

pHcRed-Tandem-B vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	1	49
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	2	2589; 3002
AatI	AGG!CCT	0	
AatII	GACGT!C	1	4709
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	2666
AccII	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
AccIII	T!CCGGA	1	1872
Acc16I	TGC!GCA	3	157; 847; 4009
Acc36I	ACCTGCNNNN!	0	
Acc36I	!NNNNNNNNGCAGGT	2	226; 916
Acc65I	G!GTACC	2	496; 1186
AccB1I	G!GYRCC	6	303; 496; 993; 1186; 2342; 3735
AccB7I	CCANNNN!NTGG	3	580; 1270; 2108
AccBSI	CCG!CTC	1	2479
AccBSI	GAG!CGG	4	36; 68; 2827; 4628
AceIII	CAGCTCNNNNNNN!	3	2546; 2846; 4086
AceIII	!NNNNNNNNNNGAGCTG	2	1891; 2473
Acil	C!CGC	23	717; 1407; 1592; 1854; 2218; 2474; 2477; 2734; 2760; 2777; 2939; 2967; 3094; 3113; 3234; 3479; 3850; 3941; 4178; 4343; 4420; 4529; 4675
Acil	G!CGG	17	36; 68; 2312; 2567; 2606; 2616; 2658; 2683; 2721; 2820; 2827; 2848; 3344; 3488; 4132; 4299; 4628
AclI	AA!CGTT	3	1963; 4013; 4386
AclWI	GGATCNNNN!	4	129; 3543; 3640; 4420
AclWI	!NNNNNGATCC	7	122; 1533; 3455; 3541; 3639; 4103; 4424
AcoI	Y!GGCCR	4	189; 879; 2141; 4175
AcsI	R!AATTY	2	17; 1876
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	3	404; 1094; 3442
AcuI	!NNNNNNNNNNNNNNCTTCAG	3	706; 1396; 4454
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	2	4324; 4706
AdeI	CACNNN!GTG	0	
Afal	GT!AC	18	169; 240; 319; 498; 751; 763; 784; 859; 930; 1009; 1188; 1441; 1453; 1474; 1755; 2293; 2702; 4267
Afel	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	15	235; 345; 514; 580; 823; 925; 1035; 1204; 1270; 2108; 2545; 2916; 2934; 3100; 3379
AfIII	C!TTAAG	0	
AfIII	A!CRYGT	1	2894
AgeI	A!CCGGT	0	
AgsI	TTS!AA	14	59; 144; 201; 369; 757; 834; 891; 1059; 1447; 3363; 4565; 4588; 4598; 4642
AhdI	GACNNN!NNGTC	1	3787
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	2	261; 951
AjiI	GAC!GTG	0	
AjnI	!CCWGG	10	455; 693; 1145; 1383; 2051; 2107; 2355; 2920; 3041; 3054
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	
AleI	CACNN!NNGTG	2	562; 1252
AlfI	GCANNNNNNTGCNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AlfI	!NNNNNNNNNNNGCANNNNNNNTGC	0	
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNNGAACNNNNNNNTCC	0	
AluI	AG!CT	21	1506; 1515; 1520; 1624; 1628; 1648; 1657; 1776; 1905; 2376; 2487; 2536; 2555; 2836; 3062; 3198; 3455; 3775; 3976; 4076; 4139
AluBI	AG!CT	21	1506; 1515; 1520; 1624; 1628; 1648; 1657; 1776; 1905; 2376; 2487; 2536; 2555; 2836; 3062; 3198; 3455; 3775; 3976; 4076; 4139
AlwI	GGATCNNNN!	4	129; 3543; 3640; 4420
AlwI	!NNNNNGATCC	7	122; 1533; 3455; 3541; 3639; 4103; 4424
Alw21I	GWGCW!C	4	2714; 3212; 4373; 4458
Alw26I	GTCTCN!	2	2100; 4624
Alw26I	!NNNNNGAGAC	4	212; 902; 2537; 3848
Alw44I	G!TGCAC	3	2710; 3208; 4454
AlwNI	CAGNNN!CTG	3	729; 1419; 3310
Ama87I	C!YCGRG	2	1; 817
Aor13HI	T!CCGGA	1	1872
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	680; 1370; 2719
ApaLI	G!TGCAC	3	2710; 3208; 4454
ApeKI	G!CWGC	14	323; 1013; 2487; 2533; 2630; 2799; 2817; 3236; 3301; 3304; 3510; 3775; 3838; 4204
ApoI	R!AATTY	2	17; 1876
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3018
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	0	
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	0	
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	2	299; 989
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	125
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNNCTCCYC	1	2762
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	3	768; 1458; 2175
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	3	736; 1426; 2143
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	3959
Asi256I	G!ATC	23	122; 128; 625; 636; 790; 812; 1315; 1326; 1480; 1539; 3461; 3536; 3547; 3555; 3633; 3645; 3750; 4091; 4109; 4155; 4413; 4430; 4466
AsiGI	A!CCGGT	0	
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2641
Asp700I	GAANN!NNTTC	1	4386
Asp718I	G!GTACC	2	496; 1186
AspA2I	C!CTAGG	0	
AspEI	GACNNN!NNGTC	1	3787
AspLEI	GCG!C	16	158; 848; 2497; 2600; 2630; 2771; 2804; 3074; 3141; 3241; 3415; 3524; 3917; 4010; 4347; 4679
AspS9I	G!GNCC	14	329; 517; 609; 662; 1019; 1207; 1299; 1352; 2418; 3829; 3908; 3925; 4147; 4763
AssI	AGT!ACT	4	751; 1441; 2293; 4267
AsuII	TT!CGAA	0	
AsuC2I	CC!SGG	8	818; 819; 1596; 2540; 2575; 3274; 3970; 4321
AsuHPI	GGTGANNNNNNNN!	12	495; 634; 1185; 1324; 1623; 1912; 2056; 2124; 2458; 2516; 4273; 4514
AsuHPI	!NNNNNNNTCACC	9	255; 945; 1918; 2112; 2166; 3630; 3857; 4479; 4768
AsuNHI	G!CTAGC	1	1624
AvaI	C!YCGRG	2	1; 817
AvaII	G!GWCC	6	329; 662; 1019; 1352; 3925; 4147
AviII	TGC!GCA	3	157; 847; 4009
AvrII	C!CTAGG	0	

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AxyI	CC!TNAGG	0	
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	4	2347; 2714; 3212; 4458
BalI	TGG!CCA	3	191; 881; 2143
BamHI	G!GATCC	1	127
BanI	G!GYRCC	6	303; 496; 993; 1186; 2342; 3735
BanII	GRGCY!C	2	276; 966
BanIII	AT!CGAT	0	
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	3	580; 1270; 2108
BauI	C!ACGAG	1	4758
BauI	C!TCGTG	2	3067; 4451
BbeI	GGCGC!C	0	
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNGTCTTC	1	4760
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	0	
BbsI	!NNNNNGTCTTC	1	4765
BbuI	GCATG!C	0	
BbvI	GCAGCNNNNNN!	7	335; 1025; 2545; 2642; 3313; 3522; 4216
BbvI	!NNNNNNNNNNNGCTGC	6	2474; 2786; 2804; 3223; 3762; 3825
Bbv12I	GWGCW!C	4	2714; 3212; 4373; 4458
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	2	730; 1420
BccI	CCATCNNNN!	6	650; 1340; 1570; 3831; 3955; 4242
BccI	!NNNNNGATGG	9	415; 508; 539; 600; 1105; 1198; 1229; 1290; 2245
BceAI	ACGGCNNNNNNNNNN!	8	237; 336; 362; 927; 1026; 1052; 1802; 3396
BceAI	!NNNNNNNNNNNGCCGT	1	2227
Bcefl	ACGGCNNNNNNNNNN!	8	237; 336; 362; 927; 1026; 1052; 1802; 3396
Bcefl	!NNNNNNNNNNNGCCGT	1	2228
BcgI	CGANNNNNNTGCNNNNNNNNNN!	1	4326
BcgI	!NNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNCGANNNNNNTGC	1	4292
BciVI	GTATCCNNNNNN!	0	
BciVI	!NNNNNGGATAC	2	3097; 4624
BclI	T!GATCA	0	
BcnI	CC!SGG	8	818; 819; 1596; 2540; 2575; 3274; 3970; 4321
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	2	1751; 2999
BdaI	!NNNNNNNNNTGANNNNNNTCA	2	1717; 2965
BfaI	C!TAG	8	779; 1469; 1625; 2373; 2482; 3389; 3642; 3977
BfiI	ACTGGGNNNN!	1	2425
BfiI	!NNNCCCAGT	2	2635; 3827
BfmI	C!TRYAG	3	3159; 3350; 4028
BfoI	RGCGC!Y	2	2772; 3142
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	0	
BfuI	!NNNNNGGATAC	2	3097; 4624
BfuAI	ACCTGCNNNN!	0	
BfuAI	!NNNNNNNGCAGGT	2	226; 916
BfuCI	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
BglI	GCCNNNN!NGGC	1	3907
BglII	A!GATCT	1	811
BisI	GC!NGC	24	324; 1014; 1592; 2218; 2477; 2488; 2534; 2631; 2684; 2800; 2818; 2821; 2939; 3094; 3237; 3302; 3305; 3511; 3776; 3839; 4178; 4205; 4300; 4529

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BlnI	C!CTAGG	0	
BlpI	GC!TNAGC	1	1516
BlsI	GCN!GC	24	325; 1015; 1593; 2219; 2478; 2489; 2535; 2632; 2685; 2801; 2819; 2822; 2940; 3095; 3238; 3303; 3306; 3512; 3777; 3840; 4179; 4206; 4301; 4530
BmcAI	AGT!ACT	4	751; 1441; 2293; 4267
Bme18I	G!GWCC	6	329; 662; 1019; 1352; 3925; 4147
Bme1390I	CC!NGG	18	457; 695; 818; 819; 1147; 1385; 1596; 2053; 2109; 2357; 2540; 2575; 2922; 3043; 3056; 3274; 3970; 4321
BmeRI	GACNNN!NNGTC	1	3787
BmeT110I	C!YCGRG	2	1; 817
BmgBI	CAC!GTC	2	261; 951
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	14	330; 518; 610; 663; 1020; 1208; 1300; 1353; 2419; 3830; 3909; 3926; 4148; 4764
BmiI	GGN!NCC	19	129; 275; 305; 498; 519; 551; 965; 995; 1188; 1209; 1241; 2344; 2926; 2965; 3737; 3831; 3872; 4083; 4673
BmrI	ACTGGGNNNNN!	1	2425
BmrI	!NNNNCCCAGT	2	2635; 3827
BmrFI	CC!NGG	18	457; 695; 818; 819; 1147; 1385; 1596; 2053; 2109; 2357; 2540; 2575; 2922; 3043; 3056; 3274; 3970; 4321
BmsI	GCATCNNNNN!	11	167; 778; 857; 1468; 1719; 2392; 2695; 2771; 2991; 4043; 4483
BmsI	!NNNNNNNNNGATGC	6	716; 1406; 2204; 2560; 2731; 4234
BmtI	GCTAG!C	1	1628
BmuI	ACTGGGNNNNN!	1	2425
BmuI	!NNNNCCCAGT	2	2635; 3827
BoxI	GACNN!NNGTC	2	334; 1024
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	1	4765
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	0	
BpI	!NNNNNNNNGAGNNNNNCTC	0	
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	3	478; 1168; 1998
BpmI	!NNNNNNNNNNNNNNCTCCAG	1	3857
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	3	730; 1420; 1649
Bpu14I	TT!CGAA	0	
Bpu1102I	GC!TNAGC	1	1516
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	1	4765
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	2398; 3283
BpuEI	!NNNNNNNNNNNNNNCTCAAG	3	2985; 3524; 4392
BpuMI	CC!SGG	8	818; 819; 1596; 2540; 2575; 3274; 3970; 4321
BpvUI	CGAT!CG	1	4157
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	3848
Bsa29I	AT!CGAT	0	
BsaAI	YAC!GTR	1	2648
BsaBI	GATNN!NNATC	1	126
BsaHI	GR!CGYC	2	4324; 4706
BsaJI	C!CNNGG	8	492; 817; 1182; 2107; 2108; 2177; 2356; 3054
BsaMI	GAATGCN!	2	1869; 2276
BsaMI	G!CATTC	2	428; 1118
BsaWI	W!CCGGW	4	1872; 3100; 3247; 4078
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	0	
BsaXI	!NNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	0	
BsbI	CAACACNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	3	289; 979; 2590
Bsc4I	CCNNNNN!NNGG	15	235; 345; 514; 580; 823; 925; 1035; 1204; 1270; 2108; 2545; 2916; 2934; 3100; 3379
BscAI	GCATCNNNN!	11	166; 777; 856; 1467; 1718; 2391; 2694; 2770; 2990; 4042; 4482
BscAI	!NNNNNNGATGC	6	719; 1409; 2207; 2563; 2734; 4237
Bse1I	ACTGGN!	6	1683; 2420; 2674; 3302; 3315; 4263
Bse1I	C!CAGT	8	1542; 2123; 2641; 3427; 3833; 3951; 3994; 4433
Bse8I	GATNN!NNATC	1	126

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bse2II	CC!TNAGG	0	
Bse118I	R!CCGGY	1	3867
BseAI	T!CCGGA	1	1872
BseBI	CC!WGG	10	457; 695; 1147; 1385; 2053; 2109; 2357; 2922; 3043; 3056
BseCI	AT!CGAT	0	
BseDI	C!CNNGG	8	492; 817; 1182; 2107; 2108; 2177; 2356; 3054
Bse3DI	GCAATGNN!	2	1895; 3848
Bse3DI	!CATTGC	1	4022
BseGI	GGATGNN!	3	550; 1240; 2575
BseGI	!CATCC	6	713; 1403; 1869; 3766; 3947; 4234
BseJI	GATNN!NNATC	1	126
BseLI	CCNNNNN!NNGG	15	235; 345; 514; 580; 823; 925; 1035; 1204; 1270; 2108; 2545; 2916; 2934; 3100; 3379
BseMI	GCAATGNN!	2	1895; 3848
BseMI	!CATTGC	1	4022
BseMII	CTCAGNNNNNNNNNN!	6	1567; 2111; 2417; 3183; 3592; 3758
BseMII	!NNNNNNNNCTGAG	8	551; 721; 1241; 1411; 1507; 2450; 2695; 4275
BseNI	ACTGGN!	6	1683; 2420; 2674; 3302; 3315; 4263
BseNI	C!CAGT	8	1542; 2123; 2641; 3427; 3833; 3951; 3994; 4433
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	115
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGC!C	4	2347; 2714; 3212; 4458
BseXI	GCAGNNNNNNNN!	7	335; 1025; 2545; 2642; 3313; 3522; 4216
BseXI	!NNNNNNNNNNNGCTGC	6	2474; 2786; 2804; 3223; 3762; 3825
BseX3I	C!GGCCG	0	
BseYI	C!CCAGC	0	
BseYI	G!CTGGG	1	3198
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
Bsh1285I	CGRY!CG	3	3234; 4157; 4306
BshFI	GG!CC	19	191; 518; 610; 881; 1208; 1300; 1789; 1834; 2056; 2143; 2420; 2909; 2920; 2938; 3372; 3830; 3910; 4177; 4764
BshNI	G!GYRCC	6	303; 496; 993; 1186; 2342; 3735
BshTI	A!CCGGT	0	
BshVI	AT!CGAT	0	
BsiEI	CGRY!CG	3	3234; 4157; 4306
BsiHKAI	GWGCW!C	4	2714; 3212; 4373; 4458
BsiHKCI	C!YCGRG	2	1; 817
BsiSI	C!CGG	16	818; 1595; 1831; 1873; 2001; 2540; 2574; 3101; 3248; 3274; 3464; 3868; 3902; 3969; 4079; 4321
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	15	235; 345; 514; 580; 823; 925; 1035; 1204; 1270; 2108; 2545; 2916; 2934; 3100; 3379
BsIFI	GGGACNNNNNNNNNN!	0	
BsIFI	!NNNNNNNNNNNNNGTCCC	0	
BsmI	GAATGCN!	2	1869; 2276
BsmI	G!CATTC	2	428; 1118
BsmAI	GTCTCN!	2	2100; 4624
BsmAI	!NNNNNGAGAC	4	212; 902; 2537; 3848
BsmBI	CGTCTCN!	1	2100
BsmBI	!NNNNNGAGACG	3	212; 902; 2537
BsmFI	GGGACNNNNNNNNNN!	0	
BsmFI	!NNNNNNNNNNNNNGTCCC	0	
BsnI	GG!CC	19	191; 518; 610; 881; 1208; 1300; 1789; 1834; 2056; 2143; 2420; 2909; 2920; 2938; 3372; 3830; 3910; 4177; 4764
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	1	3848
BsoBI	C!YCGRG	2	1; 817
Bsp13I	T!CCGGA	1	1872
Bsp19I	C!CATGG	3	492; 1182; 2177
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	3419; 3597
Bsp24I	!NNNNNNCCANNNNNNNGTC	1	4691
Bsp24I	CCANNNNNNGTCCNNNNNNNNNNNN!	1	4723

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Bsp24I	!NNNNNNNNGACNNNNNTGG	2	3387; 3565
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	0	
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
Bsp1286I	GDGCH!C	7	276; 966; 2347; 2714; 3212; 4373; 4458
Bsp1407I	T!GTACA	2	167; 857
Bsp1720I	GC!TNAGC	1	1516
BspACI	C!CGC	23	717; 1407; 1592; 1854; 2218; 2474; 2477; 2734; 2760; 2777; 2939; 2967; 3094; 3113; 3234; 3479; 3850; 3941; 4178; 4343; 4420; 4529; 4675
BspACI	G!CGG	17	36; 68; 2312; 2567; 2606; 2616; 2658; 2683; 2721; 2820; 2827; 2848; 3344; 3488; 4132; 4299; 4628
BspCNI	CTCAGNNNNNNNN!	6	1566; 2110; 2416; 3182; 3591; 3757
BspCNI	!NNNNNNNCTGAG	8	552; 722; 1242; 1412; 1508; 2451; 2696; 4276
BspDI	AT!CGAT	0	
BspD6I	GACTCNNNN!	4	1533; 2375; 2802; 3790
BspD6I	!NNNNNNGAGTC	1	3258
BspEI	T!CCGGA	1	1872
BspFNI	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
BspHI	T!CATGA	3	3614; 4622; 4727
BspLI	GGN!NCC	19	129; 275; 305; 498; 519; 551; 965; 995; 1188; 1209; 1241; 2344; 2926; 2965; 3737; 3831; 3872; 4083; 4673
BspMI	ACCTGCNNNN!	0	
BspMI	!NNNNNNNNGCAGGT	2	226; 916
BspOI	GCTAG!C	1	1628
BspPI	GGATCNNNN!	4	129; 3543; 3640; 4420
BspPI	!NNNNNGATCC	7	122; 1533; 3455; 3541; 3639; 4103; 4424
BspQI	GCTCTCN!	1	2778
BspQI	!NNNNGAAGAGC	0	
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	0	
BspT107I	G!GYRCC	6	303; 496; 993; 1186; 2342; 3735
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	1	3848
BsrI	ACTGGN!	6	1683; 2420; 2674; 3302; 3315; 4263
BsrI	C!CAGT	8	1542; 2123; 2641; 3427; 3833; 3951; 3994; 4433
BsrBI	CCG!CTC	1	2479
BsrBI	GAG!CGG	4	36; 68; 2827; 4628
BsrDI	GCAATGNN!	2	1895; 3848
BsrDI	!CATTGC	1	4022
BsrFI	R!CCGGY	1	3867
BsrGI	T!GTACA	2	167; 857
BsrSI	ACTGGN!	6	1683; 2420; 2674; 3302; 3315; 4263
BsrSI	C!CAGT	8	1542; 2123; 2641; 3427; 3833; 3951; 3994; 4433
BssAI	R!CCGGY	1	3867
BssECI	C!CNNGG	8	492; 817; 1182; 2107; 2108; 2177; 2356; 3054
BssHII	G!CGCGC	0	
BssKI	!CCNGG	18	455; 693; 816; 817; 1145; 1383; 1594; 2051; 2107; 2355; 2538; 2573; 2920; 3041; 3054; 3272; 3968; 4319
BssMI	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
BssNI	GR!CGYC	2	4324; 4706
BssNAI	GTA!TAC	1	2667
BssSI	C!ACGAG	1	4758
BssSI	C!TCGTG	2	3067; 4451
BssT1I	C!CWWGG	3	492; 1182; 2177
Bst6I	CTCTCN!	2	2778; 4582
Bst6I	!NNNNGAAGAG	0	
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	1	2667
BstACI	GR!CGYC	2	4324; 4706
BstAFI	C!TTAAG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstAPI	GCANNNN!NTGC	3	679; 1369; 2718
BstAUI	T!GTACA	2	167; 857
BstBI	TT!CGAA	0	
Bst2BI	C!ACGAG	1	4758
Bst2BI	C!TCGTG	2	3067; 4451
BstBAI	YAC!GTR	1	2648
Bst4CI	ACN!GT	22	183; 308; 761; 787; 873; 998; 1451; 1477; 1692; 1770; 1803; 1900; 1941; 2044; 2291; 2513; 2548; 2858; 2929; 3399; 3712; 4227
BstC8I	GCN!NGC	8	1626; 1854; 2222; 2825; 2911; 2948; 3508; 3899
BstDEI	C!TNAG	16	560; 730; 1250; 1420; 1516; 1553; 1649; 2097; 2403; 2459; 2704; 3169; 3578; 3744; 4284; 4710
BstDSI	C!CRYGG	3	492; 1182; 2177
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	3	550; 1240; 2575
BstF5I	!CATCC	6	713; 1403; 1869; 3766; 3947; 4234
BstFNI	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
BstH2I	RGCGC!Y	2	2772; 3142
BstHHI	GCG!C	16	158; 848; 2497; 2600; 2630; 2771; 2804; 3074; 3141; 3241; 3415; 3524; 3917; 4010; 4347; 4679
BstKTI	GAT!C	23	124; 130; 627; 638; 792; 814; 1317; 1328; 1482; 1541; 3463; 3538; 3549; 3557; 3635; 3647; 3752; 4093; 4111; 4157; 4415; 4432; 4468
BstMAI	GTCTCN!	2	2100; 4624
BstMAI	!NNNNNGAGAC	4	212; 902; 2537; 3848
BstMBI	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
BstMCI	CGRY!CG	3	3234; 4157; 4306
BstMWI	GCNNNNN!NNGC	15	33; 679; 775; 1369; 1465; 1512; 1630; 1654; 2217; 2718; 2768; 2833; 2947; 3519; 3907
BstNI	CC!WGG	10	457; 695; 1147; 1385; 2053; 2109; 2357; 2922; 3043; 3056
BstNSI	RCATG!Y	2	2533; 2898
BstOI	CC!WGG	10	457; 695; 1147; 1385; 2053; 2109; 2357; 2922; 3043; 3056
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	2	334; 1024
BstSCI	!CCNGG	18	455; 693; 816; 817; 1145; 1383; 1594; 2051; 2107; 2355; 2538; 2573; 2920; 3041; 3054; 3272; 3968; 4319
BstSFI	C!TRYAG	3	3159; 3350; 4028
BstSLI	GKGCMI!C	4	2347; 2714; 3212; 4458
BstSNI	TAC!GTA	0	
BstUI	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
Bst2UI	CC!WGG	10	457; 695; 1147; 1385; 2053; 2109; 2357; 2922; 3043; 3056
BstV1I	GCAGCNNNNNNN!	7	335; 1025; 2545; 2642; 3313; 3522; 4216
BstV1I	!NNNNNNNNNNNGCTGC	6	2474; 2786; 2804; 3223; 3762; 3825
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	1	4765
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	9	127; 811; 1538; 3535; 3546; 3632; 3644; 4412; 4429
BstYI	R!GATCY	9	127; 811; 1538; 3535; 3546; 3632; 3644; 4412; 4429
BstZI	C!GGCCG	0	
BstZ17I	GTA!TAC	1	2667
BsuI	GTATCCNNNNNN!	0	
BsuI	!NNNNNGGATAC	2	3097; 4624
Bsu15I	AT!CGAT	0	
Bsu36I	CC!TNAGG	0	
BsuRI	GG!CC	19	191; 518; 610; 881; 1208; 1300; 1789; 1834; 2056; 2143; 2420; 2909; 2920; 2938; 3372; 3830; 3910; 4177; 4764
BsuTUI	AT!CGAT	0	
BtgI	C!CRYGG	3	492; 1182; 2177
BtgZI	GCGATGNNNNNNNNN!	1	2312
BtgZI	!NNNNNNNNNNNNNCATCGC	1	1955
BthCI	GCNG!C	24	326; 1016; 1594; 2220; 2479; 2490; 2536; 2633; 2686; 2802; 2820; 2823; 2941; 3096; 3239; 3304; 3307; 3513; 3778; 3841; 4180; 4207; 4302; 4531

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BtrI	CAC!GTC	2	261; 951
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	1	4187
BtsI	!CACTGC	1	4207
BtsCI	GGATGNN!	3	550; 1240; 2575
BtsCI	!CATCC	6	713; 1403; 1869; 3766; 3947; 4234
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	0	
BveI	!NNNNNNNNNGCAGGT	2	226; 916
Cac8I	GCN!NGC	8	1626; 1854; 2222; 2825; 2911; 2948; 3508; 3899
CaiI	CAGNNN!CTG	3	729; 1419; 3310
CciI	T!CATGA	3	3614; 4622; 4727
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	3	1714; 1973; 4038
CdiI	C!GATG	2	2298; 4439
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	2683
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	1	2946
CelII	GC!TNAGC	1	1516
CfoI	GCG!C	16	158; 848; 2497; 2600; 2630; 2771; 2804; 3074; 3141; 3241; 3415; 3524; 3917; 4010; 4347; 4679
CfrI	Y!GGCCR	4	189; 879; 2141; 4175
Cfr9I	C!CCGGG	1	817
Cfr10I	R!CCGGY	1	3867
Cfr13I	G!GNCC	14	329; 517; 609; 662; 1019; 1207; 1299; 1352; 2418; 3829; 3908; 3925; 4147; 4763
Cfr42I	CCGC!GG	0	
ChaI	GATC!	23	125; 131; 628; 639; 793; 815; 1318; 1329; 1483; 1542; 3464; 3539; 3550; 3558; 3636; 3648; 3753; 4094; 4112; 4158; 4416; 4433; 4469
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	4	2740; 2946; 3501; 4724
CjeI	!NNNNNNNNNACNNNNNNNTGG	6	171; 861; 1549; 3387; 3465; 3565
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	6	205; 895; 1583; 3421; 3499; 3599
CjeI	!NNNNNNNNNCCANNNNNNGT	4	2706; 2912; 3467; 4690
CjePI	CCANNNNNNTCNNNNNNNNNNNNNNN!	4	308; 998; 3452; 4724
CjePI	!NNNNNNNNGANNNNNNNTGG	6	477; 1167; 3387; 3565; 3685; 4157
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	6	510; 1200; 3420; 3598; 3718; 4190
CjePI	!NNNNNNNCCANNNNNNTC	4	275; 965; 3419; 4691
Clai	AT!CGAT	0	
CpoI	CG!GWCCG	0	
CseI	GACGCNNNNN!	2	3005; 3583
CseI	!NNNNNNNNNNGCGTC	2	2589; 4313
CsiI	A!CCWGGT	0	
CspI	CG!GWCCG	0	
Csp6I	G!TAC	18	168; 239; 318; 497; 750; 762; 783; 858; 929; 1008; 1187; 1440; 1452; 1473; 1754; 2292; 2701; 4266
Csp45I	TT!CGAA	0	
CspAI	A!CCGGT	0	
CspCI	CAANNNNNGTGNNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTGNNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	0	
CstMI	AAGGAGNNNNNNNNNNNNNNNNNNNN!	3	234; 924; 2773
CstMI	!NNNNNNNNNNNNNNNNNNNNCTCCTT	1	4121
CviAII	C!ATG	20	171; 249; 493; 861; 939; 1183; 1948; 2178; 2239; 2260; 2530; 2635; 2895; 3615; 4106; 4116; 4194; 4230; 4623; 4728
CviJI	RG!CY	68	191; 274; 389; 455; 518; 552; 610; 778; 881; 964; 1079; 1145; 1208; 1242; 1300; 1468; 1506; 1515; 1520; 1624; 1628; 1648; 1657; 1776; 1789; 1834; 1905; 2056; 2101; 2143; 2255; 2376; 2402; 2420; 2487; 2536; 2555; 2588; 2633; 2673; 2817; 2836; 2909; 2920; 2938; 2964; 3062; 3198; 3203; 3228; 3307; 3372; 3383; 3426; 3455; 3775; 3818; 3830; 3871; 3897; 3901; 3910; 3976; 4066; 4076; 4139; 4177; 4764

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CviKI-1	RG!CY	68	191; 274; 389; 455; 518; 552; 610; 778; 881; 964; 1079; 1145; 1208; 1242; 1300; 1468; 1506; 1515; 1520; 1624; 1628; 1648; 1657; 1776; 1789; 1834; 1905; 2056; 2101; 2143; 2255; 2376; 2402; 2420; 2487; 2536; 2555; 2588; 2633; 2673; 2817; 2836; 2909; 2920; 2938; 2964; 3062; 3198; 3203; 3228; 3307; 3372; 3383; 3426; 3455; 3775; 3818; 3830; 3871; 3897; 3901; 3910; 3976; 4066; 4076; 4139; 4177; 4764
CviQI	G!TAC	18	168; 239; 318; 497; 750; 762; 783; 858; 929; 1008; 1187; 1440; 1452; 1473; 1754; 2292; 2701; 4266
DdeI	C!TNAG	16	560; 730; 1250; 1420; 1516; 1553; 1649; 2097; 2403; 2459; 2704; 3169; 3578; 3744; 4284; 4710
DinI	GGC!GCC	0	
DpnI	GA!TC	23	123; 129; 626; 637; 791; 813; 1316; 1327; 1481; 1540; 3462; 3537; 3548; 3556; 3634; 3646; 3751; 4092; 4110; 4156; 4414; 4431; 4467
DpnII	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
DraI	TTT!AAA	5	1796; 2135; 3653; 3672; 4364
DraII	RG!GNCCY	3	329; 1019; 4763
DraIII	CACNNN!GTG	0	
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNN!	2	580; 1270
DraRI	!NNNNNNNNNNNNNNNNNGTCTTG	1	3338
DrdI	GACNNN!NNGTC	2	2589; 3002
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	0	
DriI	GACNNN!NNGTC	1	3787
DseDI	GACNNN!NNGTC	2	2589; 3002
EaeI	Y!GGCCR	4	189; 879; 2141; 4175
EagI	C!GGCCG	0	
Eam1104I	CTCTCN!	2	2778; 4582
Eam1104I	!NNNNGAAGAG	0	
Eam1105I	GACNNN!NNGTC	1	3787
EarI	CTCTCN!	2	2778; 4582
EarI	!NNNNGAAGAG	0	
EciI	GGCGANNNNNNNNNNNN!	0	
EciI	!NNNNNNNNNTCCGCC	6	706; 1396; 2463; 2956; 3102; 3930
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	0	
Eco24I	GRGCY!C	2	276; 966
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNGAGACC	1	3848
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	6	329; 662; 1019; 1352; 3925; 4147
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	0	
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	3	404; 1094; 3442
Eco57I	!NNNNNNNNNNNNNNCTTCAG	3	706; 1396; 4454
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	0	
Eco88I	C!YCGRG	2	1; 817
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	0	
Eco130I	C!CWWGG	3	492; 1182; 2177
Eco147I	AGG!CCT	0	
EcoHI	!CCSGG	8	816; 817; 1594; 2538; 2573; 3272; 3968; 4319
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	6	404; 478; 1094; 1168; 1998; 3442
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	4	706; 1396; 3857; 4454
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	3	329; 1019; 4763
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	10	455; 693; 1145; 1383; 2051; 2107; 2355; 2920; 3041; 3054
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	3	492; 1182; 2177

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EcoT22I	ATGCA!T	0	
EcoT38I	GRGCY!C	2	276; 966
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	0	
EheI	GGC!GCC	0	
ErhI	C!CWWGG	3	492; 1182; 2177
EsaBC3I	TC!GA	6	3; 294; 984; 2409; 2995; 4439
Esp3I	CGTCTCN!	1	2100
Esp3I	!NNNNNGAGACG	3	212; 902; 2537
FaeI	CATG!	20	174; 252; 496; 864; 942; 1186; 1951; 2181; 2242; 2263; 2533; 2638; 2898; 3618; 4109; 4119; 4197; 4233; 4626; 4731
Fail	YA!TR	64	12; 49; 115; 154; 172; 250; 344; 416; 475; 477; 494; 650; 844; 862; 940; 1034; 1106; 1165; 1167; 1184; 1340; 1685; 1699; 1760; 1885; 1914; 1949; 2017; 2019; 2086; 2149; 2179; 2192; 2240; 2261; 2531; 2636; 2667; 2681; 2717; 2719; 2896; 2960; 3033; 3338; 3616; 3688; 3690; 3692; 3772; 4063; 4107; 4117; 4195; 4201; 4214; 4231; 4297; 4352; 4573; 4624; 4636; 4729; 4742
FalI	AAGNNNNNCTNNNNNNNNNNNN!	0	
FalI	!NNNNNNNNAAGNNNNNCTT	0	
FaqI	GGGACNNNNNNNNNN!	0	
FaqI	!NNNNNNNNNNNNNGTCCC	0	
FatI	!CATG	20	170; 248; 492; 860; 938; 1182; 1947; 2177; 2238; 2259; 2529; 2634; 2894; 3614; 4105; 4115; 4193; 4229; 4622; 4727
FauI	CCCGCNNNN!	1	1861
FauI	!NNNNNGCGGG	2	2305; 2599
FauNDI	CA!TATG	1	2717
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	2666
FmuI	GGNC!C	14	332; 520; 612; 665; 1022; 1210; 1302; 1355; 2421; 3832; 3911; 3928; 4150; 4766
Fnu4HI	GC!NGC	24	324; 1014; 1592; 2218; 2477; 2488; 2534; 2631; 2684; 2800; 2818; 2821; 2939; 3094; 3237; 3302; 3305; 3511; 3776; 3839; 4178; 4205; 4300; 4529
FokI	GGATGNNNNNNNN!	3	557; 1247; 2582
FokI	!NNNNNNNNNNNNNCATCC	6	700; 1390; 1856; 3753; 3934; 4221
FriOI	GRGCY!C	2	276; 966
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	3	157; 847; 4009
FspAI	RTGC!GCAY	2	157; 847
FspBI	C!TAG	8	779; 1469; 1625; 2373; 2482; 3389; 3642; 3977
FspEI	CCNNNNNNNNNNNN!	140	13; 144; 205; 241; 279; 296; 320; 345; 371; 394; 420; 469; 484; 505; 521; 566; 587; 601; 624; 655; 678; 696; 730; 809; 830; 895; 931; 969; 986; 1010; 1035; 1061; 1084; 1110; 1159; 1174; 1195; 1211; 1256; 1277; 1291; 1314; 1345; 1368; 1386; 1420; 1499; 1542; 1565; 1605; 1633; 1701; 1716; 1770; 1803; 1844; 1866; 1886; 1942; 1960; 2002; 2065; 2115; 2136; 2157; 2178; 2231; 2256; 2272; 2359; 2434; 2471; 2487; 2504; 2534; 2552; 2587; 2602; 2647; 2728; 2747; 2773; 2790; 2877; 2923; 2941; 2971; 2985; 3034; 3055; 3078; 3092; 3107; 3121; 3136; 3207; 3230; 3247; 3261; 3282; 3308; 3386; 3440; 3477; 3492; 3563; 3654; 3730; 3752; 3783; 3799; 3836; 3863; 3881; 3907; 3924; 3941; 3957; 3982; 4007; 4035; 4092; 4125; 4155; 4191; 4247; 4287; 4319; 4333; 4356; 4433; 4460; 4503; 4542; 4594; 4688; 4702; 4731; 4752; 4778
FspEI	!NNNNNNNNNNNNNNNGG	139	21; 53; 85; 104; 157; 194; 221; 254; 286; 305; 331; 371; 407; 430; 466; 500; 524; 547; 566; 592; 645; 680; 717; 760; 803; 847; 884; 911; 944; 976; 995; 1021; 1061; 1097; 1120; 1156; 1190; 1214; 1237; 1256; 1282; 1335; 1370; 1407; 1450; 1507; 1551; 1570; 1594; 1615; 1636; 1664; 1692; 1714; 1762; 1816; 1858; 1883; 1962; 1986; 2017; 2038; 2094; 2125; 2164; 2183; 2206; 2237; 2289; 2315; 2342; 2365; 2384; 2402; 2429; 2449; 2487; 2525; 2552; 2579; 2598; 2643; 2668; 2706; 2733; 2751; 2791; 2812; 2830; 2858; 2891; 2920; 2946; 2994; 3028; 3086; 3112; 3147; 3166; 3184; 3233; 3259; 3283; 3303; 3326; 3351; 3378; 3422; 3449; 3467; 3518; 3550; 3587; 3615; 3687; 3718; 3795; 3853; 3887; 3908; 3954; 4016; 4043; 4064; 4117; 4159; 4180; 4244; 4284; 4306; 4364; 4395; 4484; 4503; 4522; 4594; 4613; 4652; 4734

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fsp4HI	GC!NGC	24	324; 1014; 1592; 2218; 2477; 2488; 2534; 2631; 2684; 2800; 2818; 2821; 2939; 3094; 3237; 3302; 3305; 3511; 3776; 3839; 4178; 4205; 4300; 4529
GdiII	C!GGCCR	0	
GdiII	Y!GGCCG	1	4175
GlaI	GC!GC	16	157; 847; 2496; 2599; 2629; 2770; 2803; 3073; 3140; 3240; 3414; 3523; 3916; 4009; 4346; 4678
GluI	GC!NGC	24	324; 1014; 1592; 2218; 2477; 2488; 2534; 2631; 2684; 2800; 2818; 2821; 2939; 3094; 3237; 3302; 3305; 3511; 3776; 3839; 4178; 4205; 4300; 4529
GsaI	CCCAG!C	0	
GsaI	GCTGG!G	1	3202
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	3	478; 1168; 1998
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3857
HaeI	WGG!CCW	7	191; 881; 2056; 2143; 2909; 2920; 3372
HaeII	RGCGC!Y	2	2772; 3142
HaeIII	GG!CC	19	191; 518; 610; 881; 1208; 1300; 1789; 1834; 2056; 2143; 2420; 2909; 2920; 2938; 3372; 3830; 3910; 4177; 4764
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	3	660; 1350; 3806
HaeIV	!NNNNNNNNNGAYNNNNNRTC	3	626; 1316; 3772
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	3	659; 1349; 3805
HaeIV	!NNNNNNNGAYNNNNNRTC	3	628; 1318; 3774
HapII	C!CGG	16	818; 1595; 1831; 1873; 2001; 2540; 2574; 3101; 3248; 3274; 3464; 3868; 3902; 3969; 4079; 4321
HgaI	GACGCNNNNN!	2	3005; 3583
HgaI	!NNNNNNNNNGCGTC	2	2589; 4313
HhaI	GCG!C	16	158; 848; 2497; 2600; 2630; 2771; 2804; 3074; 3141; 3241; 3415; 3524; 3917; 4010; 4347; 4679
HinI	GR!CGYC	2	4324; 4706
HinIII	CATG!	20	174; 252; 496; 864; 942; 1186; 1951; 2181; 2242; 2263; 2533; 2638; 2898; 3618; 4109; 4119; 4197; 4233; 4626; 4731
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	5	659; 1349; 1883; 3805; 3879
Hin4I	!NNNNNNNNGABNNNNNRTC	3	627; 1317; 3773
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	659; 1349; 3805
Hin4I	!NNNNNNNNGAYNNNNNVTC	5	627; 1317; 1851; 3773; 3847
Hin6I	G!CGC	16	156; 846; 2495; 2598; 2628; 2769; 2802; 3072; 3139; 3239; 3413; 3522; 3915; 4008; 4345; 4677
HinP1I	G!CGC	16	156; 846; 2495; 2598; 2628; 2769; 2802; 3072; 3139; 3239; 3413; 3522; 3915; 4008; 4345; 4677
HincII	GTY!RAC	0	
HindII	GTY!RAC	0	
HindIII	A!AGCTT	1	1504
HinfI	G!ANTC	13	55; 255; 354; 945; 1044; 1525; 1616; 2226; 2367; 2794; 2869; 3265; 3782
HpaI	GTT!AAC	0	
HpaII	C!CGG	16	818; 1595; 1831; 1873; 2001; 2540; 2574; 3101; 3248; 3274; 3464; 3868; 3902; 3969; 4079; 4321
HphI	GGTGANNNNNNNN!	12	495; 634; 1185; 1324; 1623; 1912; 2056; 2124; 2458; 2516; 4273; 4514
HphI	!NNNNNNNTCACC	9	255; 945; 1918; 2112; 2166; 3630; 3857; 4479; 4768
Hpy8I	GTN!NAC	11	339; 595; 1029; 1285; 1926; 2449; 2667; 2712; 3210; 3698; 4456
Hpy99I	CGWCG!	4	1996; 2999; 3793; 4056
Hpy166II	GTN!NAC	11	339; 595; 1029; 1285; 1926; 2449; 2667; 2712; 3210; 3698; 4456
Hpy188I	TCN!GA	14	725; 1415; 1556; 1578; 2525; 2691; 3008; 3086; 3439; 3573; 3708; 4154; 4165; 4285
Hpy188III	TC!NNGA	30	3; 125; 162; 358; 445; 539; 574; 796; 852; 1048; 1135; 1229; 1264; 1486; 1566; 1643; 1873; 1977; 2458; 2482; 3128; 3262; 3360; 3458; 3541; 3615; 3874; 4623; 4728; 4758
HpyAV	CCTCANNNNNN!	7	300; 730; 990; 1420; 3134; 3444; 4152
HpyAV	!NNNNNGAAGG	11	169; 202; 262; 379; 859; 892; 952; 1069; 3386; 3899; 4511
HpyCH4III	ACN!GT	22	183; 308; 761; 787; 873; 998; 1451; 1477; 1692; 1770; 1803; 1900; 1941; 2044; 2291; 2513; 2548; 2858; 2929; 3399; 3712; 4227
HpyCH4IV	A!CGT	11	260; 597; 950; 1287; 1963; 2138; 2647; 3597; 4013; 4386; 4706

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HpyCH4V	TG!CA	11	235; 925; 2533; 2712; 3210; 3506; 3841; 3931; 4124; 4212; 4456
HpyF3I	C!TNAG	16	560; 730; 1250; 1420; 1516; 1553; 1649; 2097; 2403; 2459; 2704; 3169; 3578; 3744; 4284; 4710
HpyF10VI	GCNNNNN!NNGC	15	33; 679; 775; 1369; 1465; 1512; 1630; 1654; 2217; 2718; 2768; 2833; 2947; 3519; 3907
Hsp92I	GR!CGYC	2	4324; 4706
Hsp92II	CATG!	20	174; 252; 496; 864; 942; 1186; 1951; 2181; 2242; 2263; 2533; 2638; 2898; 3618; 4109; 4119; 4197; 4233; 4626; 4731
HspAI	G!CGC	16	156; 846; 2495; 2598; 2628; 2769; 2802; 3072; 3139; 3239; 3413; 3522; 3915; 4008; 4345; 4677
KasI	G!GCGCC	0	
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	2	500; 1190
Kpn2I	T!CCGGA	1	1872
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	0	
Kzo9I	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
LguI	GCTCTTCN!	1	2778
LguI	!NNNNGAAGAGC	0	
LpnI	RGC!GCGY	2	2770; 3140
LpnPI	CCDGNNNNNNNNNN!	52	395; 469; 521; 587; 601; 707; 809; 831; 1085; 1159; 1211; 1277; 1291; 1397; 1499; 1542; 1608; 1777; 1844; 1870; 1886; 2014; 2065; 2121; 2136; 2369; 2471; 2553; 2587; 2654; 2923; 2987; 3055; 3092; 3114; 3261; 3287; 3440; 3477; 3792; 3846; 3881; 3907; 3941; 3964; 3982; 4007; 4092; 4334; 4446; 4503; 4715
LpnPI	!NNNNNNNNNNNNNCHGG	58	119; 221; 312; 430; 524; 645; 680; 803; 911; 1002; 1120; 1214; 1335; 1370; 1551; 1580; 1628; 1664; 1762; 1816; 1858; 1891; 1962; 1986; 2038; 2094; 2206; 2293; 2342; 2401; 2525; 2559; 2579; 2655; 2751; 2858; 2907; 2932; 3011; 3041; 3086; 3184; 3233; 3259; 3283; 3303; 3449; 3467; 3812; 3853; 3887; 3954; 4016; 4064; 4244; 4306; 4484; 4594
Lsp1109I	GCAGCNNNNNNNN!	7	335; 1025; 2545; 2642; 3313; 3522; 4216
Lsp1109I	!NNNNNNNNNNNNNGCTGC	6	2474; 2786; 2804; 3223; 3762; 3825
LweI	GCATCNNNNN!	11	167; 778; 857; 1468; 1719; 2392; 2695; 2771; 2991; 4043; 4483
LweI	!NNNNNNNNNNGATGC	6	716; 1406; 2204; 2560; 2731; 4234
MabI	A!CCWGGT	0	
MaeI	C!TAG	8	779; 1469; 1625; 2373; 2482; 3389; 3642; 3977
MaeII	A!CGT	11	260; 597; 950; 1287; 1963; 2138; 2647; 3597; 4013; 4386; 4706
MaeIII	!GTNAC	14	261; 951; 1933; 2038; 2548; 2643; 3250; 3313; 3429; 3712; 4043; 4101; 4254; 4442
MalI	GA!TC	23	123; 129; 626; 637; 791; 813; 1316; 1327; 1481; 1540; 3462; 3537; 3548; 3556; 3634; 3646; 3751; 4092; 4110; 4156; 4414; 4431; 4467
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	0	
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	0	
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	1	2479
MbiI	GAG!CGG	4	36; 68; 2827; 4628
MboI	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
MboII	GAAGANNNNNNNN!	5	430; 540; 1120; 1230; 3556
MboII	!NNNNNNNTCTTC	11	357; 784; 1047; 1474; 2151; 2765; 3627; 4382; 4460; 4569; 4765
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	59
MfII	R!GATCY	9	127; 811; 1538; 3535; 3546; 3632; 3644; 4412; 4429
MhII	GDGCH!C	7	276; 966; 2347; 2714; 3212; 4373; 4458
MisI	TGG!CCA	3	191; 881; 2143
MluI	A!CGCGT	0	
MluNI	TGG!CCA	3	191; 881; 2143
MlyI	GAGTCNNNNN!	1	3274
MlyI	!NNNNNGACTC	4	1519; 2361; 2788; 3776

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Mly113I	GG!CGCC	0	
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	2	3109; 3293
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	0	
MnII	CCTCNNNNNNN!	9	10; 141; 1562; 2501; 2531; 2793; 3076; 3954; 4160
MnII	!NNNNNNNGAGG	21	93; 112; 245; 418; 453; 535; 555; 725; 935; 1108; 1143; 1225; 1245; 1415; 1722; 2373; 3002; 3326; 3726; 3807; 4754
Mph1103I	ATGCA!T	0	
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1872
MroNI	G!CCGGC	0	
MroXI	GAANN!NNTTC	1	4386
MscI	TGG!CCA	3	191; 881; 2143
MseI	T!TAA	22	95; 109; 185; 614; 875; 1304; 1508; 1795; 2134; 2276; 2328; 2349; 2675; 3600; 3652; 3657; 3671; 3724; 3959; 3998; 4363; 4735
MslI	CAYNN!NNRTG	7	163; 562; 853; 1252; 4039; 4198; 4557
MspI	C!CGG	16	818; 1595; 1831; 1873; 2001; 2540; 2574; 3101; 3248; 3274; 3464; 3868; 3902; 3969; 4079; 4321
Msp20I	TGG!CCA	3	191; 881; 2143
MspA1I	CMG!CKG	6	1776; 2220; 2606; 3236; 3481; 4422
MspCI	C!TTAAG	0	
MspJI	CNNRNNNNNNNNN!	230	13; 49; 81; 94; 137; 169; 183; 213; 240; 254; 271; 320; 339; 355; 370; 394; 407; 420; 445; 462; 484; 505; 520; 534; 551; 565; 586; 600; 625; 668; 691; 706; 722; 736; 759; 777; 791; 808; 829; 859; 873; 903; 930; 944; 961; 1010; 1029; 1045; 1060; 1084; 1097; 1110; 1135; 1152; 1174; 1195; 1210; 1224; 1241; 1255; 1276; 1290; 1315; 1358; 1381; 1396; 1412; 1426; 1449; 1467; 1481; 1498; 1519; 1533; 1554; 1567; 1589; 1607; 1632; 1646; 1661; 1691; 1715; 1760; 1776; 1789; 1815; 1831; 1855; 1869; 1885; 1918; 1943; 1960; 1989; 2002; 2026; 2048; 2064; 2077; 2109; 2135; 2151; 2179; 2196; 2209; 2224; 2242; 2272; 2287; 2320; 2360; 2385; 2399; 2415; 2428; 2470; 2494; 2508; 2536; 2551; 2568; 2586; 2601; 2619; 2636; 2652; 2671; 2686; 2702; 2716; 2747; 2773; 2796; 2817; 2836; 2849; 2877; 2895; 2915; 2933; 2952; 2971; 2986; 3000; 3014; 3028; 3054; 3067; 3081; 3097; 3113; 3140; 3158; 3181; 3206; 3223; 3241; 3255; 3274; 3295; 3310; 3323; 3339; 3365; 3385; 3401; 3433; 3450; 3470; 3484; 3519; 3533; 3551; 3578; 3600; 3627; 3653; 3693; 3713; 3729; 3751; 3783; 3799; 3823; 3839; 3863; 3876; 3906; 3923; 3940; 3963; 3981; 4006; 4021; 4043; 4058; 4091; 4106; 4126; 4165; 4191; 4204; 4225; 4242; 4271; 4286; 4318; 4332; 4345; 4361; 4384; 4406; 4419; 4445; 4459; 4472; 4502; 4520; 4534; 4565; 4582; 4621; 4635; 4675; 4688; 4701; 4714; 4740; 4765
MspJI	!NNNNNNNNNNNNNNYNGG	197	10; 49; 100; 119; 139; 157; 187; 218; 235; 272; 294; 313; 331; 355; 381; 401; 430; 466; 494; 524; 547; 574; 606; 624; 646; 663; 680; 702; 733; 758; 782; 803; 829; 847; 877; 908; 925; 962; 984; 1003; 1021; 1045; 1071; 1091; 1120; 1156; 1184; 1214; 1237; 1264; 1296; 1314; 1336; 1353; 1370; 1392; 1423; 1448; 1472; 1498; 1515; 1540; 1557; 1581; 1599; 1616; 1636; 1665; 1712; 1750; 1771; 1801; 1835; 1858; 1888; 1917; 1934; 1962; 1986; 2008; 2027; 2065; 2084; 2109; 2134; 2153; 2179; 2207; 2225; 2246; 2282; 2299; 2326; 2343; 2363; 2390; 2410; 2430; 2450; 2468; 2487; 2509; 2526; 2546; 2571; 2589; 2609; 2627; 2656; 2675; 2704; 2729; 2751; 2770; 2787; 2805; 2841; 2858; 2881; 2907; 2926; 2947; 2965; 2988; 3007; 3028; 3053; 3070; 3087; 3112; 3141; 3160; 3181; 3206; 3224; 3248; 3269; 3297; 3318; 3346; 3365; 3389; 3413; 3435; 3468; 3485; 3505; 3527; 3550; 3582; 3601; 3628; 3677; 3714; 3731; 3765; 3790; 3812; 3837; 3854; 3880; 3898; 3926; 3955; 3976; 3993; 4017; 4036; 4059; 4080; 4102; 4122; 4149; 4180; 4216; 4238; 4261; 4282; 4302; 4319; 4365; 4395; 4413; 4437; 4457; 4476; 4500; 4530; 4594; 4611; 4636; 4653; 4674; 4697; 4714; 4735; 4755
MspR9I	CC!NGG	18	457; 695; 818; 819; 1147; 1385; 1596; 2053; 2109; 2357; 2540; 2575; 2922; 3043; 3056; 3274; 3970; 4321
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	59
MvaI	CC!WGG	10	457; 695; 1147; 1385; 2053; 2109; 2357; 2922; 3043; 3056
Mva1269I	GAATGCN!	2	1869; 2276

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Mva1269I	G!CATTC	2	428; 1118
MvnI	CG!CG	8	2495; 2497; 2600; 2941; 3522; 3852; 4345; 4677
MvrI	CGAT!CG	1	4157
MwoI	GCNNNNN!NNGC	15	33; 679; 775; 1369; 1465; 1512; 1630; 1654; 2217; 2718; 2768; 2833; 2947; 3519; 3907
NaeI	GCC!GGC	0	
NarI	GG!CGCC	0	
NciI	CC!SGG	8	818; 819; 1596; 2540; 2575; 3274; 3970; 4321
NcoI	C!CATGG	3	492; 1182; 2177
NdeI	CA!TATG	1	2717
NdeII	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	2	4033; 4258
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	2	4069; 4294
NgoAVIII	!NNNNNNNNNNNNGACNNNNNTGA	0	
NgoMIV	G!CCGGC	0	
NheI	G!CTAGC	1	1624
NlaIII	CATG!	20	174; 252; 496; 864; 942; 1186; 1951; 2181; 2242; 2263; 2533; 2638; 2898; 3618; 4109; 4119; 4197; 4233; 4626; 4731
NlaIV	GGN!NCC	19	129; 275; 305; 498; 519; 551; 965; 995; 1188; 1209; 1241; 2344; 2926; 2965; 3737; 3831; 3872; 4083; 4673
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	667; 1357; 3007
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	6	505; 586; 1195; 1276; 2231; 2487
Nli3877I	CYCGR!G	2	5; 821
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	1	3936
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	0	
NmeDI	RCCGGYNNNNNNNN!	1	3879
NmeDI	!NNNNNNNNNNNNRCCGGY	1	3854
NmuCI	!GTSAC	6	261; 951; 2548; 2643; 4043; 4254
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	3	157; 847; 4009
NsiI	ATGCA!T	0	
NspI	RCATG!Y	2	2533; 2898
NspV	TT!CGAA	0	
OliI	CACNN!NNGTG	2	562; 1252
PabI	GTA!C	18	170; 241; 320; 499; 752; 764; 785; 860; 931; 1010; 1189; 1442; 1454; 1475; 1756; 2294; 2703; 4268
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	0	
PaeR7I	C!TCGAG	1	1
PagI	T!CATGA	3	3614; 4622; 4727
PaIAI	GG!CGCGCC	0	
PasI	CC!CWGGG	1	2108
PauI	G!CGCGC	0	
PceI	AGG!CCT	0	
PciI	A!CATGT	1	2894
PciSI	GCTCTTCN!	1	2778
PciSI	!NNNNGAAGAGC	0	
PcsI	WCGNNNN!NNNCGW	3	2820; 3218; 4095
PctI	GAATGCN!	2	1869; 2276
PctI	G!CATTC	2	428; 1118
PdiI	GCC!GGC	0	
PdmI	GAANN!NNTTC	1	4386
PfeI	G!AWTC	8	55; 255; 354; 945; 1044; 1616; 2226; 2869
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2641
PfIMI	CCANNNN!NTGG	3	580; 1270; 2108
PfoI	T!CCNGGA	1	2538
PhoI	GG!CC	19	191; 518; 610; 881; 1208; 1300; 1789; 1834; 2056; 2143; 2420; 2909; 2920; 2938; 3372; 3830; 3910; 4177; 4764
PinAI	A!CCGGT	0	
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	4	468; 1158; 2713; 2789
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	4	492; 1182; 1838; 2192

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PleI	GAGTCNNNN!	1	3273
PleI	!NNNNNGACTC	4	1519; 2361; 2788; 3776
Ple19I	CGAT!CG	1	4157
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	3609
PpiI	!NNNNNNNGAGNNNNNGTTC	1	4419
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4451
PpiI	!NNNNNNNGAACNNNNNCTC	1	3577
PpsI	GAGTCNNNN!	1	3273
PpsI	!NNNNNGACTC	4	1519; 2361; 2788; 3776
Ppu10I	A!TGCAT	0	
Ppu21I	YAC!GTR	1	2648
PpuMI	RG!GWCCY	2	329; 1019
PscI	A!CATGT	1	2894
PshAI	GACNN!NNGTC	2	334; 1024
PshBI	AT!TAAT	1	3959
PsiI	TTA!TAA	1	49
Psp03I	GGWC!C	6	332; 665; 1022; 1355; 3928; 4150
Psp5II	RG!GWCCY	2	329; 1019
Psp6I	!CCWGG	10	455; 693; 1145; 1383; 2051; 2107; 2355; 2920; 3041; 3054
Psp1406I	AA!CGTT	3	1963; 4013; 4386
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	10	455; 693; 1145; 1383; 2051; 2107; 2355; 2920; 3041; 3054
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	19	129; 275; 305; 498; 519; 551; 965; 995; 1188; 1209; 1241; 2344; 2926; 2965; 3737; 3831; 3872; 4083; 4673
PspOMI	G!GGCCC	0	
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNN!	0	
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	0	
PspPI	G!GNCC	14	329; 517; 609; 662; 1019; 1207; 1299; 1352; 2418; 3829; 3908; 3925; 4147; 4763
PspPPI	RG!GWCCY	2	329; 1019
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	2	1572; 3851
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	5	546; 716; 1236; 1406; 2343
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	3	332; 1022; 4766
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	3	729; 1419; 3310
PsuI	R!GATCY	9	127; 811; 1538; 3535; 3546; 3632; 3644; 4412; 4429
PsyI	GACN!NNGTC	1	2641
PteI	G!CGCGC	0	
PvuI	CGAT!CG	1	4157
PvuII	CAG!CTG	1	1776
RcaI	T!CATGA	3	3614; 4622; 4727
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	0	
RceI	!NNNNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	0	
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	18	169; 240; 319; 498; 751; 763; 784; 859; 930; 1009; 1188; 1441; 1453; 1474; 1755; 2293; 2702; 4267

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
RsaNI	G!TAC	18	168; 239; 318; 497; 750; 762; 783; 858; 929; 1008; 1187; 1440; 1452; 1473; 1754; 2292; 2701; 4266
RseI	CAYNN!NNRTG	7	163; 562; 853; 1252; 4039; 4198; 4557
RsrII	CG!GWCCG	0	
Rsr2I	CG!GWCCG	0	
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SaI	G!TCGAC	0	
SapI	GCTCTTCN!	1	2778
SapI	!NNNNGAAGAGC	0	
SaqAI	T!TAA	22	95; 109; 185; 614; 875; 1304; 1508; 1795; 2134; 2276; 2328; 2349; 2675; 3600; 3652; 3657; 3671; 3724; 3959; 3998; 4363; 4735
SatI	GC!NGC	24	324; 1014; 1592; 2218; 2477; 2488; 2534; 2631; 2684; 2800; 2818; 2821; 2939; 3094; 3237; 3302; 3305; 3511; 3776; 3839; 4178; 4205; 4300; 4529
Sau96I	G!GNCC	14	329; 517; 609; 662; 1019; 1207; 1299; 1352; 2418; 3829; 3908; 3925; 4147; 4763
Sau3AI	!GATC	23	121; 127; 624; 635; 789; 811; 1314; 1325; 1479; 1538; 3460; 3535; 3546; 3554; 3632; 3644; 3749; 4090; 4108; 4154; 4412; 4429; 4465
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	4	751; 1441; 2293; 4267
SchI	GAGTCNNNNN!	1	3274
SchI	!NNNNNGACTC	4	1519; 2361; 2788; 3776
SciI	CTC!GAG	1	3
ScrFI	CC!NGG	18	457; 695; 818; 819; 1147; 1385; 1596; 2053; 2109; 2357; 2540; 2575; 2922; 3043; 3056; 3274; 3970; 4321
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	5	565; 1255; 1669; 3944; 4190
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	3	1507; 2436; 3057
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	1	4034
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNNNN!	1	4068
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	0	
SduI	GDGCH!C	7	276; 966; 2347; 2714; 3212; 4373; 4458
SelI	!CGCG	8	2493; 2495; 2598; 2939; 3520; 3850; 4343; 4675
SetI	ASST!	63	2; 240; 263; 334; 415; 485; 566; 600; 664; 784; 930; 953; 1024; 1105; 1175; 1256; 1290; 1354; 1474; 1508; 1517; 1522; 1554; 1626; 1630; 1650; 1659; 1759; 1778; 1907; 1966; 2054; 2141; 2210; 2234; 2378; 2489; 2523; 2538; 2557; 2650; 2838; 3013; 3064; 3110; 3166; 3185; 3200; 3337; 3436; 3457; 3600; 3643; 3741; 3777; 3978; 4016; 4078; 4141; 4389; 4704; 4709; 4741
SexAI	A!CCWGGT	0	
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	11	167; 778; 857; 1468; 1719; 2392; 2695; 2771; 2991; 4043; 4483
SfaNI	!NNNNNNNNNGATGC	6	716; 1406; 2204; 2560; 2731; 4234
SfcI	C!TRYAG	3	3159; 3350; 4028
SfiI	GGCCNNNN!NGGCC	0	
SfoI	GGC!GCC	0	
Sfr274I	C!TCGAG	1	1
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	CNNGNNNNNNNNN!	172	13; 137; 174; 192; 213; 248; 261; 320; 339; 370; 394; 407; 457; 492; 505; 520; 534; 551; 566; 586; 600; 672; 691; 706; 759; 791; 808; 829; 864; 882; 903; 938; 951; 1010; 1029; 1060; 1084; 1097; 1147; 1182; 1195; 1210; 1224; 1241; 1256; 1276; 1290; 1362; 1381; 1396; 1449; 1481; 1498; 1533; 1554; 1578; 1596; 1633; 1646; 1691; 1776; 1789; 1833; 1861; 1885; 1918; 1943; 1960; 1989; 2002; 2038; 2064; 2120; 2135; 2151; 2179; 2209; 2233; 2251; 2272; 2320; 2368; 2385; 2428; 2470; 2494; 2508; 2542; 2568; 2586; 2601; 2619; 2636; 2653; 2682; 2778; 2796; 2817; 2836; 2885; 2907; 2922; 2952; 2986; 3014; 3033; 3054; 3067; 3081; 3102; 3120; 3140; 3167; 3207; 3223; 3241; 3260; 3274; 3295; 3310; 3323; 3344; 3372; 3401; 3439; 3470; 3494; 3519; 3533; 3553; 3578; 3608; 3627; 3654; 3713; 3791; 3804; 3823; 3839; 3863; 3880; 3906; 3924; 3940; 3963; 3981; 4006; 4043; 4058; 4091; 4106; 4128; 4206; 4242; 4271; 4287; 4319; 4332; 4345; 4406; 4421; 4445; 4463; 4502; 4526; 4565; 4621; 4635; 4688; 4714; 4740; 4770
SgeI	!NNNNNNNNNNNNCNG	145	111; 148; 166; 187; 222; 245; 294; 313; 344; 368; 431; 466; 494; 525; 560; 646; 665; 733; 765; 782; 803; 838; 856; 877; 912; 935; 984; 1003; 1034; 1058; 1121; 1156; 1184; 1215; 1250; 1336; 1355; 1423; 1455; 1472; 1507; 1528; 1552; 1570; 1607; 1629; 1665; 1750; 1807; 1835; 1859; 1892; 1917; 1934; 1963; 1987; 2012; 2038; 2094; 2125; 2153; 2183; 2207; 2225; 2246; 2294; 2342; 2359; 2402; 2444; 2468; 2516; 2542; 2560; 2580; 2603; 2621; 2656; 2752; 2770; 2791; 2810; 2859; 2881; 2907; 2926; 2960; 2988; 3007; 3028; 3053; 3076; 3094; 3114; 3141; 3181; 3206; 3234; 3259; 3284; 3304; 3346; 3375; 3413; 3444; 3468; 3493; 3527; 3552; 3582; 3601; 3628; 3687; 3765; 3797; 3819; 3837; 3854; 3880; 3898; 3937; 3955; 3980; 4017; 4036; 4065; 4085; 4102; 4180; 4216; 4245; 4293; 4319; 4380; 4419; 4437; 4476; 4500; 4539; 4595; 4662; 4688; 4714; 4744; 4766
Sgfl	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	2	821; 3569
SimI	!GACCC	3	2637; 3086; 3855
SinI	G!GWCC	6	329; 662; 1019; 1352; 3925; 4147
SlaI	C!TCGAG	1	1
SmaI	CCC!GGG	1	819
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	7	163; 562; 853; 1252; 4039; 4198; 4557
SmlI	C!TYRAG	6	1; 2377; 3000; 3262; 3539; 4407
SmoI	C!TYRAG	6	1; 2377; 3000; 3262; 3539; 4407
SmuI	CCCGCNNNN!	1	1861
SmuI	!NNNNNNGCGGG	2	2305; 2599
SnaBI	TAC!GTA	0	
SpeI	A!CTAGT	0	
SphI	GCATG!C	0	
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	16	17; 44; 59; 76; 88; 106; 501; 1191; 1497; 1509; 1876; 2281; 2320; 3654; 3960; 4215
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	2	329; 1019
SseBI	AGG!CCT	0	
SsiI	C!CGC	23	717; 1407; 1592; 1854; 2218; 2474; 2477; 2734; 2760; 2777; 2939; 2967; 3094; 3113; 3234; 3479; 3850; 3941; 4178; 4343; 4420; 4529; 4675
SsiI	G!CGG	17	36; 68; 2312; 2567; 2606; 2616; 2658; 2683; 2721; 2820; 2827; 2848; 3344; 3488; 4132; 4299; 4628
SspI	AAT!ATT	2	2188; 4591
SspDI	G!GCGCC	0	
SspD5I	GGTGANNNNNNN!	12	495; 634; 1185; 1324; 1623; 1912; 2056; 2124; 2458; 2516; 4273; 4514
SspD5I	!NNNNNNNNTCACC	9	254; 944; 1917; 2111; 2165; 3629; 3856; 4478; 4767
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	16	365; 527; 824; 1055; 1217; 1860; 2174; 2546; 2596; 3028; 3227; 3236; 3280; 3794; 4327; 4695
Sth132I	!NNNNNNNNCCGGG	13	116; 810; 1587; 2304; 2566; 2598; 2615; 3119; 3557; 3802; 3961; 4324; 4385
Sth302II	CC!GG	16	819; 1596; 1832; 1874; 2002; 2541; 2575; 3102; 3249; 3275; 3465; 3869; 3903; 3970; 4080; 4322
StrI	C!TCGAG	1	1
StsI	GGATGNNNNNNNNNN!	3	558; 1248; 2583
StsI	!NNNNNNNNNNNNNNNNCATCC	6	699; 1389; 1855; 3752; 3933; 4220
StuI	AGG!CCT	0	
StyI	C!CWWGG	3	492; 1182; 2177
StyD4I	!CCNGG	18	455; 693; 816; 817; 1145; 1383; 1594; 2051; 2107; 2355; 2538; 2573; 2920; 3041; 3054; 3272; 3968; 4319
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	22	183; 308; 761; 787; 873; 998; 1451; 1477; 1692; 1770; 1803; 1900; 1941; 2044; 2291; 2513; 2548; 2858; 2929; 3399; 3712; 4227
TaiI	ACGT!	11	263; 600; 953; 1290; 1966; 2141; 2650; 3600; 4016; 4389; 4709
TaqI	T!CGA	6	2; 293; 983; 2408; 2994; 4438
TaqII	GACCGANNNNNNNNNNNN!	1	4320
TaqII	!NNNNNNNNNTCGGTC	2	2796; 4135
TaqII	CACCCANNNNNNNNNNNN!	1	4473
TaqII	!NNNNNNNNNTGGGTG	2	2100; 4490
TasI	!AATT	16	17; 44; 59; 76; 88; 106; 501; 1191; 1497; 1509; 1876; 2281; 2320; 3654; 3960; 4215
TatI	W!GTACW	7	167; 749; 857; 1439; 2291; 2700; 4265
TauI	GCSG!C	10	1594; 2220; 2479; 2686; 2823; 2941; 3096; 4180; 4302; 4531
TfiI	G!AWTC	8	55; 255; 354; 945; 1044; 1616; 2226; 2869
TliI	C!TCGAG	1	1
TruII	T!TAA	22	95; 109; 185; 614; 875; 1304; 1508; 1795; 2134; 2276; 2328; 2349; 2675; 3600; 3652; 3657; 3671; 3724; 3959; 3998; 4363; 4735
Tru9I	T!TAA	22	95; 109; 185; 614; 875; 1304; 1508; 1795; 2134; 2276; 2328; 2349; 2675; 3600; 3652; 3657; 3671; 3724; 3959; 3998; 4363; 4735
TscAI	CASTGNN!	13	564; 792; 1254; 1482; 1683; 2796; 3302; 3315; 3586; 3735; 3840; 4187; 4214
TseI	G!CWGC	14	323; 1013; 2487; 2533; 2630; 2799; 2817; 3236; 3301; 3304; 3510; 3775; 3838; 4204
TsoI	TARCCANNNNNNNNNNNN!	1	1777
TsoI	!NNNNNNNNNTGGYTA	3	766; 1456; 4186
Tsp45I	!GTSAC	6	261; 951; 2548; 2643; 4043; 4254
Tsp509I	!AATT	16	17; 44; 59; 76; 88; 106; 501; 1191; 1497; 1509; 1876; 2281; 2320; 3654; 3960; 4215
TspDTI	ATGAANNNNNNNNNNNN!	8	431; 541; 1121; 1231; 1876; 1906; 2294; 3678
TspDTI	!NNNNNNNNNTTCAT	6	691; 1381; 1958; 2224; 3755; 4058
TspEI	!AATT	16	17; 44; 59; 76; 88; 106; 501; 1191; 1497; 1509; 1876; 2281; 2320; 3654; 3960; 4215
TspGWI	ACGGANNNNNNNNNNNN!	1	4569
TspGWI	!NNNNNNNNNTCCGT	3	667; 1357; 4227
TspMI	C!CCGGG	1	817
TspRI	CASTGNN!	13	564; 792; 1254; 1482; 1683; 2796; 3302; 3315; 3586; 3735; 3840; 4187; 4214
TstI	CACNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	2	587; 1277
TstI	GGANNNNNGTGNNNNNNNNNNNN!	2	619; 1309
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2641
Tth111II	CAARCCANNNNNNNNNNNN!	6	385; 570; 1075; 1260; 3484; 3523
Tth111III	!NNNNNNNNNTGYTTG	2	2428; 3491
UnbI	!GNCC	14	328; 516; 608; 661; 1018; 1206; 1298; 1351; 2417; 3828; 3907; 3924; 4146; 4762
Van9II	CCANNNN!NTGG	3	580; 1270; 2108
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	3	2710; 3208; 4454

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
VpaK11AI	!GGWCC	6	328; 661; 1018; 1351; 3924; 4146
VpaK11BI	G!GWCC	6	329; 662; 1019; 1352; 3925; 4147
VspI	AT!TAAT	1	3959
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	2	17; 1876
XbaI	T!CTAGA	1	2481
XceI	RCATG!Y	2	2533; 2898
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	1	1
XhoII	R!GATCY	9	127; 811; 1538; 3535; 3546; 3632; 3644; 4412; 4429
XmaI	C!CCGGG	1	817
XmaJI	C!CTAGG	0	
XmiI	GT!MKAC	1	2666
XmnI	GAANN!NNTTC	1	4386
XspI	C!TAG	8	779; 1469; 1625; 2373; 2482; 3389; 3642; 3977
ZraI	GAC!GTC	1	4707
ZrmI	AGT!ACT	4	751; 1441; 2293; 4267
Zsp2I	ATGCA!T	0	