI	GCNG!C	36	824; 875; 1019; 1094; 1136; 1317; 1379; 1382; 1512; 2031; 2053; 2067; 2505; 2644; 2696; 2707; 2797; 2802; 2839; 2880; 2967; 2970; 2973; 3209; 3305; 3346; 3360; 3474; 3813; 3828; 4039; 4245; 4248; 4313; 4456; 4611
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	1188; 1572
BtsCI	GGATGNN!	4	2593; 3050; 3075; 3529
BtsCI	!CATCC	5	757; 845; 902; 1057; 2419
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	1193; 3001; 3451
BveI	!NNNNNNNNNGCAGGT	1	2620
Cac8I	GCN!NGC	32	86; 279; 593; 653; 685; 775; 979; 1952; 1995; 2009; 2282; 2301; 2354; 2373; 2627; 2813; 3032; 3098; 3104; 3132; 3136; 3177; 3181; 3235; 3518; 3705; 3752; 3808; 3830; 4041; 4601; 4638
CaiI	CAGNNN!CTG	2	3834; 4242
CciI	T!CATGA	2	2159; 3931
CciNI	GC!GGCCGC	1	1377
CdiI	CATC!G	5	352; 3022; 3027; 3225; 3366
CdiI	C!GATG	2	1836; 3171
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	4605
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2394; 2436
CelII	GC!TNAGC	0	
CfoI	GCG!C	21	597; 1999; 2007; 2033; 2055; 2064; 2077; 2108; 2727; 2735; 2799; 2836; 3102; 3362; 3538; 3624; 4027; 4136; 4310; 4410; 4477
CfrI	Y!GGCCR	6	1331; 1377; 2639; 2813; 3204; 3231
Cfr9I	C!CCGGG	1	656
Cfr10I	R!CCGGY	5	666; 1950; 3052; 3233; 3516
Cfr13I	G!GNCC	13	83; 276; 654; 823; 1066; 1158; 1263; 1840; 3249; 3694; 3740; 3798; 3831
Cfr42I	CCGC!GG	1	652
ChaI	GATC!	24	589; 613; 664; 693; 807; 1041; 1217; 1394; 2574; 2578; 2597; 2908; 2986; 3067; 3076; 3154; 3530; 3546; 3905; 3917; 3995; 4003; 4014; 4089
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	769; 2550; 3990; 4090; 4168
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2217; 2312; 3504; 4054; 4609
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2251; 2346; 3538; 4088; 4643
CjeI	!NNNNNNNNCCANNNNNNNGT	5	735; 2516; 3956; 4056; 4134
CjePI	CCANNNNNNNTCNNNNNNNNNNNNNNNN!	2	3990; 4168
CjePI	!NNNNNNNNGANNNNNNNNNTGG	3	257; 3504; 4103

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	3	290; 3537; 4136
CjePI	!NNNNNNNCCANNNNNNNTC	2	3957; 4135
ClaI	AT!CGAT	1	2573
CpoI	CG!GWCCG	1	3249
CseI	GACGCNNNNN!	3	526; 3443; 3522
CseI	!NNNNNNNNNNGCGTC	3	2066; 3961; 4539
CsiI	A!CCWGGT	1	2322
CspI	CG!GWCCG	1	3249
Csp6I	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 717; 867; 1119; 1338; 3038
Csp45I	TT!CGAA	2	627; 3415
CspAI	A!CCGGT	1	666
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	719; 1310; 2013; 3622
CstMI	!NNNNNNNNNNNNNNNNNCTCCTT	1	1175
CviAII	C!ATG	22	301; 361; 678; 702; 708; 720; 798; 864; 944; 2160; 2300; 2372; 2463; 2604; 2949; 3135; 3166; 3192; 3548; 3932; 4652; 4703
CviJI	RG!CY	98	42; 84; 93; 277; 566; 618; 624; 655; 687; 714; 777; 824; 853; 860; 880; 938; 1004; 1016; 1067; 1094; 1102; 1136; 1145; 1151; 1159; 1167; 1181; 1250; 1291; 1327; 1333; 1379; 1402; 1512; 1679; 1699; 1841; 1922; 1936; 1950; 2231; 2272; 2344; 2467; 2496; 2502; 2511; 2519; 2542; 2554; 2560; 2641; 2658; 2666; 2693; 2718; 2802; 2811; 2815; 2839; 2877; 2953; 2970; 2989; 3052; 3096; 3106; 3123; 3206; 3233; 3237; 3274; 3297; 3313; 3493; 3520; 3581; 3703; 3742; 3799; 3806; 3813; 3832; 3843; 4094; 4123; 4166; 4177; 4242; 4321; 4346; 4351; 4397; 4487; 4585; 4611; 4629; 4640
CviKI-1	RG!CY	98	42; 84; 93; 277; 566; 618; 624; 655; 687; 714; 777; 824; 853; 860; 880; 938; 1004; 1016; 1067; 1094; 1102; 1136; 1145; 1151; 1159; 1167; 1181; 1250; 1291; 1327; 1333; 1379; 1402; 1512; 1679; 1699; 1841; 1922; 1936; 1950; 2231; 2272; 2344; 2467; 2496; 2502; 2511; 2519; 2542; 2554; 2560; 2641; 2658; 2666; 2693; 2718; 2802; 2811; 2815; 2839; 2877; 2953; 2970; 2989; 3052; 3096; 3106; 3123; 3206; 3233; 3237; 3274; 3297; 3313; 3493; 3520; 3581; 3703; 3742; 3799; 3806; 3813; 3832; 3843; 4094; 4123; 4166; 4177; 4242; 4321; 4346; 4351; 4397; 4487; 4585; 4611; 4629; 4640
CviQI	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 717; 867; 1119; 1338; 3038
DdeI	C!TNAG	10	606; 932; 1138; 1229; 2213; 2515; 3396; 3845; 3968; 4377
DinI	GGC!GCC	1	2734
DpnI	GA!TC	24	587; 611; 662; 691; 805; 1039; 1215; 1392; 2572; 2576; 2595; 2906; 2984; 3065; 3074; 3152; 3528; 3544; 3903; 3915; 3993; 4001; 4012; 4087
DpnII	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
DraI	TTT!AAA	3	1435; 3877; 3896
DraII	RG!GNCCY	1	3831
DraIII	CACNNN!GTG	2	1260; 1849
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	3	266; 1361; 4213
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1804; 2760; 4549
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1804; 2760; 4549
EaeI	Y!GGCCR	6	1331; 1377; 2639; 2813; 3204; 3231
EagI	C!GGCCG	2	1377; 2639
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2200; 3077; 3287
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2200; 3077; 3287

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EciI	GGCGGANNNNNNNNNNN!	4	2233; 3262; 4449; 4595
EciI	!NNNNNNNNNTCCGCC	4	496; 2404; 2425; 2446
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	2	1377; 2639
Eco24I	GRGCY!C	5	620; 657; 1924; 3098; 3808
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1294; 3722
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1263; 3249; 3694
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	2	1377; 2639
Eco57I	CTGAAGNNNNNNNNNNNNNNN!	3	1183; 2879; 3311
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4109
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	932; 2213; 3845
Eco88I	C!YCGRG	2	613; 656
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	5	360; 2462; 2555; 3165; 3570
Eco147I	AGG!CCT	1	2554
EcoHI	!CCSGG	7	655; 656; 1245; 2735; 2895; 3508; 4272
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNNNNN!	4	1183; 2879; 3311; 3573
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	2	3516; 4109
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3831
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	14	88; 281; 848; 896; 992; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	5	360; 2462; 2555; 3165; 3570
EcoT22I	ATGCA!T	3	2305; 2377; 4708
EcoT38I	GRGCY!C	5	620; 657; 1924; 3098; 3808
Eco53kI	GAG!CTC	1	618
EgeI	GGC!GCC	1	2734
EheI	GGC!GCC	1	2734
ErhI	C!CWWGG	5	360; 2462; 2555; 3165; 3570
EsaBC3I	TC!GA	17	615; 628; 641; 816; 843; 1311; 1883; 2574; 2847; 3003; 3027; 3063; 3225; 3416; 3461; 3716; 4554
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	22	304; 364; 681; 705; 711; 723; 801; 867; 947; 2163; 2303; 2375; 2466; 2607; 2952; 3138; 3169; 3195; 3551; 3935; 4655; 4706
Fail	YA!TR	60	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 679; 703; 709; 721; 799; 865; 945; 963; 1209; 1395; 1405; 1471; 1516; 1721; 2149; 2161; 2292; 2301; 2364; 2373; 2397; 2464; 2488; 2605; 2669; 2950; 2975; 3136; 3167; 3193; 3265; 3481; 3549; 3627; 3679; 3840; 3857; 3859; 3861; 3933; 4211; 4400; 4516; 4589; 4653; 4704
FalI	AAGNNNNNCTNNNNNNNNNNNNN!	2	942; 3073
FalI	!NNNNNNNNAAGNNNNNCTT	2	910; 3041
FaqI	GGGACNNNNNNNNNNN!	6	175; 326; 494; 2884; 3416; 3525
FaqI	!NNNNNNNNNNNNNGTCCC	4	2249; 2321; 2385; 3680
FatI	!CATG	22	300; 360; 677; 701; 707; 719; 797; 863; 943; 2159; 2299; 2371; 2462; 2603; 2948; 3134; 3165; 3191; 3547; 3931; 4651; 4702
FauI	CCCGCNNNN!	10	93; 119; 286; 1131; 1233; 2055; 2410; 2431; 3627; 3759
FauI	!NNNNNGCGGG	7	644; 1168; 1986; 2856; 3393; 3531; 3678
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	689
FblI	GT!MKAC	1	640
FmuI	GGNC!C	13	86; 279; 657; 826; 1069; 1161; 1266; 1843; 3252; 3697; 3743; 3801; 3834

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	36	822; 873; 1017; 1092; 1134; 1315; 1377; 1380; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2968; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609
FokI	GGATGNNNNNNNNNN!	4	2600; 3057; 3082; 3536
FokI	!NNNNNNNNNNNNNNCATCC	5	744; 832; 889; 1044; 2406
FriOI	GRGCY!C	5	620; 657; 1924; 3098; 3808
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2835
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1352; 1388; 1582; 2000; 2556; 3571; 3905; 4158
FspEI	CCNNNNNNNNNNNN!	156	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 662; 677; 744; 774; 791; 805; 838; 852; 870; 894; 909; 939; 972; 999; 1014; 1069; 1116; 1135; 1150; 1165; 1198; 1218; 1238; 1259; 1279; 1305; 1347; 1363; 1393; 1416; 1455; 1469; 1610; 1705; 1729; 1752; 1775; 1793; 1815; 1836; 1855; 1874; 1903; 1924; 1938; 1964; 2052; 2078; 2127; 2168; 2186; 2225; 2241; 2279; 2336; 2351; 2408; 2428; 2442; 2459; 2473; 2510; 2525; 2568; 2651; 2718; 2749; 2769; 2784; 2829; 2843; 2909; 2923; 2942; 2958; 2999; 3019; 3066; 3116; 3132; 3152; 3177; 3197; 3220; 3247; 3265; 3291; 3331; 3357; 3381; 3437; 3451; 3479; 3522; 3543; 3578; 3622; 3710; 3734; 3756; 3776; 3792; 3813; 3827; 3846; 3930; 3950; 3978; 3993; 4027; 4069; 4096; 4111; 4156; 4180; 4194; 4216; 4242; 4262; 4286; 4312; 4360; 4379; 4398; 4424; 4459; 4504; 4534; 4548; 4599; 4613; 4638; 4654; 4675; 4704
FspEI	!NNNNNNNNNNNNNNNGG	128	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 628; 652; 679; 706; 748; 769; 793; 835; 854; 883; 919; 956; 979; 998; 1028; 1049; 1076; 1115; 1141; 1160; 1232; 1258; 1309; 1345; 1404; 1504; 1573; 1603; 1681; 1730; 1752; 1780; 1816; 1861; 1890; 1926; 1945; 1973; 1993; 2056; 2079; 2187; 2219; 2237; 2266; 2309; 2338; 2449; 2478; 2521; 2542; 2570; 2603; 2623; 2648; 2675; 2700; 2722; 2750; 2776; 2797; 2848; 2869; 2887; 2935; 2971; 3027; 3052; 3076; 3105; 3128; 3152; 3178; 3200; 3219; 3244; 3284; 3320; 3385; 3470; 3494; 3523; 3557; 3578; 3598; 3643; 3670; 3689; 3722; 3774; 3805; 3832; 3884; 3982; 4053; 4098; 4159; 4224; 4258; 4284; 4302; 4338; 4408; 4431; 4453; 4477; 4510; 4558; 4593; 4611; 4668
Fsp4HI	GC!NGC	36	822; 873; 1017; 1092; 1134; 1315; 1377; 1380; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2968; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609
GdiII	C!GGCCR	2	1377; 2639
GdiII	Y!GGCCG	4	1377; 2639; 3204; 3231
GlaI	GC!GC	21	596; 1998; 2006; 2032; 2054; 2063; 2076; 2107; 2726; 2734; 2798; 2835; 3101; 3361; 3537; 3623; 4026; 4135; 4309; 4409; 4476
GluI	GC!NGC	36	822; 873; 1017; 1092; 1134; 1315; 1377; 1380; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2968; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609
GsaI	CCCAG!C	3	2280; 2352; 4351
GsaI	GCTGG!G	2	1098; 3241
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3573
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3516
HaeI	WGG!CCW	8	1102; 1145; 1333; 2554; 2815; 4177; 4629; 4640
HaeII	RGCGC!Y	5	598; 2000; 2008; 2736; 4411
HaeIII	GG!CC	29	84; 277; 655; 824; 1067; 1102; 1136; 1145; 1159; 1291; 1333; 1379; 1699; 1841; 2496; 2502; 2511; 2554; 2641; 2815; 3206; 3233; 3742; 3799; 3832; 4177; 4611; 4629; 4640
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1408; 2929
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1374; 2895
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1407; 2928
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1376; 2897
HapII	C!CGG	20	601; 657; 667; 1247; 1951; 2638; 2715; 2737; 2765; 2896; 2986; 3053; 3234; 3509; 3517; 3609; 4083; 4273; 4299; 4446
HgaI	GACGCNNNNN!	3	526; 3443; 3522
HgaI	!NNNNNNNNNGCGTC	3	2066; 3961; 4539

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	21	597; 1999; 2007; 2033; 2055; 2064; 2077; 2108; 2727; 2735; 2799; 2836; 3102; 3362; 3538; 3624; 4027; 4136; 4310; 4410; 4477
Hin1I	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
Hin1II	CATG!	22	304; 364; 681; 705; 711; 723; 801; 867; 947; 2163; 2303; 2375; 2466; 2607; 2952; 3138; 3169; 3195; 3551; 3935; 4655; 4706
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1407; 2928
Hin4I	!NNNNNNNNGABNNNNNRTC	3	1375; 2896; 2926
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1407; 2928; 2958
Hin4I	!NNNNNNNNGAYNNNNNVTC	2	1375; 2896
Hin6I	G!CGC	21	595; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475
HinP1I	G!CGC	21	595; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475
HincII	GTY!RAC	2	641; 1496
HindII	GTY!RAC	2	641; 1496
HindIII	A!AGCTT	1	622
HinfI	G!ANTC	15	410; 604; 953; 1280; 1384; 1776; 1798; 2208; 3218; 3352; 3404; 3462; 3499; 4281; 4677
HpaI	GTT!AAC	1	1496
HpaII	C!CGG	20	601; 657; 667; 1247; 1951; 2638; 2715; 2737; 2765; 2896; 2986; 3053; 3234; 3509; 3517; 3609; 4083; 4273; 4299; 4446
HphI	GGTGANNNNNNNN!	4	376; 1059; 3804; 3920
HphI	!NNNNNNNTCACC	3	948; 1850; 2911
Hpy8I	GTN!NAC	13	201; 539; 577; 641; 735; 755; 1050; 1263; 1496; 1780; 1797; 1852; 4339
Hpy99I	CGWCG!	9	645; 1312; 2823; 2851; 3145; 3160; 3437; 3822; 4555
Hpy166II	GTN!NAC	13	201; 539; 577; 641; 735; 755; 1050; 1263; 1496; 1780; 1797; 1852; 4339
Hpy188I	TCN!GA	13	585; 609; 762; 1907; 2516; 2700; 3044; 3397; 3498; 3977; 4111; 4464; 4542
Hpy188III	TC!NNGA	25	613; 1008; 1035; 1200; 1239; 1388; 2160; 2212; 2525; 2578; 2751; 3067; 3076; 3159; 3215; 3259; 3349; 3382; 3451; 3932; 4006; 4089; 4187; 4285; 4419
HpyAV	CCTTCNNNNNN!	7	843; 891; 936; 1206; 3378; 3485; 4164
HpyAV	!NNNNNGAAGG	8	763; 1966; 2861; 3590; 3606; 3789; 4106; 4416
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1824; 3113; 3229; 3337; 3660; 4151; 4621; 4692
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1031; 1307; 1793; 1805; 1848; 1958; 2849; 3036; 3817; 3950
HpyCH4V	TG!CA	22	636; 705; 755; 1019; 1077; 1188; 1482; 1509; 1577; 2294; 2303; 2366; 2375; 2490; 2566; 2625; 2784; 2959; 2973; 4043; 4339; 4706
HpyF3I	C!TNAG	10	606; 932; 1138; 1229; 2213; 2515; 3396; 3845; 3968; 4377
HpyF10VI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1960; 1990; 2017; 2059; 2300; 2372; 2423; 2502; 2724; 2808; 2831; 2970; 3093; 3176; 3443; 3630; 3834; 4033; 4605
Hsp92I	GR!CGYC	7	122; 175; 258; 444; 2733; 3435; 3514
Hsp92II	CATG!	22	304; 364; 681; 705; 711; 723; 801; 867; 947; 2163; 2303; 2375; 2466; 2607; 2952; 3138; 3169; 3195; 3551; 3935; 4655; 4706
HspAI	G!CGC	21	595; 1997; 2005; 2031; 2053; 2062; 2075; 2106; 2725; 2733; 2797; 2834; 3100; 3360; 3536; 3622; 4025; 4134; 4308; 4408; 4475
KasI	G!GCGCC	1	2732
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	649
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	652
Ksp22I	T!GATCA	1	689
KspAI	GTT!AAC	1	1496
Kzo9I	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
LguI	GCTCTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LguI	!NNNNGAAGAGC	2	3077; 3287
LpnI	RGC!GCGY	5	596; 1998; 2006; 2734; 4409
LpnPI	CCDGNNNNNNNNN!	59	102; 295; 614; 670; 805; 862; 910; 944; 1006; 1021; 1082; 1150; 1165; 1198; 1260; 1470; 1775; 1964; 2187; 2225; 2241; 2281; 2336; 2353; 2453; 2538; 2651; 2728; 2750; 2773; 2909; 2923; 2942; 2999; 3066; 3116; 3132; 3189; 3247; 3456; 3522; 3546; 3622; 3711; 3814; 3847; 4078; 4096; 4242; 4262; 4286; 4312; 4361; 4459; 4504; 4534; 4613; 4638; 4675
LpnPI	!NNNNNNNNNNNNNCHGG	53	75; 268; 552; 586; 642; 835; 883; 979; 1080; 1232; 1258; 1345; 1816; 1936; 1993; 2056; 2254; 2266; 2326; 2338; 2570; 2615; 2658; 2700; 2722; 2750; 2797; 2859; 2881; 2971; 3038; 3061; 3105; 3200; 3219; 3244; 3393; 3494; 3537; 3594; 3684; 3787; 3814; 3832; 4068; 4105; 4258; 4284; 4424; 4442; 4477; 4558; 4611
Lsp1109I	GCAGCNNNNNNNN!	8	884; 1326; 1521; 2806; 2848; 3369; 3822; 4322
Lsp1109I	!NNNNNNNNNNNNNGCTGC	7	1003; 2015; 2680; 2864; 2957; 4023; 4229
LweI	GCATCNNNNN!	8	911; 1028; 1549; 2312; 2384; 3032; 3096; 3371
LweI	!NNNNNNNNNGATGC	9	357; 1064; 1103; 1232; 1363; 2691; 2946; 3162; 4554
MabI	A!CCWGGT	1	2322
MaeI	C!TAG	9	592; 1352; 1388; 1582; 2000; 2556; 3571; 3905; 4158
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1031; 1307; 1793; 1805; 1848; 1958; 2849; 3036; 3817; 3950
MaeIII	!GTNAC	12	61; 148; 497; 1521; 2022; 2034; 2853; 3159; 3849; 4115; 4231; 4294
MalI	GA!TC	24	587; 611; 662; 691; 805; 1039; 1215; 1392; 2572; 2576; 2595; 2906; 2984; 3065; 3074; 3152; 3528; 3544; 3903; 3915; 3993; 4001; 4012; 4087
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2157; 3346
MbiI	GAG!CGG	2	1993; 3400
MboI	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
MboII	GAAGANNNNNNNN!	8	813; 979; 1092; 1989; 2217; 3094; 3304; 3923
MboII	!NNNNNNNTCTTC	4	3384; 3551; 3751; 3994
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1483
MfII	R!GATCY	11	585; 609; 660; 1213; 2904; 3150; 3542; 3901; 3913; 3999; 4010
MhII	GDGCH!C	14	620; 657; 730; 757; 790; 1367; 1924; 2679; 2772; 2846; 3036; 3098; 3808; 4341
MisI	TGG!CCA	2	1333; 2815
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	1333; 2815
MlyI	GAGTCNNNNN!	2	1785; 2217
MlyI	!NNNNNGACTC	6	404; 598; 1378; 1792; 3398; 4275
Mly113I	GG!CGCC	1	2733
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNN!	2	1085; 1826
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4258; 4442
MnII	CCTCNNNNNNN!	10	836; 1246; 1357; 1452; 2516; 3334; 3540; 3854; 4224; 4548
MnII	!NNNNNGAGG	21	541; 717; 756; 777; 810; 927; 1092; 1135; 1281; 1412; 1877; 2208; 2486; 2529; 2544; 2584; 2648; 2784; 3141; 3571; 4474
Mph1103I	ATGCA!T	3	2305; 2377; 4708
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1950; 3233; 3516
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1333; 2815
MseI	T!TAA	16	7; 917; 1434; 1495; 1616; 1637; 1648; 1660; 1671; 1688; 1786; 2057; 3876; 3890; 3895; 3947
MslI	CAYNN!NNRTG	4	365; 706; 1111; 3170
MspI	C!CGG	20	601; 657; 667; 1247; 1951; 2638; 2715; 2737; 2765; 2896; 2986; 3053; 3234; 3509; 3517; 3609; 4083; 4273; 4299; 4446
Msp20I	TGG!CCA	2	1333; 2815
MspA1I	CMG!CKG	6	651; 1126; 2231; 2839; 4068; 4313
MspCI	C!TTAAG	1	1615

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	239	36; 50; 71; 97; 113; 127; 147; 167; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 627; 640; 662; 679; 696; 714; 732; 762; 780; 795; 810; 828; 861; 876; 904; 919; 943; 956; 972; 990; 1004; 1020; 1047; 1068; 1081; 1100; 1115; 1135; 1149; 1164; 1180; 1197; 1212; 1229; 1249; 1272; 1285; 1304; 1323; 1346; 1363; 1378; 1393; 1406; 1421; 1440; 1457; 1470; 1511; 1525; 1538; 1556; 1594; 1609; 1627; 1668; 1692; 1712; 1730; 1751; 1774; 1806; 1821; 1843; 1861; 1874; 1895; 1912; 1925; 1938; 1954; 1967; 1997; 2012; 2037; 2055; 2068; 2083; 2107; 2121; 2145; 2170; 2186; 2224; 2240; 2279; 2293; 2307; 2335; 2351; 2365; 2379; 2408; 2421; 2442; 2451; 2473; 2503; 2519; 2537; 2567; 2590; 2614; 2638; 2657; 2685; 2711; 2727; 2740; 2763; 2777; 2797; 2810; 2824; 2843; 2857; 2870; 2886; 2901; 2914; 2930; 2945; 2961; 2986; 3005; 3021; 3034; 3047; 3065; 3079; 3093; 3109; 3131; 3147; 3166; 3188; 3204; 3227; 3246; 3260; 3276; 3290; 3310; 3326; 3339; 3361; 3394; 3408; 3428; 3441; 3455; 3509; 3522; 3545; 3558; 3577; 3594; 3621; 3657; 3690; 3709; 3734; 3755; 3782; 3795; 3812; 3826; 3841; 3857; 3917; 3942; 3958; 3980; 3993; 4007; 4038; 4052; 4077; 4095; 4110; 4123; 4142; 4155; 4170; 4199; 4218; 4236; 4261; 4276; 4295; 4311; 4330; 4348; 4364; 4378; 4397; 4424; 4447; 4469; 4488; 4503; 4516; 4533; 4553; 4580; 4593; 4612; 4637; 4660; 4674; 4687; 4704
MspJI	!NNNNNNNNNNNNYNG	197	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 593; 612; 636; 653; 670; 688; 706; 736; 760; 778; 802; 821; 843; 883; 904; 930; 950; 979; 1021; 1055; 1074; 1096; 1123; 1147; 1171; 1204; 1225; 1244; 1270; 1292; 1315; 1338; 1361; 1385; 1414; 1443; 1485; 1568; 1603; 1630; 1653; 1682; 1726; 1748; 1780; 1816; 1833; 1854; 1891; 1911; 1928; 1945; 1980; 1998; 2016; 2033; 2057; 2079; 2106; 2134; 2160; 2198; 2219; 2236; 2254; 2277; 2298; 2326; 2349; 2370; 2388; 2409; 2426; 2449; 2473; 2493; 2511; 2533; 2564; 2586; 2612; 2631; 2648; 2676; 2695; 2714; 2732; 2750; 2771; 2793; 2817; 2850; 2870; 2888; 2909; 2935; 2962; 2979; 2996; 3013; 3039; 3061; 3083; 3101; 3121; 3140; 3162; 3200; 3220; 3244; 3264; 3284; 3311; 3335; 3368; 3387; 3415; 3437; 3466; 3494; 3519; 3538; 3557; 3578; 3595; 3612; 3643; 3670; 3690; 3713; 3733; 3770; 3787; 3806; 3832; 3852; 3891; 3918; 3937; 3955; 3992; 4010; 4051; 4069; 4095; 4112; 4144; 4173; 4201; 4222; 4245; 4264; 4285; 4303; 4320; 4338; 4364; 4385; 4405; 4425; 4443; 4464; 4490; 4507; 4526; 4545; 4574; 4593; 4611; 4630; 4648; 4666; 4689
MspR9I	CC!NGG	21	90; 283; 657; 658; 850; 898; 994; 1247; 2269; 2324; 2341; 2737; 2897; 3120; 3510; 3699; 3802; 4274; 4492; 4505; 4626
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1483
MvaI	CC!WGG	14	90; 283; 850; 898; 994; 2269; 2324; 2341; 3120; 3699; 3802; 4492; 4505; 4626
MvaI269I	GAATGCN!	1	1484
MvaI269I	G!CATTC	1	1577
MvnI	CG!CG	17	60; 651; 1091; 1382; 1657; 2033; 2053; 2077; 2108; 2799; 3100; 3538; 3622; 3685; 3754; 4027; 4608
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1960; 1990; 2017; 2059; 2300; 2372; 2423; 2502; 2724; 2808; 2831; 2970; 3093; 3176; 3443; 3630; 3834; 4033; 4605
NaeI	GCC!GGC	3	1952; 3235; 3518
NarI	GG!CGCC	1	2733
NciI	CC!SGG	7	657; 658; 1247; 2737; 2897; 3510; 4274
NcoI	C!CATGG	3	360; 2462; 3165
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	794
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	830
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1950; 3233; 3516
NheI	G!CTAGC	1	591

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NlaIII	CATG!	22	304; 364; 681; 705; 711; 723; 801; 867; 947; 2163; 2303; 2375; 2466; 2607; 2952; 3138; 3169; 3195; 3551; 3935; 4655; 4706
NlaIV	GGN!NCC	19	467; 647; 655; 662; 729; 789; 1888; 1909; 1921; 2112; 2273; 2345; 2734; 2769; 3617; 3696; 3741; 4584; 4623
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1565; 1880; 3472
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1054; 4544
Nli3877I	CYCGR!G	2	617; 660
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2522; 2958
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	2487
NmeDI	RCCGGYNNNNNNNN!	5	678; 1962; 3064; 3245; 3528
NmeDI	!NNNNNNNNNNNNRCCGGY	5	653; 1937; 3039; 3220; 3503
NmuCI	!GTSAC	3	2022; 2853; 3159
NotI	GC!GGCCGC	1	1377
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2835
NsiI	ATGCA!T	3	2305; 2377; 4708
NspI	RCATG!Y	5	705; 2303; 2375; 3138; 4655
NspV	TT!CGAA	2	627; 3415
OliI	CACNN!NNGTG	0	
PabI	GTA!C	12	220; 245; 300; 333; 384; 541; 648; 719; 869; 1121; 1340; 3040
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2303; 2375; 3138
PaeR7I	C!TCGAG	1	613
PagI	T!CATGA	2	2159; 3931
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	897; 3698; 3801
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2554
PciI	A!CATGT	1	4651
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3077; 3287
PcsI	WCGNNNN!NNNCGW	7	1316; 3027; 3104; 3347; 3421; 3814; 4332
PctI	GAATGCN!	1	1484
PctI	G!CATTC	1	1577
PdiI	GCC!GGC	3	1952; 3235; 3518
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	953; 1280; 3218; 3352; 3462; 3499; 4677
Pfi23II	C!GTACG	0	
PfifI	GACN!NNGTC	1	2851
PfIMI	CCANNNN!NTGG	2	1260; 1272
PfoI	T!CCNGGA	1	3508
PhoI	GG!CC	29	84; 277; 655; 824; 1067; 1102; 1136; 1145; 1159; 1291; 1333; 1379; 1699; 1841; 2496; 2502; 2511; 2554; 2641; 2815; 3206; 3233; 3742; 3799; 3832; 4177; 4611; 4629; 4640
PinAI	A!CCGGT	1	666
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3114
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2679; 2934
PleI	GAGTCNNNN!	2	1784; 2216
PleI	!NNNNNGACTC	6	404; 598; 1378; 1792; 3398; 4275
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1815
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	3945
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	3977
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1783
PpsI	GAGTCNNNN!	2	1784; 2216
PpsI	!NNNNNGACTC	6	404; 598; 1378; 1792; 3398; 4275
Ppu10I	A!TGCAT	3	2301; 2373; 4704
Ppu21I	YAC!GTR	3	340; 1849; 3037
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4651

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PshAI	GACNN!NNGTC	1	1306
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1516; 1721
Psp03I	GGWC!C	3	1266; 3252; 3697
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	14	88; 281; 848; 896; 992; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	14	88; 281; 848; 896; 992; 2267; 2322; 2339; 3118; 3697; 3800; 4490; 4503; 4624
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	19	467; 647; 655; 662; 729; 789; 1888; 1909; 1921; 2112; 2273; 2345; 2734; 2769; 3617; 3696; 3741; 4584; 4623
PspOMI	G!GGCCC	1	653
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNN!	3	125; 2463; 3462
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2865
PspPI	G!GNCC	13	83; 276; 654; 823; 1066; 1158; 1263; 1840; 3249; 3694; 3740; 3798; 3831
PspPPI	RG!GWCCY	0	
PspPRI	CCYACNNNNNNNNNNNNNNNNNN!	3	2286; 2358; 3864
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	918; 1346; 2199; 3394
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3834
PstI	CTGCA!G	1	638
PstNI	CAGNN!CTG	2	3834; 4242
PsuI	R!GATCY	11	585; 609; 660; 1213; 2904; 3150; 3542; 3901; 3913; 3999; 4010
Psyl	GACN!NNGTC	1	2851
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2231; 2839
RcaI	T!CATGA	2	2159; 3931
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3248
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNNNN!	1	1462
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	12	219; 244; 299; 332; 383; 540; 647; 718; 868; 1120; 1339; 3039
RsaNI	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 717; 867; 1119; 1338; 3038
RseI	CAYNN!NNRTG	4	365; 706; 1111; 3170
RsrII	CG!GWCCG	1	3249
Rsr2I	CG!GWCCG	1	3249
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SalI	G!TCGAC	1	639
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3077; 3287
SaqAI	T!TAA	16	7; 917; 1434; 1495; 1616; 1637; 1648; 1660; 1671; 1688; 1786; 2057; 3876; 3890; 3895; 3947

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	36	822; 873; 1017; 1092; 1134; 1315; 1377; 1380; 1510; 2029; 2051; 2065; 2503; 2642; 2694; 2705; 2795; 2800; 2837; 2878; 2965; 2968; 2971; 3207; 3303; 3344; 3358; 3472; 3811; 3826; 4037; 4243; 4246; 4311; 4454; 4609
Sau96I	G!GNCC	13	83; 276; 654; 823; 1066; 1158; 1263; 1840; 3249; 3694; 3740; 3798; 3831
Sau3AI	!GATC	24	585; 609; 660; 689; 803; 1037; 1213; 1390; 2570; 2574; 2593; 2904; 2982; 3063; 3072; 3150; 3526; 3542; 3901; 3913; 3991; 3999; 4010; 4085
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	1339
SchI	GAGTCNNNNN!	2	1785; 2217
SchI	!NNNNNGACTC	6	404; 598; 1378; 1792; 3398; 4275
SciI	CTC!GAG	1	615
ScrFI	CC!NGG	21	90; 283; 657; 658; 850; 898; 994; 1247; 2269; 2324; 2341; 2737; 2897; 3120; 3510; 3699; 3802; 4274; 4492; 4505; 4626
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	5	1104; 2311; 2383; 2552; 4494
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2888; 3373
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	14	620; 657; 730; 757; 790; 1367; 1924; 2679; 2772; 2846; 3036; 3098; 3808; 4341
SelI	!CGCG	17	58; 649; 1089; 1380; 1655; 2031; 2051; 2075; 2106; 2797; 3098; 3536; 3620; 3683; 3752; 4025; 4606
SetI	ASST!	63	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 689; 716; 812; 862; 1006; 1034; 1169; 1187; 1238; 1306; 1310; 1349; 1423; 1444; 1453; 1465; 1514; 1681; 1796; 1808; 1851; 1888; 1938; 1961; 2085; 2233; 2328; 2521; 2634; 2762; 2841; 2852; 2924; 2995; 3039; 3299; 3445; 3489; 3820; 3851; 3910; 3953; 4096; 4117; 4216; 4353; 4368; 4387; 4399; 4443; 4489; 4540
SexAI	A!CCWGGT	1	2322
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	8	911; 1028; 1549; 2312; 2384; 3032; 3096; 3371
SfaNI	!NNNNNNNNNGATGC	9	357; 1064; 1103; 1232; 1363; 2691; 2946; 3162; 4554
SfiI	C!TRYAG	4	634; 2068; 4195; 4386
SfiI	GGCCNNNN!NGGCC	2	1142; 2508
SfoI	GGC!GCC	1	2734
Sfr274I	C!TCGAG	1	613
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 3415
SgeI	CNNGNNNNNNNN!	187	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 662; 679; 696; 714; 732; 762; 786; 804; 819; 861; 876; 909; 943; 956; 984; 1005; 1020; 1047; 1081; 1100; 1122; 1135; 1149; 1164; 1180; 1197; 1212; 1230; 1251; 1272; 1285; 1323; 1347; 1364; 1393; 1440; 1469; 1511; 1594; 1668; 1752; 1774; 1806; 1843; 1861; 1880; 1895; 1937; 1954; 1971; 2006; 2020; 2037; 2059; 2083; 2107; 2172; 2186; 2224; 2240; 2280; 2293; 2312; 2335; 2352; 2365; 2384; 2414; 2435; 2452; 2475; 2510; 2537; 2568; 2590; 2616; 2638; 2657; 2685; 2721; 2740; 2763; 2777; 2797; 2810; 2824; 2843; 2857; 2876; 2908; 2922; 2935; 2961; 2992; 3005; 3022; 3039; 3053; 3070; 3088; 3103; 3131; 3147; 3166; 3188; 3204; 3227; 3246; 3271; 3290; 3310; 3337; 3361; 3394; 3413; 3441; 3455; 3521; 3545; 3560; 3583; 3604; 3621; 3669; 3696; 3710; 3739; 3763; 3796; 3813; 3833; 3846; 3859; 3917; 3944; 3963; 3993; 4018; 4038; 4052; 4077; 4095; 4132; 4170; 4199; 4227; 4241; 4261; 4276; 4297; 4311; 4330; 4348; 4364; 4404; 4424; 4451; 4469; 4490; 4503; 4516; 4533; 4557; 4580; 4612; 4637; 4664; 4686

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; 599; 636; 653; 670; 688; 706; 736; 760; 778; 802; 835; 883; 917; 958; 979; 1021; 1055; 1074; 1096; 1123; 1147; 1171; 1204; 1225; 1246; 1270; 1297; 1321; 1338; 1367; 1414; 1443; 1485; 1568; 1642; 1726; 1748; 1780; 1817; 1835; 1854; 1911; 1928; 1945; 1980; 1998; 2018; 2038; 2057; 2081; 2146; 2198; 2254; 2286; 2309; 2326; 2358; 2388; 2409; 2426; 2449; 2484; 2511; 2542; 2564; 2590; 2612; 2631; 2659; 2695; 2714; 2737; 2758; 2776; 2793; 2817; 2850; 2882; 2909; 2935; 2966; 2996; 3013; 3039; 3062; 3083; 3105; 3125; 3145; 3162; 3201; 3220; 3245; 3264; 3284; 3311; 3335; 3368; 3387; 3415; 3437; 3495; 3519; 3538; 3557; 3578; 3595; 3643; 3670; 3690; 3713; 3737; 3770; 3787; 3807; 3833; 3891; 3918; 3937; 3967; 3992; 4012; 4051; 4069; 4106; 4144; 4173; 4201; 4222; 4250; 4271; 4304; 4322; 4378; 4398; 4425; 4443; 4464; 4490; 4507; 4531; 4554; 4586; 4611; 4638; 4660; 4689
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	652
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1880; 3667; 4460
SimI	!GACCC	4	106; 3161; 3729; 3977
SinI	G!GWCC	3	1263; 3249; 3694
SlaI	C!TCGAG	1	613
SmaI	CCC!GGG	1	658
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	4	365; 706; 1111; 3170
SmlI	C!TYRAG	8	613; 619; 1237; 1615; 3124; 4006; 4283; 4545
SmoI	C!TYRAG	8	613; 619; 1237; 1615; 3124; 4006; 4283; 4545
SmuI	CCCGCNNNN!	10	93; 119; 286; 1131; 1233; 2055; 2410; 2431; 3627; 3759
SmuI	!NNNNNNGCGGG	7	644; 1168; 1986; 2856; 3393; 3531; 3678
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2303; 2375; 3138
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 629; 1483; 1547; 1625; 1651; 1662; 2309; 2381; 2473; 3891
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2554
SsiI	C!CGC	36	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1380; 2048; 2051; 2065; 2155; 2403; 2415; 2424; 2436; 2446; 2457; 2503; 2642; 2705; 3207; 3252; 3318; 3344; 3469; 3472; 3620; 3752; 4059; 4203; 4699
SsiI	G!CGG	29	370; 403; 528; 651; 821; 1091; 1133; 1175; 1376; 1993; 2020; 2108; 2218; 2799; 2863; 2964; 2967; 3247; 3302; 3400; 3538; 3685; 3825; 4068; 4313; 4434; 4453; 4580; 4608
SspI	AAT!ATT	2	1641; 2194
SspDI	G!GCGCC	1	2732
SspD5I	GGTGANNNNNNNN!	4	376; 1059; 3804; 3920
SspD5I	!NNNNNNNNNTCACC	3	947; 1849; 2910
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	992
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 663; 914; 1130; 1232; 1253; 1932; 2054; 2409; 2430; 2743; 3146; 3285; 3356; 3626; 3758; 3988; 4426
Sth132I	!NNNNNNNNNCGGG	22	15; 407; 470; 643; 963; 1035; 1167; 1933; 1985; 2086; 2813; 2855; 2888; 3392; 3501; 3530; 3677; 3781; 3812; 4265; 4309; 4517
Sth302II	CC!GG	20	602; 658; 668; 1248; 1952; 2639; 2716; 2738; 2766; 2897; 2987; 3054; 3235; 3510; 3518; 3610; 4084; 4274; 4300; 4447
StrI	C!TCGAG	1	613
StsI	GGATGNNNNNNNNNN!	4	2601; 3058; 3083; 3537
StsI	!NNNNNNNNNNNNNNCATCC	5	743; 831; 888; 1043; 2405
StuI	AGG!CCT	1	2554
StyI	C!CWWGG	5	360; 2462; 2555; 3165; 3570

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	21	88; 281; 655; 656; 848; 896; 992; 1245; 2267; 2322; 2339; 2735; 2895; 3118; 3508; 3697; 3800; 4272; 4490; 4503; 4624
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1824; 3113; 3229; 3337; 3660; 4151; 4621; 4692
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1034; 1310; 1796; 1808; 1851; 1961; 2852; 3039; 3820; 3953
TaqI	T!CGA	17	614; 627; 640; 815; 842; 1310; 1882; 2573; 2846; 3002; 3026; 3062; 3224; 3415; 3460; 3715; 4553
TaqII	GACCGANNNNNNNNNNN!	3	1753; 2770; 3438
TaqII	!NNNNNNNNNTCGGTC	1	3682
TaqII	CACCCANNNNNNNNNNN!	2	805; 910
TaqII	!NNNNNNNNNTGGGTG	3	172; 2637; 3229
TasI	!AATT	11	18; 629; 1483; 1547; 1625; 1651; 1662; 2309; 2381; 2473; 3891
TatI	W!GTACW	6	217; 297; 330; 381; 716; 1337
TauI	GCSG!C	20	824; 1094; 1136; 1379; 1382; 2053; 2067; 2505; 2644; 2707; 2802; 2967; 2970; 3209; 3305; 3346; 3474; 3828; 4456; 4611
TfiI	G!AWTC	7	953; 1280; 3218; 3352; 3462; 3499; 4677
TliI	C!TCGAG	1	613
TruII	T!TAA	16	7; 917; 1434; 1495; 1616; 1637; 1648; 1660; 1671; 1688; 1786; 2057; 3876; 3890; 3895; 3947
Tru9I	T!TAA	16	7; 917; 1434; 1495; 1616; 1637; 1648; 1660; 1671; 1688; 1786; 2057; 3876; 3890; 3895; 3947
TscAI	CASTGNN!	6	1195; 1579; 2862; 3972; 4243; 4256
TseI	G!CWGC	16	872; 1016; 1314; 1509; 2028; 2693; 2794; 2836; 2877; 2970; 3357; 3810; 4036; 4242; 4245; 4310
TsoI	TARCCANNNNNNNNNNN!	2	1705; 2052
TsoI	!NNNNNNNNNTGGYTA	3	841; 1510; 3262
Tsp45I	!GTSAC	3	2022; 2853; 3159
Tsp509I	!AATT	11	18; 629; 1483; 1547; 1625; 1651; 1662; 2309; 2381; 2473; 3891
TspDTI	ATGAANNNNNNNNNNN!	5	724; 814; 1491; 2792; 3496
TspDTI	!NNNNNNNNNTTCAT	6	26; 852; 873; 3210; 3666; 3873
TspEI	!AATT	11	18; 629; 1483; 1547; 1625; 1651; 1662; 2309; 2381; 2473; 3891
TspGWI	ACGGANNNNNNNNNNN!	1	3608
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	656
TspRI	CASTGNN!	6	1195; 1579; 2862; 3972; 4243; 4256
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2851
Tth111II	CAARCANNNNNNNNNNN!	1	4060
Tth111II	!NNNNNNNNNTGYTTG	3	3168; 4028; 4067
UnbI	!GGNCC	13	82; 275; 653; 822; 1065; 1157; 1262; 1839; 3248; 3693; 3739; 3797; 3830
Van9I	CCANNNN!NTGG	2	1260; 1272
Vha464I	C!TTAAG	1	1615
VneI	G!TGCAC	2	753; 4337
VpaK11AI	!GGWCC	3	1262; 3248; 3693
VpaK11BI	G!GWCC	3	1263; 3249; 3694
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	629; 1547; 1651; 1662
XbaI	T!CTAGA	1	1387
XceI	RCATG!Y	5	705; 2303; 2375; 3138; 4655
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	1	613
XhoII	R!GATCY	11	585; 609; 660; 1213; 2904; 3150; 3542; 3901; 3913; 3999; 4010
XmaI	C!CCGGG	1	656
XmaJI	C!CTAGG	2	2555; 3570
XmiI	GT!MKAC	1	640
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1352; 1388; 1582; 2000; 2556; 3571; 3905; 4158
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	1	1339

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Zsp21	ATGCA!T	3	2305; 2377; 4708