

pNirFP-C vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1523; 1728
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1811; 2767; 4556
AatI	AGG!CCT	1	2561
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	1355
AccII	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
AccIII	T!CCGGA	1	1315
Acc16I	TGC!GCA	1	2842
Acc36I	ACCTGCNNNN!	4	1136; 1298; 3008; 3458
Acc36I	!NNNNNNNNGCAGGT	1	2627
Acc65I	G!GTACC	1	1360
AccB1I	G!GYRCC	7	465; 670; 730; 1360; 1893; 2739; 2774
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2164; 3353
AccBSI	GAG!CGG	2	2000; 3407
AceIII	CAGCTCNNNNNNN!	2	1323; 1696
AceIII	!NNNNNNNNNNGAGCTG	2	552; 616
AciI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 929; 1067; 1169; 1364; 2055; 2058; 2072; 2162; 2410; 2422; 2431; 2443; 2453; 2464; 2510; 2649; 2712; 3214; 3259; 3325; 3351; 3476; 3479; 3627; 3759; 4066; 4210; 4706
AciI	G!CGG	27	370; 403; 528; 764; 1076; 1118; 1366; 2000; 2027; 2115; 2225; 2806; 2870; 2971; 2974; 3254; 3309; 3407; 3545; 3692; 3832; 4075; 4320; 4441; 4460; 4587; 4615
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	10	904; 1383; 1392; 2608; 2919; 3165; 3557; 3916; 4014; 4100
AclWI	!NNNNNGATCC	7	580; 1151; 1370; 2984; 3528; 3915; 4012
AcoI	Y!GGCCR	6	681; 1274; 2646; 2820; 3211; 3238
AcsI	R!AATTY	4	1344; 1554; 1658; 1669
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1126; 2886; 3318
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4116
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
AdeI	CACNNN!GTG	1	1856
AfaI	GT!AC	12	219; 244; 299; 332; 383; 540; 661; 811; 1063; 1282; 1362; 3046
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	20	49; 727; 840; 1006; 1215; 1752; 2078; 2470; 2721; 3265; 3546; 3578; 3710; 3745; 3795; 3827; 4180; 4459; 4625; 4643
AfII	C!TTAAG	0	
AfIII	A!CRYGT	2	1626; 4658
AgeI	A!CCGGT	1	600
AgsI	TTS!AA	6	693; 2151; 2195; 2205; 2618; 4194
AhdI	GACNNN!NNGTC	0	
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajnl	!CCWGG	15	88; 281; 791; 839; 935; 1276; 2274; 2329; 2346; 3125; 3704; 3807; 4497; 4510; 4631
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2314; 2386
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2280; 2352
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1017; 1822
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	985; 1790
AluI	AG!CT	18	566; 630; 803; 1110; 1313; 1333; 1339; 1519; 1686; 1943; 2238; 2526; 2846; 3304; 4101; 4358; 4404; 4494
AluBI	AG!CT	18	566; 630; 803; 1110; 1313; 1333; 1339; 1519; 1686; 1943; 2238; 2526; 2846; 3304; 4101; 4358; 4404; 4494
AlwI	GGATCNNNN!	10	904; 1383; 1392; 2608; 2919; 3165; 3557; 3916; 4014; 4100
AlwI	!NNNNNGATCC	7	580; 1151; 1370; 2984; 3528; 3915; 4012
Alw21I	GWGCW!C	5	700; 1335; 2853; 3043; 4348
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1237; 2164; 2582; 3601; 3729
Alw44I	G!TGCAC	2	696; 4344
AlwNI	CAGNN!CTG	3	1283; 3841; 4249
Ama87I	C!YCGRG	2	1328; 1371
Aor13HI	T!CCGGA	1	1315
Aor51HI	AG!GCT	1	596
ApaI	GGGCC!C	1	1372
ApaBI	GCANNNNN!TGC	3	2308; 2380; 3842
ApaLI	G!TGCAC	2	696; 4344
ApeKI	G!CWGC	16	815; 959; 1257; 1516; 2035; 2700; 2801; 2843; 2884; 2977; 3364; 3817; 4043; 4249; 4252; 4317
ApoI	R!AATTY	4	1344; 1554; 1658; 1669
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3255
ApyPI	!NNNNNNNNNNNNNNNNNNNGTTCGAT	3	3049; 3702; 4540
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3139
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	791
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2568
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3310
ArsI	GACNNNNNTTYGNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	26	586; 633; 747; 897; 981; 1157; 1325; 1376; 1385; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
AsiGI	A!CCGGT	1	600
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2858
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	1360
AspA2I	C!CTAGG	2	2562; 3577
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	21	597; 2006; 2014; 2040; 2062; 2071; 2084; 2115; 2734; 2742; 2806; 2843; 3109; 3369; 3545; 3631; 4034; 4143; 4317; 4417; 4484
AspS9I	G!GNCC	13	83; 276; 766; 1009; 1101; 1206; 1369; 1847; 3256; 3701; 3747; 3805; 3838
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	1342; 3422
AsuC2I	CC!SGG	7	1190; 1372; 1373; 2744; 2904; 3517; 4281
AsuHPI	GGTGANNNNNNNN!	4	376; 1002; 3811; 3927
AsuHPI	!NNNNNNNTCACC	3	891; 1857; 2918
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	1328; 1371
AvaII	G!GWCC	3	1206; 3256; 3701
AviII	TGC!GCA	1	2842
AvrII	C!CTAGG	2	2562; 3577

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AxyI	CC!TNAGG	3	875; 2220; 3852
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCMI!C	8	673; 700; 733; 1310; 1372; 2686; 2779; 4348
BalI	TGG!CCA	2	1276; 2822
BamHI	G!GATCC	1	1375
BanI	G!GYRCC	7	465; 670; 730; 1360; 1893; 2739; 2774
BanII	GRGCY!C	5	1335; 1372; 1931; 3105; 3815
BanIII	AT!CGAT	1	2580
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNNN!NTGG	0	
BauI	C!ACGAG	3	1261; 3458; 4485
BauI	C!TCGTG	2	1111; 3332
BbeI	GGCGC!C	1	2743
Bbr7I	GAAGACNNNNNN!	1	922
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	917
BbsI	!NNNNNGTCTTC	0	
BbuI	GCATG!C	3	2310; 2382; 3145
BbvI	GCAGCNNNNNNN!	8	827; 1269; 1528; 2813; 2855; 3376; 3829; 4329
BbvI	!NNNNNNNNNNNGCTGC	7	946; 2022; 2687; 2871; 2964; 4030; 4236
Bbv12I	GWGCW!C	5	700; 1335; 2853; 3043; 4348
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1008; 1870; 2434; 2960; 3462
BccI	!NNNNNGATGG	5	1092; 1260; 1838; 2618; 3046
BceAI	ACGGCNNNNNNNNNNNN!	6	696; 828; 972; 1023; 3166; 3653
BceAI	!NNNNNNNNNNNNNGCCGT	3	1881; 2699; 4158
BceFI	ACGGCNNNNNNNNNNNN!	6	696; 828; 972; 1023; 3166; 3653
BceFI	!NNNNNNNNNNNNNGCCGT	3	1882; 2700; 4159
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2169; 2959; 4460
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	1397
BcnI	CC!SGG	7	1190; 1372; 1373; 2744; 2904; 3517; 4281
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNN!	2	1420; 4593
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	2	1386; 4559
BfaI	C!TAG	9	592; 1295; 1388; 1589; 2007; 2563; 3578; 3912; 4165
BfiI	ACTGGGNNNNN!	2	1312; 2689
BfiI	!NNNNCCCAGT	2	289; 2441
BfmI	C!TRYAG	4	1349; 2075; 4202; 4393
BfoI	RGCGC!Y	5	598; 2007; 2015; 2743; 4418
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	3	2169; 2959; 4460
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	4	1136; 1298; 3008; 3458
BfuAI	!NNNNNNNNNGCAGGT	1	2627
BfuCI	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2515
BglII	A!GATCT	1	1324

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BisI	GC!NGC	32	765; 816; 960; 1258; 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
BlnI	C!CTAGG	2	2562; 3577
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	32	766; 817; 961; 1259; 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
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	1206; 3256; 3701
Bme1390I	CC!NGG	22	90; 283; 793; 841; 937; 1190; 1278; 1372; 1373; 2276; 2331; 2348; 2744; 2904; 3127; 3517; 3706; 3809; 4281; 4499; 4512; 4633
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	1328; 1371
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	13	84; 277; 767; 1010; 1102; 1207; 1370; 1848; 3257; 3702; 3748; 3806; 3839
BmiI	GGN!NCC	19	467; 672; 732; 1362; 1370; 1377; 1895; 1916; 1928; 2119; 2280; 2352; 2741; 2776; 3624; 3703; 3748; 4591; 4630
BmrI	ACTGGGNNNNN!	2	1312; 2689
BmrI	!NNNNCCCAGT	2	289; 2441
BmrFI	CC!NGG	22	90; 283; 793; 841; 937; 1190; 1278; 1372; 1373; 2276; 2331; 2348; 2744; 2904; 3127; 3517; 3706; 3809; 4281; 4499; 4512; 4633
BmsI	GCATCNNNNN!	7	854; 1556; 2319; 2391; 3039; 3103; 3378
BmsI	!NNNNNNNNNGATGC	8	357; 1007; 1046; 1175; 2698; 2953; 3169; 4561
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1312; 2689
BmuI	!NNNNCCCAGT	2	289; 2441
BoxI	GACNN!NNGTC	2	1076; 1249
BpiI	GAAGACNN!	1	917
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	3	651; 2529; 3428
BpI	!NNNNNNNNGAGNNNNNCTC	3	619; 2497; 3396
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3580
BpmI	!NNNNNNNNNNNNNNNCTCCAG	2	934; 3523
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	1342; 3422
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	917
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4034; 4573
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	5	1126; 1165; 1319; 3116; 4275
BpuMI	CC!SGG	7	1190; 1372; 1373; 2744; 2904; 3517; 4281
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1237; 3729
Bsa29I	AT!CGAT	1	2580
BsaAI	YAC!GTR	3	340; 1856; 3044
BsaBI	GATNN!NNATC	2	1402; 2599
BsaHI	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
BsaJI	C!CNNGG	22	360; 611; 704; 839; 840; 935; 1364; 1371; 2274; 2346; 2469; 2504; 2513; 2562; 2903; 3172; 3577; 3704; 3705; 3807; 3808; 4498
BsaMI	GAATGCN!	1	1491
BsaMI	G!CATTC	1	1584
BsaWI	W!CCGGW	7	600; 1315; 1381; 2771; 3615; 4305; 4452
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1820
BsaXI	!NNNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1790

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BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	1	1073
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1741; 3648
Bsc4I	CCNNNNN!NNGG	20	49; 727; 840; 1006; 1215; 1752; 2078; 2470; 2721; 3265; 3546; 3578; 3710; 3745; 3795; 3827; 4180; 4459; 4625; 4643
BscAI	GCATCNNNN!	7	853; 1555; 2318; 2390; 3038; 3102; 3377
BscAI	!NNNNNNGATGC	8	360; 1010; 1049; 1178; 2701; 2956; 3172; 4564
Bse1I	ACTGGN!	5	1220; 1307; 2684; 2885; 4131
Bse1I	C!CAGT	5	295; 1769; 2447; 4243; 4256
Bse8I	GATNN!NNATC	2	1402; 2599
Bse21I	CC!TNAGG	3	875; 2220; 3852
Bse118I	R!CCGGY	5	600; 1957; 3059; 3240; 3523
BseAI	T!CCGGA	1	1315
BseBI	CC!WGG	15	90; 283; 793; 841; 937; 1278; 2276; 2331; 2348; 3127; 3706; 3809; 4499; 4512; 4633
BseCI	AT!CGAT	1	2580
BseDI	C!CNNGG	22	360; 611; 704; 839; 840; 935; 1364; 1371; 2274; 2346; 2469; 2504; 2513; 2562; 2903; 3172; 3577; 3704; 3705; 3807; 3808; 4498
Bse3DI	GCAATGNN!	1	2973
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2600; 3057; 3082; 3536
BseGI	!CATCC	5	700; 788; 845; 1000; 2426
BseJI	GATNN!NNATC	2	1402; 2599
BseLI	CCNNNNN!NNGG	20	49; 727; 840; 1006; 1215; 1752; 2078; 2470; 2721; 3265; 3546; 3578; 3710; 3745; 3795; 3827; 4180; 4459; 4625; 4643
BseMI	GCAATGNN!	1	2973
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	1335; 3866
BseMII	!NNNNNNNNCTGAG	7	866; 1072; 2211; 2513; 3394; 3966; 4375
BseNI	ACTGGN!	5	1220; 1307; 2684; 2885; 4131
BseNI	C!CAGT	5	295; 1769; 2447; 4243; 4256
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2558
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!	8	673; 700; 733; 1310; 1372; 2686; 2779; 4348
BseXI	GCAGCNNNNNNNN!	8	827; 1269; 1528; 2813; 2855; 3376; 3829; 4329
BseXI	!NNNNNNNNNNNGTCTG	7	946; 2022; 2687; 2871; 2964; 4030; 4236
BseX3I	C!GGCCG	1	2646
BseYI	C!CCAGC	3	2283; 2355; 4354
BseYI	G!CTGGG	2	1037; 3244
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	1	1114
Bsh1236I	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
Bsh1285I	CGRY!CG	3	605; 2649; 4324
BshFI	GG!CC	28	84; 277; 683; 767; 1010; 1045; 1088; 1102; 1234; 1276; 1370; 1706; 1848; 2503; 2509; 2518; 2561; 2648; 2822; 3213; 3240; 3749; 3806; 3839; 4184; 4618; 4636; 4647
BshNI	G!GYRCC	7	465; 670; 730; 1360; 1893; 2739; 2774
BshTI	A!CCGGT	1	600
BshVI	AT!CGAT	1	2580
BsiEI	CGRY!CG	3	605; 2649; 4324
BsiHKAI	GWGCW!C	5	700; 1335; 2853; 3043; 4348
BsiHKCI	C!YCGRG	2	1328; 1371
BsiSI	C!CGG	21	601; 1190; 1316; 1372; 1382; 1958; 2645; 2722; 2744; 2772; 2903; 2993; 3060; 3241; 3516; 3524; 3616; 4090; 4280; 4306; 4453
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	20	49; 727; 840; 1006; 1215; 1752; 2078; 2470; 2721; 3265; 3546; 3578; 3710; 3745; 3795; 3827; 4180; 4459; 4625; 4643
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2891; 3423; 3532
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2256; 2328; 2392; 3687
BsmI	GAATGCN!	1	1491
BsmI	G!CATTC	1	1584
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1237; 2164; 2582; 3601; 3729

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BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2891; 3423; 3532
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2256; 2328; 2392; 3687
BsnI	GG!CC	28	84; 277; 683; 767; 1010; 1045; 1088; 1102; 1234; 1276; 1370; 1706; 1848; 2503; 2509; 2518; 2561; 2648; 2822; 3213; 3240; 3749; 3806; 3839; 4184; 4618; 4636; 4647
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACG	2	1237; 3729
BsoBI	C!YCGRG	2	1328; 1371
Bsp13I	T!CCGGA	1	1315
Bsp19I	C!CATGG	4	360; 611; 2469; 3172
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3543
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	3964; 4142
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	3996; 4174
Bsp24I	!NNNNNNNGACNNNNNNNTGG	2	257; 3511
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	1342; 3422
Bsp120I	G!GGCCC	1	1368
Bsp143I	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
Bsp1286I	GDGCH!C	14	673; 700; 733; 1310; 1335; 1372; 1931; 2686; 2779; 2853; 3043; 3105; 3815; 4348
Bsp1407I	T!GTACA	1	659
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 929; 1067; 1169; 1364; 2055; 2058; 2072; 2162; 2410; 2422; 2431; 2443; 2453; 2464; 2510; 2649; 2712; 3214; 3259; 3325; 3351; 3476; 3479; 3627; 3759; 4066; 4210; 4706
BspACI	G!CGG	27	370; 403; 528; 764; 1076; 1118; 1366; 2000; 2027; 2115; 2225; 2806; 2870; 2971; 2974; 3254; 3309; 3407; 3545; 3692; 3832; 4075; 4320; 4441; 4460; 4587; 4615
BspCNI	CTCAGNNNNNNNN!	2	1334; 3865
BspCNI	!NNNNNNNCTGAG	7	867; 1073; 2212; 2514; 3395; 3967; 4376
BspDI	AT!CGAT	1	2580
BspD6I	GACTCNNNN!	5	418; 1327; 1813; 3419; 4296
BspD6I	!NNNNNGAGTC	2	1776; 2208
BspEI	T!CCGGA	1	1315
BspFNI	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
BspHI	T!CATGA	2	2166; 3938
BspLI	GGN!NCC	19	467; 672; 732; 1362; 1370; 1377; 1895; 1916; 1928; 2119; 2280; 2352; 2741; 2776; 3624; 3703; 3748; 4591; 4630
BspMI	ACCTGCNNNN!	4	1136; 1298; 3008; 3458
BspMI	!NNNNNNNGCAGGT	1	2627
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	10	904; 1383; 1392; 2608; 2919; 3165; 3557; 3916; 4014; 4100
BspPI	!NNNNNGATCC	7	580; 1151; 1370; 2984; 3528; 3915; 4012
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3084; 3294
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	2	1342; 3422
BspT107I	G!GYRCC	7	465; 670; 730; 1360; 1893; 2739; 2774
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1237; 3729
BsrI	ACTGGN!	5	1220; 1307; 2684; 2885; 4131
BsrI	C!CAGT	5	295; 1769; 2447; 4243; 4256
BsrBI	CCG!CTC	2	2164; 3353
BsrBI	GAG!CGG	2	2000; 3407
BsrDI	GCAATGNN!	1	2973
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	600; 1957; 3059; 3240; 3523
BsrGI	T!GTACA	1	659
BsrSI	ACTGGN!	5	1220; 1307; 2684; 2885; 4131
BsrSI	C!CAGT	5	295; 1769; 2447; 4243; 4256

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssAI	R!CCGGY	5	600; 1957; 3059; 3240; 3523
BssECI	C!CNNGG	22	360; 611; 704; 839; 840; 935; 1364; 1371; 2274; 2346; 2469; 2504; 2513; 2562; 2903; 3172; 3577; 3704; 3705; 3807; 3808; 4498
BssHII	G!CGCGC	0	
BssKI	!CCNGG	22	88; 281; 791; 839; 935; 1188; 1276; 1370; 1371; 2274; 2329; 2346; 2742; 2902; 3125; 3515; 3704; 3807; 4279; 4497; 4510; 4631
BssMI	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
BssNI	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1261; 3458; 4485
BssSI	C!TCGTG	2	1111; 3332
BssT1I	C!CWWGG	6	360; 611; 2469; 2562; 3172; 3577
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	2207; 3084; 3294
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	3	2307; 2379; 3841
BstAUI	T!GTACA	1	659
BstBI	TT!CGAA	2	1342; 3422
Bst2BI	C!ACGAG	3	1261; 3458; 4485
Bst2BI	C!TCGTG	2	1111; 3332
BstBAI	YAC!GTR	3	340; 1856; 3044
Bst4CI	ACN!GT	17	76; 198; 269; 543; 581; 659; 675; 1210; 1360; 1831; 3120; 3236; 3344; 3667; 4158; 4628; 4699
BstC8I	GCN!NGC	32	86; 279; 593; 628; 718; 922; 1368; 1959; 2002; 2016; 2289; 2308; 2361; 2380; 2634; 2820; 3039; 3105; 3111; 3139; 3143; 3184; 3188; 3242; 3525; 3712; 3759; 3815; 3837; 4048; 4608; 4645
BstDEI	C!TNAG	10	875; 1081; 1172; 1321; 2220; 2522; 3403; 3852; 3975; 4384
BstDSI	C!CRYGG	5	360; 611; 1364; 2469; 3172
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2600; 3057; 3082; 3536
BstF5I	!CATCC	5	700; 788; 845; 1000; 2426
BstFNI	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
BstH2I	RGCGC!Y	5	598; 2007; 2015; 2743; 4418
BstHHI	GCG!C	21	597; 2006; 2014; 2040; 2062; 2071; 2084; 2115; 2734; 2742; 2806; 2843; 3109; 3369; 3545; 3631; 4034; 4143; 4317; 4417; 4484
BstKTI	GAT!C	26	588; 635; 749; 899; 983; 1159; 1327; 1378; 1387; 1400; 2580; 2584; 2603; 2914; 2992; 3073; 3082; 3160; 3536; 3552; 3911; 3923; 4001; 4009; 4020; 4095
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1237; 2164; 2582; 3601; 3729
BstMBI	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
BstMCI	CGRY!CG	3	605; 2649; 4324
BstMWI	GCNNNNN!NNGC	25	90; 212; 244; 283; 376; 400; 1967; 1997; 2024; 2066; 2307; 2379; 2430; 2509; 2731; 2815; 2838; 2977; 3100; 3183; 3450; 3637; 3841; 4040; 4612
BstNI	CC!WGG	15	90; 283; 793; 841; 937; 1278; 2276; 2331; 2348; 3127; 3706; 3809; 4499; 4512; 4633
BstNSI	RCATG!Y	5	648; 2310; 2382; 3145; 4662
BstOI	CC!WGG	15	90; 283; 793; 841; 937; 1278; 2276; 2331; 2348; 3127; 3706; 3809; 4499; 4512; 4633
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	2	1076; 1249
BstSCI	!CCNGG	22	88; 281; 791; 839; 935; 1188; 1276; 1370; 1371; 2274; 2329; 2346; 2742; 2902; 3125; 3515; 3704; 3807; 4279; 4497; 4510; 4631

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSFI	C!TRYAG	4	1349; 2075; 4202; 4393
BstSLI	GKGCMI!C	8	673; 700; 733; 1310; 1372; 2686; 2779; 4348
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
Bst2UI	CC!WGG	15	90; 283; 793; 841; 937; 1278; 2276; 2331; 2348; 3127; 3706; 3809; 4499; 4512; 4633
BstV1I	GCAGCNNNNNNNN!	8	827; 1269; 1528; 2813; 2855; 3376; 3829; 4329
BstV1I	!NNNNNNNNNNNGCTGC	7	946; 2022; 2687; 2871; 2964; 4030; 4236
BstV2I	GAAGACNN!	1	917
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	12	585; 1156; 1324; 1375; 1384; 2911; 3157; 3549; 3908; 3920; 4006; 4017
BstYI	R!GATCY	12	585; 1156; 1324; 1375; 1384; 2911; 3157; 3549; 3908; 3920; 4006; 4017
BstZI	C!GGCCG	1	2646
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2169; 2959; 4460
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2580
Bsu36I	CC!TNAGG	3	875; 2220; 3852
BsuRI	GG!CC	28	84; 277; 683; 767; 1010; 1045; 1088; 1102; 1234; 1276; 1370; 1706; 1848; 2503; 2509; 2518; 2561; 2648; 2822; 3213; 3240; 3749; 3806; 3839; 4184; 4618; 4636; 4647
BsuTUI	AT!CGAT	1	2580
BtgI	C!CRYGG	5	360; 611; 1364; 2469; 3172
BtgZI	GCGATGNNNNNNNNNN!	2	1857; 3192
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3011; 3355
BthCI	GCNG!C	32	767; 818; 962; 1260; 1519; 2038; 2060; 2074; 2512; 2651; 2703; 2714; 2804; 2809; 2846; 2887; 2974; 2977; 2980; 3216; 3312; 3353; 3367; 3481; 3820; 3835; 4046; 4252; 4255; 4320; 4463; 4618
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	1131; 1579
BtsCI	GGATGNN!	4	2600; 3057; 3082; 3536
BtsCI	!CATCC	5	700; 788; 845; 1000; 2426
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	4	1136; 1298; 3008; 3458
BveI	!NNNNNNNNNGCAGGT	1	2627
Cac8I	GCN!NGC	32	86; 279; 593; 628; 718; 922; 1368; 1959; 2002; 2016; 2289; 2308; 2361; 2380; 2634; 2820; 3039; 3105; 3111; 3139; 3143; 3184; 3188; 3242; 3525; 3712; 3759; 3815; 3837; 4048; 4608; 4645
CaiI	CAGNNN!CTG	3	1283; 3841; 4249
CciI	T!CATGA	2	2166; 3938
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	5	352; 3029; 3034; 3232; 3373
CdiI	C!GATG	2	1843; 3178
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4612
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2401; 2443
CelII	GC!TNAGC	0	
CfoI	GCG!C	21	597; 2006; 2014; 2040; 2062; 2071; 2084; 2115; 2734; 2742; 2806; 2843; 3109; 3369; 3545; 3631; 4034; 4143; 4317; 4417; 4484
CfrI	Y!GGCCR	6	681; 1274; 2646; 2820; 3211; 3238
Cfr9I	C!CCGGG	1	1371
Cfr10I	R!CCGGY	5	600; 1957; 3059; 3240; 3523
Cfr13I	G!GNCC	13	83; 276; 766; 1009; 1101; 1206; 1369; 1847; 3256; 3701; 3747; 3805; 3838
Cfr42I	CCG!GG	1	1367
ChaI	GATC!	26	589; 636; 750; 900; 984; 1160; 1328; 1379; 1388; 1401; 2581; 2585; 2604; 2915; 2993; 3074; 3083; 3161; 3537; 3553; 3912; 3924; 4002; 4010; 4021; 4096
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	712; 2557; 3997; 4097; 4175

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	!NNNNNNNNNACNNNNNTGG	8	64; 257; 647; 2224; 2319; 3511; 4061; 4616
CjeI	ACNNNNNTGGNNNNNNNNNNNN!	8	98; 291; 681; 2258; 2353; 3545; 4095; 4650
CjeI	!NNNNNNNNCCANNNNNGT	5	678; 2523; 3963; 4063; 4141
CjePI	CCANNNNNTCANNNNNNNNNN!	2	3997; 4175
CjePI	!NNNNNNNGANNNNNNNTGG	3	257; 3511; 4110
CjePI	GANNNNNTGGNNNNNNNNNN!	3	290; 3544; 4143
CjePI	!NNNNNNCCANNNNNNNTC	2	3964; 4142
Clal	AT!CGAT	1	2580
CpoI	CG!GWCCG	1	3256
CseI	GACGCNNNN!	3	526; 3450; 3529
CseI	!NNNNNNNNNGCGTC	3	2073; 3968; 4546
CsiI	A!CCWGGT	1	2329
CspI	CG!GWCCG	1	3256
Csp6I	G!TAC	12	218; 243; 298; 331; 382; 539; 660; 810; 1062; 1281; 1361; 3045
Csp45I	TT!CGAA	2	1342; 3422
CspAI	A!CCGGT	1	600
CspCI	CAANNNNNGTGGNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTGNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNN!	3	1253; 2020; 3629
CstMI	!NNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	20	301; 361; 612; 645; 663; 807; 887; 2167; 2307; 2379; 2470; 2611; 2956; 3142; 3173; 3199; 3555; 3939; 4659; 4710
CviJI	RG!CY	95	42; 84; 93; 277; 566; 630; 683; 720; 767; 796; 803; 881; 947; 959; 1010; 1037; 1045; 1088; 1102; 1110; 1124; 1193; 1234; 1270; 1276; 1313; 1333; 1339; 1370; 1409; 1519; 1686; 1706; 1848; 1929; 1943; 1957; 2238; 2279; 2351; 2474; 2503; 2509; 2518; 2526; 2549; 2561; 2567; 2648; 2665; 2673; 2700; 2725; 2809; 2818; 2822; 2846; 2884; 2960; 2977; 2996; 3059; 3103; 3113; 3130; 3213; 3240; 3244; 3281; 3304; 3320; 3500; 3527; 3588; 3710; 3749; 3806; 3813; 3820; 3839; 3850; 4101; 4130; 4173; 4184; 4249; 4328; 4353; 4358; 4404; 4494; 4592; 4618; 4636; 4647
CviKI-1	RG!CY	95	42; 84; 93; 277; 566; 630; 683; 720; 767; 796; 803; 881; 947; 959; 1010; 1037; 1045; 1088; 1102; 1110; 1124; 1193; 1234; 1270; 1276; 1313; 1333; 1339; 1370; 1409; 1519; 1686; 1706; 1848; 1929; 1943; 1957; 2238; 2279; 2351; 2474; 2503; 2509; 2518; 2526; 2549; 2561; 2567; 2648; 2665; 2673; 2700; 2725; 2809; 2818; 2822; 2846; 2884; 2960; 2977; 2996; 3059; 3103; 3113; 3130; 3213; 3240; 3244; 3281; 3304; 3320; 3500; 3527; 3588; 3710; 3749; 3806; 3813; 3820; 3839; 3850; 4101; 4130; 4173; 4184; 4249; 4328; 4353; 4358; 4404; 4494; 4592; 4618; 4636; 4647
CviQI	G!TAC	12	218; 243; 298; 331; 382; 539; 660; 810; 1062; 1281; 1361; 3045
DdeI	C!TNAG	10	875; 1081; 1172; 1321; 2220; 2522; 3403; 3852; 3975; 4384
DinI	GGC!GCC	1	2741
DpnI	GA!TC	26	587; 634; 748; 898; 982; 1158; 1326; 1377; 1386; 1399; 2579; 2583; 2602; 2913; 2991; 3072; 3081; 3159; 3535; 3551; 3910; 3922; 4000; 4008; 4019; 4094
DpnII	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
DraI	TTT!AAA	3	1442; 3884; 3903
DraII	RG!GNCCY	1	3838
DraIII	CACNN!GTG	1	1856
DraRI	CAAGNACNNNNNNNNNNNNNNNN!	2	266; 4220
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1811; 2767; 4556
DrdIV	TACGACNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1811; 2767; 4556
EaeI	Y!GGCCR	6	681; 1274; 2646; 2820; 3211; 3238
EagI	C!GGCCG	1	2646
Eam1104I	CTCTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eam1104I	!NNNNGAAGAG	3	2207; 3084; 3294
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2207; 3084; 3294
EciI	GGCGANNNNNNNNNNN!	4	2240; 3269; 4456; 4602
EciI	!NNNNNNNNNTCCGCC	4	496; 2411; 2432; 2453
Ecl136II	GAG!CTC	1	1333
EclXI	C!GGCCG	1	2646
Eco24I	GRGCY!C	5	1335; 1372; 1931; 3105; 3815
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNGAGACC	2	1237; 3729
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1206; 3256; 3701
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	1	2646
Eco57I	CTGAAGNNNNNNNNNNNNNNN!	3	1126; 2886; 3318
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4116
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	875; 2220; 3852
Eco88I	C!YCGRG	2	1328; 1371
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 611; 2469; 2562; 3172; 3577
Eco147I	AGG!CCT	1	2561
EcoHI	!CCSGG	7	1188; 1370; 1371; 2742; 2902; 3515; 4279
EcoICRI	GAG!CTC	1	1333
Eco57MI	CTGRAGNNNNNNNNNNNNNNN!	4	1126; 2886; 3318; 3580
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	934; 3523; 4116
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3838
EcoRI	G!AATTC	1	1344
EcoRII	!CCWGG	15	88; 281; 791; 839; 935; 1276; 2274; 2329; 2346; 3125; 3704; 3807; 4497; 4510; 4631
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 611; 2469; 2562; 3172; 3577
EcoT22I	ATGCA!T	3	2312; 2384; 4715
EcoT38I	GRGCY!C	5	1335; 1372; 1931; 3105; 3815
Eco53kI	GAG!CTC	1	1333
EgeI	GGC!GCC	1	2741
EheI	GGC!GCC	1	2741
ErhI	C!CWWGG	6	360; 611; 2469; 2562; 3172; 3577
EsaBC3I	TC!GA	17	759; 786; 1254; 1330; 1343; 1356; 1890; 2581; 2854; 3010; 3034; 3070; 3232; 3423; 3468; 3723; 4561
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNGAGACG	0	
FaeI	CATG!	20	304; 364; 615; 648; 666; 810; 890; 2170; 2310; 2382; 2473; 2614; 2959; 3145; 3176; 3202; 3558; 3942; 4662; 4713
FaiI	YA!TR	59	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 613; 646; 664; 808; 888; 906; 1091; 1152; 1402; 1412; 1478; 1523; 1728; 2156; 2168; 2299; 2308; 2371; 2380; 2404; 2471; 2495; 2612; 2676; 2957; 2982; 3143; 3174; 3200; 3272; 3488; 3556; 3634; 3686; 3847; 3864; 3866; 3868; 3940; 4218; 4407; 4523; 4596; 4660; 4711
FalI	AAGNNNNNCTNNNNNNNNNNNN!	2	885; 3080
FalI	!NNNNNNNNAAGNNNNNCTT	2	853; 3048
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2891; 3423; 3532
FaqI	!NNNNNNNNNNNNNGTCCC	4	2256; 2328; 2392; 3687
FatI	!CATG	20	300; 360; 611; 644; 662; 806; 886; 2166; 2306; 2378; 2469; 2610; 2955; 3141; 3172; 3198; 3554; 3938; 4658; 4709
FauI	CCCGCNNNN!	10	93; 119; 286; 1074; 1176; 2062; 2417; 2438; 3634; 3766
FauI	!NNNNNNGCGGG	7	1111; 1359; 1993; 2863; 3400; 3538; 3685
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	1397
FblI	GT!MKAC	1	1355

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FmuI	GGNC!C	13	86; 279; 769; 1012; 1104; 1209; 1372; 1850; 3259; 3704; 3750; 3808; 3841
Fnu4HI	GC!NGC	32	765; 816; 960; 1258; 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
FokI	GGATGNNNNNNNNN!	4	2607; 3064; 3089; 3543
FokI	!NNNNNNNNNNNNNNCATCC	5	687; 775; 832; 987; 2413
FriOI	GRGCY!C	5	1335; 1372; 1931; 3105; 3815
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2842
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1295; 1388; 1589; 2007; 2563; 3578; 3912; 4165
FspEI	CCNNNNNNNNNNNN!	158	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 651; 687; 717; 734; 748; 781; 795; 813; 837; 852; 882; 915; 942; 957; 976; 1012; 1059; 1078; 1102; 1116; 1141; 1161; 1181; 1202; 1222; 1248; 1290; 1307; 1329; 1377; 1392; 1423; 1462; 1476; 1617; 1712; 1736; 1759; 1782; 1800; 1822; 1843; 1862; 1881; 1910; 1931; 1945; 1971; 2059; 2085; 2134; 2175; 2193; 2232; 2248; 2286; 2343; 2358; 2415; 2435; 2449; 2466; 2480; 2517; 2532; 2575; 2658; 2725; 2756; 2776; 2791; 2836; 2850; 2916; 2930; 2949; 2965; 3006; 3026; 3073; 3123; 3139; 3159; 3184; 3204; 3227; 3254; 3272; 3298; 3338; 3364; 3388; 3444; 3458; 3486; 3529; 3550; 3585; 3629; 3717; 3741; 3763; 3783; 3799; 3820; 3834; 3853; 3937; 3957; 3985; 4000; 4034; 4076; 4103; 4118; 4163; 4187; 4201; 4223; 4249; 4269; 4293; 4319; 4367; 4386; 4405; 4431; 4466; 4511; 4541; 4555; 4606; 4620; 4645; 4661; 4682; 4711
FspEI	!NNNNNNNNNNNNNNNGG	127	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 604; 649; 691; 712; 736; 778; 797; 826; 862; 899; 922; 941; 971; 992; 1019; 1061; 1084; 1103; 1175; 1201; 1252; 1288; 1343; 1367; 1411; 1511; 1580; 1688; 1737; 1759; 1787; 1823; 1868; 1897; 1933; 1952; 1980; 2000; 2063; 2086; 2194; 2226; 2244; 2273; 2316; 2345; 2456; 2485; 2528; 2549; 2577; 2610; 2630; 2655; 2682; 2707; 2729; 2757; 2783; 2804; 2855; 2876; 2894; 2942; 2978; 3034; 3059; 3083; 3112; 3135; 3159; 3185; 3207; 3226; 3251; 3291; 3327; 3392; 3477; 3501; 3530; 3564; 3585; 3605; 3650; 3677; 3696; 3729; 3781; 3812; 3839; 3891; 3989; 4060; 4105; 4166; 4231; 4265; 4291; 4309; 4345; 4415; 4438; 4460; 4484; 4517; 4565; 4600; 4618; 4675
Fsp4HI	GC!NGC	32	765; 816; 960; 1258; 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
GdiII	C!GGCCR	2	681; 2646
GdiII	Y!GGCCG	3	2646; 3211; 3238
GlaI	GC!GC	21	596; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
GluI	GC!NGC	32	765; 816; 960; 1258; 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
GsaI	CCCAG!C	3	2287; 2359; 4358
GsaI	GCTGG!G	2	1041; 3248
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3580
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	934; 3523
HaeI	WGG!CCW	8	1045; 1088; 1276; 2561; 2822; 4184; 4636; 4647
HaeII	RGCGC!Y	5	598; 2007; 2015; 2743; 4418
HaeIII	GG!CC	28	84; 277; 683; 767; 1010; 1045; 1088; 1102; 1234; 1276; 1370; 1706; 1848; 2503; 2509; 2518; 2561; 2648; 2822; 3213; 3240; 3749; 3806; 3839; 4184; 4618; 4636; 4647
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1415; 2936
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1381; 2902
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1414; 2935
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1383; 2904

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HapII	C!CGG	21	601; 1190; 1316; 1372; 1382; 1958; 2645; 2722; 2744; 2772; 2903; 2993; 3060; 3241; 3516; 3524; 3616; 4090; 4280; 4306; 4453
HgaI	GACGCNNNNN!	3	526; 3450; 3529
HgaI	!NNNNNNNNNGCGTC	3	2073; 3968; 4546
HhaI	GCG!C	21	597; 2006; 2014; 2040; 2062; 2071; 2084; 2115; 2734; 2742; 2806; 2843; 3109; 3369; 3545; 3631; 4034; 4143; 4317; 4417; 4484
Hin1I	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
Hin1III	CATG!	20	304; 364; 615; 648; 666; 810; 890; 2170; 2310; 2382; 2473; 2614; 2959; 3145; 3176; 3202; 3558; 3942; 4662; 4713
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1414; 2935
Hin4I	!NNNNNNNGABNNNNNRTC	3	1382; 2903; 2933
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1414; 2935; 2965
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1382; 2903
Hin6I	G!CGC	21	595; 2004; 2012; 2038; 2060; 2069; 2082; 2113; 2732; 2740; 2804; 2841; 3107; 3367; 3543; 3629; 4032; 4141; 4315; 4415; 4482
HinP1I	G!CGC	21	595; 2004; 2012; 2038; 2060; 2069; 2082; 2113; 2732; 2740; 2804; 2841; 3107; 3367; 3543; 3629; 4032; 4141; 4315; 4415; 4482
HincII	GTY!RAC	2	1356; 1503
HindII	GTY!RAC	2	1356; 1503
HindIII	A!AGCTT	1	1337
HinfI	G!ANTC	13	410; 1223; 1319; 1783; 1805; 2215; 3225; 3359; 3411; 3469; 3506; 4288; 4684
HpaI	GTT!AAC	1	1503
HpaII	C!CGG	21	601; 1190; 1316; 1372; 1382; 1958; 2645; 2722; 2744; 2772; 2903; 2993; 3060; 3241; 3516; 3524; 3616; 4090; 4280; 4306; 4453
HphI	GGTGANNNNNNN!	4	376; 1002; 3811; 3927
HphI	!NNNNNNNTCACC	3	891; 1857; 2918
Hpy8I	GTN!NAC	14	201; 539; 577; 678; 698; 993; 1206; 1213; 1356; 1503; 1787; 1804; 1859; 4346
Hpy99I	CGWCG!	9	1255; 1360; 2830; 2858; 3152; 3167; 3444; 3829; 4562
Hpy166II	GTN!NAC	14	201; 539; 577; 678; 698; 993; 1206; 1213; 1356; 1503; 1787; 1804; 1859; 4346
Hpy188I	TCN!GA	16	585; 639; 705; 1082; 1097; 1324; 1914; 2523; 2707; 3051; 3404; 3505; 3984; 4118; 4471; 4549
Hpy188III	TC!NNGA	26	951; 978; 1143; 1182; 1316; 1328; 1388; 2167; 2219; 2532; 2585; 2758; 3074; 3083; 3166; 3222; 3266; 3356; 3389; 3458; 3939; 4013; 4096; 4194; 4292; 4426
HpyAV	CCTCANNNNNN!	5	786; 879; 3385; 3492; 4171
HpyAV	!NNNNNGAAGG	8	706; 1973; 2868; 3597; 3613; 3796; 4113; 4423
HpyCH4III	ACN!GT	17	76; 198; 269; 543; 581; 659; 675; 1210; 1360; 1831; 3120; 3236; 3344; 3667; 4158; 4628; 4699
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 974; 1250; 1800; 1812; 1855; 1965; 2856; 3043; 3824; 3957
HpyCH4V	TG!CA	21	648; 698; 1020; 1131; 1351; 1489; 1516; 1584; 2301; 2310; 2373; 2382; 2497; 2573; 2632; 2791; 2966; 2980; 4050; 4346; 4713
HpyF3I	C!TNAG	10	875; 1081; 1172; 1321; 2220; 2522; 3403; 3852; 3975; 4384
HpyF10VI	GCNNNNN!NNGC	25	90; 212; 244; 283; 376; 400; 1967; 1997; 2024; 2066; 2307; 2379; 2430; 2509; 2731; 2815; 2838; 2977; 3100; 3183; 3450; 3637; 3841; 4040; 4612
Hsp92I	GR!CGYC	7	122; 175; 258; 444; 2740; 3442; 3521
Hsp92II	CATG!	20	304; 364; 615; 648; 666; 810; 890; 2170; 2310; 2382; 2473; 2614; 2959; 3145; 3176; 3202; 3558; 3942; 4662; 4713
HspAI	G!CGC	21	595; 2004; 2012; 2038; 2060; 2069; 2082; 2113; 2732; 2740; 2804; 2841; 3107; 3367; 3543; 3629; 4032; 4141; 4315; 4415; 4482
KasI	G!GCGCC	1	2739
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	1	1364
Kpn2I	T!CCGGA	1	1315
KspI	CCGC!GG	1	1367
Ksp22I	T!GATCA	1	1397
KspAI	GTT!AAC	1	1503

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Kzo9I	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3084; 3294
LpnI	RGC!GCGY	5	596; 2005; 2013; 2741; 4416
LpnPI	CCDGNNNNNNNNNN!	60	102; 295; 614; 748; 805; 853; 887; 949; 964; 1025; 1117; 1141; 1203; 1290; 1329; 1385; 1477; 1782; 1971; 2194; 2232; 2248; 2288; 2343; 2360; 2460; 2545; 2658; 2735; 2757; 2780; 2916; 2930; 2949; 3006; 3073; 3123; 3139; 3196; 3254; 3463; 3529; 3553; 3629; 3718; 3821; 3854; 4085; 4103; 4249; 4269; 4293; 4319; 4368; 4466; 4511; 4541; 4620; 4645; 4682
LpnPI	!NNNNNNNNNNNNNCHGG	54	75; 268; 552; 586; 778; 826; 922; 1023; 1175; 1201; 1263; 1288; 1357; 1823; 1943; 2000; 2063; 2261; 2273; 2333; 2345; 2577; 2622; 2665; 2707; 2729; 2757; 2804; 2866; 2888; 2978; 3045; 3068; 3112; 3207; 3226; 3251; 3400; 3501; 3544; 3601; 3691; 3794; 3821; 3839; 4075; 4112; 4265; 4291; 4431; 4449; 4484; 4565; 4618
Lsp1109I	GCAGCNNNNNNNN!	8	827; 1269; 1528; 2813; 2855; 3376; 3829; 4329
Lsp1109I	!NNNNNNNNNNNGCTGC	7	946; 2022; 2687; 2871; 2964; 4030; 4236
LweI	GCATCNNNNN!	7	854; 1556; 2319; 2391; 3039; 3103; 3378
LweI	!NNNNNNNNNGATGC	8	357; 1007; 1046; 1175; 2698; 2953; 3169; 4561
MabI	A!CCWGGT	1	2329
MaeI	C!TAG	9	592; 1295; 1388; 1589; 2007; 2563; 3578; 3912; 4165
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 974; 1250; 1800; 1812; 1855; 1965; 2856; 3043; 3824; 3957
MaeIII	!GTNAC	12	61; 148; 497; 1528; 2029; 2041; 2860; 3166; 3856; 4122; 4238; 4301
MalI	GA!TC	26	587; 634; 748; 898; 982; 1158; 1326; 1377; 1386; 1399; 2579; 2583; 2602; 2913; 2991; 3072; 3081; 3159; 3535; 3551; 3910; 3922; 4000; 4008; 4019; 4094
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2164; 3353
MbiI	GAG!CGG	2	2000; 3407
MboI	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
MboII	GAAGANNNNNNNN!	7	922; 1035; 1996; 2224; 3101; 3311; 3930
MboII	!NNNNNNNTCTTC	4	3391; 3558; 3758; 4001
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1490
MfII	R!GATCY	12	585; 1156; 1324; 1375; 1384; 2911; 3157; 3549; 3908; 3920; 4006; 4017
MhII	GDGCH!C	14	673; 700; 733; 1310; 1335; 1372; 1931; 2686; 2779; 2853; 3043; 3105; 3815; 4348
MisI	TGG!CCA	2	1276; 2822
MluI	A!CGCGT	1	1626
MluNI	TGG!CCA	2	1276; 2822
MlyI	GAGTCNNNNN!	2	1792; 2224
MlyI	!NNNNNGACTC	5	404; 1313; 1799; 3405; 4282
Mly113I	GG!CGCC	1	2740
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	2	1028; 1833
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	2	4265; 4449
MnII	CCTCNNNNNNN!	12	779; 958; 973; 1150; 1189; 1459; 2523; 3341; 3547; 3861; 4231; 4555
MnII	!NNNNNGAGG	23	541; 612; 660; 699; 720; 753; 870; 887; 1035; 1078; 1224; 1419; 1884; 2215; 2493; 2536; 2551; 2591; 2655; 2791; 3148; 3578; 4481
Mph1103I	ATGCA!T	3	2312; 2384; 4715
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1315
MroNI	G!CCGGC	3	1957; 3240; 3523
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1276; 2822
MseI	T!TAA	16	7; 860; 1441; 1502; 1623; 1644; 1655; 1667; 1678; 1695; 1793; 2064; 3883; 3897; 3902; 3954

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MslI	CAYNN!NNRTG	3	365; 1054; 3177
MspI	C!CGG	21	601; 1190; 1316; 1372; 1382; 1958; 2645; 2722; 2744; 2772; 2903; 2993; 3060; 3241; 3516; 3524; 3616; 4090; 4280; 4306; 4453
Msp20I	TGG!CCA	2	1276; 2822
MspA1I	CMG!CKG	7	1069; 1076; 1366; 2238; 2846; 4075; 4320
MspCI	C!TTAAG	0	
MspJI	CNNRRNNNNNNNN!	242	36; 50; 71; 97; 113; 127; 147; 167; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 624; 639; 657; 675; 705; 723; 738; 752; 771; 804; 819; 847; 862; 886; 899; 915; 933; 947; 963; 976; 990; 1011; 1024; 1045; 1058; 1078; 1093; 1108; 1123; 1140; 1153; 1167; 1180; 1194; 1215; 1228; 1247; 1266; 1289; 1302; 1315; 1328; 1342; 1355; 1377; 1394; 1408; 1423; 1447; 1464; 1477; 1518; 1532; 1545; 1563; 1601; 1616; 1634; 1675; 1699; 1719; 1737; 1758; 1781; 1813; 1828; 1850; 1868; 1881; 1902; 1919; 1932; 1945; 1961; 1974; 2004; 2019; 2044; 2062; 2075; 2090; 2114; 2128; 2152; 2177; 2193; 2231; 2247; 2286; 2300; 2314; 2342; 2358; 2372; 2386; 2415; 2428; 2449; 2458; 2480; 2510; 2526; 2544; 2574; 2597; 2621; 2645; 2664; 2692; 2718; 2734; 2747; 2770; 2784; 2804; 2817; 2831; 2850; 2864; 2877; 2893; 2908; 2921; 2937; 2952; 2968; 2993; 3012; 3028; 3041; 3054; 3072; 3086; 3100; 3116; 3138; 3154; 3173; 3195; 3211; 3234; 3253; 3267; 3283; 3297; 3317; 3333; 3346; 3368; 3401; 3415; 3435; 3448; 3462; 3516; 3529; 3552; 3565; 3584; 3601; 3628; 3664; 3697; 3716; 3741; 3762; 3789; 3802; 3819; 3833; 3848; 3864; 3924; 3949; 3965; 3987; 4000; 4014; 4045; 4059; 4084; 4102; 4117; 4130; 4149; 4162; 4177; 4206; 4225; 4243; 4268; 4283; 4302; 4318; 4337; 4355; 4371; 4385; 4404; 4431; 4454; 4476; 4495; 4510; 4523; 4540; 4560; 4587; 4600; 4619; 4644; 4667; 4681; 4694; 4711
MspJI	!NNNNNNNNNNNNNYNG	196	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 598; 623; 649; 679; 703; 721; 745; 764; 786; 826; 847; 873; 893; 922; 964; 998; 1019; 1039; 1066; 1090; 1114; 1147; 1168; 1187; 1213; 1235; 1258; 1276; 1301; 1322; 1351; 1368; 1392; 1421; 1450; 1492; 1575; 1613; 1637; 1660; 1689; 1733; 1755; 1787; 1823; 1840; 1861; 1898; 1918; 1935; 1952; 1987; 2005; 2023; 2040; 2064; 2086; 2113; 2141; 2167; 2205; 2226; 2243; 2261; 2284; 2305; 2333; 2356; 2377; 2395; 2416; 2433; 2456; 2480; 2500; 2518; 2540; 2571; 2593; 2619; 2638; 2655; 2683; 2702; 2721; 2739; 2757; 2778; 2800; 2824; 2857; 2877; 2895; 2916; 2942; 2969; 2986; 3003; 3020; 3046; 3068; 3090; 3108; 3128; 3147; 3169; 3207; 3227; 3251; 3271; 3291; 3318; 3342; 3375; 3394; 3422; 3444; 3473; 3501; 3526; 3545; 3564; 3585; 3602; 3619; 3650; 3677; 3697; 3720; 3740; 3777; 3794; 3813; 3839; 3859; 3898; 3925; 3944; 3962; 3999; 4017; 4058; 4076; 4102; 4119; 4151; 4180; 4208; 4229; 4252; 4271; 4292; 4310; 4327; 4345; 4371; 4392; 4412; 4432; 4450; 4471; 4497; 4514; 4533; 4552; 4581; 4600; 4618; 4637; 4655; 4673; 4696
MspR9I	CC!NGG	22	90; 283; 793; 841; 937; 1190; 1278; 1372; 1373; 2276; 2331; 2348; 2744; 2904; 3127; 3517; 3706; 3809; 4281; 4499; 4512; 4633
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1490
MvaI	CC!WGG	15	90; 283; 793; 841; 937; 1278; 2276; 2331; 2348; 3127; 3706; 3809; 4499; 4512; 4633
Mva1269I	GAATGCN!	1	1491
Mva1269I	G!CATTC	1	1584
MvnI	CG!CG	16	60; 1366; 1628; 1664; 2040; 2060; 2084; 2115; 2806; 3107; 3545; 3629; 3692; 3761; 4034; 4615
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	25	90; 212; 244; 283; 376; 400; 1967; 1997; 2024; 2066; 2307; 2379; 2430; 2509; 2731; 2815; 2838; 2977; 3100; 3183; 3450; 3637; 3841; 4040; 4612
NaeI	GCC!GGC	3	1959; 3242; 3525
NarI	GG!CGCC	1	2740
NciI	CC!SGG	7	1190; 1372; 1373; 2744; 2904; 3517; 4281
NcoI	C!CATGG	4	360; 611; 2469; 3172
NdeI	CA!TATG	1	234

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NdeII	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	737
NgoAVIII	TCANNNNGTCNNNNNNNNNNNN!	1	773
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1957; 3240; 3523
NheI	G!CTAGC	1	591
NlaIII	CATG!	20	304; 364; 615; 648; 666; 810; 890; 2170; 2310; 2382; 2473; 2614; 2959; 3145; 3176; 3202; 3558; 3942; 4662; 4713
NlaIV	GGN!NCC	19	467; 672; 732; 1362; 1370; 1377; 1895; 1916; 1928; 2119; 2280; 2352; 2741; 2776; 3624; 3703; 3748; 4591; 4630
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1572; 1887; 3479
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 997; 4551
Nli3877I	CYCGR!G	2	1332; 1375
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2529; 2965
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	1013; 2494
NmeDI	RCCGGYNNNNNNNN!	5	612; 1969; 3071; 3252; 3535
NmeDI	!NNNNNNNNNNNNRCCGGY	5	587; 1944; 3046; 3227; 3510
NmuCI	!GTSAC	3	2029; 2860; 3166
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2842
NsiI	ATGCA!T	3	2312; 2384; 4715
NspI	RCATG!Y	5	648; 2310; 2382; 3145; 4662
NspV	TT!CGAA	2	1342; 3422
OliI	CACNN!NNGTG	0	
PabI	GTA!C	12	220; 245; 300; 333; 384; 541; 662; 812; 1064; 1283; 1363; 3047
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2310; 2382; 3145
PaeR7I	C!TCGAG	1	1328
PagI	T!CATGA	2	2166; 3938
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	840; 3705; 3808
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2561
PciI	A!CATGT	1	4658
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3084; 3294
PcsI	WCGNNNN!NNNCGW	7	1259; 3034; 3111; 3354; 3428; 3821; 4339
PctI	GAATGCN!	1	1491
PctI	G!CATTC	1	1584
PdiI	GCC!GGC	3	1959; 3242; 3525
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	6	1223; 3225; 3359; 3469; 3506; 4684
PfiI23II	C!GTACG	0	
PfifiI	GACN!NNGTC	1	2858
PfimiI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	1	3515
PhoI	GG!CC	28	84; 277; 683; 767; 1010; 1045; 1088; 1102; 1234; 1276; 1370; 1706; 1848; 2503; 2509; 2518; 2561; 2648; 2822; 3213; 3240; 3749; 3806; 3839; 4184; 4618; 4636; 4647
PinAI	A!CCGGT	1	600
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3121
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2686; 2941
PleI	GAGTCNNNN!	2	1791; 2223
PleI	!NNNNNGACTC	5	404; 1313; 1799; 3405; 4282
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1822
PpiI	!NNNNNNNGAGNNNNNGTTC	1	3952
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	3984

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1790
Ppsi	GAGTCNNNN!	2	1791; 2223
Ppsi	!NNNNNGACTC	5	404; 1313; 1799; 3405; 4282
Ppu10I	A!TGCAT	3	2308; 2380; 4711
Ppu21I	YAC!GTR	3	340; 1856; 3044
PpuMI	RG!GWCCY	0	
Psci	A!CATGT	1	4658
PshAI	GACNN!NNGTC	2	1076; 1249
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1523; 1728
Psp03I	GGWC!C	3	1209; 3259; 3704
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	15	88; 281; 791; 839; 935; 1276; 2274; 2329; 2346; 3125; 3704; 3807; 4497; 4510; 4631
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	1335
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	15	88; 281; 791; 839; 935; 1276; 2274; 2329; 2346; 3125; 3704; 3807; 4497; 4510; 4631
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	19	467; 672; 732; 1362; 1370; 1377; 1895; 1916; 1928; 2119; 2280; 2352; 2741; 2776; 3624; 3703; 3748; 4591; 4630
PspOMI	G!GGCCC	1	1368
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	3	125; 2470; 3469
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2872
PspPI	G!GNCC	13	83; 276; 766; 1009; 1101; 1206; 1369; 1847; 3256; 3701; 3747; 3805; 3838
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2293; 2365; 3871
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	861; 1289; 2206; 3401
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
Pssi	RGGNC!CY	1	3841
PstI	CTGCA!G	1	1353
PstNI	CAGNNN!CTG	3	1283; 3841; 4249
PsuI	R!GATCY	12	585; 1156; 1324; 1375; 1384; 2911; 3157; 3549; 3908; 3920; 4006; 4017
PsyI	GACN!NNGTC	1	2858
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2238; 2846
RcaI	T!CATGA	2	2166; 3938
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3255
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	1	1469
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; 661; 811; 1063; 1282; 1362; 3046
RsaNI	G!TAC	12	218; 243; 298; 331; 382; 539; 660; 810; 1062; 1281; 1361; 3045
RseI	CAYNN!NNRTG	3	365; 1054; 3177
RsrII	CG!GWCCG	1	3256
Rsr2I	CG!GWCCG	1	3256
SacI	GAGCT!C	1	1335
SacII	CCGC!GG	1	1367

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SaI	G!TCGAC	1	1354
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3084; 3294
SaqAI	T!TAA	16	7; 860; 1441; 1502; 1623; 1644; 1655; 1667; 1678; 1695; 1793; 2064; 3883; 3897; 3902; 3954
SatI	GC!NGC	32	765; 816; 960; 1258; 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
Sau96I	G!GNCC	13	83; 276; 766; 1009; 1101; 1206; 1369; 1847; 3256; 3701; 3747; 3805; 3838
Sau3AI	!GATC	26	585; 632; 746; 896; 980; 1156; 1324; 1375; 1384; 1397; 2577; 2581; 2600; 2911; 2989; 3070; 3079; 3157; 3533; 3549; 3908; 3920; 3998; 4006; 4017; 4092
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1792; 2224
SchI	!NNNNNGACTC	5	404; 1313; 1799; 3405; 4282
SciI	CTC!GAG	1	1330
ScrFI	CC!NGG	22	90; 283; 793; 841; 937; 1190; 1278; 1372; 1373; 2276; 2331; 2348; 2744; 2904; 3127; 3517; 3706; 3809; 4281; 4499; 4512; 4633
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNNNN!	5	1047; 2318; 2390; 2559; 4501
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2895; 3380
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	14	673; 700; 733; 1310; 1335; 1372; 1931; 2686; 2779; 2853; 3043; 3105; 3815; 4348
SelI	!CGCG	16	58; 1364; 1626; 1662; 2038; 2058; 2082; 2113; 2804; 3105; 3543; 3627; 3690; 3759; 4032; 4613
SetI	ASST!	65	125; 137; 178; 261; 308; 342; 447; 552; 568; 632; 742; 755; 805; 826; 977; 1112; 1130; 1181; 1249; 1253; 1282; 1292; 1315; 1335; 1341; 1430; 1451; 1460; 1472; 1521; 1688; 1803; 1815; 1858; 1895; 1945; 1968; 2092; 2240; 2335; 2528; 2641; 2769; 2848; 2859; 2931; 3002; 3046; 3306; 3452; 3496; 3827; 3858; 3917; 3960; 4103; 4124; 4223; 4360; 4375; 4394; 4406; 4450; 4496; 4547
SexAI	A!CCWGGT	1	2329
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	854; 1556; 2319; 2391; 3039; 3103; 3378
SfaNI	!NNNNNNNNNGATGC	8	357; 1007; 1046; 1175; 2698; 2953; 3169; 4561
Sfcl	C!TRYAG	4	1349; 2075; 4202; 4393
SfiI	GGCCNNNN!NGGCC	1	2515
SfoI	GGC!GCC	1	2741
Sfr274I	C!TCGAG	1	1328
Sfr303I	CCGC!GG	1	1367
Sful	TT!CGAA	2	1342; 3422
SgeI	CNNGNNNNNNNNNN!	188	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 624; 639; 657; 675; 705; 729; 747; 762; 804; 819; 852; 886; 899; 927; 948; 963; 990; 1024; 1045; 1065; 1078; 1116; 1131; 1155; 1173; 1194; 1215; 1228; 1266; 1289; 1302; 1315; 1328; 1342; 1377; 1394; 1447; 1476; 1518; 1601; 1639; 1675; 1759; 1781; 1813; 1850; 1868; 1887; 1902; 1944; 1961; 1978; 2013; 2027; 2044; 2066; 2090; 2114; 2179; 2193; 2231; 2247; 2287; 2300; 2319; 2342; 2359; 2372; 2391; 2421; 2442; 2459; 2482; 2517; 2544; 2575; 2597; 2623; 2645; 2664; 2692; 2728; 2747; 2770; 2784; 2804; 2817; 2831; 2850; 2864; 2883; 2915; 2929; 2942; 2968; 2999; 3012; 3029; 3046; 3060; 3077; 3095; 3110; 3138; 3154; 3173; 3195; 3211; 3234; 3253; 3278; 3297; 3317; 3344; 3368; 3401; 3420; 3448; 3462; 3528; 3552; 3567; 3590; 3611; 3628; 3676; 3703; 3717; 3746; 3770; 3803; 3820; 3840; 3853; 3866; 3924; 3951; 3970; 4000; 4025; 4045; 4059; 4084; 4102; 4139; 4177; 4206; 4234; 4248; 4268; 4283; 4304; 4318; 4337; 4355; 4371; 4411; 4431; 4458; 4476; 4497; 4510; 4523; 4540; 4564; 4587; 4619; 4644; 4671; 4693

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNCNG	163	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 598; 625; 649; 679; 703; 721; 745; 778; 826; 860; 901; 922; 964; 998; 1019; 1039; 1090; 1114; 1147; 1168; 1189; 1213; 1240; 1263; 1281; 1302; 1322; 1351; 1368; 1421; 1450; 1492; 1575; 1613; 1649; 1733; 1755; 1787; 1824; 1842; 1861; 1918; 1935; 1952; 1987; 2005; 2025; 2045; 2064; 2088; 2153; 2205; 2261; 2293; 2316; 2333; 2365; 2395; 2416; 2433; 2456; 2491; 2518; 2549; 2571; 2597; 2619; 2638; 2666; 2702; 2721; 2744; 2765; 2783; 2800; 2824; 2857; 2889; 2916; 2942; 2973; 3003; 3020; 3046; 3069; 3090; 3112; 3132; 3152; 3169; 3208; 3227; 3252; 3271; 3291; 3318; 3342; 3375; 3394; 3422; 3444; 3502; 3526; 3545; 3564; 3585; 3602; 3650; 3677; 3697; 3720; 3744; 3777; 3794; 3814; 3840; 3898; 3925; 3944; 3974; 3999; 4019; 4058; 4076; 4113; 4151; 4180; 4208; 4229; 4257; 4278; 4311; 4329; 4385; 4405; 4432; 4450; 4471; 4497; 4514; 4538; 4561; 4593; 4618; 4645; 4667; 4696
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	1367
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1887; 3674; 4467
SimI	!GACCC	4	106; 3168; 3736; 3984
SinI	G!GWCC	3	1206; 3256; 3701
SlaI	C!TCGAG	1	1328
SmaI	CCC!GGG	1	1373
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	3	365; 1054; 3177
SmlI	C!TYRAG	8	1141; 1180; 1328; 1334; 3131; 4013; 4290; 4552
SmoI	C!TYRAG	8	1141; 1180; 1328; 1334; 3131; 4013; 4290; 4552
SmuI	CCCGCNNNN!	10	93; 119; 286; 1074; 1176; 2062; 2417; 2438; 3634; 3766
SmuI	!NNNNNNGCGGG	7	1111; 1359; 1993; 2863; 3400; 3538; 3685
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2310; 2382; 3145
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1344; 1490; 1554; 1632; 1658; 1669; 2316; 2388; 2480; 3898
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2561
SsiI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 929; 1067; 1169; 1364; 2055; 2058; 2072; 2162; 2410; 2422; 2431; 2443; 2453; 2464; 2510; 2649; 2712; 3214; 3259; 3325; 3351; 3476; 3479; 3627; 3759; 4066; 4210; 4706
SsiI	G!CGG	27	370; 403; 528; 764; 1076; 1118; 1366; 2000; 2027; 2115; 2225; 2806; 2870; 2971; 2974; 3254; 3309; 3407; 3545; 3692; 3832; 4075; 4320; 4441; 4460; 4587; 4615
SspI	AAT!ATT	2	1648; 2201
SspDI	G!GCGCC	1	2739
SspD5I	GGTGANNNNNNNN!	4	376; 1002; 3811; 3927
SspD5I	!NNNNNNNNTCACC	3	890; 1856; 2917
SstI	GAGCT!C	1	1335
SstII	CCGC!GG	1	1367
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	1	935
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 857; 1073; 1175; 1196; 1378; 1939; 2061; 2416; 2437; 2750; 3153; 3292; 3363; 3633; 3765; 3995; 4433
Sth132I	!NNNNNNNNCGGG	22	15; 407; 470; 906; 978; 1110; 1358; 1940; 1992; 2093; 2820; 2862; 2895; 3399; 3508; 3537; 3684; 3788; 3819; 4272; 4316; 4524
Sth302II	CC!GG	21	602; 1191; 1317; 1373; 1383; 1959; 2646; 2723; 2745; 2773; 2904; 2994; 3061; 3242; 3517; 3525; 3617; 4091; 4281; 4307; 4454
StrI	C!TCGAG	1	1328
StsI	GGATGNNNNNNNNNN!	4	2608; 3065; 3090; 3544
StsI	!NNNNNNNNNNNNNCATCC	5	686; 774; 831; 986; 2412
StuI	AGG!CCT	1	2561

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyI	C!CWWGG	6	360; 611; 2469; 2562; 3172; 3577
StyD4I	!CCNGG	22	88; 281; 791; 839; 935; 1188; 1276; 1370; 1371; 2274; 2329; 2346; 2742; 2902; 3125; 3515; 3704; 3807; 4279; 4497; 4510; 4631
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	17	76; 198; 269; 543; 581; 659; 675; 1210; 1360; 1831; 3120; 3236; 3344; 3667; 4158; 4628; 4699
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 977; 1253; 1803; 1815; 1858; 1968; 2859; 3046; 3827; 3960
TaqI	T!CGA	17	758; 785; 1253; 1329; 1342; 1355; 1889; 2580; 2853; 3009; 3033; 3069; 3231; 3422; 3467; 3722; 4560
TaqII	GACCGANNNNNNNNNNN!	3	1760; 2777; 3445
TaqII	!NNNNNNNNNTCGGTC	1	3689
TaqII	CACCCANNNNNNNNNNN!	2	748; 853
TaqII	!NNNNNNNNNTGGGTG	3	172; 2644; 3236
TasI	!AATT	11	18; 1344; 1490; 1554; 1632; 1658; 1669; 2316; 2388; 2480; 3898
TatI	W!GTACW	5	217; 297; 330; 381; 659
TauI	GCSG!C	16	767; 2060; 2074; 2512; 2651; 2714; 2809; 2974; 2977; 3216; 3312; 3353; 3481; 3835; 4463; 4618
TfiI	G!AWTC	6	1223; 3225; 3359; 3469; 3506; 4684
TiiI	C!TCGAG	1	1328
TruII	T!TAA	16	7; 860; 1441; 1502; 1623; 1644; 1655; 1667; 1678; 1695; 1793; 2064; 3883; 3897; 3902; 3954
Tru9I	T!TAA	16	7; 860; 1441; 1502; 1623; 1644; 1655; 1667; 1678; 1695; 1793; 2064; 3883; 3897; 3902; 3954
TscAI	CASTGNN!	6	1138; 1586; 2869; 3979; 4250; 4263
TseI	G!CWGC	16	815; 959; 1257; 1516; 2035; 2700; 2801; 2843; 2884; 2977; 3364; 3817; 4043; 4249; 4252; 4317
TsoI	TARCCANNNNNNNNNNN!	2	1712; 2059
TsoI	!NNNNNNNNNTGGYTA	3	784; 1517; 3269
Tsp45I	!GTSAC	3	2029; 2860; 3166
Tsp509I	!AATT	11	18; 1344; 1490; 1554; 1632; 1658; 1669; 2316; 2388; 2480; 3898
TspDTI	ATGAANNNNNNNNNNN!	3	1498; 2799; 3503
TspDTI	!NNNNNNNNNTTCAT	5	26; 795; 3217; 3673; 3880
TspEI	!AATT	11	18; 1344; 1490; 1554; 1632; 1658; 1669; 2316; 2388; 2480; 3898
TspGWI	ACGGANNNNNNNNNNN!	1	3615
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	1371
TspRI	CASTGNN!	6	1138; 1586; 2869; 3979; 4250; 4263
TstI	CACNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNCCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2858
Tth111II	CAARCANNNNNNNNNNN!	1	4067
Tth111II	!NNNNNNNNNTGYTTG	3	3175; 4035; 4074
UnbI	!GGNCC	13	82; 275; 765; 1008; 1100; 1205; 1368; 1846; 3255; 3700; 3746; 3804; 3837
Van9II	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	2	696; 4344
VpaK11AI	!GGWCC	3	1205; 3255; 3700
VpaK11BI	G!GWCC	3	1206; 3256; 3701
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	1344; 1554; 1658; 1669
XbaI	T!CTAGA	1	1387
XceI	RCATG!Y	5	648; 2310; 2382; 3145; 4662
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	1	1328
XhoII	R!GATCY	12	585; 1156; 1324; 1375; 1384; 2911; 3157; 3549; 3908; 3920; 4006; 4017
XmaI	C!CCGGG	1	1371

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XmaJI	C!CTAGG	2	2562; 3577
XmiI	GT!MKAC	1	1355
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1295; 1388; 1589; 2007; 2563; 3578; 3912; 4165
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2312; 2384; 4715