

pPA-TagRFP-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	1522; 1727
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1810; 2766; 4555
AatI	AGG!CCT	1	2560
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	3	640; 1151; 1253
AccII	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2841
Acc36I	ACCTGCNNNN!	2	3007; 3457
Acc36I	!NNNNNNNNGCAGGT	1	2626
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	7	465; 645; 727; 787; 1892; 2738; 2773
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2163; 3352
AccBSI	GAG!CGG	2	1999; 3406
AceIII	CAGCTCNNNNNNN!	1	1695
AceIII	!NNNNNNNNNNGAGCTG	2	552; 673
AciI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1266; 1386; 2054; 2057; 2071; 2161; 2409; 2421; 2430; 2442; 2452; 2463; 2509; 2648; 2711; 3213; 3258; 3324; 3350; 3475; 3478; 3626; 3758; 4065; 4209; 4705
AciI	G!CGG	28	370; 403; 528; 651; 821; 1133; 1175; 1382; 1999; 2026; 2114; 2224; 2805; 2869; 2970; 2973; 3253; 3308; 3406; 3544; 3691; 3831; 4074; 4319; 4440; 4459; 4586; 4614
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	8	668; 2607; 2918; 3164; 3556; 3915; 4013; 4099
AclWI	!NNNNNGATCC	7	580; 655; 1208; 2983; 3527; 3914; 4011
AcoI	Y!GGCCR	6	1331; 1383; 2645; 2819; 3210; 3237
AcsI	R!AATY	4	629; 1553; 1657; 1668
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1183; 2885; 3317
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4115
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
AdeI	CACNNN!GTG	2	1323; 1855
AfaI	GT!AC	10	219; 244; 299; 332; 383; 540; 647; 718; 868; 3045
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	22	49; 784; 897; 914; 1063; 1129; 1272; 1751; 2077; 2469; 2720; 3264; 3545; 3577; 3709; 3744; 3794; 3826; 4179; 4458; 4624; 4642
AfIII	C!TTAAG	1	1621
AfIII	A!CRYGT	1	4657
AgeI	A!CCGGT	1	666
AgsI	TTS!AA	7	750; 1200; 2150; 2194; 2204; 2617; 4193
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajni	!CCWGG	16	88; 281; 848; 896; 992; 1007; 1136; 2273; 2328; 2345; 3124; 3703; 3806; 4496; 4509; 4630
AjuI	GAANNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNNTTC	0	
AjuI	CCAANNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2313; 2385
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2279; 2351
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1074; 1821
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	1042; 1789
AluI	AG!CT	19	566; 618; 624; 687; 714; 860; 1167; 1371; 1518; 1685; 1942; 2237; 2525; 2845; 3303; 4100; 4357; 4403; 4493
AluBI	AG!CT	19	566; 618; 624; 687; 714; 860; 1167; 1371; 1518; 1685; 1942; 2237; 2525; 2845; 3303; 4100; 4357; 4403; 4493
AlwI	GGATCNNNN!	8	668; 2607; 2918; 3164; 3556; 3915; 4013; 4099
AlwI	!NNNNNGATCC	7	580; 655; 1208; 2983; 3527; 3914; 4011
Alw21I	GWGCW!C	6	620; 757; 1108; 2852; 3042; 4347
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1294; 2163; 2581; 3600; 3728
Alw44I	G!TGCAC	2	753; 4343
AlwNI	CAGNN!CTG	2	3840; 4248
Ama87I	C!YCGRG	2	613; 656
Aor13HI	T!CCGGA	0	
Aor51HI	AG!GCT	1	596
ApaI	GGGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2307; 2379; 3841
ApaLI	G!TGCAC	2	753; 4343
ApeKI	G!CWGC	17	872; 875; 1016; 1314; 1515; 2034; 2699; 2800; 2842; 2883; 2976; 3363; 3816; 4042; 4248; 4251; 4316
ApoI	R!AATTY	4	629; 1553; 1657; 1668
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3254
ApyPI	!NNNNNNNNNNNNNNNNNNGTTCGAT	3	3048; 3701; 4539
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3138
AquII	!NNNNNNNNNNNNNNNNNNGTNCGGC	1	848
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2567
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3309
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	23	586; 610; 661; 1038; 1188; 1214; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
AsiGI	A!CCGGT	1	666
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2857
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	2561; 3576
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	21	597; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
AspS9I	G!GNCC	14	83; 276; 654; 823; 1066; 1158; 1179; 1263; 1846; 3255; 3700; 3746; 3804; 3837
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	627; 3421
AsuC2I	CC!SGG	7	657; 658; 1247; 2743; 2903; 3516; 4280
AsuHPI	GGTGANNNNNNNN!	4	376; 1059; 3810; 3926
AsuHPI	!NNNNNNNTCACC	3	948; 1856; 2917
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	613; 656
AvaII	G!GWCC	3	1263; 3255; 3700
AviII	TGC!GCA	1	2841
AvrII	C!CTAGG	2	2561; 3576

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	3	932; 2219; 3851
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI:C	8	657; 730; 757; 790; 1367; 2685; 2778; 4347
BalI	TGG!CCA	2	1333; 2821
BamHI	G!GATCC	1	660
BanI	G!GYRCC	7	465; 645; 727; 787; 1892; 2738; 2773
BanII	GRGCY!C	5	620; 657; 1930; 3104; 3814
BanIII	AT!CGAT	1	2579
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	0	
BauI	C!ACGAG	3	1318; 3457; 4484
BauI	C!TCGTG	2	1168; 3331
BbeI	GGCGC!C	1	2742
Bbr7I	GAAGACNNNNNNNN!	1	979
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	974
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2309; 2381; 3144
BbvI	GCAGCNNNNNNNN!	8	884; 1326; 1527; 2812; 2854; 3375; 3828; 4328
BbvI	!NNNNNNNNNNNGCTGC	7	1003; 2021; 2686; 2870; 2963; 4029; 4235
Bbv12I	GWGCW!C	6	620; 757; 1108; 2852; 3042; 4347
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1065; 1869; 2433; 2959; 3461
BccI	!NNNNNGATGG	3	1837; 2617; 3045
BceAI	ACGGCNNNNNNNNNNNN!	6	885; 1029; 1080; 1146; 3165; 3652
BceAI	!NNNNNNNNNNNNNGCCGT	3	1880; 2698; 4157
Bcefl	ACGGCNNNNNNNNNNNN!	6	885; 1029; 1080; 1146; 3165; 3652
Bcefl	!NNNNNNNNNNNNNGCCGT	3	1881; 2699; 4158
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2168; 2958; 4459
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	7	657; 658; 1247; 2743; 2903; 3516; 4280
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNN!	1	4592
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	4558
BfaI	C!TAG	9	592; 1352; 1394; 1588; 2006; 2562; 3577; 3911; 4164
BfiI	ACTGGGNNNNN!	3	1317; 1369; 2688
BfiI	!NNNNCCCAGT	2	289; 2440
BfmI	C!TRYAG	4	634; 2074; 4201; 4392
BfoI	RGCGC!Y	5	598; 2006; 2014; 2742; 4417
BfrI	C!TTAAG	1	1621
BfuI	GTATCCNNNNNN!	3	2168; 2958; 4459
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	3007; 3457
BfuAI	!NNNNNNNNNGCAGGT	1	2626
BfuCI	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1142; 2514
BglII	A!GATCT	1	609

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BisI	GC!NGC	36	822; 873; 876; 1017; 1134; 1315; 1383; 1386; 1516; 2035; 2057; 2071; 2509; 2648; 2700; 2711; 2801; 2806; 2843; 2884; 2971; 2974; 2977; 3213; 3309; 3350; 3364; 3478; 3817; 3832; 4043; 4249; 4252; 4317; 4460; 4615
BlnI	C!CTAGG	2	2561; 3576
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	36	823; 874; 877; 1018; 1135; 1316; 1384; 1387; 1517; 2036; 2058; 2072; 2510; 2649; 2701; 2712; 2802; 2807; 2844; 2885; 2972; 2975; 2978; 3214; 3310; 3351; 3365; 3479; 3818; 3833; 4044; 4250; 4253; 4318; 4461; 4616
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	1263; 3255; 3700
Bme1390I	CC!NGG	23	90; 283; 657; 658; 850; 898; 994; 1009; 1138; 1247; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	613; 656
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	84; 277; 655; 824; 1067; 1159; 1180; 1264; 1847; 3256; 3701; 3747; 3805; 3838
BmiI	GGN!NCC	21	467; 647; 655; 662; 729; 789; 1100; 1180; 1894; 1915; 1927; 2118; 2279; 2351; 2740; 2775; 3623; 3702; 3747; 4590; 4629
BmrI	ACTGGGNNNNN!	3	1317; 1369; 2688
BmrI	!NNNNCCCAGT	2	289; 2440
BmrFI	CC!NGG	23	90; 283; 657; 658; 850; 898; 994; 1009; 1138; 1247; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
BmsI	GCATCNNNNN!	7	911; 1555; 2318; 2390; 3038; 3102; 3377
BmsI	!NNNNNNNNNGATGC	6	357; 1232; 2697; 2952; 3168; 4560
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	3	1317; 1369; 2688
BmuI	!NNNNCCCAGT	2	289; 2440
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	1	974
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2528; 3427
BpI	!NNNNNNNGAGNNNNNCTC	2	2496; 3395
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3579
BpmI	!NNNNNNNNNNNNNNCTCCAG	2	991; 3522
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 3421
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	974
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4033; 4572
BpuEI	!NNNNNNNNNNNNNNCTCAAG	4	604; 1222; 3115; 4274
BpuMI	CC!SGG	7	657; 658; 1247; 2743; 2903; 3516; 4280
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1294; 3728
Bsa29I	AT!CGAT	1	2579
BsaAI	YAC!GTR	3	340; 1855; 3043
BsaBI	GATNN!NNATC	2	1401; 2598
BsaHI	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
BsaJI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2273; 2345; 2468; 2503; 2512; 2561; 2902; 3171; 3576; 3703; 3704; 3806; 3807; 4497
BsaMI	GAATGCN!	1	1490
BsaMI	G!CATTC	1	1583
BsaWI	W!CCGGW	6	600; 666; 2770; 3614; 4304; 4451
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1819
BsaXI	!NNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1789
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	

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BsbI	!NNNNNNNNNNNNNNNNNNNGTGTTG	2	1740; 3647
Bsc4I	CCNNNNN!NNGG	22	49; 784; 897; 914; 1063; 1129; 1272; 1751; 2077; 2469; 2720; 3264; 3545; 3577; 3709; 3744; 3794; 3826; 4179; 4458; 4624; 4642
BscAI	GCATCNNNN!	7	910; 1554; 2317; 2389; 3037; 3101; 3376
BscAI	!NNNNNNGATGC	6	360; 1235; 2700; 2955; 3171; 4563
BseI	ACTGGN!	6	1277; 1312; 1364; 2683; 2884; 4130
BseI	C!CAGT	5	295; 1768; 2446; 4242; 4255
Bse8I	GATNN!NNATC	2	1401; 2598
Bse2II	CC!TNAGG	3	932; 2219; 3851
Bse118I	R!CCGGY	5	666; 1956; 3058; 3239; 3522
BseAI	T!CCGGA	0	
BseBI	CC!WGG	16	90; 283; 850; 898; 994; 1009; 1138; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
BseCI	AT!CGAT	1	2579
BseDI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2273; 2345; 2468; 2503; 2512; 2561; 2902; 3171; 3576; 3703; 3704; 3806; 3807; 4497
Bse3DI	GCAATGNN!	1	2972
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2599; 3056; 3081; 3535
BseGI	!CATCC	5	757; 845; 902; 1057; 2425
BseJI	GATNN!NNATC	2	1401; 2598
BseLI	CCNNNNN!NNGG	22	49; 784; 897; 914; 1063; 1129; 1272; 1751; 2077; 2469; 2720; 3264; 3545; 3577; 3709; 3744; 3794; 3826; 4179; 4458; 4624; 4642
BseMI	GCAATGNN!	1	2972
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 3865
BseMII	!NNNNNNNNCTGAG	6	923; 2210; 2512; 3393; 3965; 4374
BseNI	ACTGGN!	6	1277; 1312; 1364; 2683; 2884; 4130
BseNI	C!CAGT	5	295; 1768; 2446; 4242; 4255
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2557
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	8	657; 730; 757; 790; 1367; 2685; 2778; 4347
BseXI	GCAGCNNNNNNNN!	8	884; 1326; 1527; 2812; 2854; 3375; 3828; 4328
BseXI	!NNNNNNNNNNNGCTGC	7	1003; 2021; 2686; 2870; 2963; 4029; 4235
BseX3I	C!GGCCG	2	1383; 2645
BseYI	C!CCAGC	3	2282; 2354; 4353
BseYI	G!CTGGG	2	1094; 3243
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
Bsh1285I	CGRY!CG	4	671; 1386; 2648; 4323
BshFI	GG!CC	28	84; 277; 655; 824; 1067; 1136; 1159; 1181; 1291; 1333; 1385; 1705; 1847; 2502; 2508; 2517; 2560; 2647; 2821; 3212; 3239; 3748; 3805; 3838; 4183; 4617; 4635; 4646
BshNI	G!GYRCC	7	465; 645; 727; 787; 1892; 2738; 2773
BshTI	A!CCGGT	1	666
BshVI	AT!CGAT	1	2579
BsiEI	CGRY!CG	4	671; 1386; 2648; 4323
BsiHKAI	GWGCW!C	6	620; 757; 1108; 2852; 3042; 4347
BsiHKCI	C!YCGRG	2	613; 656
BsiSI	C!CGG	20	601; 657; 667; 1247; 1957; 2644; 2721; 2743; 2771; 2902; 2992; 3059; 3240; 3515; 3523; 3615; 4089; 4279; 4305; 4452
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	22	49; 784; 897; 914; 1063; 1129; 1272; 1751; 2077; 2469; 2720; 3264; 3545; 3577; 3709; 3744; 3794; 3826; 4179; 4458; 4624; 4642
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2890; 3422; 3531
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2255; 2327; 2391; 3686
BsmI	GAATGCN!	1	1490
BsmI	G!CATTC	1	1583
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1294; 2163; 2581; 3600; 3728

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BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2890; 3422; 3531
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2255; 2327; 2391; 3686
BsnI	GG!CC	28	84; 277; 655; 824; 1067; 1136; 1159; 1181; 1291; 1333; 1385; 1705; 1847; 2502; 2508; 2517; 2560; 2647; 2821; 3212; 3239; 3748; 3805; 3838; 4183; 4617; 4635; 4646
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACG	2	1294; 3728
BsoBI	C!YCGRG	2	613; 656
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	3	360; 2468; 3171
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3542
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	3963; 4141
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	3995; 4173
Bsp24I	!NNNNNNNGACNNNNNNTGG	2	257; 3510
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 3421
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
Bsp1286I	GDGCH!C	15	620; 657; 730; 757; 790; 1108; 1367; 1930; 2685; 2778; 2852; 3042; 3104; 3814; 4347
Bsp1407I	T!GTACA	1	716
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1266; 1386; 2054; 2057; 2071; 2161; 2409; 2421; 2430; 2442; 2452; 2463; 2509; 2648; 2711; 3213; 3258; 3324; 3350; 3475; 3478; 3626; 3758; 4065; 4209; 4705
BspACI	G!CGG	28	370; 403; 528; 651; 821; 1133; 1175; 1382; 1999; 2026; 2114; 2224; 2805; 2869; 2970; 2973; 3253; 3308; 3406; 3544; 3691; 3831; 4074; 4319; 4440; 4459; 4586; 4614
BspCNI	CTCAGNNNNNNNN!	2	619; 3864
BspCNI	!NNNNNNNCTGAG	6	924; 2211; 2513; 3394; 3966; 4375
BspDI	AT!CGAT	1	2579
BspD6I	GACTCNNNN!	6	418; 612; 1398; 1812; 3418; 4295
BspD6I	!NNNNNNGAGTC	3	946; 1775; 2207
BspEI	T!CCGGA	0	
BspFNI	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
BspHI	T!CATGA	2	2165; 3937
BspLI	GGN!NCC	21	467; 647; 655; 662; 729; 789; 1100; 1180; 1894; 1915; 1927; 2118; 2279; 2351; 2740; 2775; 3623; 3702; 3747; 4590; 4629
BspMI	ACCTGCNNNN!	2	3007; 3457
BspMI	!NNNNNNNGCAGGT	1	2626
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	668; 2607; 2918; 3164; 3556; 3915; 4013; 4099
BspPI	!NNNNNGATCC	7	580; 655; 1208; 2983; 3527; 3914; 4011
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3083; 3293
BspTI	C!TTAAG	1	1621
BspT104I	TT!CGAA	2	627; 3421
BspT107I	G!GYRCC	7	465; 645; 727; 787; 1892; 2738; 2773
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1294; 3728
BsrI	ACTGGN!	6	1277; 1312; 1364; 2683; 2884; 4130
BsrI	C!CAGT	5	295; 1768; 2446; 4242; 4255
BsrBI	CCG!CTC	2	2163; 3352
BsrBI	GAG!CGG	2	1999; 3406
BsrDI	GCAATGNN!	1	2972
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	666; 1956; 3058; 3239; 3522
BsrGI	T!GTACA	1	716
BsrSI	ACTGGN!	6	1277; 1312; 1364; 2683; 2884; 4130
BsrSI	C!CAGT	5	295; 1768; 2446; 4242; 4255

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssAI	R!CCGGY	5	666; 1956; 3058; 3239; 3522
BssECI	C!CNNGG	21	360; 649; 656; 761; 896; 897; 992; 2273; 2345; 2468; 2503; 2512; 2561; 2902; 3171; 3576; 3703; 3704; 3806; 3807; 4497
BssHII	G!CGCGC	0	
BssKI	!CCNGG	23	88; 281; 655; 656; 848; 896; 992; 1007; 1136; 1245; 2273; 2328; 2345; 2741; 2901; 3124; 3514; 3703; 3806; 4278; 4496; 4509; 4630
BssMI	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
BssNI	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1318; 3457; 4484
BssSI	C!TCGTG	2	1168; 3331
BssT1I	C!CWVGG	5	360; 2468; 2561; 3171; 3576
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2206; 3083; 3293
Bst98I	C!TTAAG	1	1621
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
BstAFI	C!TTAAG	1	1621
BstAPI	GCANNNN!NTGC	3	2306; 2378; 3840
BstAUI	T!GTACA	1	716
BstBI	TT!CGAA	2	627; 3421
Bst2BI	C!ACGAG	3	1318; 3457; 4484
Bst2BI	C!TCGTG	2	1168; 3331
BstBAI	YAC!GTR	3	340; 1855; 3043
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1830; 3119; 3235; 3343; 3666; 4157; 4627; 4698
BstC8I	GCN!NGC	32	86; 279; 593; 653; 685; 775; 979; 1958; 2001; 2015; 2288; 2307; 2360; 2379; 2633; 2819; 3038; 3104; 3110; 3138; 3142; 3183; 3187; 3241; 3524; 3711; 3758; 3814; 3836; 4047; 4607; 4644
BstDEI	C!TNAG	9	606; 932; 1229; 2219; 2521; 3402; 3851; 3974; 4383
BstDSI	C!CRYGG	4	360; 649; 2468; 3171
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2599; 3056; 3081; 3535
BstF5I	!CATCC	5	757; 845; 902; 1057; 2425
BstFNI	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
BstH2I	RGCGC!Y	5	598; 2006; 2014; 2742; 4417
BstHHI	GCG!C	21	597; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
BstKTI	GAT!C	23	588; 612; 663; 1040; 1190; 1216; 1399; 2579; 2583; 2602; 2913; 2991; 3072; 3081; 3159; 3535; 3551; 3910; 3922; 4000; 4008; 4019; 4094
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1294; 2163; 2581; 3600; 3728
BstMBI	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
BstMCI	CGRY!CG	4	671; 1386; 2648; 4323
BstMWI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1966; 1996; 2023; 2065; 2306; 2378; 2429; 2508; 2730; 2814; 2837; 2976; 3099; 3182; 3449; 3636; 3840; 4039; 4611
BstNI	CC!WGG	16	90; 283; 850; 898; 994; 1009; 1138; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
BstNSI	RCATG!Y	5	705; 2309; 2381; 3144; 4661
BstOI	CC!WGG	16	90; 283; 850; 898; 994; 1009; 1138; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	23	88; 281; 655; 656; 848; 896; 992; 1007; 1136; 1245; 2273; 2328; 2345; 2741; 2901; 3124; 3514; 3703; 3806; 4278; 4496; 4509; 4630

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSFI	C!TRYAG	4	634; 2074; 4201; 4392
BstSLI	GKGCMI!C	8	657; 730; 757; 790; 1367; 2685; 2778; 4347
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
Bst2UI	CC!WGG	16	90; 283; 850; 898; 994; 1009; 1138; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
BstV1I	GCAGCNNNNNNNN!	8	884; 1326; 1527; 2812; 2854; 3375; 3828; 4328
BstV1I	!NNNNNNNNNNNGCTGC	7	1003; 2021; 2686; 2870; 2963; 4029; 4235
BstV2I	GAAGACNN!	1	974
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 609; 660; 1213; 2910; 3156; 3548; 3907; 3919; 4005; 4016
BstYI	R!GATCY	11	585; 609; 660; 1213; 2910; 3156; 3548; 3907; 3919; 4005; 4016
BstZI	C!GGCCG	2	1383; 2645
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2168; 2958; 4459
BsuI	!NNNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2579
Bsu36I	CC!TNAGG	3	932; 2219; 3851
BsuRI	GG!CC	28	84; 277; 655; 824; 1067; 1136; 1159; 1181; 1291; 1333; 1385; 1705; 1847; 2502; 2508; 2517; 2560; 2647; 2821; 3212; 3239; 3748; 3805; 3838; 4183; 4617; 4635; 4646
BsuTUI	AT!CGAT	1	2579
BtgI	C!CRYGG	4	360; 649; 2468; 3171
BtgZI	GCGATGNNNNNNNNNN!	2	1856; 3191
BtgZI	!NNNNNNNNNNNNNNNCATCGC	3	334; 3010; 3354
BthCI	GCNG!C	36	824; 875; 878; 1019; 1136; 1317; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1578
BtsCI	GGATGNN!	4	2599; 3056; 3081; 3535
BtsCI	!CATCC	5	757; 845; 902; 1057; 2425
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3007; 3457
BveI	!NNNNNNNNGCAGGT	1	2626
Cac8I	GCN!NGC	32	86; 279; 593; 653; 685; 775; 979; 1958; 2001; 2015; 2288; 2307; 2360; 2379; 2633; 2819; 3038; 3104; 3110; 3138; 3142; 3183; 3187; 3241; 3524; 3711; 3758; 3814; 3836; 4047; 4607; 4644
CaiI	CAGNNN!CTG	2	3840; 4248
CciI	T!CATGA	2	2165; 3937
CciNI	GC!GGCCGC	1	1383
CdiI	CATC!G	5	352; 3028; 3033; 3231; 3372
CdiI	C!GATG	2	1842; 3177
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4611
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2400; 2442
CelII	GC!TNAGC	0	
CfoI	GCG!C	21	597; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
CfrI	Y!GGCCR	6	1331; 1383; 2645; 2819; 3210; 3237
Cfr9I	C!CCGGG	1	656
Cfr10I	R!CCGGY	5	666; 1956; 3058; 3239; 3522
Cfr13I	G!GNCC	14	83; 276; 654; 823; 1066; 1158; 1179; 1263; 1846; 3255; 3700; 3746; 3804; 3837
Cfr42I	CCGC!GG	1	652
ChaI	GATC!	23	589; 613; 664; 1041; 1191; 1217; 1400; 2580; 2584; 2603; 2914; 2992; 3073; 3082; 3160; 3536; 3552; 3911; 3923; 4001; 4009; 4020; 4095
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	769; 2556; 3996; 4096; 4174
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2223; 2318; 3510; 4060; 4615
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2257; 2352; 3544; 4094; 4649

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	!NNNNNNNNCCANNNNNNNGT	5	735; 2522; 3962; 4062; 4140
CjePI	CCANNNNNNNTCANNNNNNNNNNNN!	2	3996; 4174
CjePI	!NNNNNNNNGANNNNNNNTGG	5	257; 794; 1291; 3510; 4109
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	5	290; 827; 1324; 3543; 4142
CjePI	!NNNNNNCCANNNNNNNTC	2	3963; 4141
Clal	AT!CGAT	1	2579
CpoI	CG!GWCCG	1	3255
CseI	GACGCNNNNN!	3	526; 3449; 3528
CseI	!NNNNNNNNNGCGTC	4	1239; 2072; 3967; 4545
CsiI	A!CCWGGT	1	2328
Cspi	CG!GWCCG	1	3255
Csp6I	G!TAC	10	218; 243; 298; 331; 382; 539; 646; 717; 867; 3044
Csp45I	TT!CGAA	2	627; 3421
CspAI	A!CCGGT	1	666
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	719; 1310; 2019; 3628
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	23	301; 361; 678; 702; 708; 720; 798; 864; 944; 1155; 2166; 2306; 2378; 2469; 2610; 2955; 3141; 3172; 3198; 3554; 3938; 4658; 4709
CviJI	RG!CY	94	42; 84; 93; 277; 566; 618; 624; 655; 687; 714; 777; 824; 853; 860; 938; 1004; 1016; 1067; 1094; 1136; 1159; 1167; 1181; 1291; 1327; 1333; 1371; 1385; 1408; 1518; 1685; 1705; 1847; 1928; 1942; 1956; 2237; 2278; 2350; 2473; 2502; 2508; 2517; 2525; 2548; 2560; 2566; 2647; 2664; 2672; 2699; 2724; 2808; 2817; 2821; 2845; 2883; 2959; 2976; 2995; 3058; 3102; 3112; 3129; 3212; 3239; 3243; 3280; 3303; 3319; 3499; 3526; 3587; 3709; 3748; 3805; 3812; 3819; 3838; 3849; 4100; 4129; 4172; 4183; 4248; 4327; 4352; 4357; 4403; 4493; 4591; 4617; 4635; 4646
CviKI-1	RG!CY	94	42; 84; 93; 277; 566; 618; 624; 655; 687; 714; 777; 824; 853; 860; 938; 1004; 1016; 1067; 1094; 1136; 1159; 1167; 1181; 1291; 1327; 1333; 1371; 1385; 1408; 1518; 1685; 1705; 1847; 1928; 1942; 1956; 2237; 2278; 2350; 2473; 2502; 2508; 2517; 2525; 2548; 2560; 2566; 2647; 2664; 2672; 2699; 2724; 2808; 2817; 2821; 2845; 2883; 2959; 2976; 2995; 3058; 3102; 3112; 3129; 3212; 3239; 3243; 3280; 3303; 3319; 3499; 3526; 3587; 3709; 3748; 3805; 3812; 3819; 3838; 3849; 4100; 4129; 4172; 4183; 4248; 4327; 4352; 4357; 4403; 4493; 4591; 4617; 4635; 4646
CviQI	G!TAC	10	218; 243; 298; 331; 382; 539; 646; 717; 867; 3044
DdeI	C!TNAG	9	606; 932; 1229; 2219; 2521; 3402; 3851; 3974; 4383
DinI	GGC!GCC	1	2740
DpnI	GA!TC	23	587; 611; 662; 1039; 1189; 1215; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
DpnII	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
DraI	TTT!AAA	3	1441; 3883; 3902
DraII	RG!GNCCY	1	3837
DraIII	CACNN!GTG	2	1323; 1855
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4219
DraRI	!NNNNNNNNNNNNNNNNNGTCTTG	0	
DrdI	GACNNN!NNGTC	3	1810; 2766; 4555
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1810; 2766; 4555
EaeI	Y!GGCCR	6	1331; 1383; 2645; 2819; 3210; 3237
EagI	C!GGCCG	2	1383; 2645
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2206; 3083; 3293
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EarI	!NNNNGAAGAG	3	2206; 3083; 3293
EciI	GGCGGANNNNNNNNNN!	4	2239; 3268; 4455; 4601
EciI	!NNNNNNNNNTCCGCC	4	496; 2410; 2431; 2452
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	2	1383; 2645
Eco24I	GRGCY!C	5	620; 657; 1930; 3104; 3814
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1294; 3728
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1263; 3255; 3700
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	2	1383; 2645
Eco57I	CTGAAGNNNNNNNNNNNNNN!	3	1183; 2885; 3317
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4115
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	932; 2219; 3851
Eco88I	C!YCGRG	2	613; 656
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWGGG	5	360; 2468; 2561; 3171; 3576
Eco147I	AGG!CCT	1	2560
EcoHI	!CCSGG	7	655; 656; 1245; 2741; 2901; 3514; 4278
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	4	1183; 2885; 3317; 3579
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	991; 3522; 4115
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3837
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	16	88; 281; 848; 896; 992; 1007; 1136; 2273; 2328; 2345; 3124; 3703; 3806; 4496; 4509; 4630
EcoRV	GAT!ATC	0	
EcoT14I	C!CWGGG	5	360; 2468; 2561; 3171; 3576
EcoT22I	ATGCA!T	3	2311; 2383; 4714
EcoT38I	GRGCY!C	5	620; 657; 1930; 3104; 3814
Eco53kI	GAG!CTC	1	618
EgeI	GGC!GCC	1	2740
EheI	GGC!GCC	1	2740
ErhI	C!CWGGG	5	360; 2468; 2561; 3171; 3576
EsaBC3I	TC!GA	17	615; 628; 641; 816; 843; 1152; 1889; 2580; 2853; 3009; 3033; 3069; 3231; 3422; 3467; 3722; 4560
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	23	304; 364; 681; 705; 711; 723; 801; 867; 947; 1158; 2169; 2309; 2381; 2472; 2613; 2958; 3144; 3175; 3201; 3557; 3941; 4661; 4712
FaiI	YA!TR	62	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 679; 703; 709; 721; 799; 865; 945; 963; 1156; 1209; 1259; 1401; 1411; 1477; 1522; 1727; 2155; 2167; 2298; 2307; 2370; 2379; 2403; 2470; 2494; 2611; 2675; 2956; 2981; 3142; 3173; 3199; 3271; 3487; 3555; 3633; 3685; 3846; 3863; 3865; 3867; 3939; 4217; 4406; 4522; 4595; 4659; 4710
FalI	AAGNNNNNCTNNNNNNNNNNNN!	2	942; 3079
FalI	!NNNNNNNNAAGNNNNNCTT	2	910; 3047
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2890; 3422; 3531
FaqI	!NNNNNNNNNNNNNGTCCC	4	2255; 2327; 2391; 3686
FatI	!CATG	23	300; 360; 677; 701; 707; 719; 797; 863; 943; 1154; 2165; 2305; 2377; 2468; 2609; 2954; 3140; 3171; 3197; 3553; 3937; 4657; 4708
FauI	CCCGCNNNN!	10	93; 119; 286; 1131; 1233; 2061; 2416; 2437; 3633; 3765
FauI	!NNNNNNGCGGG	7	644; 1168; 1992; 2862; 3399; 3537; 3684
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	3	640; 1151; 1253
FmuI	GGNC!C	14	86; 279; 657; 826; 1069; 1161; 1182; 1266; 1849; 3258; 3703; 3749; 3807; 3840

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	36	822; 873; 876; 1017; 1134; 1315; 1383; 1386; 1516; 2035; 2057; 2071; 2509; 2648; 2700; 2711; 2801; 2806; 2843; 2884; 2971; 2974; 2977; 3213; 3309; 3350; 3364; 3478; 3817; 3832; 4043; 4249; 4252; 4317; 4460; 4615
FokI	GGATGNNNNNNNNNN!	4	2606; 3063; 3088; 3542
FokI	!NNNNNNNNNNNNNNCATCC	5	744; 832; 889; 1044; 2412
FriOI	GRGCY!C	5	620; 657; 1930; 3104; 3814
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2841
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1352; 1394; 1588; 2006; 2562; 3577; 3911; 4164
FspEI	CCNNNNNNNNNNNN!	157	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; 1033; 1069; 1115; 1136; 1150; 1173; 1195; 1218; 1238; 1259; 1279; 1305; 1347; 1363; 1399; 1422; 1461; 1475; 1616; 1711; 1735; 1758; 1781; 1799; 1821; 1842; 1861; 1880; 1909; 1930; 1944; 1970; 2058; 2084; 2133; 2174; 2192; 2231; 2247; 2285; 2342; 2357; 2414; 2434; 2448; 2465; 2479; 2516; 2531; 2574; 2657; 2724; 2755; 2775; 2790; 2835; 2849; 2915; 2929; 2948; 2964; 3005; 3025; 3072; 3122; 3138; 3158; 3183; 3203; 3226; 3253; 3271; 3297; 3337; 3363; 3387; 3443; 3457; 3485; 3528; 3549; 3584; 3628; 3716; 3740; 3762; 3782; 3798; 3819; 3833; 3852; 3936; 3956; 3984; 3999; 4033; 4075; 4102; 4117; 4162; 4186; 4200; 4222; 4248; 4268; 4292; 4318; 4366; 4385; 4404; 4430; 4465; 4510; 4540; 4554; 4605; 4619; 4644; 4660; 4681; 4710
FspEI	!NNNNNNNNNNNNNNNGG	130	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; 1293; 1315; 1345; 1367; 1410; 1510; 1579; 1609; 1687; 1736; 1758; 1786; 1822; 1867; 1896; 1932; 1951; 1979; 1999; 2062; 2085; 2193; 2225; 2243; 2272; 2315; 2344; 2455; 2484; 2527; 2548; 2576; 2609; 2629; 2654; 2681; 2706; 2728; 2756; 2782; 2803; 2854; 2875; 2893; 2941; 2977; 3033; 3058; 3082; 3111; 3134; 3158; 3184; 3206; 3225; 3250; 3290; 3326; 3391; 3476; 3500; 3529; 3563; 3584; 3604; 3649; 3676; 3695; 3728; 3780; 3811; 3838; 3890; 3988; 4059; 4104; 4165; 4230; 4264; 4290; 4308; 4344; 4414; 4437; 4459; 4483; 4516; 4564; 4599; 4617; 4674
Fsp4HI	GC!NGC	36	822; 873; 876; 1017; 1134; 1315; 1383; 1386; 1516; 2035; 2057; 2071; 2509; 2648; 2700; 2711; 2801; 2806; 2843; 2884; 2971; 2974; 2977; 3213; 3309; 3350; 3364; 3478; 3817; 3832; 4043; 4249; 4252; 4317; 4460; 4615
GdiII	C!GGCCR	2	1383; 2645
GdiII	Y!GGCCG	4	1383; 2645; 3210; 3237
GlaI	GC!GC	21	596; 2004; 2012; 2038; 2060; 2069; 2082; 2113; 2732; 2740; 2804; 2841; 3107; 3367; 3543; 3629; 4032; 4141; 4315; 4415; 4482
GluI	GC!NGC	36	822; 873; 876; 1017; 1134; 1315; 1383; 1386; 1516; 2035; 2057; 2071; 2509; 2648; 2700; 2711; 2801; 2806; 2843; 2884; 2971; 2974; 2977; 3213; 3309; 3350; 3364; 3478; 3817; 3832; 4043; 4249; 4252; 4317; 4460; 4615
GsaI	CCCAG!C	3	2286; 2358; 4357
GsaI	GCTGG!G	2	1098; 3247
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3579
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	991; 3522
HaeI	WGG!CCW	6	1333; 2560; 2821; 4183; 4635; 4646
HaeII	RGCGC!Y	5	598; 2006; 2014; 2742; 4417
HaeIII	GG!CC	28	84; 277; 655; 824; 1067; 1136; 1159; 1181; 1291; 1333; 1385; 1705; 1847; 2502; 2508; 2517; 2560; 2647; 2821; 3212; 3239; 3748; 3805; 3838; 4183; 4617; 4635; 4646
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	3	1295; 1414; 2935
HaeIV	!NNNNNNNNNGAYNNNNNRTC	3	1261; 1380; 2901
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	3	1294; 1413; 2934
HaeIV	!NNNNNNNGAYNNNNNRTC	3	1263; 1382; 2903
HapII	C!CGG	20	601; 657; 667; 1247; 1957; 2644; 2721; 2743; 2771; 2902; 2992; 3059; 3240; 3515; 3523; 3615; 4089; 4279; 4305; 4452
HgaI	GACGCNNNNN!	3	526; 3449; 3528
HgaI	!NNNNNNNNNGCGTC	4	1239; 2072; 3967; 4545

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	21	597; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
Hin1I	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
Hin1III	CATG!	23	304; 364; 681; 705; 711; 723; 801; 867; 947; 1158; 2169; 2309; 2381; 2472; 2613; 2958; 3144; 3175; 3201; 3557; 3941; 4661; 4712
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	3	1294; 1413; 2934
Hin4I	!NNNNNNNNGABNNNNNNRTC	4	1262; 1381; 2902; 2932
Hin4I	GABNNNNNNRTCNNNNNNNNNNNN!	4	1294; 1413; 2934; 2964
Hin4I	!NNNNNNNNGAYNNNNNVTC	3	1262; 1381; 2902
Hin6I	G!CGC	21	595; 2003; 2011; 2037; 2059; 2068; 2081; 2112; 2731; 2739; 2803; 2840; 3106; 3366; 3542; 3628; 4031; 4140; 4314; 4414; 4481
HinP1I	G!CGC	21	595; 2003; 2011; 2037; 2059; 2068; 2081; 2112; 2731; 2739; 2803; 2840; 3106; 3366; 3542; 3628; 4031; 4140; 4314; 4414; 4481
HincII	GTY!RAC	3	641; 1152; 1502
HindII	GTY!RAC	3	641; 1152; 1502
HindIII	A!AGCTT	2	622; 1369
HinfI	G!ANTC	15	410; 604; 803; 953; 1390; 1782; 1804; 2214; 3224; 3358; 3410; 3468; 3505; 4287; 4683
HpaI	GTT!AAC	1	1502
HpaII	C!CGG	20	601; 657; 667; 1247; 1957; 2644; 2721; 2743; 2771; 2902; 2992; 3059; 3240; 3515; 3523; 3615; 4089; 4279; 4305; 4452
HphI	GGTGANNNNNNNN!	4	376; 1059; 3810; 3926
HphI	!NNNNNNNTCACC	3	948; 1856; 2917
Hpy8I	GTN!NAC	15	201; 539; 577; 641; 735; 755; 1050; 1152; 1254; 1263; 1502; 1786; 1803; 1858; 4345
Hpy99I	CGWCG!	8	645; 2829; 2857; 3151; 3166; 3443; 3828; 4561
Hpy166II	GTN!NAC	15	201; 539; 577; 641; 735; 755; 1050; 1152; 1254; 1263; 1502; 1786; 1803; 1858; 4345
Hpy188I	TCN!GA	15	585; 609; 762; 1042; 1344; 1913; 2522; 2706; 3050; 3403; 3504; 3983; 4117; 4470; 4548
Hpy188III	TC!NNGA	25	613; 915; 1035; 1200; 1239; 1394; 2166; 2218; 2531; 2584; 2757; 3073; 3082; 3165; 3221; 3265; 3355; 3388; 3457; 3938; 4012; 4095; 4193; 4291; 4425
HpyAV	CCTTCNNNNNN!	6	843; 891; 936; 3384; 3491; 4170
HpyAV	!NNNNNGAAGG	9	763; 1135; 1972; 2867; 3596; 3612; 3795; 4112; 4422
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1830; 3119; 3235; 3343; 3666; 4157; 4627; 4698
HpyCH4IV	A!CGT	15	122; 134; 175; 258; 339; 444; 1031; 1799; 1811; 1854; 1964; 2855; 3042; 3823; 3956
HpyCH4V	TG!CA	20	636; 705; 755; 1193; 1488; 1515; 1583; 2300; 2309; 2372; 2381; 2496; 2572; 2631; 2790; 2965; 2979; 4049; 4345; 4712
HpyF3I	C!TNAG	9	606; 932; 1229; 2219; 2521; 3402; 3851; 3974; 4383
HpyF10VI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1966; 1996; 2023; 2065; 2306; 2378; 2429; 2508; 2730; 2814; 2837; 2976; 3099; 3182; 3449; 3636; 3840; 4039; 4611
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 1250; 2739; 3441; 3520
Hsp92II	CATG!	23	304; 364; 681; 705; 711; 723; 801; 867; 947; 1158; 2169; 2309; 2381; 2472; 2613; 2958; 3144; 3175; 3201; 3557; 3941; 4661; 4712
HspAI	G!CGC	21	595; 2003; 2011; 2037; 2059; 2068; 2081; 2112; 2731; 2739; 2803; 2840; 3106; 3366; 3542; 3628; 4031; 4140; 4314; 4414; 4481
KasI	G!GCGCC	1	2738
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	649
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	652
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	1502
Kzo9I	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3083; 3293

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnI	RGC!GCGY	5	596; 2004; 2012; 2740; 4415
LpnPI	CCDGNNNNNNNNNNN!	60	102; 295; 614; 670; 805; 862; 910; 944; 1006; 1021; 1082; 1150; 1174; 1198; 1260; 1347; 1476; 1781; 1970; 2193; 2231; 2247; 2287; 2342; 2359; 2459; 2544; 2657; 2734; 2756; 2779; 2915; 2929; 2948; 3005; 3072; 3122; 3138; 3195; 3253; 3462; 3528; 3552; 3628; 3717; 3820; 3853; 4084; 4102; 4248; 4268; 4292; 4318; 4367; 4465; 4510; 4540; 4619; 4644; 4681
LpnPI	!NNNNNNNNNNNNNCHGG	55	75; 268; 552; 586; 642; 835; 883; 979; 1080; 1123; 1232; 1258; 1293; 1345; 1822; 1942; 1999; 2062; 2260; 2272; 2332; 2344; 2576; 2621; 2664; 2706; 2728; 2756; 2803; 2865; 2887; 2977; 3044; 3067; 3111; 3206; 3225; 3250; 3399; 3500; 3543; 3600; 3690; 3793; 3820; 3838; 4074; 4111; 4264; 4290; 4430; 4448; 4483; 4564; 4617
Lsp1109I	GCAGCNNNNNNNN!	8	884; 1326; 1527; 2812; 2854; 3375; 3828; 4328
Lsp1109I	!NNNNNNNNNNNNNGCTGC	7	1003; 2021; 2686; 2870; 2963; 4029; 4235
LweI	GCATCNNNNN!	7	911; 1555; 2318; 2390; 3038; 3102; 3377
LweI	!NNNNNNNNNNNGATGC	6	357; 1232; 2697; 2952; 3168; 4560
MabI	A!CCWGGT	1	2328
MaeI	C!TAG	9	592; 1352; 1394; 1588; 2006; 2562; 3577; 3911; 4164
MaeII	A!CGT	15	122; 134; 175; 258; 339; 444; 1031; 1799; 1811; 1854; 1964; 2855; 3042; 3823; 3956
MaeIII	!GTNAC	13	61; 148; 497; 954; 1527; 2028; 2040; 2859; 3165; 3855; 4121; 4237; 4300
MalI	GA!TC	23	587; 611; 662; 1039; 1189; 1215; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2163; 3352
MbiI	GAG!CGG	2	1999; 3406
MboI	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
MboII	GAAGANNNNNNNN!	7	979; 1089; 1995; 2223; 3100; 3310; 3929
MboII	!NNNNNNNTCTTC	4	3390; 3557; 3757; 4000
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1489
MfiI	R!GATCY	11	585; 609; 660; 1213; 2910; 3156; 3548; 3907; 3919; 4005; 4016
MhII	GDGCH!C	15	620; 657; 730; 757; 790; 1108; 1367; 1930; 2685; 2778; 2852; 3042; 3104; 3814; 4347
MisI	TGG!CCA	2	1333; 2821
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	1333; 2821
MlyI	GAGTCNNNNN!	3	962; 1791; 2223
MlyI	!NNNNNGACTC	6	404; 598; 1384; 1798; 3404; 4281
Mly113I	GG!CGCC	1	2739
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	3	1085; 1367; 1832
MmeI	!NNNNNNNNNNNNNNNNNNNNNGTYGGA	2	4264; 4448
MnII	CCTCNNNNNNN!	12	836; 1015; 1030; 1246; 1357; 1458; 2522; 3340; 3546; 3860; 4230; 4554
MnII	!NNNNNNGAGG	21	541; 717; 756; 777; 810; 927; 1036; 1281; 1314; 1418; 1883; 2214; 2492; 2535; 2550; 2590; 2654; 2790; 3147; 3577; 4480
Mph1103I	ATGCA!T	3	2311; 2383; 4714
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1956; 3239; 3522
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1333; 2821
MseI	T!TAA	18	7; 692; 1373; 1377; 1440; 1501; 1622; 1643; 1654; 1666; 1677; 1694; 1792; 2063; 3882; 3896; 3901; 3953
MslI	CAYNN!NNRTG	3	365; 706; 3176
MspI	C!CGG	20	601; 657; 667; 1247; 1957; 2644; 2721; 2743; 2771; 2902; 2992; 3059; 3240; 3515; 3523; 3615; 4089; 4279; 4305; 4452
Msp20I	TGG!CCA	2	1333; 2821
MspA1I	CMG!CKG	6	651; 1126; 2237; 2845; 4074; 4319
MspCI	C!TTAAG	1	1621

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	240	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; 1033; 1047; 1068; 1081; 1102; 1115; 1129; 1149; 1167; 1180; 1197; 1212; 1229; 1249; 1279; 1296; 1316; 1330; 1346; 1363; 1378; 1399; 1412; 1427; 1446; 1463; 1476; 1517; 1531; 1544; 1562; 1600; 1615; 1633; 1674; 1698; 1718; 1736; 1757; 1780; 1812; 1827; 1849; 1867; 1880; 1901; 1918; 1931; 1944; 1960; 1973; 2003; 2018; 2043; 2061; 2074; 2089; 2113; 2127; 2151; 2176; 2192; 2230; 2246; 2285; 2299; 2313; 2341; 2357; 2371; 2385; 2414; 2427; 2448; 2457; 2479; 2509; 2525; 2543; 2573; 2596; 2620; 2644; 2663; 2691; 2717; 2733; 2746; 2769; 2783; 2803; 2816; 2830; 2849; 2863; 2876; 2892; 2907; 2920; 2936; 2951; 2967; 2992; 3011; 3027; 3040; 3053; 3071; 3085; 3099; 3115; 3137; 3153; 3172; 3194; 3210; 3233; 3252; 3266; 3282; 3296; 3316; 3332; 3345; 3367; 3400; 3414; 3434; 3447; 3461; 3515; 3528; 3551; 3564; 3583; 3600; 3627; 3663; 3696; 3715; 3740; 3761; 3788; 3801; 3818; 3832; 3847; 3863; 3923; 3948; 3964; 3986; 3999; 4013; 4044; 4058; 4083; 4101; 4116; 4129; 4148; 4161; 4176; 4205; 4224; 4242; 4267; 4282; 4301; 4317; 4336; 4354; 4370; 4384; 4403; 4430; 4453; 4475; 4494; 4509; 4522; 4539; 4559; 4586; 4599; 4618; 4643; 4666; 4680; 4693; 4710
MspJI	!NNNNNNNNNNNNYNG	198	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; 900; 917; 950; 979; 1021; 1055; 1076; 1096; 1123; 1141; 1158; 1176; 1204; 1225; 1244; 1270; 1294; 1315; 1338; 1373; 1391; 1420; 1449; 1491; 1574; 1609; 1636; 1659; 1688; 1732; 1754; 1786; 1822; 1839; 1860; 1897; 1917; 1934; 1951; 1986; 2004; 2022; 2039; 2063; 2085; 2112; 2140; 2166; 2204; 2225; 2242; 2260; 2283; 2304; 2332; 2355; 2376; 2394; 2415; 2432; 2455; 2479; 2499; 2517; 2539; 2570; 2592; 2618; 2637; 2654; 2682; 2701; 2720; 2738; 2756; 2777; 2799; 2823; 2856; 2876; 2894; 2915; 2941; 2968; 2985; 3002; 3019; 3045; 3067; 3089; 3107; 3127; 3146; 3168; 3206; 3226; 3250; 3270; 3290; 3317; 3341; 3374; 3393; 3421; 3443; 3472; 3500; 3525; 3544; 3563; 3584; 3601; 3618; 3649; 3676; 3696; 3719; 3739; 3776; 3793; 3812; 3838; 3858; 3897; 3924; 3943; 3961; 3998; 4016; 4057; 4075; 4101; 4118; 4150; 4179; 4207; 4228; 4251; 4270; 4291; 4309; 4326; 4344; 4370; 4391; 4411; 4431; 4449; 4470; 4496; 4513; 4532; 4551; 4580; 4599; 4617; 4636; 4654; 4672; 4695
MspR9I	CC!NGG	23	90; 283; 657; 658; 850; 898; 994; 1009; 1138; 1247; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1489
MvaI	CC!WGG	16	90; 283; 850; 898; 994; 1009; 1138; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
MvaI269I	GAATGCN!	1	1490
MvaI269I	G!CATTC	1	1583
MvnI	CG!CG	16	60; 651; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 711; 1142; 1966; 1996; 2023; 2065; 2306; 2378; 2429; 2508; 2730; 2814; 2837; 2976; 3099; 3182; 3449; 3636; 3840; 4039; 4611
NaeI	GCC!GGC	3	1958; 3241; 3524
NarI	GG!CGCC	1	2739
NciI	CC!SGG	7	657; 658; 1247; 2743; 2903; 3516; 4280
NcoI	C!CATGG	3	360; 2468; 3171
NdeI	CA!TATG	1	234
NdeII	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
NgoAVIII	GACNNNNNTGANNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	794
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	830
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1956; 3239; 3522

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NheI	G!CTAGC	1	591
NlaIII	CATG!	23	304; 364; 681; 705; 711; 723; 801; 867; 947; 1158; 2169; 2309; 2381; 2472; 2613; 2958; 3144; 3175; 3201; 3557; 3941; 4661; 4712
NlaIV	GGN!NCC	21	467; 647; 655; 662; 729; 789; 1100; 1180; 1894; 1915; 1927; 2118; 2279; 2351; 2740; 2775; 3623; 3702; 3747; 4590; 4629
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1571; 1886; 3478
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1054; 4550
Nli3877I	CYCGR!G	2	617; 660
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2528; 2964
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	1070; 2493
NmeDI	RCCGGYNNNNNNNN!	5	678; 1968; 3070; 3251; 3534
NmeDI	!NNNNNNNNNNNNRCCGGY	5	653; 1943; 3045; 3226; 3509
NmuCI	!GTSAC	4	954; 2028; 2859; 3165
NotI	GC!GGCCGC	1	1383
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2841
NsiI	ATGCA!T	3	2311; 2383; 4714
NspI	RCATG!Y	5	705; 2309; 2381; 3144; 4661
NspV	TT!CGAA	2	627; 3421
OliI	CACNN!NNGTG	0	
PabI	GTA!C	10	220; 245; 300; 333; 384; 541; 648; 719; 869; 3046
PacI	TTAAT!TAA	1	1377
PaeI	GCATG!C	3	2309; 2381; 3144
PaeR7I	C!TCGAG	1	613
PagI	T!CATGA	2	2165; 3937
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	897; 3704; 3807
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2560
PciI	A!CATGT	1	4657
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3083; 3293
PcsI	WCGNNNN!NNNCGW	6	3033; 3110; 3353; 3427; 3820; 4338
PctI	GAATGCN!	1	1490
PctI	G!CATTC	1	1583
PdiI	GCC!GGC	3	1958; 3241; 3524
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	6	803; 3224; 3358; 3468; 3505; 4683
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2857
PfIMI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	2	1007; 3514
PhoI	GG!CC	28	84; 277; 655; 824; 1067; 1136; 1159; 1181; 1291; 1333; 1385; 1705; 1847; 2502; 2508; 2517; 2560; 2647; 2821; 3212; 3239; 3748; 3805; 3838; 4183; 4617; 4635; 4646
PinAI	A!CCGGT	1	666
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3120
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2685; 2940
PleI	GAGTCNNNN!	3	961; 1790; 2222
PleI	!NNNNNGACTC	6	404; 598; 1384; 1798; 3404; 4281
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1821
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	3951
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	3983
PpiI	!NNNNNNNGAACNNNNNCTC	1	1789
PpsI	GAGTCNNNN!	3	961; 1790; 2222
PpsI	!NNNNNGACTC	6	404; 598; 1384; 1798; 3404; 4281
Ppu10I	A!TGCAT	3	2307; 2379; 4710
Ppu21I	YAC!GTR	3	340; 1855; 3043
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4657

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1522; 1727
Psp03I	GGWC!C	3	1266; 3258; 3703
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	16	88; 281; 848; 896; 992; 1007; 1136; 2273; 2328; 2345; 3124; 3703; 3806; 4496; 4509; 4630
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	16	88; 281; 848; 896; 992; 1007; 1136; 2273; 2328; 2345; 3124; 3703; 3806; 4496; 4509; 4630
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	21	467; 647; 655; 662; 729; 789; 1100; 1180; 1894; 1915; 1927; 2118; 2279; 2351; 2740; 2775; 3623; 3702; 3747; 4590; 4629
PspOMI	G!GGCCC	1	653
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNN!	3	125; 2469; 3468
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2871
PspPI	G!GNCC	14	83; 276; 654; 823; 1066; 1158; 1179; 1263; 1846; 3255; 3700; 3746; 3804; 3837
PspPPI	RG!GWCCY	0	
PspPRI	CCYACAGNNNNNNNNNNNNNNNN!	3	2292; 2364; 3870
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	918; 1346; 2205; 3400
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3840
PstI	CTGCA!G	1	638
PstNI	CAGNN!CTG	2	3840; 4248
PsuI	R!GATCY	11	585; 609; 660; 1213; 2910; 3156; 3548; 3907; 3919; 4005; 4016
Psyl	GACN!NNGTC	1	2857
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2237; 2845
RcaI	T!CATGA	2	2165; 3937
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3254
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1468
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	10	219; 244; 299; 332; 383; 540; 647; 718; 868; 3045
RsaNI	G!TAC	10	218; 243; 298; 331; 382; 539; 646; 717; 867; 3044
RseI	CAYNN!NNRTG	3	365; 706; 3176
RsrII	CG!GWCCG	1	3255
Rsr2I	CG!GWCCG	1	3255
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SalI	G!TCGAC	2	639; 1150
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3083; 3293
SaqAI	T!TAA	18	7; 692; 1373; 1377; 1440; 1501; 1622; 1643; 1654; 1666; 1677; 1694; 1792; 2063; 3882; 3896; 3901; 3953
SatI	GC!NGC	36	822; 873; 876; 1017; 1134; 1315; 1383; 1386; 1516; 2035; 2057; 2071; 2509; 2648; 2700; 2711; 2801; 2806; 2843; 2884; 2971; 2974; 2977; 3213; 3309; 3350; 3364; 3478; 3817; 3832; 4043; 4249; 4252; 4317; 4460; 4615

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau96I	G!GNCC	14	83; 276; 654; 823; 1066; 1158; 1179; 1263; 1846; 3255; 3700; 3746; 3804; 3837
Sau3AI	!GATC	23	585; 609; 660; 1037; 1187; 1213; 1396; 2576; 2580; 2599; 2910; 2988; 3069; 3078; 3156; 3532; 3548; 3907; 3919; 3997; 4005; 4016; 4091
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	3	962; 1791; 2223
SchI	!NNNNNGACTC	6	404; 598; 1384; 1798; 3404; 4281
SciI	CTC!GAG	1	615
ScrFI	CC!NGG	23	90; 283; 657; 658; 850; 898; 994; 1009; 1138; 1247; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	4	2317; 2389; 2558; 4500
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	3	892; 2894; 3379
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	15	620; 657; 730; 757; 790; 1108; 1367; 1930; 2685; 2778; 2852; 3042; 3104; 3814; 4347
SelI	!CGCG	16	58; 649; 1386; 1661; 2037; 2057; 2081; 2112; 2803; 3104; 3542; 3626; 3689; 3758; 4031; 4612
SetI	ASST!	64	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 689; 716; 812; 862; 883; 1034; 1169; 1187; 1238; 1306; 1325; 1349; 1373; 1429; 1450; 1459; 1471; 1520; 1687; 1802; 1814; 1857; 1894; 1944; 1967; 2091; 2239; 2334; 2527; 2640; 2768; 2847; 2858; 2930; 3001; 3045; 3305; 3451; 3495; 3826; 3857; 3916; 3959; 4102; 4123; 4222; 4359; 4374; 4393; 4405; 4449; 4495; 4546
SexAI	A!CCWGGT	1	2328
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	911; 1555; 2318; 2390; 3038; 3102; 3377
SfaNI	!NNNNNNNNNGATGC	6	357; 1232; 2697; 2952; 3168; 4560
SfcI	C!TRYAG	4	634; 2074; 4201; 4392
SfiI	GGCCNNNN!NGGCC	1	2514
SfoI	GGC!GCC	1	2740
Sfr274I	C!TCGAG	1	613
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 3421
SgeI	CNNGNNNNNNNNN!	188	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; 927; 943; 956; 984; 1005; 1020; 1047; 1081; 1102; 1115; 1135; 1149; 1167; 1180; 1197; 1212; 1230; 1251; 1285; 1320; 1346; 1364; 1380; 1399; 1446; 1475; 1517; 1600; 1674; 1758; 1780; 1812; 1849; 1867; 1886; 1901; 1943; 1960; 1977; 2012; 2026; 2043; 2065; 2089; 2113; 2178; 2192; 2230; 2246; 2286; 2299; 2318; 2341; 2358; 2371; 2390; 2420; 2441; 2458; 2481; 2516; 2543; 2574; 2596; 2622; 2644; 2663; 2691; 2727; 2746; 2769; 2783; 2803; 2816; 2830; 2849; 2863; 2882; 2914; 2928; 2941; 2967; 2998; 3011; 3028; 3045; 3059; 3076; 3094; 3109; 3137; 3153; 3172; 3194; 3210; 3233; 3252; 3277; 3296; 3316; 3343; 3367; 3400; 3419; 3447; 3461; 3527; 3551; 3566; 3589; 3610; 3627; 3675; 3702; 3716; 3745; 3769; 3802; 3819; 3839; 3852; 3865; 3923; 3950; 3969; 3999; 4024; 4044; 4058; 4083; 4101; 4138; 4176; 4205; 4233; 4247; 4267; 4282; 4303; 4317; 4336; 4354; 4370; 4410; 4430; 4457; 4475; 4496; 4509; 4522; 4539; 4563; 4586; 4618; 4643; 4670; 4692

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	164	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; 901; 930; 958; 979; 1021; 1055; 1076; 1096; 1123; 1141; 1162; 1186; 1204; 1225; 1259; 1294; 1320; 1338; 1373; 1420; 1449; 1491; 1574; 1648; 1732; 1754; 1786; 1823; 1841; 1860; 1917; 1934; 1951; 1986; 2004; 2024; 2044; 2063; 2087; 2152; 2204; 2260; 2292; 2315; 2332; 2364; 2394; 2415; 2432; 2455; 2490; 2517; 2548; 2570; 2596; 2618; 2637; 2665; 2701; 2720; 2743; 2764; 2782; 2799; 2823; 2856; 2888; 2915; 2941; 2972; 3002; 3019; 3045; 3068; 3089; 3111; 3131; 3151; 3168; 3207; 3226; 3251; 3270; 3290; 3317; 3341; 3374; 3393; 3421; 3443; 3501; 3525; 3544; 3563; 3584; 3601; 3649; 3676; 3696; 3719; 3743; 3776; 3793; 3813; 3839; 3897; 3924; 3943; 3973; 3998; 4018; 4057; 4075; 4112; 4150; 4179; 4207; 4228; 4256; 4277; 4310; 4328; 4384; 4404; 4431; 4449; 4470; 4496; 4513; 4537; 4560; 4592; 4617; 4644; 4666; 4695
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	652
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	5	27; 1149; 1886; 3673; 4466
SimI	!GACCC	4	106; 3167; 3735; 3983
SinI	G!GWCC	3	1263; 3255; 3700
SlaI	C!TCGAG	1	613
SmaI	CCC!GGG	1	658
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	3	365; 706; 3176
SmlI	C!TYRAG	8	613; 619; 1237; 1621; 3130; 4012; 4289; 4551
SmoI	C!TYRAG	8	613; 619; 1237; 1621; 3130; 4012; 4289; 4551
SmuI	CCCGCNNNN!	10	93; 119; 286; 1131; 1233; 2061; 2416; 2437; 3633; 3765
SmuI	!NNNNNNGCGGG	7	644; 1168; 1992; 2862; 3399; 3537; 3684
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2309; 2381; 3144
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	12	18; 629; 1374; 1489; 1553; 1631; 1657; 1668; 2315; 2387; 2479; 3897
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2560
SsiI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 986; 1124; 1226; 1266; 1386; 2054; 2057; 2071; 2161; 2409; 2421; 2430; 2442; 2452; 2463; 2509; 2648; 2711; 3213; 3258; 3324; 3350; 3475; 3478; 3626; 3758; 4065; 4209; 4705
SsiI	G!CGG	28	370; 403; 528; 651; 821; 1133; 1175; 1382; 1999; 2026; 2114; 2224; 2805; 2869; 2970; 2973; 3253; 3308; 3406; 3544; 3691; 3831; 4074; 4319; 4440; 4459; 4586; 4614
SspI	AAT!ATT	2	1647; 2200
SspDI	G!CGGCC	1	2738
SspD5I	GGTGANNNNNNNN!	4	376; 1059; 3810; 3926
SspD5I	!NNNNNNNNNTCACC	3	947; 1855; 2916
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNN!	1	992
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 663; 914; 1130; 1232; 1253; 1938; 2060; 2415; 2436; 2749; 3152; 3291; 3362; 3632; 3764; 3994; 4432
Sth132I	!NNNNNNNNNCGGG	21	15; 407; 470; 643; 963; 1167; 1939; 1991; 2092; 2819; 2861; 2894; 3398; 3507; 3536; 3683; 3787; 3818; 4271; 4315; 4523
Sth302II	CC!GG	20	602; 658; 668; 1248; 1958; 2645; 2722; 2744; 2772; 2903; 2993; 3060; 3241; 3516; 3524; 3616; 4090; 4280; 4306; 4453
StrI	C!TCGAG	1	613
StsI	GGATGNNNNNNNNNN!	4	2607; 3064; 3089; 3543
StsI	!NNNNNNNNNNNNNNCATCC	5	743; 831; 888; 1043; 2411
StuI	AGG!CCT	1	2560
StyI	C!CWWGG	5	360; 2468; 2561; 3171; 3576

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	23	88; 281; 655; 656; 848; 896; 992; 1007; 1136; 1245; 2273; 2328; 2345; 2741; 2901; 3124; 3514; 3703; 3806; 4278; 4496; 4509; 4630
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 645; 732; 1830; 3119; 3235; 3343; 3666; 4157; 4627; 4698
TaiI	ACGT!	15	125; 137; 178; 261; 342; 447; 1034; 1802; 1814; 1857; 1967; 2858; 3045; 3826; 3959
TaqI	T!CGA	17	614; 627; 640; 815; 842; 1151; 1888; 2579; 2852; 3008; 3032; 3068; 3230; 3421; 3466; 3721; 4559
TaqII	GACCGANNNNNNNNNNN!	3	1759; 2776; 3444
TaqII	!NNNNNNNNNTCGGTC	1	3688
TaqII	CACCCANNNNNNNNNNN!	2	805; 910
TaqII	!NNNNNNNNNTGGGTG	3	172; 2643; 3235
TasI	!AATT	12	18; 629; 1374; 1489; 1553; 1631; 1657; 1668; 2315; 2387; 2479; 3897
TatI	W!GTACW	5	217; 297; 330; 381; 716
TauI	GCSG!C	19	824; 1136; 1385; 1388; 2059; 2073; 2511; 2650; 2713; 2808; 2973; 2976; 3215; 3311; 3352; 3480; 3834; 4462; 4617
TfiI	G!AWTC	6	803; 3224; 3358; 3468; 3505; 4683
TliI	C!TCGAG	1	613
TruII	T!TAA	18	7; 692; 1373; 1377; 1440; 1501; 1622; 1643; 1654; 1666; 1677; 1694; 1792; 2063; 3882; 3896; 3901; 3953
Tru9I	T!TAA	18	7; 692; 1373; 1377; 1440; 1501; 1622; 1643; 1654; 1666; 1677; 1694; 1792; 2063; 3882; 3896; 3901; 3953
TscAI	CASTGNN!	5	1585; 2868; 3978; 4249; 4262
TseI	G!CWGC	17	872; 875; 1016; 1314; 1515; 2034; 2699; 2800; 2842; 2883; 2976; 3363; 3816; 4042; 4248; 4251; 4316
TsoI	TARCCANNNNNNNNNNN!	2	1711; 2058
TsoI	!NNNNNNNNNTGGYTA	3	841; 1516; 3268
Tsp45I	!GTSAC	4	954; 2028; 2859; 3165
Tsp509I	!AATT	12	18; 629; 1374; 1489; 1553; 1631; 1657; 1668; 2315; 2387; 2479; 3897
TspDTI	ATGAANNNNNNNNNNN!	5	724; 1090; 1497; 2798; 3502
TspDTI	!NNNNNNNNNTTCAT	6	26; 852; 873; 3216; 3672; 3879
TspEI	!AATT	12	18; 629; 1374; 1489; 1553; 1631; 1657; 1668; 2315; 2387; 2479; 3897
TspGWI	ACGGANNNNNNNNNNN!	1	3614
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	656
TspRI	CASTGNN!	5	1585; 2868; 3978; 4249; 4262
TstI	CACNNNNNNNTCCNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2857
Tth111II	CAARCANNNNNNNNNNN!	1	4066
Tth111III	!NNNNNNNNNTGYTTG	3	3174; 4034; 4073
UnbI	!GGNCC	14	82; 275; 653; 822; 1065; 1157; 1178; 1262; 1845; 3254; 3699; 3745; 3803; 3836
Van91I	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	1	1621
VneI	G!TGCAC	2	753; 4343
VpaK11AI	!GGWCC	3	1262; 3254; 3699
VpaK11BI	G!GWCC	3	1263; 3255; 3700
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	629; 1553; 1657; 1668
XbaI	T!CTAGA	1	1393
XceI	RCATG!Y	5	705; 2309; 2381; 3144; 4661
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	1	613
XhoII	R!GATCY	11	585; 609; 660; 1213; 2910; 3156; 3548; 3907; 3919; 4005; 4016
XmaI	C!CCGGG	1	656
XmaJI	C!CTAGG	2	2561; 3576
XmiI	GT!MKAC	3	640; 1151; 1253

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1352; 1394; 1588; 2006; 2562; 3577; 3911; 4164
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2311; 2383; 4714