

## pFusionRed-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	1529; 1734
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1817; 2773; 4562
AatI	AGG!CCT	2	1039; 2567
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	2	1190; 1361
AccII	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
AccIII	T!CCGGA	1	1321
Acc16I	TGC!GCA	1	2848
Acc36I	ACCTGCNNNN!	2	3014; 3464
Acc36I	!NNNNNNNNGCAGGT	1	2633
Acc65I	G!GTACC	1	1366
AccB1I	G!GYRCC	7	465; 664; 724; 1366; 1899; 2745; 2780
AccB7I	CCANNNN!NTGG	1	1209
AccBSI	CCG!CTC	2	2170; 3359
AccBSI	GAG!CGG	2	2006; 3413
AceIII	CAGTCNNNNNNN!	1	1702
AceIII	!NNNNNNNNNNGAGCTG	2	552; 610
AciI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1370; 2061; 2064; 2078; 2168; 2416; 2428; 2437; 2449; 2459; 2470; 2516; 2655; 2718; 3220; 3265; 3331; 3357; 3482; 3485; 3633; 3765; 4072; 4216; 4712
AciI	G!CGG	27	370; 403; 528; 758; 1070; 1112; 1372; 2006; 2033; 2121; 2231; 2812; 2876; 2977; 2980; 3260; 3315; 3413; 3551; 3698; 3838; 4081; 4326; 4447; 4466; 4593; 4621
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	9	1389; 1398; 2614; 2925; 3171; 3563; 3922; 4020; 4106
AclWI	!NNNNNGATCC	7	580; 1145; 1376; 2990; 3534; 3921; 4018
AcoI	Y!GGCCR	5	1268; 2652; 2826; 3217; 3244
AcsI	R!AATY	4	1350; 1560; 1664; 1675
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	3	1120; 2892; 3324
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4122
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
AdeI	CACNNN!GTG	2	1260; 1862
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 655; 805; 1057; 1368; 3052
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	20	49; 721; 1000; 1066; 1209; 1758; 2084; 2476; 2727; 3271; 3552; 3584; 3716; 3751; 3801; 3833; 4186; 4465; 4631; 4649
AfII	C!TTAAG	0	
AfIII	A!CRYGT	2	1632; 4664
AgeI	A!CCGGT	1	600
AgsI	TTS!AA	6	687; 2157; 2201; 2211; 2624; 4200
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	15	88; 281; 785; 929; 944; 1073; 2280; 2335; 2352; 3131; 3710; 3813; 4503; 4516; 4637
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	1	613
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2320; 2392
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2286; 2358
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1828
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1796
AluI	AG!CT	18	566; 624; 651; 797; 1104; 1339; 1345; 1525; 1692; 1949; 2244; 2532; 2852; 3310; 4107; 4364; 4410; 4500
AluBI	AG!CT	18	566; 624; 651; 797; 1104; 1339; 1345; 1525; 1692; 1949; 2244; 2532; 2852; 3310; 4107; 4364; 4410; 4500
AlwI	GGATCNNNN!	9	1389; 1398; 2614; 2925; 3171; 3563; 3922; 4020; 4106
AlwI	!NNNNNGATCC	7	580; 1145; 1376; 2990; 3534; 3921; 4018
Alw21I	GWGCW!C	5	694; 1341; 2859; 3049; 4354
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	7	1042; 1132; 1231; 2170; 2588; 3607; 3735
Alw44I	G!TGCAC	2	690; 4350
AlwNI	CAGNN!CTG	2	3847; 4255
Ama87I	C!YCGRG	2	1334; 1377
Aor13HI	T!CCGGA	1	1321
Aor51HI	AG!GCT	1	596
ApaI	GGGCC!C	1	1378
ApaBI	GCANNNNN!TGC	3	2314; 2386; 3848
ApaLI	G!TGCAC	2	690; 4350
ApeKI	G!CWGC	16	809; 953; 1251; 1522; 2041; 2706; 2807; 2849; 2890; 2983; 3370; 3823; 4049; 4255; 4258; 4323
ApoI	R!AATTY	4	1350; 1560; 1664; 1675
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3261
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3055; 3708; 4546
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3145
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	785
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	2	1338; 2574
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3316
ArsI	GACNNNNNTTYGNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	23	586; 1125; 1151; 1331; 1382; 1391; 1404; 2584; 2588; 2607; 2918; 2996; 3077; 3086; 3164; 3540; 3556; 3915; 3927; 4005; 4013; 4024; 4099
AsiGI	A!CCGGT	1	600
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2864
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	1366
AspA2I	C!CTAGG	2	2568; 3583
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	23	597; 1084; 1291; 2012; 2020; 2046; 2068; 2077; 2090; 2121; 2740; 2748; 2812; 2849; 3115; 3375; 3551; 3637; 4040; 4149; 4323; 4423; 4490
AspS9I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1200; 1375; 1853; 3262; 3707; 3753; 3811; 3844
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	1348; 3428
AsuC2I	CC!SGG	7	836; 1184; 1379; 2750; 2910; 3523; 4287
AsuHPI	GGTGANNNNNNNNN!	6	376; 627; 996; 1306; 3817; 3933
AsuHPI	!NNNNNNNTCACC	3	885; 1863; 2924
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	1334; 1377
AvaII	G!GWCC	3	1200; 3262; 3707
AviII	TGC!GCA	1	2848
AvrII	C!CTAGG	2	2568; 3583

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	3	869; 2226; 3858
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	7	667; 694; 727; 1378; 2692; 2785; 4354
BalI	TGG!CCA	2	1270; 2828
BamHI	G!GATCC	1	1381
BanI	G!GYRCC	7	465; 664; 724; 1366; 1899; 2745; 2780
BanII	GRGCY!C	5	1341; 1378; 1937; 3111; 3821
BanIII	AT!CGAT	1	2586
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNNN!NTGG	1	1209
BauI	C!ACGAG	3	1255; 3464; 4491
BauI	C!TCGTG	2	1105; 3338
BbeI	GGCGC!C	1	2749
Bbr7I	GAAGACNNNNNN!	1	916
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	911
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2316; 2388; 3151
BbvI	GCAGCNNNNNNN!	8	821; 1263; 1534; 2819; 2861; 3382; 3835; 4335
BbvI	!NNNNNNNNNNNGCTGC	7	940; 2028; 2693; 2877; 2970; 4036; 4242
Bbv12I	GWGCW!C	5	694; 1341; 2859; 3049; 4354
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	4	1876; 2440; 2966; 3468
BccI	!NNNNNGATGG	4	1291; 1844; 2624; 3052
BceAI	ACGGCNNNNNNNNNNNN!	6	822; 966; 1017; 1083; 3172; 3659
BceAI	!NNNNNNNNNNNNNGCCGT	3	1887; 2705; 4164
Bcefl	ACGGCNNNNNNNNNNNN!	6	822; 966; 1017; 1083; 3172; 3659
Bcefl	!NNNNNNNNNNNNNGCCGT	3	1888; 2706; 4165
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2175; 2965; 4466
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	1403
BcnI	CC!SGG	7	836; 1184; 1379; 2750; 2910; 3523; 4287
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	2	1426; 4599
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	2	1392; 4565
BfaI	C!TAG	8	592; 1394; 1595; 2013; 2569; 3584; 3918; 4171
BfiI	ACTGGGNNNNN!	1	2695
BfiI	!NNNNCCCAGT	2	289; 2447
BfmI	C!TRYAG	4	1355; 2081; 4208; 4399
BfoI	RGCGC!Y	6	598; 1292; 2013; 2021; 2749; 4424
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	3	2175; 2965; 4466
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	3014; 3464
BfuAI	!NNNNNNNNNGCAGGT	1	2633
BfuCI	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1079; 2521
BglII	A!GATCT	1	1330

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BisI	GC!NGC	33	759; 810; 954; 1071; 1252; 1523; 2042; 2064; 2078; 2516; 2655; 2707; 2718; 2808; 2813; 2850; 2891; 2978; 2981; 2984; 3220; 3316; 3357; 3371; 3485; 3824; 3839; 4050; 4256; 4259; 4324; 4467; 4622
BlnI	C!CTAGG	2	2568; 3583
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	33	760; 811; 955; 1072; 1253; 1524; 2043; 2065; 2079; 2517; 2656; 2708; 2719; 2809; 2814; 2851; 2892; 2979; 2982; 2985; 3221; 3317; 3358; 3372; 3486; 3825; 3840; 4051; 4257; 4260; 4325; 4468; 4623
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	1200; 3262; 3707
Bme1390I	CC!NGG	22	90; 283; 787; 836; 931; 946; 1075; 1184; 1379; 2282; 2337; 2354; 2750; 2910; 3133; 3523; 3712; 3815; 4287; 4505; 4518; 4639
BmeRI	GACNN!NNGTC	0	
BmeT110I	C!YCGRG	2	1334; 1377
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	84; 277; 761; 1004; 1096; 1117; 1201; 1376; 1854; 3263; 3708; 3754; 3812; 3845
BmiI	GGN!NCC	21	467; 666; 726; 1117; 1320; 1368; 1376; 1383; 1901; 1922; 1934; 2125; 2286; 2358; 2747; 2782; 3630; 3709; 3754; 4597; 4636
BmrI	ACTGGGNNNNN!	1	2695
BmrI	!NNNNCCCAGT	2	289; 2447
BmrFI	CC!NGG	22	90; 283; 787; 836; 931; 946; 1075; 1184; 1379; 2282; 2337; 2354; 2750; 2910; 3133; 3523; 3712; 3815; 4287; 4505; 4518; 4639
BmsI	GCATCNNNNN!	7	848; 1562; 2325; 2397; 3045; 3109; 3384
BmsI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2704; 2959; 3175; 4567
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2695
BmuI	!NNNNCCCAGT	2	289; 2447
BoxI	GACNN!NNGTC	1	1243
BpiI	GAAGACNN!	1	911
BpiI	!NNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2535; 3434
BpI	!NNNNNNNGAGNNNNNNCTC	2	2503; 3402
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3586
BpmI	!NNNNNNNNNNNNNNNCTCCAG	2	928; 3529
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	1348; 3428
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	911
BpuAI	!NNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	3	1156; 4040; 4579
BpuEI	!NNNNNNNNNNNNNCTCAAG	4	1159; 1325; 3122; 4281
BpuMI	CC!SGG	7	836; 1184; 1379; 2750; 2910; 3523; 4287
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	1132; 1231; 3735
Bsa29I	AT!CGAT	1	2586
BsaAI	YAC!GTR	3	340; 1862; 3050
BsaBI	GATNN!NNATC	2	1408; 2605
BsaHI	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
BsaJI	C!CNNGG	20	360; 611; 698; 929; 1370; 1377; 2280; 2352; 2475; 2510; 2519; 2568; 2909; 3178; 3583; 3710; 3711; 3813; 3814; 4504
BsaMI	GAATGCN!	1	1497
BsaMI	G!CATTC	1	1590
BsaWI	W!CCGGW	7	600; 1321; 1387; 2777; 3621; 4311; 4458
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1826
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1796

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1747; 3654
Bsc4I	CCNNNN!NNGG	20	49; 721; 1000; 1066; 1209; 1758; 2084; 2476; 2727; 3271; 3552; 3584; 3716; 3751; 3801; 3833; 4186; 4465; 4631; 4649
BscAI	GCATCNNNN!	7	847; 1561; 2324; 2396; 3044; 3108; 3383
BscAI	!NNNNNNGATGC	7	360; 1004; 1172; 2707; 2962; 3178; 4570
Bse1I	ACTGGN!	5	1214; 1287; 2690; 2891; 4137
Bse1I	C!CAGT	5	295; 1775; 2453; 4249; 4262
Bse8I	GATNN!NNATC	2	1408; 2605
Bse21I	CC!TNAGG	3	869; 2226; 3858
Bse118I	R!CCGGY	5	600; 1963; 3065; 3246; 3529
BseAI	T!CCGGA	1	1321
BseBI	CC!WGG	15	90; 283; 787; 931; 946; 1075; 2282; 2337; 2354; 3133; 3712; 3815; 4505; 4518; 4639
BseCI	AT!CGAT	1	2586
BseDI	C!CNNGG	20	360; 611; 698; 929; 1370; 1377; 2280; 2352; 2475; 2510; 2519; 2568; 2909; 3178; 3583; 3710; 3711; 3813; 3814; 4504
Bse3DI	GCAATGNN!	1	2979
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2606; 3063; 3088; 3542
BseGI	!CATCC	4	694; 782; 839; 2432
BseJI	GATNN!NNATC	2	1408; 2605
BseLI	CCNNNN!NNGG	20	49; 721; 1000; 1066; 1209; 1758; 2084; 2476; 2727; 3271; 3552; 3584; 3716; 3751; 3801; 3833; 4186; 4465; 4631; 4649
BseMI	GCAATGNN!	1	2979
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	1341; 3872
BseMII	!NNNNNNNNCTGAG	6	860; 2217; 2519; 3400; 3972; 4381
BseNI	ACTGGN!	5	1214; 1287; 2690; 2891; 4137
BseNI	C!CAGT	5	295; 1775; 2453; 4249; 4262
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	2	1328; 2564
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGC!C	7	667; 694; 727; 1378; 2692; 2785; 4354
BseXI	GCAGCNNNNNNNN!	8	821; 1263; 1534; 2819; 2861; 3382; 3835; 4335
BseXI	!NNNNNNNNNNNGCTGC	7	940; 2028; 2693; 2877; 2970; 4036; 4242
BseX3I	C!GGCCG	1	2652
BseYI	C!CCAGC	4	993; 2289; 2361; 4360
BseYI	G!CTGGG	2	1031; 3250
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
Bsh1285I	CGRY!CG	3	605; 2655; 4330
BshFI	GG!CC	28	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1376; 1712; 1854; 2509; 2515; 2524; 2567; 2654; 2828; 3219; 3246; 3755; 3812; 3845; 4190; 4624; 4642; 4653
BshNI	G!GYRCC	7	465; 664; 724; 1366; 1899; 2745; 2780
BshTI	A!CCGGT	1	600
BshVI	AT!CGAT	1	2586
BsiEI	CGRY!CG	3	605; 2655; 4330
BsiHKAI	GWGCW!C	5	694; 1341; 2859; 3049; 4354
BsiHKCI	C!YCGRG	2	1334; 1377
BsiSI	C!CGG	22	601; 835; 1184; 1322; 1378; 1388; 1964; 2651; 2728; 2750; 2778; 2909; 2999; 3066; 3247; 3522; 3530; 3622; 4096; 4286; 4312; 4459
BsiWI	C!GTACG	0	
BsII	CCNNNN!NNGG	20	49; 721; 1000; 1066; 1209; 1758; 2084; 2476; 2727; 3271; 3552; 3584; 3716; 3751; 3801; 3833; 4186; 4465; 4631; 4649
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2897; 3429; 3538
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2262; 2334; 2398; 3693
BsmI	GAATGCN!	1	1497
BsmI	G!CATTC	1	1590
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	7	1042; 1132; 1231; 2170; 2588; 3607; 3735
BsmBI	CGTCTCN!	0	

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BsmBI	!NNNNNGAGACG	1	1042
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2897; 3429; 3538
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2262; 2334; 2398; 3693
BsnI	GG!CC	28	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1376; 1712; 1854; 2509; 2515; 2524; 2567; 2654; 2828; 3219; 3246; 3755; 3812; 3845; 4190; 4624; 4642; 4653
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	3	1132; 1231; 3735
BsoBI	C!YCGRG	2	1334; 1377
Bsp13I	T!CCGGA	1	1321
Bsp19I	C!CATGG	4	360; 611; 2475; 3178
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3549
Bsp24I	!NNNNNNCCANNNNNGTC	2	3970; 4148
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	4002; 4180
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3517
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	1348; 3428
Bsp120I	G!GGCCC	1	1374
Bsp143I	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
Bsp1286I	GDGCH!C	13	667; 694; 727; 1341; 1378; 1937; 2692; 2785; 2859; 3049; 3111; 3821; 4354
Bsp1407I	T!GTACA	1	653
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1370; 2061; 2064; 2078; 2168; 2416; 2428; 2437; 2449; 2459; 2470; 2516; 2655; 2718; 3220; 3265; 3331; 3357; 3482; 3485; 3633; 3765; 4072; 4216; 4712
BspACI	G!CGG	27	370; 403; 528; 758; 1070; 1112; 1372; 2006; 2033; 2121; 2231; 2812; 2876; 2977; 2980; 3260; 3315; 3413; 3551; 3698; 3838; 4081; 4326; 4447; 4466; 4593; 4621
BspCNI	CTCAGNNNNNNNN!	2	1340; 3871
BspCNI	!NNNNNNCTGAG	6	861; 2218; 2520; 3401; 3973; 4382
BspDI	AT!CGAT	1	2586
BspD6I	GACTCNNNN!	5	418; 1333; 1819; 3425; 4302
BspD6I	!NNNNNGAGTC	3	883; 1782; 2214
BspEI	T!CCGGA	1	1321
BspFNI	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
BspHI	T!CATGA	2	2172; 3944
BspLI	GGN!NCC	21	467; 666; 726; 1117; 1320; 1368; 1376; 1383; 1901; 1922; 1934; 2125; 2286; 2358; 2747; 2782; 3630; 3709; 3754; 4597; 4636
BspMI	ACCTGCNNNN!	2	3014; 3464
BspMI	!NNNNNNNGCAGGT	1	2633
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	1389; 1398; 2614; 2925; 3171; 3563; 3922; 4020; 4106
BspPI	!NNNNNGATCC	7	580; 1145; 1376; 2990; 3534; 3921; 4018
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3090; 3300
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	2	1348; 3428
BspT107I	G!GYRCC	7	465; 664; 724; 1366; 1899; 2745; 2780
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	1132; 1231; 3735
BsrI	ACTGGN!	5	1214; 1287; 2690; 2891; 4137
BsrI	C!CAGT	5	295; 1775; 2453; 4249; 4262
BsrBI	CCG!CTC	2	2170; 3359
BsrBI	GAG!CGG	2	2006; 3413
BsrDI	GCAATGNN!	1	2979
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	600; 1963; 3065; 3246; 3529
BsrGI	T!GTACA	1	653
BsrSI	ACTGGN!	5	1214; 1287; 2690; 2891; 4137
BsrSI	C!CAGT	5	295; 1775; 2453; 4249; 4262

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssAI	R!CCGGY	5	600; 1963; 3065; 3246; 3529
BssECI	C!CNNGG	20	360; 611; 698; 929; 1370; 1377; 2280; 2352; 2475; 2510; 2519; 2568; 2909; 3178; 3583; 3710; 3711; 3813; 3814; 4504
BssHII	G!CGCGC	0	
BssKI	!CCNGG	22	88; 281; 785; 834; 929; 944; 1073; 1182; 1377; 2280; 2335; 2352; 2748; 2908; 3131; 3521; 3710; 3813; 4285; 4503; 4516; 4637
BssMI	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
BssNI	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1255; 3464; 4491
BssSI	C!TCGTG	2	1105; 3338
BssT1I	C!CWWGG	6	360; 611; 2475; 2568; 3178; 3583
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2213; 3090; 3300
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	3	2313; 2385; 3847
BstAUI	T!GTACA	1	653
BstBI	TT!CGAA	2	1348; 3428
Bst2BI	C!ACGAG	3	1255; 3464; 4491
Bst2BI	C!TCGTG	2	1105; 3338
BstBAI	YAC!GTR	3	340; 1862; 3050
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 669; 1366; 1837; 3126; 3242; 3350; 3673; 4164; 4634; 4705
BstC8I	GCN!NGC	32	86; 279; 593; 622; 712; 916; 1374; 1965; 2008; 2022; 2295; 2314; 2367; 2386; 2640; 2826; 3045; 3111; 3117; 3145; 3149; 3190; 3194; 3248; 3531; 3718; 3765; 3821; 3843; 4054; 4614; 4651
BstDEI	C!TNAG	8	869; 1327; 2226; 2528; 3409; 3858; 3981; 4390
BstDSI	C!CRYGG	5	360; 611; 1370; 2475; 3178
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2606; 3063; 3088; 3542
BstF5I	!CATCC	4	694; 782; 839; 2432
BstFNI	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
BstH2I	RGCGC!Y	6	598; 1292; 2013; 2021; 2749; 4424
BstHHI	GCG!C	23	597; 1084; 1291; 2012; 2020; 2046; 2068; 2077; 2090; 2121; 2740; 2748; 2812; 2849; 3115; 3375; 3551; 3637; 4040; 4149; 4323; 4423; 4490
BstKTI	GAT!C	23	588; 1127; 1153; 1333; 1384; 1393; 1406; 2586; 2590; 2609; 2920; 2998; 3079; 3088; 3166; 3542; 3558; 3917; 3929; 4007; 4015; 4026; 4101
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	7	1042; 1132; 1231; 2170; 2588; 3607; 3735
BstMBI	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
BstMCI	CGRY!CG	3	605; 2655; 4330
BstMWI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 648; 1079; 1973; 2003; 2030; 2072; 2313; 2385; 2436; 2515; 2737; 2821; 2844; 2983; 3106; 3189; 3456; 3643; 3847; 4046; 4618
BstNI	CC!WGG	15	90; 283; 787; 931; 946; 1075; 2282; 2337; 2354; 3133; 3712; 3815; 4505; 4518; 4639
BstNSI	RCATG!Y	6	642; 1088; 2316; 2388; 3151; 4668
BstOI	CC!WGG	15	90; 283; 787; 931; 946; 1075; 2282; 2337; 2354; 3133; 3712; 3815; 4505; 4518; 4639
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1243
BstSCI	!CCNGG	22	88; 281; 785; 834; 929; 944; 1073; 1182; 1377; 2280; 2335; 2352; 2748; 2908; 3131; 3521; 3710; 3813; 4285; 4503; 4516; 4637

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSFI	C!TRYAG	4	1355; 2081; 4208; 4399
BstSLI	GKGC!C	7	667; 694; 727; 1378; 2692; 2785; 4354
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
Bst2UI	CC!WGG	15	90; 283; 787; 931; 946; 1075; 2282; 2337; 2354; 3133; 3712; 3815; 4505; 4518; 4639
BstV1I	GCAGC!NNNNNNNN!	8	821; 1263; 1534; 2819; 2861; 3382; 3835; 4335
BstV1I	!NNNNNNNNNNNGCTGC	7	940; 2028; 2693; 2877; 2970; 4036; 4242
BstV2I	GAAGACNN!	1	911
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANN!NN!NTGG	0	
BstX2I	R!GATCY	12	585; 1150; 1330; 1381; 1390; 2917; 3163; 3555; 3914; 3926; 4012; 4023
BstYI	R!GATCY	12	585; 1150; 1330; 1381; 1390; 2917; 3163; 3555; 3914; 3926; 4012; 4023
BstZI	C!GGCCG	1	2652
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2175; 2965; 4466
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2586
Bsu36I	CC!TNAGG	3	869; 2226; 3858
BsuRI	GG!CC	28	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1376; 1712; 1854; 2509; 2515; 2524; 2567; 2654; 2828; 3219; 3246; 3755; 3812; 3845; 4190; 4624; 4642; 4653
BsuTUI	AT!CGAT	1	2586
BtgI	C!CRYGG	5	360; 611; 1370; 2475; 3178
BtgZI	GCGATGNNNNNNNNNN!	2	1863; 3198
BtgZI	!NNNNNNNNNNNNNNNNCATCGC	3	334; 3017; 3361
BthCI	GCNG!C	33	761; 812; 956; 1073; 1254; 1525; 2044; 2066; 2080; 2518; 2657; 2709; 2720; 2810; 2815; 2852; 2893; 2980; 2983; 2986; 3222; 3318; 3359; 3373; 3487; 3826; 3841; 4052; 4258; 4261; 4326; 4469; 4624
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1585
BtsCI	GGATGNN!	4	2606; 3063; 3088; 3542
BtsCI	!CATCC	4	694; 782; 839; 2432
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3014; 3464
BveI	!NNNNNNNNNGCAGGT	1	2633
Cac8I	GCN!NGC	32	86; 279; 593; 622; 712; 916; 1374; 1965; 2008; 2022; 2295; 2314; 2367; 2386; 2640; 2826; 3045; 3111; 3117; 3145; 3149; 3190; 3194; 3248; 3531; 3718; 3765; 3821; 3843; 4054; 4614; 4651
CaiI	CAGNNN!CTG	2	3847; 4255
CciI	T!CATGA	2	2172; 3944
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	5	352; 3035; 3040; 3238; 3379
CdiI	C!GATG	4	1052; 1233; 1849; 3184
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4618
CdpI	!NNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2407; 2449
CelII	GC!TNAGC	0	
CfoI	GCG!C	23	597; 1084; 1291; 2012; 2020; 2046; 2068; 2077; 2090; 2121; 2740; 2748; 2812; 2849; 3115; 3375; 3551; 3637; 4040; 4149; 4323; 4423; 4490
CfrI	Y!GGCCR	5	1268; 2652; 2826; 3217; 3244
Cfr9I	C!CCGGG	1	1377
Cfr10I	R!CCGGY	5	600; 1963; 3065; 3246; 3529
Cfr13I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1200; 1375; 1853; 3262; 3707; 3753; 3811; 3844
Cfr42I	CCG!GG	1	1373
ChaI	GATC!	23	589; 1128; 1154; 1334; 1385; 1394; 1407; 2587; 2591; 2610; 2921; 2999; 3080; 3089; 3167; 3543; 3559; 3918; 3930; 4008; 4016; 4027; 4102
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	706; 2563; 4003; 4103; 4181



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	!NNNNNNNNNACNNNNNTGG	7	64; 257; 2230; 2325; 3517; 4067; 4622
CjeI	ACNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2264; 2359; 3551; 4101; 4656
CjeI	!NNNNNNNNCCANNNNNGT	5	672; 2529; 3969; 4069; 4147
CjePI	CCANNNNNTCANNNNNNNNNN!	2	4003; 4181
CjePI	!NNNNNNNGANNNNNNNTGG	3	257; 3517; 4116
CjePI	GANNNNNTGGNNNNNNNNNNNN!	3	290; 3550; 4149
CjePI	!NNNNNNCCANNNNNNNTC	2	3970; 4148
ClaI	AT!CGAT	1	2586
CpoI	CG!GWCCG	1	3262
CseI	GACGCNNNNN!	3	526; 3456; 3535
CseI	!NNNNNNNNNGCGTC	4	1176; 2079; 3974; 4552
CsiI	A!CCWGGT	1	2335
CspI	CG!GWCCG	1	3262
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1367; 3051
Csp45I	TT!CGAA	2	1348; 3428
CspAI	A!CCGGT	1	600
CspCI	CAANNNNNGTGGNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTGNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNN!	4	656; 1247; 2026; 3635
CstMI	!NNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	24	301; 361; 612; 639; 645; 657; 735; 801; 881; 1085; 1092; 2173; 2313; 2385; 2476; 2617; 2962; 3148; 3179; 3205; 3561; 3945; 4665; 4716
CviJI	RG!CY	94	42; 84; 93; 277; 566; 624; 651; 714; 761; 790; 797; 875; 941; 953; 997; 1004; 1031; 1039; 1073; 1096; 1104; 1118; 1228; 1264; 1270; 1339; 1345; 1376; 1415; 1525; 1692; 1712; 1854; 1935; 1949; 1963; 2244; 2285; 2357; 2480; 2509; 2515; 2524; 2532; 2555; 2567; 2573; 2654; 2671; 2679; 2706; 2731; 2815; 2824; 2828; 2852; 2890; 2966; 2983; 3002; 3065; 3109; 3119; 3136; 3219; 3246; 3250; 3287; 3310; 3326; 3506; 3533; 3594; 3716; 3755; 3812; 3819; 3826; 3845; 3856; 4107; 4136; 4179; 4190; 4255; 4334; 4359; 4364; 4410; 4500; 4598; 4624; 4642; 4653
CviKI-1	RG!CY	94	42; 84; 93; 277; 566; 624; 651; 714; 761; 790; 797; 875; 941; 953; 997; 1004; 1031; 1039; 1073; 1096; 1104; 1118; 1228; 1264; 1270; 1339; 1345; 1376; 1415; 1525; 1692; 1712; 1854; 1935; 1949; 1963; 2244; 2285; 2357; 2480; 2509; 2515; 2524; 2532; 2555; 2567; 2573; 2654; 2671; 2679; 2706; 2731; 2815; 2824; 2828; 2852; 2890; 2966; 2983; 3002; 3065; 3109; 3119; 3136; 3219; 3246; 3250; 3287; 3310; 3326; 3506; 3533; 3594; 3716; 3755; 3812; 3819; 3826; 3845; 3856; 4107; 4136; 4179; 4190; 4255; 4334; 4359; 4364; 4410; 4500; 4598; 4624; 4642; 4653
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1367; 3051
DdeI	C!TNAG	8	869; 1327; 2226; 2528; 3409; 3858; 3981; 4390
DinI	GGC!GCC	1	2747
DpnI	GA!TC	23	587; 1126; 1152; 1332; 1383; 1392; 1405; 2585; 2589; 2608; 2919; 2997; 3078; 3087; 3165; 3541; 3557; 3916; 3928; 4006; 4014; 4025; 4100
DpnII	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
DraI	TTT!AAA	3	1448; 3890; 3909
DraII	RG!GNCCY	1	3844
DraIII	CACNNN!GTG	2	1260; 1862
DraRI	CAAGNACNNNNNNNNNNNNNNNN!	3	266; 851; 4226
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1817; 2773; 4562
DrdIV	TACGACNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1817; 2773; 4562
EaeI	Y!GGCCR	5	1268; 2652; 2826; 3217; 3244
EagI	C!GGCCG	1	2652
Eam1104I	CTCTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2213; 3090; 3300

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	3	2213; 3090; 3300
EciI	GGCGGANNNNNNNNNN!	4	2246; 3275; 4462; 4608
EciI	!NNNNNNNNNTCCGCC	4	496; 2417; 2438; 2459
Ecl136II	GAG!CTC	1	1339
EclXI	C!GGCCG	1	2652
Eco24I	GRGCY!C	5	1341; 1378; 1937; 3111; 3821
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	3	1132; 1231; 3735
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1200; 3262; 3707
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	1	2652
Eco57I	CTGAAGNNNNNNNNNNNNNN!	3	1120; 2892; 3324
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4122
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	869; 2226; 3858
Eco88I	C!YCGRG	2	1334; 1377
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 611; 2475; 2568; 3178; 3583
Eco147I	AGG!CCT	2	1039; 2567
EcoHI	!CCSGG	7	834; 1182; 1377; 2748; 2908; 3521; 4285
EcoICRI	GAG!CTC	1	1339
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	4	1120; 2892; 3324; 3586
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	928; 3529; 4122
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3844
EcoRI	G!AATTC	1	1350
EcoRII	!CCWGG	15	88; 281; 785; 929; 944; 1073; 2280; 2335; 2352; 3131; 3710; 3813; 4503; 4516; 4637
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 611; 2475; 2568; 3178; 3583
EcoT22I	ATGCA!T	3	2318; 2390; 4721
EcoT38I	GRGCY!C	5	1341; 1378; 1937; 3111; 3821
Eco53kl	GAG!CTC	1	1339
EgeI	GGC!GCC	1	2747
EheI	GGC!GCC	1	2747
ErhI	C!CWWGG	6	360; 611; 2475; 2568; 3178; 3583
EsaBC3I	TC!GA	17	753; 780; 1248; 1336; 1349; 1362; 1896; 2587; 2860; 3016; 3040; 3076; 3238; 3429; 3474; 3729; 4567
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	1	1042
FaeI	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1088; 1095; 2176; 2316; 2388; 2479; 2620; 2965; 3151; 3182; 3208; 3564; 3948; 4668; 4719
Fail	YA!TR	62	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 613; 640; 646; 658; 736; 802; 882; 900; 1086; 1093; 1146; 1408; 1418; 1484; 1529; 1734; 2162; 2174; 2305; 2314; 2377; 2386; 2410; 2477; 2501; 2618; 2682; 2963; 2988; 3149; 3180; 3206; 3278; 3494; 3562; 3640; 3692; 3853; 3870; 3872; 3874; 3946; 4224; 4413; 4529; 4602; 4666; 4717
FalI	AAGNNNNCTTNNNNNNNNNNNN!	2	879; 3086
FalI	!NNNNNNNNAAGNNNNNNCTT	2	847; 3054
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2897; 3429; 3538
FaqI	!NNNNNNNNNNNNNGTCCC	4	2262; 2334; 2398; 3693
FatI	!CATG	24	300; 360; 611; 638; 644; 656; 734; 800; 880; 1084; 1091; 2172; 2312; 2384; 2475; 2616; 2961; 3147; 3178; 3204; 3560; 3944; 4664; 4715
FauI	CCCGCNNNN!	10	93; 119; 286; 1068; 1170; 2068; 2423; 2444; 3640; 3772
FauI	!NNNNNNGCGGG	7	1105; 1365; 1999; 2869; 3406; 3544; 3691
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	1403
FblI	GT!MKAC	2	1190; 1361

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FmuI	GGNC!C	14	86; 279; 763; 1006; 1098; 1119; 1203; 1378; 1856; 3265; 3710; 3756; 3814; 3847
Fnu4HI	GC!NGC	33	759; 810; 954; 1071; 1252; 1523; 2042; 2064; 2078; 2516; 2655; 2707; 2718; 2808; 2813; 2850; 2891; 2978; 2981; 2984; 3220; 3316; 3357; 3371; 3485; 3824; 3839; 4050; 4256; 4259; 4324; 4467; 4622
FokI	GGATGNNNNNNNNN!	4	2613; 3070; 3095; 3549
FokI	!NNNNNNNNNNNNNNCATCC	4	681; 769; 826; 2419
FriOI	GRGCY!C	5	1341; 1378; 1937; 3111; 3821
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2848
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1394; 1595; 2013; 2569; 3584; 3918; 4171
FspEI	CCNNNNNNNNNNNN!	157	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 681; 711; 728; 742; 775; 789; 807; 831; 845; 876; 909; 936; 951; 970; 1006; 1053; 1072; 1087; 1110; 1132; 1147; 1167; 1186; 1216; 1242; 1284; 1335; 1383; 1398; 1429; 1468; 1482; 1623; 1718; 1742; 1765; 1788; 1806; 1828; 1849; 1868; 1887; 1916; 1937; 1951; 1977; 2065; 2091; 2140; 2181; 2199; 2238; 2254; 2292; 2349; 2364; 2421; 2441; 2455; 2472; 2486; 2523; 2538; 2581; 2664; 2731; 2762; 2782; 2797; 2842; 2856; 2922; 2936; 2955; 2971; 3012; 3032; 3079; 3129; 3145; 3165; 3190; 3210; 3233; 3260; 3278; 3304; 3344; 3370; 3394; 3450; 3464; 3492; 3535; 3556; 3591; 3635; 3723; 3747; 3769; 3789; 3805; 3826; 3840; 3859; 3943; 3963; 3991; 4006; 4082; 4109; 4124; 4169; 4193; 4207; 4229; 4255; 4275; 4299; 4325; 4373; 4392; 4411; 4437; 4472; 4517; 4547; 4561; 4612; 4626; 4651; 4667; 4688; 4717
FspEI	!NNNNNNNNNNNNNNNGG	129	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 616; 643; 685; 706; 730; 772; 791; 820; 856; 893; 916; 935; 958; 986; 1013; 1052; 1078; 1097; 1169; 1195; 1243; 1268; 1286; 1307; 1349; 1373; 1417; 1517; 1586; 1694; 1743; 1765; 1793; 1829; 1874; 1903; 1939; 1958; 1986; 2006; 2069; 2092; 2200; 2232; 2250; 2279; 2322; 2351; 2462; 2491; 2534; 2555; 2583; 2616; 2636; 2661; 2688; 2713; 2735; 2763; 2789; 2810; 2861; 2882; 2900; 2948; 2984; 3040; 3065; 3089; 3118; 3141; 3165; 3191; 3213; 3232; 3257; 3297; 3333; 3398; 3483; 3507; 3536; 3570; 3591; 3611; 3656; 3683; 3702; 3735; 3787; 3818; 3845; 3897; 3995; 4066; 4111; 4172; 4237; 4271; 4297; 4315; 4351; 4421; 4444; 4466; 4490; 4523; 4571; 4606; 4624; 4681
Fsp4HI	GC!NGC	33	759; 810; 954; 1071; 1252; 1523; 2042; 2064; 2078; 2516; 2655; 2707; 2718; 2808; 2813; 2850; 2891; 2978; 2981; 2984; 3220; 3316; 3357; 3371; 3485; 3824; 3839; 4050; 4256; 4259; 4324; 4467; 4622
GdiII	C!GGCCR	1	2652
GdiII	Y!GGCCG	3	2652; 3217; 3244
GlaI	GC!GC	23	596; 1083; 1290; 2011; 2019; 2045; 2067; 2076; 2089; 2120; 2739; 2747; 2811; 2848; 3114; 3374; 3550; 3636; 4039; 4148; 4322; 4422; 4489
GluI	GC!NGC	33	759; 810; 954; 1071; 1252; 1523; 2042; 2064; 2078; 2516; 2655; 2707; 2718; 2808; 2813; 2850; 2891; 2978; 2981; 2984; 3220; 3316; 3357; 3371; 3485; 3824; 3839; 4050; 4256; 4259; 4324; 4467; 4622
GsaI	CCCAG!C	4	997; 2293; 2365; 4364
GsaI	GCTGG!G	2	1035; 3254
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3586
GsuI	!NNNNNNNNNNNNNNNCTCCAG	2	928; 3529
HaeI	WGG!CCW	7	1039; 1270; 2567; 2828; 4190; 4642; 4653
HaeII	RGCG!Y	6	598; 1292; 2013; 2021; 2749; 4424
HaeIII	GG!CC	28	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1376; 1712; 1854; 2509; 2515; 2524; 2567; 2654; 2828; 3219; 3246; 3755; 3812; 3845; 4190; 4624; 4642; 4653
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1421; 2942
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1387; 2908
HaeIV	GAYNNNNNNRTCNNNNNNNNNNNNNN!	2	1420; 2941
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1389; 2910
HapII	C!CGG	22	601; 835; 1184; 1322; 1378; 1388; 1964; 2651; 2728; 2750; 2778; 2909; 2999; 3066; 3247; 3522; 3530; 3622; 4096; 4286; 4312; 4459

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HgaI	GACGCNNNNN!	3	526; 3456; 3535
HgaI	!NNNNNNNNNNNGCGTC	4	1176; 2079; 3974; 4552
HhaI	GCG!C	23	597; 1084; 1291; 2012; 2020; 2046; 2068; 2077; 2090; 2121; 2740; 2748; 2812; 2849; 3115; 3375; 3551; 3637; 4040; 4149; 4323; 4423; 4490
Hin1I	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
Hin1II	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1088; 1095; 2176; 2316; 2388; 2479; 2620; 2965; 3151; 3182; 3208; 3564; 3948; 4668; 4719
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1420; 2941
Hin4I	!NNNNNNNNNGABNNNNNNRTC	3	1388; 2909; 2939
Hin4I	GABNNNNNNRTCNNNNNNNNNNNN!	3	1420; 2941; 2971
Hin4I	!NNNNNNNNNGAYNNNNNVTC	2	1388; 2909
Hin6I	G!CGC	23	595; 1082; 1289; 2010; 2018; 2044; 2066; 2075; 2088; 2119; 2738; 2746; 2810; 2847; 3113; 3373; 3549; 3635; 4038; 4147; 4321; 4421; 4488
HinP1I	G!CGC	23	595; 1082; 1289; 2010; 2018; 2044; 2066; 2075; 2088; 2119; 2738; 2746; 2810; 2847; 3113; 3373; 3549; 3635; 4038; 4147; 4321; 4421; 4488
HincII	GTY!RAC	2	1362; 1509
HindII	GTY!RAC	2	1362; 1509
HindIII	A!AGCTT	1	1343
HinfI	G!ANTC	15	410; 740; 890; 1217; 1325; 1789; 1811; 2221; 3231; 3365; 3417; 3475; 3512; 4294; 4690
HpaI	GTT!AAC	1	1509
HpaII	C!CGG	22	601; 835; 1184; 1322; 1378; 1388; 1964; 2651; 2728; 2750; 2778; 2909; 2999; 3066; 3247; 3522; 3530; 3622; 4096; 4286; 4312; 4459
HphI	GGTGANNNNNNN!	6	376; 627; 996; 1306; 3817; 3933
HphI	!NNNNNNNTCACC	3	885; 1863; 2924
Hpy8I	GTN!NAC	14	201; 539; 577; 672; 692; 987; 1191; 1200; 1362; 1509; 1793; 1810; 1865; 4352
Hpy99I	CGWCG!	11	754; 1234; 1249; 1366; 2836; 2864; 3158; 3173; 3450; 3835; 4568
Hpy166II	GTN!NAC	14	201; 539; 577; 672; 692; 987; 1191; 1200; 1362; 1509; 1793; 1810; 1865; 4352
Hpy188I	TCN!GA	13	585; 699; 1330; 1920; 2529; 2713; 3057; 3410; 3511; 3990; 4124; 4477; 4555
Hpy188III	TC!NNGA	23	1176; 1322; 1334; 1394; 2173; 2225; 2538; 2591; 2764; 3080; 3089; 3172; 3228; 3272; 3362; 3395; 3464; 3945; 4019; 4102; 4200; 4298; 4432
HpyAV	CCTTCNNNNNN!	6	780; 828; 873; 3391; 3498; 4177
HpyAV	!NNNNNGAAGG	9	700; 1072; 1979; 2874; 3603; 3619; 3802; 4119; 4429
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 669; 1366; 1837; 3126; 3242; 3350; 3673; 4164; 4634; 4705
HpyCH4IV	A!CGT	17	122; 134; 175; 258; 339; 444; 968; 1196; 1244; 1806; 1818; 1861; 1971; 2862; 3049; 3830; 3963
HpyCH4V	TG!CA	20	692; 1014; 1130; 1357; 1495; 1522; 1590; 2307; 2316; 2379; 2388; 2503; 2579; 2638; 2797; 2972; 2986; 4056; 4352; 4719
HpyF3I	C!TNAG	8	869; 1327; 2226; 2528; 3409; 3858; 3981; 4390
HpyF10VI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 648; 1079; 1973; 2003; 2030; 2072; 2313; 2385; 2436; 2515; 2737; 2821; 2844; 2983; 3106; 3189; 3456; 3643; 3847; 4046; 4618
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 1187; 2746; 3448; 3527
Hsp92II	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1088; 1095; 2176; 2316; 2388; 2479; 2620; 2965; 3151; 3182; 3208; 3564; 3948; 4668; 4719
HspAI	G!CGC	23	595; 1082; 1289; 2010; 2018; 2044; 2066; 2075; 2088; 2119; 2738; 2746; 2810; 2847; 3113; 3373; 3549; 3635; 4038; 4147; 4321; 4421; 4488
KasI	G!GCGCC	1	2745
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	1370
Kpn2I	T!CCGGA	1	1321
KspI	CCGC!GG	1	1373
Ksp22I	T!GATCA	1	1403
KspAI	GTT!AAC	1	1509

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Kzo9I	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3090; 3300
LpnI	RGCI!GCY	6	596; 1290; 2011; 2019; 2747; 4422
LpnPI	CCDGNNNNNNNNNN!	61	102; 295; 614; 742; 799; 848; 881; 943; 958; 1007; 1087; 1111; 1135; 1197; 1284; 1335; 1391; 1483; 1788; 1977; 2200; 2238; 2254; 2294; 2349; 2366; 2466; 2551; 2664; 2741; 2763; 2786; 2922; 2936; 2955; 3012; 3079; 3129; 3145; 3202; 3260; 3469; 3535; 3559; 3635; 3724; 3827; 3860; 4091; 4109; 4255; 4275; 4299; 4325; 4374; 4472; 4517; 4547; 4626; 4651; 4688
LpnPI	!NNNNNNNNNNNNNCHGG	55	75; 268; 552; 586; 772; 820; 916; 1017; 1060; 1169; 1195; 1268; 1307; 1363; 1829; 1949; 2006; 2069; 2267; 2279; 2339; 2351; 2583; 2628; 2671; 2713; 2735; 2763; 2810; 2872; 2894; 2984; 3051; 3074; 3118; 3213; 3232; 3257; 3406; 3507; 3550; 3607; 3697; 3800; 3827; 3845; 4081; 4118; 4271; 4297; 4437; 4455; 4490; 4571; 4624
Lsp1109I	GCAGCNNNNNNNN!	8	821; 1263; 1534; 2819; 2861; 3382; 3835; 4335
Lsp1109I	!NNNNNNNNNNNGCTGC	7	940; 2028; 2693; 2877; 2970; 4036; 4242
LweI	GCATCNNNNN!	7	848; 1562; 2325; 2397; 3045; 3109; 3384
LweI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2704; 2959; 3175; 4567
MabI	A!CCWGGT	1	2335
MaeI	C!TAG	8	592; 1394; 1595; 2013; 2569; 3584; 3918; 4171
MaeII	A!CGT	17	122; 134; 175; 258; 339; 444; 968; 1196; 1244; 1806; 1818; 1861; 1971; 2862; 3049; 3830; 3963
MaeIII	!GTNAC	14	61; 148; 497; 891; 1087; 1534; 2035; 2047; 2866; 3172; 3862; 4128; 4244; 4307
MalI	GA!TC	23	587; 1126; 1152; 1332; 1383; 1392; 1405; 2585; 2589; 2608; 2919; 2997; 3078; 3087; 3165; 3541; 3557; 3916; 3928; 4006; 4014; 4025; 4100
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2170; 3359
MbiI	GAG!CGG	2	2006; 3413
MboI	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
MboII	GAAGANNNNNNNN!	7	916; 1029; 2002; 2230; 3107; 3317; 3936
MboII	!NNNNNNNTCTTC	4	3397; 3564; 3764; 4007
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1496
MfII	R!GATCY	12	585; 1150; 1330; 1381; 1390; 2917; 3163; 3555; 3914; 3926; 4012; 4023
MhII	GDGCH!C	13	667; 694; 727; 1341; 1378; 1937; 2692; 2785; 2859; 3049; 3111; 3821; 4354
MlsI	TGG!CCA	2	1270; 2828
MluI	A!CGCGT	1	1632
MluNI	TGG!CCA	2	1270; 2828
MlyI	GAGTCNNNNN!	3	899; 1798; 2230
MlyI	!NNNNNGACTC	5	404; 1319; 1805; 3411; 4288
Mly113I	GG!CGCC	1	2746
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	1839
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	2	4271; 4455
MnlI	CCTCNNNNNNN!	13	773; 842; 952; 967; 1050; 1183; 1465; 2529; 3347; 3553; 3867; 4237; 4561
MnlI	!NNNNNGAGG	24	541; 654; 693; 714; 747; 864; 973; 1029; 1218; 1251; 1294; 1306; 1425; 1890; 2221; 2499; 2542; 2557; 2597; 2661; 2797; 3154; 3584; 4487
Mph1103I	ATGCA!T	3	2318; 2390; 4721
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1321
MroNI	G!CCGGC	3	1963; 3246; 3529
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1270; 2828
MseI	T!TAA	17	7; 629; 854; 1447; 1508; 1629; 1650; 1661; 1673; 1684; 1701; 1799; 2070; 3889; 3903; 3908; 3960

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MslI	CAYNN!NNRTG	4	365; 613; 643; 3183
MspI	C!CGG	22	601; 835; 1184; 1322; 1378; 1388; 1964; 2651; 2728; 2750; 2778; 2909; 2999; 3066; 3247; 3522; 3530; 3622; 4096; 4286; 4312; 4459
Msp20I	TGG!CCA	2	1270; 2828
MspA1I	CMG!CKG	6	1063; 1372; 2244; 2852; 4081; 4326
MspCI	C!TTAAG	0	
MspJI	CNNRNNNNNNNN!	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; 633; 651; 669; 699; 717; 732; 747; 765; 798; 813; 837; 856; 880; 893; 909; 927; 941; 957; 970; 984; 1005; 1018; 1039; 1058; 1072; 1086; 1104; 1117; 1134; 1147; 1161; 1174; 1188; 1209; 1222; 1241; 1260; 1283; 1304; 1334; 1348; 1361; 1383; 1400; 1414; 1429; 1453; 1470; 1483; 1524; 1538; 1551; 1569; 1607; 1622; 1640; 1681; 1705; 1725; 1743; 1764; 1787; 1819; 1834; 1856; 1874; 1887; 1908; 1925; 1938; 1951; 1967; 1980; 2010; 2025; 2050; 2068; 2081; 2096; 2120; 2134; 2158; 2183; 2199; 2237; 2253; 2292; 2306; 2320; 2348; 2364; 2378; 2392; 2421; 2434; 2455; 2464; 2486; 2516; 2532; 2550; 2580; 2603; 2627; 2651; 2670; 2698; 2724; 2740; 2753; 2776; 2790; 2810; 2823; 2837; 2856; 2870; 2883; 2899; 2914; 2927; 2943; 2958; 2974; 2999; 3018; 3034; 3047; 3060; 3078; 3092; 3106; 3122; 3144; 3160; 3179; 3201; 3217; 3240; 3259; 3273; 3289; 3303; 3323; 3339; 3352; 3374; 3407; 3421; 3441; 3454; 3468; 3522; 3535; 3558; 3571; 3590; 3607; 3634; 3670; 3703; 3722; 3747; 3768; 3795; 3808; 3825; 3839; 3854; 3870; 3930; 3955; 3971; 3993; 4006; 4020; 4051; 4065; 4090; 4108; 4123; 4136; 4155; 4168; 4183; 4212; 4231; 4249; 4274; 4289; 4308; 4324; 4343; 4361; 4377; 4391; 4410; 4437; 4460; 4482; 4501; 4516; 4529; 4546; 4566; 4593; 4606; 4625; 4650; 4673; 4687; 4700; 4717
MspJI	!NNNNNNNNNNNNYNG	197	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 598; 616; 643; 673; 697; 715; 739; 758; 780; 811; 830; 854; 887; 916; 958; 980; 1013; 1033; 1060; 1078; 1095; 1113; 1141; 1162; 1183; 1207; 1229; 1252; 1269; 1307; 1328; 1357; 1374; 1398; 1427; 1456; 1498; 1581; 1619; 1643; 1666; 1695; 1739; 1761; 1793; 1829; 1846; 1867; 1904; 1924; 1941; 1958; 1993; 2011; 2029; 2046; 2070; 2092; 2119; 2147; 2173; 2211; 2232; 2249; 2267; 2290; 2311; 2339; 2362; 2383; 2401; 2422; 2439; 2462; 2486; 2506; 2524; 2546; 2577; 2599; 2625; 2644; 2661; 2689; 2708; 2727; 2745; 2763; 2784; 2806; 2830; 2863; 2883; 2901; 2922; 2948; 2975; 2992; 3009; 3026; 3052; 3074; 3096; 3114; 3134; 3153; 3175; 3213; 3233; 3257; 3277; 3297; 3324; 3348; 3381; 3400; 3428; 3450; 3479; 3507; 3532; 3551; 3570; 3591; 3608; 3625; 3656; 3683; 3703; 3726; 3746; 3783; 3800; 3819; 3845; 3865; 3904; 3931; 3950; 3968; 4005; 4023; 4064; 4082; 4108; 4125; 4157; 4186; 4214; 4235; 4258; 4277; 4298; 4316; 4333; 4351; 4377; 4398; 4418; 4438; 4456; 4477; 4503; 4520; 4539; 4558; 4587; 4606; 4624; 4643; 4661; 4679; 4702
MspR9I	CC!NGG	22	90; 283; 787; 836; 931; 946; 1075; 1184; 1379; 2282; 2337; 2354; 2750; 2910; 3133; 3523; 3712; 3815; 4287; 4505; 4518; 4639
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1496
MvaI	CC!WGG	15	90; 283; 787; 931; 946; 1075; 2282; 2337; 2354; 3133; 3712; 3815; 4505; 4518; 4639
Mva1269I	GAATGCN!	1	1497
Mva1269I	G!CATTC	1	1590
MvnI	CG!CG	16	60; 1372; 1634; 1670; 2046; 2066; 2090; 2121; 2812; 3113; 3551; 3635; 3698; 3767; 4040; 4621
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	27	90; 212; 244; 283; 376; 400; 648; 1079; 1973; 2003; 2030; 2072; 2313; 2385; 2436; 2515; 2737; 2821; 2844; 2983; 3106; 3189; 3456; 3643; 3847; 4046; 4618
NaeI	GCC!GGC	3	1965; 3248; 3531
NarI	GG!CGCC	1	2746
NciI	CC!SGG	7	836; 1184; 1379; 2750; 2910; 3523; 4287
NcoI	C!CATGG	4	360; 611; 2475; 3178
NdeI	CA!TATG	1	234

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NdeII	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
NgoAVIII	GACNNNNNTGANNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	731
NgoAVIII	TCANNNNGTCNNNNNNNNNNNN!	1	767
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1963; 3246; 3529
NheI	G!CTAGC	1	591
NlaIII	CATG!	24	304; 364; 615; 642; 648; 660; 738; 804; 884; 1088; 1095; 2176; 2316; 2388; 2479; 2620; 2965; 3151; 3182; 3208; 3564; 3948; 4668; 4719
NlaIV	GGN!NCC	21	467; 666; 726; 1117; 1320; 1368; 1376; 1383; 1901; 1922; 1934; 2125; 2286; 2358; 2747; 2782; 3630; 3709; 3754; 4597; 4636
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1578; 1893; 3485
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	4	347; 991; 1277; 4557
Nli3877I	CYCGR!G	2	1338; 1381
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2535; 2971
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	1007; 2500
NmeDI	RCCGGYNNNNNNN!	5	612; 1975; 3077; 3258; 3541
NmeDI	!NNNNNNNNNNNNRCCGGY	5	587; 1950; 3052; 3233; 3516
NmuCI	!GTSAC	5	891; 1087; 2035; 2866; 3172
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2848
NsiI	ATGCA!T	3	2318; 2390; 4721
NspI	RCATG!Y	6	642; 1088; 2316; 2388; 3151; 4668
NspV	TT!CGAA	2	1348; 3428
OliI	CACNN!NNGTG	1	613
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 656; 806; 1058; 1369; 3053
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2316; 2388; 3151
PaeR7I	C!TCGAG	1	1334
PagI	T!CATGA	2	2172; 3944
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3711; 3814
PauI	G!CGCGC	0	
PceI	AGG!CCT	2	1039; 2567
PciI	A!CATGT	1	4664
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3090; 3300
PcsI	WCGNNNN!NNNCGW	7	1253; 3040; 3117; 3360; 3434; 3827; 4345
PctI	GAATGCN!	1	1497
PctI	G!CATTC	1	1590
PdiI	GCC!GGC	3	1965; 3248; 3531
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	740; 1217; 3231; 3365; 3475; 3512; 4690
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2864
PfIMI	CCANNN!NTGG	1	1209
PfoI	T!CCNGGA	2	944; 3521
PhoI	GG!CC	28	84; 277; 761; 1004; 1039; 1073; 1096; 1118; 1228; 1270; 1376; 1712; 1854; 2509; 2515; 2524; 2567; 2654; 2828; 3219; 3246; 3755; 3812; 3845; 4190; 4624; 4642; 4653
PinAI	A!CCGGT	1	600
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3127
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2692; 2947
PleI	GAGTCNNNN!	3	898; 1797; 2229
PleI	!NNNNNGACTC	5	404; 1319; 1805; 3411; 4288
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNCTCNNNNNNNNNNNN!	1	1828
PpiI	!NNNNNNNGAGNNNNNGTTC	1	3958

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	3990
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1796
PpsI	GAGTCNNNN!	3	898; 1797; 2229
PpsI	!NNNNNGACTC	5	404; 1319; 1805; 3411; 4288
Ppu10I	A!TGCAT	3	2314; 2386; 4717
Ppu21I	YAC!GTR	3	340; 1862; 3050
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4664
PshAI	GACNN!NNGTC	1	1243
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1529; 1734
Psp03I	GGWC!C	3	1203; 3265; 3710
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	15	88; 281; 785; 929; 944; 1073; 2280; 2335; 2352; 3131; 3710; 3813; 4503; 4516; 4637
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	1341
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	15	88; 281; 785; 929; 944; 1073; 2280; 2335; 2352; 3131; 3710; 3813; 4503; 4516; 4637
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	21	467; 666; 726; 1117; 1320; 1368; 1376; 1383; 1901; 1922; 1934; 2125; 2286; 2358; 2747; 2782; 3630; 3709; 3754; 4597; 4636
PspOMI	G!GGCCC	1	1374
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	3	125; 2476; 3475
PspOMII	!NNNNNNNNNNNNNNNNNYTGGGCG	1	2878
PspPI	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1200; 1375; 1853; 3262; 3707; 3753; 3811; 3844
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2299; 2371; 3877
PspPRI	!NNNNNNNNNNNNNNCTGRGG	3	855; 2212; 3407
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3847
PstI	CTGCA!G	1	1359
PstNI	CAGNN!CTG	2	3847; 4255
PsuI	R!GATCY	12	585; 1150; 1330; 1381; 1390; 2917; 3163; 3555; 3914; 3926; 4012; 4023
PsyI	GACN!NNGTC	1	2864
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2244; 2852
RcaI	T!CATGA	2	2172; 3944
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3261
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	1	1475
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	11	219; 244; 299; 332; 383; 540; 655; 805; 1057; 1368; 3052
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 654; 804; 1056; 1367; 3051
RseI	CAYNN!NNRTG	4	365; 613; 643; 3183
RsrII	CG!GWCCG	1	3262
Rsr2I	CG!GWCCG	1	3262
SacI	GAGCT!C	1	1341



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SacII	CCGC!GG	1	1373
SalI	G!TCGAC	1	1360
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3090; 3300
SaqAI	T!TAA	17	7; 629; 854; 1447; 1508; 1629; 1650; 1661; 1673; 1684; 1701; 1799; 2070; 3889; 3903; 3908; 3960
SatI	GC!NGC	33	759; 810; 954; 1071; 1252; 1523; 2042; 2064; 2078; 2516; 2655; 2707; 2718; 2808; 2813; 2850; 2891; 2978; 2981; 2984; 3220; 3316; 3357; 3371; 3485; 3824; 3839; 4050; 4256; 4259; 4324; 4467; 4622
Sau96I	G!GNCC	14	83; 276; 760; 1003; 1095; 1116; 1200; 1375; 1853; 3262; 3707; 3753; 3811; 3844
Sau3AI	!GATC	23	585; 1124; 1150; 1330; 1381; 1390; 1403; 2583; 2587; 2606; 2917; 2995; 3076; 3085; 3163; 3539; 3555; 3914; 3926; 4004; 4012; 4023; 4098
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	3	899; 1798; 2230
SchI	!NNNNGACTC	5	404; 1319; 1805; 3411; 4288
SciI	CTC!GAG	1	1336
ScrFI	CC!NGG	22	90; 283; 787; 836; 931; 946; 1075; 1184; 1379; 2282; 2337; 2354; 2750; 2910; 3133; 3523; 3712; 3815; 4287; 4505; 4518; 4639
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	5	1041; 2324; 2396; 2565; 4507
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2901; 3386
SdeOSI	GACNNNRTGANNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	13	667; 694; 727; 1341; 1378; 1937; 2692; 2785; 2859; 3049; 3111; 3821; 4354
SelI	!CGCG	16	58; 1370; 1632; 1668; 2044; 2064; 2088; 2119; 2810; 3111; 3549; 3633; 3696; 3765; 4038; 4619
SetI	ASST!	69	125; 137; 178; 261; 308; 342; 447; 552; 568; 626; 653; 749; 799; 820; 971; 977; 1106; 1124; 1136; 1175; 1199; 1243; 1247; 1262; 1305; 1311; 1320; 1341; 1347; 1436; 1457; 1466; 1478; 1527; 1694; 1809; 1821; 1864; 1901; 1951; 1974; 2098; 2246; 2341; 2534; 2647; 2775; 2854; 2865; 2937; 3008; 3052; 3312; 3458; 3502; 3833; 3864; 3923; 3966; 4109; 4130; 4229; 4366; 4381; 4400; 4412; 4456; 4502; 4553
SexAI	A!CCWGGT	1	2335
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	848; 1562; 2325; 2397; 3045; 3109; 3384
SfaNI	!NNNNNNNNNGATGC	7	357; 1001; 1169; 2704; 2959; 3175; 4567
SfcI	C!TRYAG	4	1355; 2081; 4208; 4399
SfiI	GGCCNNNN!NGGCC	1	2521
SfoI	GGC!GCC	1	2747
Sfr274I	C!TCGAG	1	1334
Sfr303I	CCGC!GG	1	1373
SfuI	TT!CGAA	2	1348; 3428

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	CNNGNNNNNNNNNN!	189	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 624; 651; 669; 699; 723; 741; 756; 798; 813; 837; 856; 880; 893; 921; 942; 957; 984; 1006; 1039; 1059; 1072; 1086; 1104; 1117; 1134; 1147; 1167; 1188; 1209; 1222; 1260; 1283; 1304; 1334; 1348; 1383; 1400; 1453; 1482; 1524; 1607; 1645; 1681; 1765; 1787; 1819; 1856; 1874; 1893; 1908; 1950; 1967; 1984; 2019; 2033; 2050; 2072; 2096; 2120; 2185; 2199; 2237; 2253; 2293; 2306; 2325; 2348; 2365; 2378; 2397; 2427; 2448; 2465; 2488; 2523; 2550; 2581; 2603; 2629; 2651; 2670; 2698; 2734; 2753; 2776; 2790; 2810; 2823; 2837; 2856; 2870; 2889; 2921; 2935; 2948; 2974; 3005; 3018; 3035; 3052; 3066; 3083; 3101; 3116; 3144; 3160; 3179; 3201; 3217; 3240; 3259; 3284; 3303; 3323; 3350; 3374; 3407; 3426; 3454; 3468; 3534; 3558; 3573; 3596; 3617; 3634; 3682; 3709; 3723; 3752; 3776; 3809; 3826; 3846; 3859; 3872; 3930; 3957; 3976; 4006; 4031; 4051; 4065; 4090; 4108; 4145; 4183; 4212; 4240; 4254; 4274; 4289; 4310; 4324; 4343; 4361; 4377; 4417; 4437; 4464; 4482; 4503; 4516; 4529; 4546; 4570; 4593; 4625; 4650; 4677; 4699
SgeI	!NNNNNNNNNNNNCNG	166	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 598; 625; 643; 673; 697; 715; 739; 772; 811; 830; 854; 895; 916; 958; 980; 1013; 1033; 1060; 1078; 1099; 1121; 1141; 1162; 1183; 1207; 1234; 1257; 1278; 1308; 1328; 1357; 1374; 1427; 1456; 1498; 1581; 1619; 1655; 1739; 1761; 1793; 1830; 1848; 1867; 1924; 1941; 1958; 1993; 2011; 2031; 2051; 2070; 2094; 2159; 2211; 2267; 2299; 2322; 2339; 2371; 2401; 2422; 2439; 2462; 2497; 2524; 2555; 2577; 2603; 2625; 2644; 2672; 2708; 2727; 2750; 2771; 2789; 2806; 2830; 2863; 2895; 2922; 2948; 2979; 3009; 3026; 3052; 3075; 3096; 3118; 3138; 3158; 3175; 3214; 3233; 3258; 3277; 3297; 3324; 3348; 3381; 3400; 3428; 3450; 3508; 3532; 3551; 3570; 3591; 3608; 3656; 3683; 3703; 3726; 3750; 3783; 3800; 3820; 3846; 3904; 3931; 3950; 3980; 4005; 4025; 4064; 4082; 4119; 4157; 4186; 4214; 4235; 4263; 4284; 4317; 4335; 4391; 4411; 4438; 4456; 4477; 4503; 4520; 4544; 4567; 4599; 4624; 4651; 4673; 4702
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	1373
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1893; 3680; 4473
SimI	!GACCC	4	106; 3174; 3742; 3990
SinI	G!GWCC	3	1200; 3262; 3707
SlaI	C!TCGAG	1	1334
SmaI	CCC!GGG	1	1379
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	4	365; 613; 643; 3183
SmlI	C!TYRAG	8	1135; 1174; 1334; 1340; 3137; 4019; 4296; 4558
SmoI	C!TYRAG	8	1135; 1174; 1334; 1340; 3137; 4019; 4296; 4558
SmuI	CCCGCNNNN!	10	93; 119; 286; 1068; 1170; 2068; 2423; 2444; 3640; 3772
SmuI	!NNNNNNGCGGG	7	1105; 1365; 1999; 2869; 3406; 3544; 3691
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2316; 2388; 3151
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1350; 1496; 1560; 1638; 1664; 1675; 2322; 2394; 2486; 3904
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	2	1039; 2567
SsiI	C!CGC	35	58; 86; 98; 112; 279; 507; 589; 923; 1061; 1163; 1370; 2061; 2064; 2078; 2168; 2416; 2428; 2437; 2449; 2459; 2470; 2516; 2655; 2718; 3220; 3265; 3331; 3357; 3482; 3485; 3633; 3765; 4072; 4216; 4712
SsiI	G!CGG	27	370; 403; 528; 758; 1070; 1112; 1372; 2006; 2033; 2121; 2231; 2812; 2876; 2977; 2980; 3260; 3315; 3413; 3551; 3698; 3838; 4081; 4326; 4447; 4466; 4593; 4621
SspI	AAT!ATT	2	1654; 2207
SspDI	G!GCGCC	1	2745
SspD5I	GGTGANNNNNNNN!	6	376; 627; 996; 1306; 3817; 3933

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SspD5I	!NNNNNNNNTCACC	3	884; 1862; 2923
SstI	GAGCT!C	1	1341
SstII	CCGC!GG	1	1373
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	929
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 851; 1067; 1169; 1190; 1384; 1945; 2067; 2422; 2443; 2756; 3159; 3298; 3369; 3639; 3771; 4001; 4439
Sth132I	!NNNNNNNNCCGGG	22	15; 407; 470; 827; 900; 1104; 1364; 1946; 1998; 2099; 2826; 2868; 2901; 3405; 3514; 3543; 3690; 3794; 3825; 4278; 4322; 4530
Sth302II	CC!GG	22	602; 836; 1185; 1323; 1379; 1389; 1965; 2652; 2729; 2751; 2779; 2910; 3000; 3067; 3248; 3523; 3531; 3623; 4097; 4287; 4313; 4460
StrI	C!TCGAG	1	1334
StsI	GGATGNNNNNNNNNN!	4	2614; 3071; 3096; 3550
StsI	!NNNNNNNNNNNNNNNNCATCC	4	680; 768; 825; 2418
StuI	AGG!CCT	2	1039; 2567
StyI	C!CWWGG	6	360; 611; 2475; 2568; 3178; 3583
StyD4I	!CCNGG	22	88; 281; 785; 834; 929; 944; 1073; 1182; 1377; 2280; 2335; 2352; 2748; 2908; 3131; 3521; 3710; 3813; 4285; 4503; 4516; 4637
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 669; 1366; 1837; 3126; 3242; 3350; 3673; 4164; 4634; 4705
TaiI	ACGT!	17	125; 137; 178; 261; 342; 447; 971; 1199; 1247; 1809; 1821; 1864; 1974; 2865; 3052; 3833; 3966
TaqI	T!CGA	17	752; 779; 1247; 1335; 1348; 1361; 1895; 2586; 2859; 3015; 3039; 3075; 3237; 3428; 3473; 3728; 4566
TaqII	GACCGANNNNNNNNNNNN!	3	1766; 2783; 3451
TaqII	!NNNNNNNNNTCGGTC	1	3695
TaqII	CACCCANNNNNNNNNNNN!	1	742
TaqII	!NNNNNNNNNTGGGTG	3	172; 2650; 3242
TasI	!AATT	11	18; 1350; 1496; 1560; 1638; 1664; 1675; 2322; 2394; 2486; 3904
TatI	W!GTACW	5	217; 297; 330; 381; 653
TauI	GCSG!C	17	761; 1073; 2066; 2080; 2518; 2657; 2720; 2815; 2980; 2983; 3222; 3318; 3359; 3487; 3841; 4469; 4624
TfiI	G!AWTC	7	740; 1217; 3231; 3365; 3475; 3512; 4690
TliI	C!TCGAG	1	1334
TruII	T!TAA	17	7; 629; 854; 1447; 1508; 1629; 1650; 1661; 1673; 1684; 1701; 1799; 2070; 3889; 3903; 3908; 3960
Tru9I	T!TAA	17	7; 629; 854; 1447; 1508; 1629; 1650; 1661; 1673; 1684; 1701; 1799; 2070; 3889; 3903; 3908; 3960
TscAI	CASTGNN!	5	1592; 2875; 3985; 4256; 4269
TseI	G!CWGC	16	809; 953; 1251; 1522; 2041; 2706; 2807; 2849; 2890; 2983; 3370; 3823; 4049; 4255; 4258; 4323
TsoI	TARCCANNNNNNNNNNNN!	2	1718; 2065
TsoI	!NNNNNNNNNTGGYTA	3	778; 1523; 3275
Tsp45I	!GTSAC	5	891; 1087; 2035; 2866; 3172
Tsp509I	!AATT	11	18; 1350; 1496; 1560; 1638; 1664; 1675; 2322; 2394; 2486; 3904
TspDTI	ATGAANNNNNNNNNNNN!	4	661; 1504; 2805; 3509
TspDTI	!NNNNNNNNNTTCAT	6	26; 789; 810; 3223; 3679; 3886
TspEI	!AATT	11	18; 1350; 1496; 1560; 1638; 1664; 1675; 2322; 2394; 2486; 3904
TspGWI	ACGGANNNNNNNNNNNN!	1	3621
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	1377
TspRI	CASTGNN!	5	1592; 2875; 3985; 4256; 4269
TstI	CACNNNNNNNTCCNNNNNNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2864
Tth111II	CAARCANNNNNNNNNNNN!	2	841; 4073
Tth111III	!NNNNNNNNNTGYTTG	3	3181; 4041; 4080

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
UnbI	!GGNCC	14	82; 275; 759; 1002; 1094; 1115; 1199; 1374; 1852; 3261; 3706; 3752; 3810; 3843
Van91I	CCANNNN!NTGG	1	1209
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	2	690; 4350
VpaK11AI	!GGWCC	3	1199; 3261; 3706
VpaK11BI	G!GWCC	3	1200; 3262; 3707
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	1350; 1560; 1664; 1675
XbaI	T!CTAGA	1	1393
XceI	RCATG!Y	6	642; 1088; 2316; 2388; 3151; 4668
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	1	1334
XhoII	R!GATCY	12	585; 1150; 1330; 1381; 1390; 2917; 3163; 3555; 3914; 3926; 4012; 4023
XmaI	C!CCGGG	1	1377
XmaJI	C!CTAGG	2	2568; 3583
XmiI	GT!MKAC	2	1190; 1361
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	8	592; 1394; 1595; 2013; 2569; 3584; 3918; 4171
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2318; 2390; 4721