

pKillerRed-membrane vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1594; 1799
AarI	CACCTGCNNNN!	1	1090
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1882; 2838; 4627
AatI	AGG!CCT	1	2632
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	640
AccII	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2913
Acc36I	ACCTGCNNNN!	3	1090; 3079; 3529
Acc36I	!NNNNNNNNGCAGGT	1	2698
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	6	465; 645; 1042; 1964; 2810; 2845
AccB7I	CCANNNN!NTGG	2	905; 1155
AccBSI	CCG!CTC	2	2235; 3424
AccBSI	GAG!CGG	2	2071; 3478
AceIII	CAGCTCNNNNNNN!	1	1767
AceIII	!NNNNNNNNNNGAGCTG	3	552; 891; 1057
AciI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 752; 954; 1017; 1095; 1238; 1296; 1416; 1458; 2126; 2129; 2143; 2233; 2481; 2493; 2502; 2514; 2524; 2535; 2581; 2720; 2783; 3285; 3330; 3396; 3422; 3547; 3550; 3698; 3830; 4137; 4281; 4777
AciI	G!CGG	27	370; 403; 528; 651; 746; 1247; 1454; 2071; 2098; 2186; 2296; 2877; 2941; 3042; 3045; 3325; 3380; 3478; 3616; 3763; 3903; 4146; 4391; 4512; 4531; 4658; 4686
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	8	668; 2679; 2990; 3236; 3628; 3987; 4085; 4171
AclWI	!NNNNNGATCC	8	580; 655; 921; 1302; 3055; 3599; 3986; 4083
AcoI	Y!GGCCR	7	807; 827; 1455; 2717; 2891; 3282; 3309
AcsI	R!AATY	4	629; 1625; 1729; 1740
AcuI	CTGAAGNNNNNNNNNNNNNNN!	2	2957; 3389
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4187
AcvI	CAC!GTG	1	1377
AcyI	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
AdeI	CACNNN!GTG	4	876; 1326; 1410; 1927
AfaI	GT!AC	9	219; 244; 299; 332; 383; 540; 647; 934; 3117
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	20	49; 905; 1155; 1257; 1389; 1823; 2149; 2541; 2792; 3336; 3617; 3649; 3781; 3816; 3866; 3898; 4251; 4530; 4696; 4714
AfII	C!TTAAG	1	1693
AfIII	A!CRYGT	3	1181; 1376; 4729
AgeI	A!CCGGT	1	666
AgsI	TTS!AA	9	712; 780; 864; 1287; 2222; 2266; 2276; 2689; 4265
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	12	88; 281; 983; 2345; 2400; 2417; 3196; 3775; 3878; 4568; 4581; 4702
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	2	823; 1084
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2385; 2457
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2351; 2423
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1893
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1861
AluI	AG!CT	19	566; 618; 624; 894; 905; 1071; 1152; 1215; 1590; 1757; 2014; 2309; 2597; 2917; 3375; 4172; 4429; 4475; 4565
AluBI	AG!CT	19	566; 618; 624; 894; 905; 1071; 1152; 1215; 1590; 1757; 2014; 2309; 2597; 2917; 3375; 4172; 4429; 4475; 4565
AlwI	GGATCNNNN!	8	668; 2679; 2990; 3236; 3628; 3987; 4085; 4171
AlwI	!NNNNNGATCC	8	580; 655; 921; 1302; 3055; 3599; 3986; 4083
Alw21I	GWGCW!C	5	620; 872; 2924; 3114; 4419
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	6	877; 1168; 2235; 2653; 3672; 3800
Alw44I	G!TGCAC	2	868; 4415
AlwNI	CAGNN!CTG	2	3912; 4320
Ama87I	C!YCGRG	3	613; 656; 997
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	1	596
ApaI	GGGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2379; 2451; 3913
ApaLI	G!TGCAC	2	868; 4415
ApeKI	G!CWGC	17	836; 839; 894; 1292; 1587; 2106; 2771; 2872; 2914; 2955; 3048; 3435; 3888; 4114; 4320; 4323; 4388
ApoI	R!AATTY	4	629; 1625; 1729; 1740
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	3	815; 1037; 3326
ApyPI	!NNNNNNNNNNNNNNNNNNNGTTCGAT	3	3120; 3773; 4611
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3210
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	914
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2639
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	2	975; 3381
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	23	586; 610; 661; 735; 927; 1308; 1469; 2649; 2653; 2672; 2983; 3061; 3142; 3151; 3229; 3605; 3621; 3980; 3992; 4070; 4078; 4089; 4164
AsiGI	A!CCGGT	1	666
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2929
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	2633; 3648
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	28	597; 1028; 1145; 1211; 1300; 1370; 1388; 1429; 2077; 2085; 2111; 2133; 2142; 2155; 2186; 2805; 2813; 2877; 2914; 3180; 3440; 3616; 3702; 4105; 4214; 4388; 4488; 4555
AspS9I	G!GNCC	16	83; 276; 654; 726; 748; 1002; 1132; 1195; 1260; 1315; 1918; 3327; 3772; 3818; 3876; 3909
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	627; 3493
AsuC2I	CC!SGG	7	657; 658; 1313; 2815; 2975; 3588; 4352
AsuHPI	GGTANNNNNNNNN!	5	376; 813; 1101; 3882; 3998
AsuHPI	!NNNNNNNTCACC	7	810; 1092; 1224; 1329; 1413; 1928; 2989
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	3	613; 656; 997
AvaII	G!GWCC	3	726; 3327; 3772
AviII	TGC!GCA	1	2913
AvrII	C!CTAGG	2	2633; 3648

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AxyI	CC!TNAGG	2	2291; 3923
BaeI	ACNNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI:C	6	657; 872; 1415; 2757; 2850; 4419
BalI	TGG!CCA	1	2893
BamHI	G!GATCC	1	660
BanI	G!GYRCC	6	465; 645; 1042; 1964; 2810; 2845
BanII	GRGCY!C	6	620; 657; 944; 2002; 3176; 3886
BanIII	AT!CGAT	1	2651
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	2	905; 1155
BauI	C!ACGAG	2	3529; 4556
BauI	C!TCGTG	1	3403
BbeI	GGCGC!C	1	2814
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	1	1377
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2381; 2453; 3216
BbvI	GCAGCNNNNNN!	8	848; 1304; 1599; 2884; 2926; 3447; 3900; 4400
BbvI	!NNNNNNNNNNNGCTGC	7	881; 2093; 2758; 2942; 3035; 4101; 4307
Bbv12I	GWGCW!C	5	620; 872; 2924; 3114; 4419
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	10	829; 922; 1144; 1309; 1339; 1438; 1941; 2505; 3031; 3533
BccI	!NNNNNGATGG	4	1251; 1909; 2689; 3117
BceAI	ACGGCNNNNNNNNNN!	12	810; 849; 870; 951; 981; 1056; 1131; 1209; 1260; 1305; 3237; 3724
BceAI	!NNNNNNNNNNNGCCGT	5	859; 1189; 1952; 2770; 4229
Bcefl	ACGGCNNNNNNNNNN!	12	810; 849; 870; 951; 981; 1056; 1131; 1209; 1260; 1305; 3237; 3724
Bcefl	!NNNNNNNNNNNGCCGT	5	860; 1190; 1953; 2771; 4230
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNN!	3	2240; 3030; 4531
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	7	657; 658; 1313; 2815; 2975; 3588; 4352
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	3	1114; 1351; 4664
BdaI	!NNNNNNNNNTGANNNNNNTCA	3	1080; 1317; 4630
BfaI	C!TAG	8	592; 1466; 1660; 2078; 2634; 3649; 3983; 4236
BfiI	ACTGGGNNNNN!	1	2760
BfiI	!NNNNCCAGT	2	289; 2512
BfmI	C!TRYAG	4	634; 2146; 4273; 4464
BfoI	RGCG!Y	6	598; 1430; 2078; 2086; 2814; 4489
BfrI	C!TTAAG	1	1693
BfuI	GTATCCNNNNN!	3	2240; 3030; 4531
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1090; 3079; 3529
BfuAI	!NNNNNNNNGCAGGT	1	2698
BfuCI	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2586
BglII	A!GATCT	2	609; 734

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BisI	GC!NGC	38	747; 837; 840; 895; 1095; 1248; 1293; 1296; 1455; 1458; 1588; 2107; 2129; 2143; 2581; 2720; 2772; 2783; 2873; 2878; 2915; 2956; 3043; 3046; 3049; 3285; 3381; 3422; 3436; 3550; 3889; 3904; 4115; 4321; 4324; 4389; 4532; 4687
BlnI	C!CTAGG	2	2633; 3648
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	38	748; 838; 841; 896; 1096; 1249; 1294; 1297; 1456; 1459; 1589; 2108; 2130; 2144; 2582; 2721; 2773; 2784; 2874; 2879; 2916; 2957; 3044; 3047; 3050; 3286; 3382; 3423; 3437; 3551; 3890; 3905; 4116; 4322; 4325; 4390; 4533; 4688
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	3	726; 3327; 3772
Bme1390I	CC!NGG	19	90; 283; 657; 658; 985; 1313; 2347; 2402; 2419; 2815; 2975; 3198; 3588; 3777; 3880; 4352; 4570; 4583; 4704
BmeRI	GACNN!NNGTC	0	
BmeT110I	C!YCGRG	3	613; 656; 997
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	16	84; 277; 655; 727; 749; 1003; 1133; 1196; 1261; 1316; 1919; 3328; 3773; 3819; 3877; 3910
BmiI	GGN!NCC	21	467; 647; 655; 662; 750; 1044; 1134; 1197; 1966; 1987; 1999; 2190; 2351; 2423; 2812; 2847; 3695; 3774; 3819; 4662; 4701
BmrI	ACTGGGNNNNN!	1	2760
BmrI	!NNNNCCCAGT	2	289; 2512
BmrFI	CC!NGG	19	90; 283; 657; 658; 985; 1313; 2347; 2402; 2419; 2815; 2975; 3198; 3588; 3777; 3880; 4352; 4570; 4583; 4704
BmsI	GCATCNNNNN!	10	977; 1019; 1106; 1427; 1627; 2390; 2462; 3110; 3174; 3449
BmsI	!NNNNNNNNNGATGC	5	357; 2769; 3024; 3240; 4632
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2760
BmuI	!NNNNCCCAGT	2	289; 2512
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2600; 3499
BpI	!NNNNNNNNGAGNNNNNCTC	2	2568; 3467
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3651
BpmI	!NNNNNNNNNNNNNNNCTCCAG	1	3594
Bpu10I	CC!TNAGC	1	1006
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 3493
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4105; 4644
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	3	604; 3187; 4346
BpuMI	CC!SGG	7	657; 658; 1313; 2815; 2975; 3588; 4352
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	877; 1168; 3800
Bsa29I	AT!CGAT	1	2651
BsaAI	YAC!GTR	4	340; 1377; 1927; 3115
BsaBI	GATNN!NNATC	2	1473; 2670
BsaHI	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
BsaJI	C!CNNGG	23	360; 649; 656; 740; 852; 983; 998; 1191; 1311; 2345; 2417; 2540; 2575; 2584; 2633; 2974; 3243; 3648; 3775; 3776; 3878; 3879; 4569
BsaMI	GAATGCN!	1	1562
BsaMI	G!CATTC	1	1655
BsaWI	W!CCGGW	6	600; 666; 2842; 3686; 4376; 4523
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1891
BsaXI	!NNNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1861
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNGTGTTG	2	1812; 3719

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Bsc4I	CCNNNNN!NNGG	20	49; 905; 1155; 1257; 1389; 1823; 2149; 2541; 2792; 3336; 3617; 3649; 3781; 3816; 3866; 3898; 4251; 4530; 4696; 4714
BscAI	GCATCNNNN!	10	976; 1018; 1105; 1426; 1626; 2389; 2461; 3109; 3173; 3448
BscAI	!NNNNNNGATGC	5	360; 2772; 3027; 3243; 4635
Bse1I	ACTGGN!	3	2755; 2956; 4202
Bse1I	C!CAGT	6	295; 930; 1840; 2518; 4314; 4327
Bse8I	GATNN!NNATC	2	1473; 2670
Bse21I	CC!TNAGG	2	2291; 3923
Bse118I	R!CCGGY	6	666; 886; 2028; 3130; 3311; 3594
BseAI	T!CCGGA	0	
BseBI	CC!WGG	12	90; 283; 985; 2347; 2402; 2419; 3198; 3777; 3880; 4570; 4583; 4704
BseCI	AT!CGAT	1	2651
BseDI	C!CNNGG	23	360; 649; 656; 740; 852; 983; 998; 1191; 1311; 2345; 2417; 2540; 2575; 2584; 2633; 2974; 3243; 3648; 3775; 3776; 3878; 3879; 4569
Bse3DI	GCAATGNN!	1	3044
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2671; 3128; 3153; 3607
BseGI	!CATCC	2	1160; 2497
BseJI	GATNN!NNATC	2	1473; 2670
BseLI	CCNNNNN!NNGG	20	49; 905; 1155; 1257; 1389; 1823; 2149; 2541; 2792; 3336; 3617; 3649; 3781; 3816; 3866; 3898; 4251; 4530; 4696; 4714
BseMI	GCAATGNN!	1	3044
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 3937
BseMII	!NNNNNNNNCTGAG	6	997; 2282; 2584; 3465; 4037; 4446
BseNI	ACTGGN!	3	2755; 2956; 4202
BseNI	C!CAGT	6	295; 930; 1840; 2518; 4314; 4327
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2629
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	6	657; 872; 1415; 2757; 2850; 4419
BseXI	GCAGCNNNNNNNN!	8	848; 1304; 1599; 2884; 2926; 3447; 3900; 4400
BseXI	!NNNNNNNNNNNGCTGC	7	881; 2093; 2758; 2942; 3035; 4101; 4307
BseX3I	C!GGCCG	2	1455; 2717
BseYI	C!CCAGC	3	2354; 2426; 4425
BseYI	G!CTGGG	1	3315
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
Bsh1285I	CGRY!CG	5	671; 1017; 1458; 2720; 4395
BshFI	GG!CC	32	84; 277; 655; 749; 809; 829; 1004; 1133; 1196; 1219; 1250; 1262; 1316; 1396; 1457; 1777; 1919; 2574; 2580; 2589; 2632; 2719; 2893; 3284; 3311; 3820; 3877; 3910; 4255; 4689; 4707; 4718
BshNI	G!GYRCC	6	465; 645; 1042; 1964; 2810; 2845
BshTI	A!CCGGT	1	666
BshVI	AT!CGAT	1	2651
BsiEI	CGRY!CG	5	671; 1017; 1458; 2720; 4395
BsiHKAI	GWGCW!C	5	620; 872; 2924; 3114; 4419
BsiHKCI	C!YCGRG	3	613; 656; 997
BsiSI	C!CGG	21	601; 657; 667; 887; 1313; 2029; 2716; 2793; 2815; 2843; 2974; 3064; 3131; 3312; 3587; 3595; 3687; 4161; 4351; 4377; 4524
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	20	49; 905; 1155; 1257; 1389; 1823; 2149; 2541; 2792; 3336; 3617; 3649; 3781; 3816; 3866; 3898; 4251; 4530; 4696; 4714
BsIFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1366; 2962; 3494; 3603
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2327; 2399; 2463; 3758
BsmI	GAATGCN!	1	1562
BsmI	G!CATTC	1	1655
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	6	877; 1168; 2235; 2653; 3672; 3800
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	

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BsmFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1366; 2962; 3494; 3603
BsmFI	!NNNNNNNNNNNGTCCC	4	2327; 2399; 2463; 3758
BsnI	GG!CC	32	84; 277; 655; 749; 809; 829; 1004; 1133; 1196; 1219; 1250; 1262; 1316; 1396; 1457; 1777; 1919; 2574; 2580; 2589; 2632; 2719; 2893; 3284; 3311; 3820; 3877; 3910; 4255; 4689; 4707; 4718
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	3	877; 1168; 3800
BsoBI	C!YCGRG	3	613; 656; 997
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	3	360; 2540; 3243
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3614
Bsp24I	!NNNNNNCCANNNNNGTC	2	4035; 4213
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4067; 4245
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3582
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 3493
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
Bsp1286I	GDGCH!C	13	620; 657; 872; 944; 1415; 2002; 2757; 2850; 2924; 3114; 3176; 3886; 4419
Bsp1407I	T!GTACA	0	
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 752; 954; 1017; 1095; 1238; 1296; 1416; 1458; 2126; 2129; 2143; 2233; 2481; 2493; 2502; 2514; 2524; 2535; 2581; 2720; 2783; 3285; 3330; 3396; 3422; 3547; 3550; 3698; 3830; 4137; 4281; 4777
BspACI	G!CGG	27	370; 403; 528; 651; 746; 1247; 1454; 2071; 2098; 2186; 2296; 2877; 2941; 3042; 3045; 3325; 3380; 3478; 3616; 3763; 3903; 4146; 4391; 4512; 4531; 4658; 4686
BspCNI	CTCAGNNNNNNNN!	2	619; 3936
BspCNI	!NNNNNNNCTGAG	6	998; 2283; 2585; 3466; 4038; 4447
BspDI	AT!CGAT	1	2651
BspD6I	GACTCNNNN!	6	418; 612; 1470; 1884; 3490; 4367
BspD6I	!NNNNNNAGATC	2	1847; 2279
BspEI	T!CCGGA	0	
BspFNI	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
BspHI	T!CATGA	2	2237; 4009
BspLI	GGN!NCC	21	467; 647; 655; 662; 750; 1044; 1134; 1197; 1966; 1987; 1999; 2190; 2351; 2423; 2812; 2847; 3695; 3774; 3819; 4662; 4701
BspMI	ACCTGCNNNN!	3	1090; 3079; 3529
BspMI	!NNNNNNNGCAGGT	1	2698
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	668; 2679; 2990; 3236; 3628; 3987; 4085; 4171
BspPI	!NNNNNGATCC	8	580; 655; 921; 1302; 3055; 3599; 3986; 4083
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3155; 3365
BspTI	C!TTAAG	1	1693
BspT104I	TT!CGAA	2	627; 3493
BspT107I	G!GYRCC	6	465; 645; 1042; 1964; 2810; 2845
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	877; 1168; 3800
BsrI	ACTGGN!	3	2755; 2956; 4202
BsrI	C!CAGT	6	295; 930; 1840; 2518; 4314; 4327
BsrBI	CCG!CTC	2	2235; 3424
BsrBI	GAG!CGG	2	2071; 3478
BsrDI	GCAATGNN!	1	3044
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	6	666; 886; 2028; 3130; 3311; 3594
BsrGI	T!GTACA	0	
BsrSI	ACTGGN!	3	2755; 2956; 4202
BsrSI	C!CAGT	6	295; 930; 1840; 2518; 4314; 4327
BssAI	R!CCGGY	6	666; 886; 2028; 3130; 3311; 3594

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNNGG	23	360; 649; 656; 740; 852; 983; 998; 1191; 1311; 2345; 2417; 2540; 2575; 2584; 2633; 2974; 3243; 3648; 3775; 3776; 3878; 3879; 4569
BssHII	G!CGCGC	0	
BssKI	!CCNGG	19	88; 281; 655; 656; 983; 1311; 2345; 2400; 2417; 2813; 2973; 3196; 3586; 3775; 3878; 4350; 4568; 4581; 4702
BssMI	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
BssNI	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	3529; 4556
BssSI	C!TCGTG	1	3403
BssTII	C!CWWGG	5	360; 2540; 2633; 3243; 3648
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2278; 3155; 3365
Bst98I	C!TTAAG	1	1693
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
BstAFI	C!TTAAG	1	1693
BstAPI	GCANNNN!NTGC	3	2378; 2450; 3912
BstAUI	T!GTACA	0	
BstBI	TT!CGAA	2	627; 3493
Bst2BI	C!ACGAG	2	3529; 4556
Bst2BI	C!TCGTG	1	3403
BstBAI	YAC!GTR	4	340; 1377; 1927; 3115
Bst4CI	ACN!GT	16	76; 198; 269; 543; 581; 645; 1023; 1104; 1902; 3191; 3307; 3415; 3738; 4229; 4699; 4770
BstC8I	GCN!NGC	37	86; 279; 593; 653; 872; 892; 940; 954; 1213; 1217; 1384; 1411; 2030; 2073; 2087; 2360; 2379; 2432; 2451; 2705; 2891; 3110; 3176; 3182; 3210; 3214; 3255; 3259; 3313; 3596; 3783; 3830; 3886; 3908; 4119; 4679; 4716
BstDEI	C!TNAG	8	606; 1006; 2291; 2593; 3474; 3923; 4046; 4455
BstDSI	C!CRYGG	6	360; 649; 852; 1191; 2540; 3243
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2671; 3128; 3153; 3607
BstF5I	!CATCC	2	1160; 2497
BstFNI	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
BstH2I	RGCGC!Y	6	598; 1430; 2078; 2086; 2814; 4489
BstHHI	GCG!C	28	597; 1028; 1145; 1211; 1300; 1370; 1388; 1429; 2077; 2085; 2111; 2133; 2142; 2155; 2186; 2805; 2813; 2877; 2914; 3180; 3440; 3616; 3702; 4105; 4214; 4388; 4488; 4555
BstKTI	GAT!C	23	588; 612; 663; 737; 929; 1310; 1471; 2651; 2655; 2674; 2985; 3063; 3144; 3153; 3231; 3607; 3623; 3982; 3994; 4072; 4080; 4091; 4166
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	6	877; 1168; 2235; 2653; 3672; 3800
BstMBI	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
BstMCI	CGRY!CG	5	671; 1017; 1458; 2720; 4395
BstMWI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 887; 1016; 1091; 1149; 1367; 1415; 2038; 2068; 2095; 2137; 2378; 2450; 2501; 2580; 2802; 2886; 2909; 3048; 3171; 3254; 3521; 3708; 3912; 4111; 4683
BstNI	CC!WGG	12	90; 283; 985; 2347; 2402; 2419; 3198; 3777; 3880; 4570; 4583; 4704
BstNSI	RCATG!Y	5	1185; 2381; 2453; 3216; 4733
BstOI	CC!WGG	12	90; 283; 985; 2347; 2402; 2419; 3198; 3777; 3880; 4570; 4583; 4704
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	19	88; 281; 655; 656; 983; 1311; 2345; 2400; 2417; 2813; 2973; 3196; 3586; 3775; 3878; 4350; 4568; 4581; 4702
BstSFI	C!TRYAG	4	634; 2146; 4273; 4464
BstSLI	GKGC!C	6	657; 872; 1415; 2757; 2850; 4419

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
Bst2UI	CC!WGG	12	90; 283; 985; 2347; 2402; 2419; 3198; 3777; 3880; 4570; 4583; 4704
BstV1I	GCAGCNNNNNNNN!	8	848; 1304; 1599; 2884; 2926; 3447; 3900; 4400
BstV1I	!NNNNNNNNNNNGCTGC	7	881; 2093; 2758; 2942; 3035; 4101; 4307
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	12	585; 609; 660; 734; 1307; 2982; 3228; 3620; 3979; 3991; 4077; 4088
BstYI	R!GATCY	12	585; 609; 660; 734; 1307; 2982; 3228; 3620; 3979; 3991; 4077; 4088
BstZI	C!GGCCG	2	1455; 2717
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2240; 3030; 4531
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2651
Bsu36I	CC!TNAGG	2	2291; 3923
BsuRI	GG!CC	32	84; 277; 655; 749; 809; 829; 1004; 1133; 1196; 1219; 1250; 1262; 1316; 1396; 1457; 1777; 1919; 2574; 2580; 2589; 2632; 2719; 2893; 3284; 3311; 3820; 3877; 3910; 4255; 4689; 4707; 4718
BsuTUI	AT!CGAT	1	2651
BtgI	C!CRYGG	6	360; 649; 852; 1191; 2540; 3243
BtgZI	GCGATGNNNNNNNNNN!	2	1928; 3263
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3082; 3426
BthCI	GCNG!C	38	749; 839; 842; 897; 1097; 1250; 1295; 1298; 1457; 1460; 1590; 2109; 2131; 2145; 2583; 2722; 2774; 2785; 2875; 2880; 2917; 2958; 3045; 3048; 3051; 3287; 3383; 3424; 3438; 3552; 3891; 3906; 4117; 4323; 4326; 4391; 4534; 4689
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1650
BtsCI	GGATGNN!	4	2671; 3128; 3153; 3607
BtsCI	!CATCC	2	1160; 2497
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	1090; 3079; 3529
BveI	!NNNNNNNNNGCAGGT	1	2698
Cac8I	GCN!NGC	37	86; 279; 593; 653; 872; 892; 940; 954; 1213; 1217; 1384; 1411; 2030; 2073; 2087; 2360; 2379; 2432; 2451; 2705; 2891; 3110; 3176; 3182; 3210; 3214; 3255; 3259; 3313; 3596; 3783; 3830; 3886; 3908; 4119; 4679; 4716
CaiI	CAGNNN!CTG	2	3912; 4320
CciI	T!CATGA	2	2237; 4009
CciNI	GC!GGCCGC	1	1455
CdiI	CATC!G	11	352; 792; 825; 1014; 1227; 1305; 1434; 3100; 3105; 3303; 3444
CdiI	C!GATG	2	1914; 3249
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4683
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2472; 2514
CelII	GC!TNAGC	0	
CfoI	GCG!C	28	597; 1028; 1145; 1211; 1300; 1370; 1388; 1429; 2077; 2085; 2111; 2133; 2142; 2155; 2186; 2805; 2813; 2877; 2914; 3180; 3440; 3616; 3702; 4105; 4214; 4388; 4488; 4555
CfrI	Y!GGCCR	7	807; 827; 1455; 2717; 2891; 3282; 3309
Cfr9I	C!CCGGG	1	656
Cfr10I	R!CCGGY	6	666; 886; 2028; 3130; 3311; 3594
Cfr13I	G!GNCC	16	83; 276; 654; 726; 748; 1002; 1132; 1195; 1260; 1315; 1918; 3327; 3772; 3818; 3876; 3909
Cfr42I	CCG!GG	1	652
ChaI	GATC!	23	589; 613; 664; 738; 930; 1311; 1472; 2652; 2656; 2675; 2986; 3064; 3145; 3154; 3232; 3608; 3624; 3983; 3995; 4073; 4081; 4092; 4167
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	1343; 2628; 4068; 4168; 4246
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2295; 2390; 3582; 4132; 4687

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	ACNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2329; 2424; 3616; 4166; 4721
CjeI	!NNNNNNNNCCANNNNNNGT	5	1309; 2594; 4034; 4134; 4212
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	3	754; 4068; 4246
CjePI	!NNNNNNNGANNNNNNNTGG	3	257; 3582; 4181
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	3	290; 3615; 4214
CjePI	!NNNNNNCCANNNNNNTC	3	721; 4035; 4213
Clal	AT!CGAT	1	2651
CpoI	CG!GWCCG	1	3327
CseI	GACGCNNNNN!	3	526; 3521; 3600
CseI	!NNNNNNNNNGCGTC	3	2144; 4039; 4617
CsiI	A!CCWGGT	1	2400
CspI	CG!GWCCG	1	3327
Csp6I	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 933; 3116
Csp45I	TT!CGAA	2	627; 3493
CspAI	A!CCGGT	1	666
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2091; 3700
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	21	301; 361; 678; 771; 900; 1047; 1140; 1182; 2238; 2378; 2450; 2541; 2682; 3027; 3213; 3244; 3270; 3626; 4010; 4730; 4781
CviJI	RG!CY	100	42; 84; 93; 277; 566; 618; 624; 655; 749; 809; 829; 894; 905; 912; 942; 974; 1004; 1055; 1071; 1094; 1118; 1125; 1133; 1152; 1196; 1215; 1219; 1229; 1250; 1262; 1295; 1316; 1396; 1457; 1480; 1590; 1757; 1777; 1919; 2000; 2014; 2028; 2309; 2350; 2422; 2545; 2574; 2580; 2589; 2597; 2620; 2632; 2638; 2719; 2736; 2744; 2771; 2796; 2880; 2889; 2893; 2917; 2955; 3031; 3048; 3067; 3130; 3174; 3184; 3201; 3284; 3311; 3315; 3352; 3375; 3391; 3571; 3598; 3659; 3781; 3820; 3877; 3884; 3891; 3910; 3921; 4172; 4201; 4244; 4255; 4320; 4399; 4424; 4429; 4475; 4565; 4663; 4689; 4707; 4718
CviKI-1	RG!CY	100	42; 84; 93; 277; 566; 618; 624; 655; 749; 809; 829; 894; 905; 912; 942; 974; 1004; 1055; 1071; 1094; 1118; 1125; 1133; 1152; 1196; 1215; 1219; 1229; 1250; 1262; 1295; 1316; 1396; 1457; 1480; 1590; 1757; 1777; 1919; 2000; 2014; 2028; 2309; 2350; 2422; 2545; 2574; 2580; 2589; 2597; 2620; 2632; 2638; 2719; 2736; 2744; 2771; 2796; 2880; 2889; 2893; 2917; 2955; 3031; 3048; 3067; 3130; 3174; 3184; 3201; 3284; 3311; 3315; 3352; 3375; 3391; 3571; 3598; 3659; 3781; 3820; 3877; 3884; 3891; 3910; 3921; 4172; 4201; 4244; 4255; 4320; 4399; 4424; 4429; 4475; 4565; 4663; 4689; 4707; 4718
CviQI	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 933; 3116
DdeI	C!TNAG	8	606; 1006; 2291; 2593; 3474; 3923; 4046; 4455
DinI	GGC!GCC	1	2812
DpnI	GA!TC	23	587; 611; 662; 736; 928; 1309; 1470; 2650; 2654; 2673; 2984; 3062; 3143; 3152; 3230; 3606; 3622; 3981; 3993; 4071; 4079; 4090; 4165
DpnII	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
DraI	TTT!AAA	3	1513; 3955; 3974
DraII	RG!GNCCY	2	1002; 3909
DraIII	CACNN!GTG	4	876; 1326; 1410; 1927
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4291
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTT	0	
DrdI	GACNNN!NNGTC	3	1882; 2838; 4627
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1882; 2838; 4627
EaeI	Y!GGCCR	7	807; 827; 1455; 2717; 2891; 3282; 3309
EagI	C!GGCCG	2	1455; 2717
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2278; 3155; 3365
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EarI	!NNNNGAAGAG	3	2278; 3155; 3365
EciI	GGCGGANNNNNNNNNN!	4	2311; 3340; 4527; 4673
EciI	!NNNNNNNNNTCCGCC	4	496; 2482; 2503; 2524
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	2	1455; 2717
Eco24I	GRGCY!C	6	620; 657; 944; 2002; 3176; 3886
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	3	877; 1168; 3800
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	726; 3327; 3772
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	2	1455; 2717
Eco57I	CTGAAGNNNNNNNNNNNNNN!	2	2957; 3389
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4187
Eco72I	CAC!GTG	1	1377
Eco81I	CC!TNAGG	2	2291; 3923
Eco88I	C!YCGRG	3	613; 656; 997
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	5	360; 2540; 2633; 3243; 3648
Eco147I	AGG!CCT	1	2632
EcoHI	!CCSGG	7	655; 656; 1311; 2813; 2973; 3586; 4350
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	3	2957; 3389; 3651
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	2	3594; 4187
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	2	1002; 3909
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	12	88; 281; 983; 2345; 2400; 2417; 3196; 3775; 3878; 4568; 4581; 4702
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	5	360; 2540; 2633; 3243; 3648
EcoT22I	ATGCA!T	3	2383; 2455; 4786
EcoT38I	GRGCY!C	6	620; 657; 944; 2002; 3176; 3886
Eco53kI	GAG!CTC	1	618
EgeI	GGC!GCC	1	2812
EheI	GGC!GCC	1	2812
ErhI	C!CWWGG	5	360; 2540; 2633; 3243; 3648
EsaBC3I	TC!GA	19	615; 628; 641; 792; 1014; 1032; 1269; 1305; 1961; 2652; 2925; 3081; 3105; 3141; 3303; 3494; 3539; 3794; 4632
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	21	304; 364; 681; 774; 903; 1050; 1143; 1185; 2241; 2381; 2453; 2544; 2685; 3030; 3216; 3247; 3273; 3629; 4013; 4733; 4784
Fail	YA!TR	58	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 679; 691; 772; 901; 1048; 1141; 1183; 1473; 1483; 1549; 1594; 1799; 2227; 2239; 2370; 2379; 2442; 2451; 2475; 2542; 2566; 2683; 2747; 3028; 3053; 3214; 3245; 3271; 3343; 3559; 3627; 3705; 3757; 3918; 3935; 3937; 3939; 4011; 4289; 4478; 4594; 4667; 4731; 4782
FalI	AAGNNNNNCTTNNNNNNNNNNNN!	2	1299; 3151
FalI	!NNNNNNNNAAGNNNNNCTT	2	1267; 3119
FaqI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1366; 2962; 3494; 3603
FaqI	!NNNNNNNNNNNNNGTCCC	4	2327; 2399; 2463; 3758
FatI	!CATG	21	300; 360; 677; 770; 899; 1046; 1139; 1181; 2237; 2377; 2449; 2540; 2681; 3026; 3212; 3243; 3269; 3625; 4009; 4729; 4780
FauI	CCCGCNNNN!	11	93; 119; 286; 759; 961; 1423; 2133; 2488; 2509; 3705; 3837
FauI	!NNNNNNGCGGG	6	644; 2064; 2934; 3471; 3609; 3756
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	640
FmuI	GGNC!C	16	86; 279; 657; 729; 751; 1005; 1135; 1198; 1263; 1318; 1921; 3330; 3775; 3821; 3879; 3912

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	38	747; 837; 840; 895; 1095; 1248; 1293; 1296; 1455; 1458; 1588; 2107; 2129; 2143; 2581; 2720; 2772; 2783; 2873; 2878; 2915; 2956; 3043; 3046; 3049; 3285; 3381; 3422; 3436; 3550; 3889; 3904; 4115; 4321; 4324; 4389; 4532; 4687
FokI	GGATGNNNNNNNNN!	4	2678; 3135; 3160; 3614
FokI	!NNNNNNNNNNNNNNCATCC	2	1147; 2484
FriOI	GRGCY!C	6	620; 657; 944; 2002; 3176; 3886
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2913
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1466; 1660; 2078; 2634; 3649; 3983; 4236
FspEI	CCNNNNNNNNNNNN!	167	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 662; 677; 714; 742; 763; 789; 823; 843; 862; 888; 911; 926; 943; 957; 973; 988; 1009; 1030; 1059; 1077; 1095; 1116; 1135; 1149; 1177; 1191; 1210; 1225; 1248; 1264; 1296; 1314; 1330; 1344; 1371; 1387; 1410; 1427; 1443; 1471; 1494; 1533; 1547; 1688; 1783; 1807; 1830; 1853; 1871; 1893; 1914; 1933; 1952; 1981; 2002; 2016; 2042; 2130; 2156; 2205; 2246; 2264; 2303; 2319; 2357; 2414; 2429; 2486; 2506; 2520; 2537; 2551; 2588; 2603; 2646; 2729; 2796; 2827; 2847; 2862; 2907; 2921; 2987; 3001; 3020; 3036; 3077; 3097; 3144; 3194; 3210; 3230; 3255; 3275; 3298; 3325; 3343; 3369; 3409; 3435; 3459; 3515; 3529; 3557; 3600; 3621; 3656; 3700; 3788; 3812; 3834; 3854; 3870; 3891; 3905; 3924; 4008; 4028; 4056; 4071; 4105; 4147; 4174; 4189; 4234; 4258; 4272; 4294; 4320; 4340; 4364; 4390; 4438; 4457; 4476; 4502; 4537; 4582; 4612; 4626; 4677; 4691; 4716; 4732; 4753; 4782
FspEI	!NNNNNNNNNNNNNNNGG	130	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 628; 652; 691; 709; 727; 779; 811; 839; 872; 891; 920; 950; 970; 1025; 1057; 1100; 1138; 1178; 1201; 1229; 1274; 1298; 1335; 1375; 1418; 1439; 1482; 1582; 1651; 1681; 1759; 1808; 1830; 1858; 1894; 1939; 1968; 2004; 2023; 2051; 2071; 2134; 2157; 2265; 2297; 2315; 2344; 2387; 2416; 2527; 2556; 2599; 2620; 2648; 2681; 2701; 2726; 2753; 2778; 2800; 2828; 2854; 2875; 2926; 2947; 2965; 3013; 3049; 3105; 3130; 3154; 3183; 3206; 3230; 3256; 3278; 3297; 3322; 3362; 3398; 3463; 3548; 3572; 3601; 3635; 3656; 3676; 3721; 3748; 3767; 3800; 3852; 3883; 3910; 3962; 4060; 4131; 4176; 4237; 4302; 4336; 4362; 4380; 4416; 4486; 4509; 4531; 4555; 4588; 4636; 4671; 4689; 4746
Fsp4HI	GC!NGC	38	747; 837; 840; 895; 1095; 1248; 1293; 1296; 1455; 1458; 1588; 2107; 2129; 2143; 2581; 2720; 2772; 2783; 2873; 2878; 2915; 2956; 3043; 3046; 3049; 3285; 3381; 3422; 3436; 3550; 3889; 3904; 4115; 4321; 4324; 4389; 4532; 4687
GdiII	C!GGCCR	3	807; 1455; 2717
GdiII	Y!GGCCG	5	827; 1455; 2717; 3282; 3309
GlaI	GC!GC	28	596; 1027; 1144; 1210; 1299; 1369; 1387; 1428; 2076; 2084; 2110; 2132; 2141; 2154; 2185; 2804; 2812; 2876; 2913; 3179; 3439; 3615; 3701; 4104; 4213; 4387; 4487; 4554
GluI	GC!NGC	38	747; 837; 840; 895; 1095; 1248; 1293; 1296; 1455; 1458; 1588; 2107; 2129; 2143; 2581; 2720; 2772; 2783; 2873; 2878; 2915; 2956; 3043; 3046; 3049; 3285; 3381; 3422; 3436; 3550; 3889; 3904; 4115; 4321; 4324; 4389; 4532; 4687
GsaI	CCCAG!C	3	2358; 2430; 4429
GsaI	GCTGG!G	1	3319
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3651
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3594
HaeI	WGG!CCW	7	1219; 1396; 2632; 2893; 4255; 4707; 4718
HaeII	RGCGC!Y	6	598; 1430; 2078; 2086; 2814; 4489
HaeIII	GG!CC	32	84; 277; 655; 749; 809; 829; 1004; 1133; 1196; 1219; 1250; 1262; 1316; 1396; 1457; 1777; 1919; 2574; 2580; 2589; 2632; 2719; 2893; 3284; 3311; 3820; 3877; 3910; 4255; 4689; 4707; 4718
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1486; 3007
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1452; 2973
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1485; 3006
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1454; 2975
HapII	C!CGG	21	601; 657; 667; 887; 1313; 2029; 2716; 2793; 2815; 2843; 2974; 3064; 3131; 3312; 3587; 3595; 3687; 4161; 4351; 4377; 4524
HgaI	GACGCNNNNN!	3	526; 3521; 3600

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HgaI	!NNNNNNNNNGCGTC	3	2144; 4039; 4617
HhaI	GCG!C	28	597; 1028; 1145; 1211; 1300; 1370; 1388; 1429; 2077; 2085; 2111; 2133; 2142; 2155; 2186; 2805; 2813; 2877; 2914; 3180; 3440; 3616; 3702; 4105; 4214; 4388; 4488; 4555
Hin1I	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
Hin1III	CATG!	21	304; 364; 681; 774; 903; 1050; 1143; 1185; 2241; 2381; 2453; 2544; 2685; 3030; 3216; 3247; 3273; 3629; 4013; 4733; 4784
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1485; 3006
Hin4I	!NNNNNNNGABNNNNNRTC	3	1453; 2974; 3004
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1485; 3006; 3036
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1453; 2974
Hin6I	G!CGC	28	595; 1026; 1143; 1209; 1298; 1368; 1386; 1427; 2075; 2083; 2109; 2131; 2140; 2153; 2184; 2803; 2811; 2875; 2912; 3178; 3438; 3614; 3700; 4103; 4212; 4386; 4486; 4553
HinP1I	G!CGC	28	595; 1026; 1143; 1209; 1298; 1368; 1386; 1427; 2075; 2083; 2109; 2131; 2140; 2153; 2184; 2803; 2811; 2875; 2912; 3178; 3438; 3614; 3700; 4103; 4212; 4386; 4486; 4553
HincII	GTY!RAC	2	641; 1574
HindII	GTY!RAC	2	641; 1574
HindIII	A!AGCTT	1	622
HinfI	G!ANTC	13	410; 604; 1462; 1854; 1876; 2286; 3296; 3430; 3482; 3540; 3577; 4359; 4755
HpaI	GTT!AAC	1	1574
HpaII	C!CGG	21	601; 657; 667; 887; 1313; 2029; 2716; 2793; 2815; 2843; 2974; 3064; 3131; 3312; 3587; 3595; 3687; 4161; 4351; 4377; 4524
HphI	GGTGANNNNNNNN!	5	376; 813; 1101; 3882; 3998
HphI	!NNNNNNNTCACC	7	810; 1092; 1224; 1329; 1413; 1928; 2989
Hpy8I	GTN!NAC	14	201; 539; 577; 641; 804; 818; 870; 1107; 1158; 1574; 1858; 1875; 1930; 4417
Hpy99I	CGWCG!	16	645; 796; 835; 967; 1042; 1117; 1132; 1246; 1444; 2901; 2929; 3223; 3238; 3515; 3900; 4633
Hpy166II	GTN!NAC	14	201; 539; 577; 641; 804; 818; 870; 1107; 1158; 1574; 1858; 1875; 1930; 4417
Hpy188I	TCN!GA	13	585; 609; 741; 1985; 2594; 2778; 3122; 3475; 3576; 4055; 4189; 4542; 4620
Hpy188III	TC!NNGA	25	613; 762; 1032; 1305; 1326; 1466; 2238; 2290; 2603; 2656; 2829; 3145; 3154; 3237; 3293; 3337; 3427; 3460; 3529; 4010; 4084; 4167; 4265; 4363; 4497
HpyAV	CCTTCNNNNNN!	7	786; 954; 1230; 1293; 3456; 3563; 4242
HpyAV	!NNNNNGAAGG	7	2044; 2939; 3668; 3684; 3867; 4184; 4494
HpyCH4III	ACN!GT	16	76; 198; 269; 543; 581; 645; 1023; 1104; 1902; 3191; 3307; 3415; 3738; 4229; 4699; 4770
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 866; 1376; 1871; 1883; 1926; 2036; 2927; 3114; 3895; 4028
HpyCH4V	TG!CA	18	636; 870; 1560; 1587; 1655; 2372; 2381; 2444; 2453; 2568; 2644; 2703; 2862; 3037; 3051; 4121; 4417; 4784
HpyF3I	C!TNAG	8	606; 1006; 2291; 2593; 3474; 3923; 4046; 4455
HpyF10VI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 887; 1016; 1091; 1149; 1367; 1415; 2038; 2068; 2095; 2137; 2378; 2450; 2501; 2580; 2802; 2886; 2909; 3048; 3171; 3254; 3521; 3708; 3912; 4111; 4683
Hsp92I	GR!CGYC	7	122; 175; 258; 444; 2811; 3513; 3592
Hsp92II	CATG!	21	304; 364; 681; 774; 903; 1050; 1143; 1185; 2241; 2381; 2453; 2544; 2685; 3030; 3216; 3247; 3273; 3629; 4013; 4733; 4784
HspAI	G!CGC	28	595; 1026; 1143; 1209; 1298; 1368; 1386; 1427; 2075; 2083; 2109; 2131; 2140; 2153; 2184; 2803; 2811; 2875; 2912; 3178; 3438; 3614; 3700; 4103; 4212; 4386; 4486; 4553
KasI	G!GCGCC	1	2810
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	649
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	652
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	1574
Kzo9I	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3155; 3365

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnI	RGC!GCGY	6	596; 1428; 2076; 2084; 2812; 4487
LpnPI	CCDGNNNNNNNNNNN!	65	102; 295; 614; 670; 769; 823; 900; 937; 997; 1018; 1065; 1095; 1135; 1162; 1177; 1225; 1264; 1326; 1371; 1396; 1437; 1548; 1853; 2042; 2265; 2303; 2319; 2359; 2414; 2431; 2531; 2616; 2729; 2806; 2828; 2851; 2987; 3001; 3020; 3077; 3144; 3194; 3210; 3267; 3325; 3534; 3600; 3624; 3700; 3789; 3892; 3925; 4156; 4174; 4320; 4340; 4364; 4390; 4439; 4537; 4582; 4612; 4691; 4716; 4753
LpnPI	!NNNNNNNNNNNNNNCHGG	54	75; 268; 552; 586; 642; 691; 872; 891; 970; 1057; 1138; 1201; 1298; 1894; 2014; 2071; 2134; 2332; 2344; 2404; 2416; 2648; 2693; 2736; 2778; 2800; 2828; 2875; 2937; 2959; 3049; 3116; 3139; 3183; 3278; 3297; 3322; 3471; 3572; 3615; 3672; 3762; 3865; 3892; 3910; 4146; 4183; 4336; 4362; 4502; 4520; 4555; 4636; 4689
Lsp1109I	GCAGCNNNNNNNN!	8	848; 1304; 1599; 2884; 2926; 3447; 3900; 4400
Lsp1109I	!NNNNNNNNNNNNNGCTGC	7	881; 2093; 2758; 2942; 3035; 4101; 4307
LweI	GCATCNNNNN!	10	977; 1019; 1106; 1427; 1627; 2390; 2462; 3110; 3174; 3449
LweI	!NNNNNNNNNNNGATGC	5	357; 2769; 3024; 3240; 4632
MabI	A!CCWGGT	1	2400
MaeI	C!TAG	8	592; 1466; 1660; 2078; 2634; 3649; 3983; 4236
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 866; 1376; 1871; 1883; 1926; 2036; 2927; 3114; 3895; 4028
MaeIII	!GTNAC	13	61; 148; 497; 1326; 1599; 2100; 2112; 2931; 3237; 3927; 4193; 4309; 4372
MalI	GA!TC	23	587; 611; 662; 736; 928; 1309; 1470; 2650; 2654; 2673; 2984; 3062; 3143; 3152; 3230; 3606; 3622; 3981; 3993; 4071; 4079; 4090; 4165
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2235; 3424
MbiI	GAG!CGG	2	2071; 3478
MboI	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
MboII	GAAGANNNNNNNN!	6	707; 2067; 2295; 3172; 3382; 4001
MboII	!NNNNNNNTCTTC	6	777; 939; 3462; 3629; 3829; 4072
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1561
MfiI	R!GATCY	12	585; 609; 660; 734; 1307; 2982; 3228; 3620; 3979; 3991; 4077; 4088
MhiI	GDGCH!C	13	620; 657; 872; 944; 1415; 2002; 2757; 2850; 2924; 3114; 3176; 3886; 4419
MisI	TGG!CCA	1	2893
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	2893
MlyI	GAGTCNNNNN!	2	1863; 2295
MlyI	!NNNNNGACTC	6	404; 598; 1456; 1870; 3476; 4353
Mly113I	GG!CGCC	1	2811
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	1904
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4336; 4520
MnII	CCTCNNNNNNN!	7	1530; 2594; 3412; 3618; 3932; 4302; 4626
MnII	!NNNNNNNGAGG	20	541; 717; 735; 792; 993; 1343; 1383; 1437; 1490; 1955; 2286; 2564; 2607; 2622; 2662; 2726; 2862; 3219; 3649; 4552
Mph1103I	ATGCA!T	3	2383; 2455; 4786
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	2028; 3311; 3594
MroXI	GAANN!NN TTC	0	
MscI	TGG!CCA	1	2893
MseI	T!TAA	16	7; 1449; 1512; 1573; 1694; 1715; 1726; 1738; 1749; 1766; 1864; 2135; 3954; 3968; 3973; 4025
MslI	CAYNN!NNRTG	5	365; 823; 1084; 1102; 3248
MspI	C!CGG	21	601; 657; 667; 887; 1313; 2029; 2716; 2793; 2815; 2843; 2974; 3064; 3131; 3312; 3587; 3595; 3687; 4161; 4351; 4377; 4524
Msp20I	TGG!CCA	1	2893
MspA1I	CMG!CKG	7	651; 1152; 1215; 2309; 2917; 4146; 4391

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspCI	C!TTAAG	1	1693
MspJI	CNNRNNNNNNNNNN!	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; 627; 640; 662; 679; 713; 741; 763; 783; 810; 823; 837; 855; 879; 894; 910; 925; 942; 965; 995; 1009; 1030; 1044; 1059; 1072; 1094; 1108; 1134; 1147; 1161; 1176; 1190; 1204; 1218; 1253; 1287; 1309; 1324; 1338; 1352; 1370; 1387; 1401; 1415; 1429; 1455; 1471; 1484; 1499; 1518; 1535; 1548; 1589; 1603; 1616; 1634; 1672; 1687; 1705; 1746; 1770; 1790; 1808; 1829; 1852; 1884; 1899; 1921; 1939; 1952; 1973; 1990; 2003; 2016; 2032; 2045; 2075; 2090; 2115; 2133; 2146; 2161; 2185; 2199; 2223; 2248; 2264; 2302; 2318; 2357; 2371; 2385; 2413; 2429; 2443; 2457; 2486; 2499; 2520; 2529; 2551; 2581; 2597; 2615; 2645; 2668; 2692; 2716; 2735; 2763; 2789; 2805; 2818; 2841; 2855; 2875; 2888; 2902; 2921; 2935; 2948; 2964; 2979; 2992; 3008; 3023; 3039; 3064; 3083; 3099; 3112; 3125; 3143; 3157; 3171; 3187; 3209; 3225; 3244; 3266; 3282; 3305; 3324; 3338; 3354; 3368; 3388; 3404; 3417; 3439; 3472; 3486; 3506; 3519; 3533; 3587; 3600; 3623; 3636; 3655; 3672; 3699; 3735; 3768; 3787; 3812; 3833; 3860; 3873; 3890; 3904; 3919; 3935; 3995; 4020; 4036; 4058; 4071; 4085; 4116; 4130; 4155; 4173; 4188; 4201; 4220; 4233; 4248; 4277; 4296; 4314; 4339; 4354; 4373; 4389; 4408; 4426; 4442; 4456; 4475; 4502; 4525; 4547; 4566; 4581; 4594; 4611; 4631; 4658; 4671; 4690; 4715; 4738; 4752; 4765; 4782
MspJI	!NNNNNNNNNNNNYNG	203	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 593; 612; 636; 653; 676; 709; 727; 748; 784; 811; 829; 853; 873; 892; 910; 935; 957; 983; 1009; 1033; 1052; 1070; 1090; 1108; 1126; 1150; 1168; 1192; 1212; 1237; 1261; 1283; 1310; 1327; 1344; 1361; 1385; 1410; 1429; 1452; 1477; 1521; 1563; 1646; 1681; 1708; 1731; 1760; 1804; 1826; 1858; 1894; 1911; 1932; 1969; 1989; 2006; 2023; 2058; 2076; 2094; 2111; 2135; 2157; 2184; 2212; 2238; 2276; 2297; 2314; 2332; 2355; 2376; 2404; 2427; 2448; 2466; 2487; 2504; 2527; 2551; 2571; 2589; 2611; 2642; 2664; 2690; 2709; 2726; 2754; 2773; 2792; 2810; 2828; 2849; 2871; 2895; 2928; 2948; 2966; 2987; 3013; 3040; 3057; 3074; 3091; 3117; 3139; 3161; 3179; 3199; 3218; 3240; 3278; 3298; 3322; 3342; 3362; 3389; 3413; 3446; 3465; 3493; 3515; 3544; 3572; 3597; 3616; 3635; 3656; 3673; 3690; 3721; 3748; 3768; 3791; 3811; 3848; 3865; 3884; 3910; 3930; 3969; 3996; 4015; 4033; 4070; 4088; 4129; 4147; 4173; 4190; 4222; 4251; 4279; 4300; 4323; 4342; 4363; 4381; 4398; 4416; 4442; 4463; 4483; 4503; 4521; 4542; 4568; 4585; 4604; 4623; 4652; 4671; 4689; 4708; 4726; 4744; 4767
MspR9I	CC!NGG	19	90; 283; 657; 658; 985; 1313; 2347; 2402; 2419; 2815; 2975; 3198; 3588; 3777; 3880; 4352; 4570; 4583; 4704
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1561
MvaI	CC!WGG	12	90; 283; 985; 2347; 2402; 2419; 3198; 3777; 3880; 4570; 4583; 4704
MvaI269I	GAATGCN!	1	1562
MvaI269I	G!CATTC	1	1655
MvnI	CG!CG	20	60; 651; 1145; 1298; 1370; 1388; 1460; 1735; 2111; 2131; 2155; 2186; 2877; 3178; 3616; 3700; 3763; 3832; 4105; 4686
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 887; 1016; 1091; 1149; 1367; 1415; 2038; 2068; 2095; 2137; 2378; 2450; 2501; 2580; 2802; 2886; 2909; 3048; 3171; 3254; 3521; 3708; 3912; 4111; 4683
NaeI	GCC!GGC	3	2030; 3313; 3596
NarI	GG!CGCC	1	2811
NciI	CC!SGG	7	657; 658; 1313; 2815; 2975; 3588; 4352
NcoI	C!CATGG	3	360; 2540; 3243
NdeI	CA!TATG	1	234
NdeII	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoMIV	G!CCGGC	3	2028; 3311; 3594
NheI	G!CTAGC	1	591
NlaIII	CATG!	21	304; 364; 681; 774; 903; 1050; 1143; 1185; 2241; 2381; 2453; 2544; 2685; 3030; 3216; 3247; 3273; 3629; 4013; 4733; 4784
NlaIV	GGN!NCC	21	467; 647; 655; 662; 750; 1044; 1134; 1197; 1966; 1987; 1999; 2190; 2351; 2423; 2812; 2847; 3695; 3774; 3819; 4662; 4701
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	6	1122; 1359; 1443; 1643; 1958; 3550
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	2	347; 4622
Nli3877I	CYCGR!G	3	617; 660; 1001
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2600; 3036
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	2565
NmeDI	RCCGGYNNNNNNNN!	6	678; 898; 2040; 3142; 3323; 3606
NmeDI	!NNNNNNNNNNNNRCCGGY	6	653; 873; 2015; 3117; 3298; 3581
NmuCI	!GTSAC	4	1326; 2100; 2931; 3237
NotI	GC!GGCCGC	1	1455
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2913
NsiI	ATGCA!T	3	2383; 2455; 4786
NspI	RCATG!Y	5	1185; 2381; 2453; 3216; 4733
NspV	TT!CGAA	2	627; 3493
OliI	CACNN!NNGTG	2	823; 1084
PabI	GTA!C	9	220; 245; 300; 333; 384; 541; 648; 935; 3118
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2381; 2453; 3216
PaeR7I	C!TCGAG	1	613
PagI	T!CATGA	2	2237; 4009
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3776; 3879
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2632
PciI	A!CATGT	2	1181; 4729
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3155; 3365
PcsI	WCGNNNN!NNNCGW	11	872; 1019; 1073; 1406; 1439; 3105; 3182; 3425; 3499; 3892; 4410
PctI	GAATGCN!	1	1562
PctI	G!CATTC	1	1655
PdiI	GCC!GGC	3	2030; 3313; 3596
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	5	3296; 3430; 3540; 3577; 4755
Pfi23II	C!GTACG	0	
PfifI	GACN!NNGTC	1	2929
PfIMI	CCANNNN!NTGG	2	905; 1155
PfoI	T!CCNGGA	1	3586
PhoI	GG!CC	32	84; 277; 655; 749; 809; 829; 1004; 1133; 1196; 1219; 1250; 1262; 1316; 1396; 1457; 1777; 1919; 2574; 2580; 2589; 2632; 2719; 2893; 3284; 3311; 3820; 3877; 3910; 4255; 4689; 4707; 4718
PinAI	A!CCGGT	1	666
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	2	995; 3192
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	3	1232; 2757; 3012
PleI	GAGTCNNNN!	2	1862; 2294
PleI	!NNNNGACTC	6	404; 598; 1456; 1870; 3476; 4353
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	1	1377
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	1	1377
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1893
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	4023
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4055
PpiI	!NNNNNNNGAACNNNNNCTC	1	1861
Ppsi	GAGTCNNNN!	2	1862; 2294
Ppsi	!NNNNGACTC	6	404; 598; 1456; 1870; 3476; 4353
Ppu10I	A!TGCAT	3	2379; 2451; 4782
Ppu21I	YAC!GTR	4	340; 1377; 1927; 3115

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpuMI	RG!GWCCY	0	
Psci	A!CATGT	2	1181; 4729
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1594; 1799
Psp03I	GGWC!C	3	729; 3330; 3775
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	12	88; 281; 983; 2345; 2400; 2417; 3196; 3775; 3878; 4568; 4581; 4702
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	1	1377
PspEI	G!GTNACC	0	
PspGI	!CCWGG	12	88; 281; 983; 2345; 2400; 2417; 3196; 3775; 3878; 4568; 4581; 4702
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	21	467; 647; 655; 662; 750; 1044; 1134; 1197; 1966; 1987; 1999; 2190; 2351; 2423; 2812; 2847; 3695; 3774; 3819; 4662; 4701
PspOMI	G!GGCCC	1	653
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	4	125; 1007; 2541; 3540
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2943
PspPI	G!GNCC	16	83; 276; 654; 726; 748; 1002; 1132; 1195; 1260; 1315; 1918; 3327; 3772; 3818; 3876; 3909
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2364; 2436; 3942
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	2	2277; 3472
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	2	1005; 3912
PstI	CTGCA!G	1	638
PstNI	CAGNN!CTG	2	3912; 4320
PsuI	R!GATCY	12	585; 609; 660; 734; 1307; 2982; 3228; 3620; 3979; 3991; 4077; 4088
PsyI	GACN!NNGTC	1	2929
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	4	1152; 1215; 2309; 2917
RcaI	T!CATGA	2	2237; 4009
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	3	815; 1037; 3326
RceI	!NNNNNNNNNNNNNNNNNGTCCGATG	0	
RgaI	GCGAT!CGC	0	
RgiI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	4	1195; 1334; 1420; 1540
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	9	219; 244; 299; 332; 383; 540; 647; 934; 3117
RsaNI	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 933; 3116
RseI	CAYNN!NNRTG	5	365; 823; 1084; 1102; 3248
RsrII	CG!GWCCG	1	3327
Rsr2I	CG!GWCCG	1	3327
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SalI	G!TCGAC	1	639
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3155; 3365
SaqAI	T!TAA	16	7; 1449; 1512; 1573; 1694; 1715; 1726; 1738; 1749; 1766; 1864; 2135; 3954; 3968; 3973; 4025

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	38	747; 837; 840; 895; 1095; 1248; 1293; 1296; 1455; 1458; 1588; 2107; 2129; 2143; 2581; 2720; 2772; 2783; 2873; 2878; 2915; 2956; 3043; 3046; 3049; 3285; 3381; 3422; 3436; 3550; 3889; 3904; 4115; 4321; 4324; 4389; 4532; 4687
Sau96I	G!GNCC	16	83; 276; 654; 726; 748; 1002; 1132; 1195; 1260; 1315; 1918; 3327; 3772; 3818; 3876; 3909
Sau3AI	!GATC	23	585; 609; 660; 734; 926; 1307; 1468; 2648; 2652; 2671; 2982; 3060; 3141; 3150; 3228; 3604; 3620; 3979; 3991; 4069; 4077; 4088; 4163
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1863; 2295
SchI	!NNNNNGACTC	6	404; 598; 1456; 1870; 3476; 4353
SciI	CTC!GAG	1	615
ScrFI	CC!NGG	19	90; 283; 657; 658; 985; 1313; 2347; 2402; 2419; 2815; 2975; 3198; 3588; 3777; 3880; 4352; 4570; 4583; 4704
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	837; 1011; 2389; 2461; 2630; 4572
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2966; 3451
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	13	620; 657; 872; 944; 1415; 2002; 2757; 2850; 2924; 3114; 3176; 3886; 4419
SelI	!CGCG	20	58; 649; 1143; 1296; 1368; 1386; 1458; 1733; 2109; 2129; 2153; 2184; 2875; 3176; 3614; 3698; 3761; 3830; 4103; 4684
SetI	ASST!	66	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 710; 778; 803; 869; 896; 907; 926; 1066; 1073; 1084; 1154; 1217; 1285; 1379; 1394; 1501; 1522; 1531; 1543; 1592; 1759; 1874; 1886; 1929; 1966; 2016; 2039; 2163; 2311; 2406; 2599; 2712; 2840; 2919; 2930; 3002; 3073; 3117; 3377; 3523; 3567; 3898; 3929; 3988; 4031; 4174; 4195; 4294; 4431; 4446; 4465; 4477; 4521; 4567; 4618
SexAI	A!CCWGGT	1	2400
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	977; 1019; 1106; 1427; 1627; 2390; 2462; 3110; 3174; 3449
SfaNI	!NNNNNNNNNGATGC	5	357; 2769; 3024; 3240; 4632
SfiI	C!TRYAG	4	634; 2146; 4273; 4464
SfiI	GGCCNNNN!NGGCC	1	2586
SfoI	GGC!GCC	1	2812
Sfr274I	C!TCGAG	1	613
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 3493
SgeI	CNNGNNNNNNNN!	193	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 662; 679; 718; 753; 768; 783; 810; 837; 855; 879; 894; 912; 936; 951; 965; 996; 1009; 1035; 1059; 1080; 1094; 1116; 1134; 1152; 1165; 1185; 1204; 1218; 1263; 1287; 1309; 1324; 1338; 1353; 1370; 1387; 1401; 1422; 1436; 1455; 1471; 1518; 1547; 1589; 1672; 1746; 1830; 1852; 1884; 1921; 1939; 1958; 1973; 2015; 2032; 2049; 2084; 2098; 2115; 2137; 2161; 2185; 2250; 2264; 2302; 2318; 2358; 2371; 2390; 2413; 2430; 2443; 2462; 2492; 2513; 2530; 2553; 2588; 2615; 2646; 2668; 2694; 2716; 2735; 2763; 2799; 2818; 2841; 2855; 2875; 2888; 2902; 2921; 2935; 2954; 2986; 3000; 3013; 3039; 3070; 3083; 3100; 3117; 3131; 3148; 3166; 3181; 3209; 3225; 3244; 3266; 3282; 3305; 3324; 3349; 3368; 3388; 3415; 3439; 3472; 3491; 3519; 3533; 3599; 3623; 3638; 3661; 3682; 3699; 3747; 3774; 3788; 3817; 3841; 3874; 3891; 3911; 3924; 3937; 3995; 4022; 4041; 4071; 4096; 4116; 4130; 4155; 4173; 4210; 4248; 4277; 4305; 4319; 4339; 4354; 4375; 4389; 4408; 4426; 4442; 4482; 4502; 4529; 4547; 4568; 4581; 4594; 4611; 4635; 4658; 4690; 4715; 4742; 4764

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	168	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 599; 636; 653; 692; 727; 748; 784; 811; 829; 853; 873; 892; 910; 939; 970; 991; 1009; 1033; 1054; 1072; 1090; 1108; 1126; 1150; 1168; 1192; 1237; 1261; 1283; 1312; 1344; 1361; 1396; 1429; 1452; 1492; 1521; 1563; 1646; 1720; 1804; 1826; 1858; 1895; 1913; 1932; 1989; 2006; 2023; 2058; 2076; 2096; 2116; 2135; 2159; 2224; 2276; 2332; 2364; 2387; 2404; 2436; 2466; 2487; 2504; 2527; 2562; 2589; 2620; 2642; 2668; 2690; 2709; 2737; 2773; 2792; 2815; 2836; 2854; 2871; 2895; 2928; 2960; 2987; 3013; 3044; 3074; 3091; 3117; 3140; 3161; 3183; 3203; 3223; 3240; 3279; 3298; 3323; 3342; 3362; 3389; 3413; 3446; 3465; 3493; 3515; 3573; 3597; 3616; 3635; 3656; 3673; 3721; 3748; 3768; 3791; 3815; 3848; 3865; 3885; 3911; 3969; 3996; 4015; 4045; 4070; 4090; 4129; 4147; 4184; 4222; 4251; 4279; 4300; 4328; 4349; 4382; 4400; 4456; 4476; 4503; 4521; 4542; 4568; 4585; 4609; 4632; 4664; 4689; 4716; 4738; 4767
Sgfl	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	652
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1958; 3745; 4538
SimI	!GACCC	5	106; 1175; 3239; 3807; 4055
SinI	G!GWCC	3	726; 3327; 3772
SlaI	C!TCGAG	1	613
SmaI	CCC!GGG	1	658
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 823; 1084; 1102; 3248
SmlI	C!TYRAG	7	613; 619; 1693; 3202; 4084; 4361; 4623
SmoI	C!TYRAG	7	613; 619; 1693; 3202; 4084; 4361; 4623
SmuI	CCCGCNNNN!	11	93; 119; 286; 759; 961; 1423; 2133; 2488; 2509; 3705; 3837
SmuI	!NNNNNNGCGGG	6	644; 2064; 2934; 3471; 3609; 3756
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2381; 2453; 3216
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 629; 1561; 1625; 1703; 1729; 1740; 2387; 2459; 2551; 3969
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2632
SsiI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 752; 954; 1017; 1095; 1238; 1296; 1416; 1458; 2126; 2129; 2143; 2233; 2481; 2493; 2502; 2514; 2524; 2535; 2581; 2720; 2783; 3285; 3330; 3396; 3422; 3547; 3550; 3698; 3830; 4137; 4281; 4777
SsiI	G!CGG	27	370; 403; 528; 651; 746; 1247; 1454; 2071; 2098; 2186; 2296; 2877; 2941; 3042; 3045; 3325; 3380; 3478; 3616; 3763; 3903; 4146; 4391; 4512; 4531; 4658; 4686
SspI	AAT!ATT	2	1719; 2272
SspDI	G!CGGCC	1	2810
SspD5I	GGTGANNNNNNN!	5	376; 813; 1101; 3882; 3998
SspD5I	!NNNNNNNNTCACC	7	809; 1091; 1223; 1328; 1412; 1927; 2988
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	23	92; 118; 285; 663; 758; 960; 968; 1004; 1133; 1319; 1422; 2010; 2132; 2487; 2508; 2821; 3224; 3363; 3434; 3704; 3836; 4066; 4504
Sth132I	!NNNNNNNNCGGG	19	15; 407; 470; 643; 2011; 2063; 2164; 2891; 2933; 2966; 3470; 3579; 3608; 3755; 3859; 3890; 4343; 4387; 4595
Sth302II	CC!GG	21	602; 658; 668; 888; 1314; 2030; 2717; 2794; 2816; 2844; 2975; 3065; 3132; 3313; 3588; 3596; 3688; 4162; 4352; 4378; 4525
StrI	C!TCGAG	1	613
StsI	GGATGNNNNNNNNN!	4	2679; 3136; 3161; 3615
StsI	!NNNNNNNNNNNNNNCATCC	2	1146; 2483
StuI	AGG!CCT	1	2632
StyI	C!CWWGG	5	360; 2540; 2633; 3243; 3648

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	19	88; 281; 655; 656; 983; 1311; 2345; 2400; 2417; 2813; 2973; 3196; 3586; 3775; 3878; 4350; 4568; 4581; 4702
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	16	76; 198; 269; 543; 581; 645; 1023; 1104; 1902; 3191; 3307; 3415; 3738; 4229; 4699; 4770
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 869; 1379; 1874; 1886; 1929; 2039; 2930; 3117; 3898; 4031
TaqI	T!CGA	19	614; 627; 640; 791; 1013; 1031; 1268; 1304; 1960; 2651; 2924; 3080; 3104; 3140; 3302; 3493; 3538; 3793; 4631
TaqII	GACCGANNNNNNNNNNN!	3	1831; 2848; 3516
TaqII	!NNNNNNNNNTCGGTC	1	3760
TaqII	CACCCANNNNNNNNNNN!	0	
TaqII	!NNNNNNNNNTGGGTG	3	172; 2715; 3307
TasI	!AATT	11	18; 629; 1561; 1625; 1703; 1729; 1740; 2387; 2459; 2551; 3969
TatI	W!GTACW	4	217; 297; 330; 381
TauI	GCSG!C	21	749; 1097; 1250; 1298; 1457; 1460; 2131; 2145; 2583; 2722; 2785; 2880; 3045; 3048; 3287; 3383; 3424; 3552; 3906; 4534; 4689
TfiI	G!AWTC	5	3296; 3430; 3540; 3577; 4755
ThiI	C!TCGAG	1	613
TruII	T!TAA	16	7; 1449; 1512; 1573; 1694; 1715; 1726; 1738; 1749; 1766; 1864; 2135; 3954; 3968; 3973; 4025
Tru9I	T!TAA	16	7; 1449; 1512; 1573; 1694; 1715; 1726; 1738; 1749; 1766; 1864; 2135; 3954; 3968; 3973; 4025
TscAI	CASTGNN!	5	1657; 2940; 4050; 4321; 4334
TseI	G!CWGC	17	836; 839; 894; 1292; 1587; 2106; 2771; 2872; 2914; 2955; 3048; 3435; 3888; 4114; 4320; 4323; 4388
TsoI	TARCCANNNNNNNNNNN!	2	1783; 2130
TsoI	!NNNNNNNNNTGGYTA	2	1588; 3340
Tsp45I	!GTSAC	4	1326; 2100; 2931; 3237
Tsp509I	!AATT	11	18; 629; 1561; 1625; 1703; 1729; 1740; 2387; 2459; 2551; 3969
TspDTI	ATGAANNNNNNNNNNN!	3	1569; 2870; 3574
TspDTI	!NNNNNNNNNTTCAT	6	26; 777; 1212; 3288; 3744; 3951
TspEI	!AATT	11	18; 629; 1561; 1625; 1703; 1729; 1740; 2387; 2459; 2551; 3969
TspGWI	ACGGANNNNNNNNNNN!	1	3686
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	656
TspRI	CASTGNN!	5	1657; 2940; 4050; 4321; 4334
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2929
Tth111II	CAARCANNNNNNNNNNN!	3	718; 1357; 4138
Tth111II	!NNNNNNNNNTGYTTG	3	3246; 4106; 4145
UnbI	!GGNCC	16	82; 275; 653; 725; 747; 1001; 1131; 1194; 1259; 1314; 1917; 3326; 3771; 3817; 3875; 3908
Van9II	CCANNNN!NTGG	2	905; 1155
Vha464I	C!TTAAG	1	1693
VneI	G!TGCAC	2	868; 4415
VpaK11AI	!GGWCC	3	725; 3326; 3771
VpaK11BI	G!GWCC	3	726; 3327; 3772
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	629; 1625; 1729; 1740
XbaI	T!CTAGA	1	1465
XceI	RCATG!Y	5	1185; 2381; 2453; 3216; 4733
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	1	613
XhoII	R!GATCY	12	585; 609; 660; 734; 1307; 2982; 3228; 3620; 3979; 3991; 4077; 4088
XmaI	C!CCGGG	1	656
XmaJI	C!CTAGG	2	2633; 3648
XmiI	GT!MKAC	1	640
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	8	592; 1466; 1660; 2078; 2634; 3649; 3983; 4236

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2383; 2455; 4786