

pJRed-N vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1549; 1754
AarI	CACCTGCNNNN!	1	1045
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1837; 2793; 4582
AatI	AGG!CCT	1	2587
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	640
AccII	CG!CG	20	60; 651; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2868
Acc36I	ACCTGCNNNN!	3	1045; 3034; 3484
Acc36I	!NNNNNNNNGCAGGT	1	2653
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	7	465; 645; 997; 1033; 1919; 2765; 2800
AccB7I	CCANNNN!NTGG	2	860; 1110
AccBSI	CCG!CTC	2	2190; 3379
AccBSI	GAG!CGG	2	2026; 3433
AceIII	CAGCTCNNNNNNN!	1	1722
AceIII	!NNNNNNNNNNGAGCTG	3	552; 846; 1012
AciI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 707; 909; 972; 1050; 1193; 1251; 1371; 1413; 2081; 2084; 2098; 2188; 2436; 2448; 2457; 2469; 2479; 2490; 2536; 2675; 2738; 3240; 3285; 3351; 3377; 3502; 3505; 3653; 3785; 4092; 4236; 4732
AciI	G!CGG	27	370; 403; 528; 651; 701; 1202; 1409; 2026; 2053; 2141; 2251; 2832; 2896; 2997; 3000; 3280; 3335; 3433; 3571; 3718; 3858; 4101; 4346; 4467; 4486; 4613; 4641
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	8	668; 2634; 2945; 3191; 3583; 3942; 4040; 4126
AcIWI	!NNNNNGATCC	8	580; 655; 876; 1257; 3010; 3554; 3941; 4038
AcoI	Y!GGCCR	7	762; 782; 1410; 2672; 2846; 3237; 3264
AcsI	R!AATTY	4	629; 1580; 1684; 1695
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	2	2912; 3344
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4142
AcvI	CAC!GTG	1	1332
AcyI	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547
AdeI	CACNNN!GTG	4	831; 1281; 1365; 1882
AfaI	GT!AC	9	219; 244; 299; 332; 383; 540; 647; 889; 3072
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	20	49; 860; 1110; 1212; 1344; 1778; 2104; 2496; 2747; 3291; 3572; 3604; 3736; 3771; 3821; 3853; 4206; 4485; 4651; 4669
AfII	C!TTAAG	1	1648
AfIII	A!CRYGT	3	1136; 1331; 4684
AgeI	A!CCGGT	1	666
AgsI	TTS!AA	8	735; 819; 1242; 2177; 2221; 2231; 2644; 4220
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	12	88; 281; 938; 2300; 2355; 2372; 3151; 3730; 3833; 4523; 4536; 4657
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	2	778; 1039
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2340; 2412
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2306; 2378
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1848
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1816
AluI	AG!CT	19	566; 618; 624; 849; 860; 1026; 1107; 1170; 1545; 1712; 1969; 2264; 2552; 2872; 3330; 4127; 4384; 4430; 4520
AluBI	AG!CT	19	566; 618; 624; 849; 860; 1026; 1107; 1170; 1545; 1712; 1969; 2264; 2552; 2872; 3330; 4127; 4384; 4430; 4520
AlwI	GGATCNNNN!	8	668; 2634; 2945; 3191; 3583; 3942; 4040; 4126
AlwI	!NNNNNGATCC	8	580; 655; 876; 1257; 3010; 3554; 3941; 4038
Alw21I	GWGCW!C	5	620; 827; 2879; 3069; 4374
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	6	832; 1123; 2190; 2608; 3627; 3755
Alw44I	G!TGCAC	2	823; 4370
AlwNI	CAGNN!CTG	2	3867; 4275
Ama87I	C!YCGRG	3	613; 656; 952
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	1	596
ApaI	GGGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2334; 2406; 3868
ApaLI	G!TGCAC	2	823; 4370
ApeKI	G!CWGC	17	791; 794; 849; 1247; 1542; 2061; 2726; 2827; 2869; 2910; 3003; 3390; 3843; 4069; 4275; 4278; 4343
ApoI	R!AATTY	4	629; 1580; 1684; 1695
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	3	770; 992; 3281
ApyPI	!NNNNNNNNNNNNNNNNNNNNGTCGAT	3	3075; 3728; 4566
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3165
AquII	!NNNNNNNNNNNNNNNNNNNNGTNCGGC	1	869
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2594
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNNCTCCYC	2	930; 3336
ArsI	GACNNNNNTTYGNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	22	586; 610; 661; 882; 1263; 1424; 2604; 2608; 2627; 2938; 3016; 3097; 3106; 3184; 3560; 3576; 3935; 3947; 4025; 4033; 4044; 4119
AsiGI	A!CCGGT	1	666
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2884
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	2588; 3603
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	28	597; 983; 1100; 1166; 1255; 1325; 1343; 1384; 2032; 2040; 2066; 2088; 2097; 2110; 2141; 2760; 2768; 2832; 2869; 3135; 3395; 3571; 3657; 4060; 4169; 4343; 4443; 4510
AspS9I	G!GNCC	15	83; 276; 654; 703; 957; 1087; 1150; 1215; 1270; 1873; 3282; 3727; 3773; 3831; 3864
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	627; 3448
AsuC2I	CC!SGG	7	657; 658; 1268; 2770; 2930; 3543; 4307
AsuHPI	GGTGANNNNNNNNN!	5	376; 768; 1359; 3837; 3953
AsuHPI	!NNNNNNNTCACC	7	765; 1047; 1179; 1284; 1368; 1883; 2944
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	3	613; 656; 952
AvaII	G!GWCC	2	3282; 3727
AviII	TGC!GCA	1	2868
AvrII	C!CTAGG	2	2588; 3603

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	2	2246; 3878
BaeI	ACNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGC!C	6	657; 827; 1370; 2712; 2805; 4374
BalI	TGG!CCA	1	2848
BamHI	G!GATCC	1	660
BanI	G!GYRCC	7	465; 645; 997; 1033; 1919; 2765; 2800
BanII	GRGCY!C	6	620; 657; 899; 1957; 3131; 3841
BanIII	AT!CGAT	1	2606
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	2	860; 1110
BauI	C!ACGAG	2	3484; 4511
BauI	C!TCGTG	1	3358
BbeI	GGCGC!C	1	2769
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	1	1332
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2336; 2408; 3171
BbvI	GCAGCNNNNNN!	8	803; 1259; 1554; 2839; 2881; 3402; 3855; 4355
BbvI	!NNNNNNNNNNNGCTGC	7	836; 2048; 2713; 2897; 2990; 4056; 4262
Bbv12I	GWGCW!C	5	620; 827; 2879; 3069; 4374
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	10	784; 877; 1099; 1264; 1294; 1393; 1896; 2460; 2986; 3488
BccI	!NNNNNGATGG	5	682; 1206; 1864; 2644; 3072
BceAI	ACGGCNNNNNNNNNN!	13	765; 804; 825; 906; 936; 1011; 1047; 1086; 1164; 1215; 1260; 3192; 3679
BceAI	!NNNNNNNNNNNGCCGT	5	814; 1144; 1907; 2725; 4184
Bcefi	ACGGCNNNNNNNNNN!	13	765; 804; 825; 906; 936; 1011; 1047; 1086; 1164; 1215; 1260; 3192; 3679
Bcefi	!NNNNNNNNNNNGCCGT	5	815; 1145; 1908; 2726; 4185
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNN!	3	2195; 2985; 4486
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	7	657; 658; 1268; 2770; 2930; 3543; 4307
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	2	1306; 4619
BdaI	!NNNNNNNNNTGANNNNNNTCA	2	1272; 4585
BfaI	C!TAG	8	592; 1421; 1615; 2033; 2589; 3604; 3938; 4191
BfiI	ACTGGGNNNNN!	1	2715
BfiI	!NNNCCAGT	2	289; 2467
BfmI	C!TRYAG	4	634; 2101; 4228; 4419
BfoI	RGCG!Y	6	598; 1385; 2033; 2041; 2769; 4444
BfrI	C!TTAAG	1	1648
BfuI	GTATCCNNNNN!	3	2195; 2985; 4486
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1045; 3034; 3484
BfuAI	!NNNNNNNGCAGGT	1	2653
BfuCI	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2541
BglII	A!GATCT	1	609

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BisI	GC!NGC	38	702; 792; 795; 850; 1050; 1203; 1248; 1251; 1410; 1413; 1543; 2062; 2084; 2098; 2536; 2675; 2727; 2738; 2828; 2833; 2870; 2911; 2998; 3001; 3004; 3240; 3336; 3377; 3391; 3505; 3844; 3859; 4070; 4276; 4279; 4344; 4487; 4642
BlnI	C!CTAGG	2	2588; 3603
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	38	703; 793; 796; 851; 1051; 1204; 1249; 1252; 1411; 1414; 1544; 2063; 2085; 2099; 2537; 2676; 2728; 2739; 2829; 2834; 2871; 2912; 2999; 3002; 3005; 3241; 3337; 3378; 3392; 3506; 3845; 3860; 4071; 4277; 4280; 4345; 4488; 4643
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	2	3282; 3727
Bme1390I	CC!NGG	19	90; 283; 657; 658; 940; 1268; 2302; 2357; 2374; 2770; 2930; 3153; 3543; 3732; 3835; 4307; 4525; 4538; 4659
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	3	613; 656; 952
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	15	84; 277; 655; 704; 958; 1088; 1151; 1216; 1271; 1874; 3283; 3728; 3774; 3832; 3865
BmiI	GGN!NCC	23	467; 647; 655; 662; 705; 999; 1035; 1089; 1152; 1272; 1921; 1942; 1954; 2145; 2306; 2378; 2767; 2802; 3650; 3729; 3774; 4617; 4656
BmrI	ACTGGGNNNNN!	1	2715
BmrI	!NNNNCCCAGT	2	289; 2467
BmrFI	CC!NGG	19	90; 283; 657; 658; 940; 1268; 2302; 2357; 2374; 2770; 2930; 3153; 3543; 3732; 3835; 4307; 4525; 4538; 4659
BmsI	GCATCNNNNN!	10	932; 974; 1061; 1382; 1582; 2345; 2417; 3065; 3129; 3404
BmsI	!NNNNNNNNNGATGC	5	357; 2724; 2979; 3195; 4587
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2715
BmuI	!NNNNCCCAGT	2	289; 2467
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNCTCNNNNNNNNNNNN!	2	2555; 3454
BpI	!NNNNNNNGAGNNNNNCTC	2	2523; 3422
BpmI	CTGGAGNNNNNNNNNNNNNNN!	1	3606
BpmI	!NNNNNNNNNNNNNNCTCCAG	1	3549
Bpu10I	CC!TNAGC	1	961
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 3448
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNN!	2	4060; 4599
BpuEI	!NNNNNNNNNNNNNNCTCAAG	3	604; 3142; 4301
BpuMI	CC!SGG	7	657; 658; 1268; 2770; 2930; 3543; 4307
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	832; 1123; 3755
Bsa29I	AT!CGAT	1	2606
BsaAI	YAC!GTR	4	340; 1332; 1882; 3070
BsaBI	GATNN!NNATC	2	1428; 2625
BsaHI	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547
BsaJI	C!CNNGG	23	360; 649; 656; 677; 807; 938; 953; 1146; 1266; 2300; 2372; 2495; 2530; 2539; 2588; 2929; 3198; 3603; 3730; 3731; 3833; 3834; 4524
BsaMI	GAATGCN!	1	1517
BsaMI	G!CATTC	1	1610
BsaWI	W!CCGGW	6	600; 666; 2797; 3641; 4331; 4478
BsaXI	ACNNNNNCTCCNNNNNNNNN!	1	1846
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1816
BsbI	CAACACNNNNNNNNNNNNNNNNN!	0	

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BsbI	!NNNNNNNNNNNNNNNNNNNGTGTTG	2	1767; 3674
Bsc4I	CCNNNNN!NNGG	20	49; 860; 1110; 1212; 1344; 1778; 2104; 2496; 2747; 3291; 3572; 3604; 3736; 3771; 3821; 3853; 4206; 4485; 4651; 4669
BscAI	GCATCNNNN!	10	931; 973; 1060; 1381; 1581; 2344; 2416; 3064; 3128; 3403
BscAI	!NNNNNNGATGC	5	360; 2727; 2982; 3198; 4590
Bse1I	ACTGGN!	3	2710; 2911; 4157
Bse1I	C!CAGT	6	295; 885; 1795; 2473; 4269; 4282
Bse8I	GATNN!NNATC	2	1428; 2625
Bse21I	CC!TNAGG	2	2246; 3878
Bse118I	R!CCGGY	6	666; 841; 1983; 3085; 3266; 3549
BseAI	T!CCGGA	0	
BseBI	CC!WGG	12	90; 283; 940; 2302; 2357; 2374; 3153; 3732; 3835; 4525; 4538; 4659
BseCI	AT!CGAT	1	2606
BseDI	C!CNNGG	23	360; 649; 656; 677; 807; 938; 953; 1146; 1266; 2300; 2372; 2495; 2530; 2539; 2588; 2929; 3198; 3603; 3730; 3731; 3833; 3834; 4524
Bse3DI	GCAATGNN!	1	2999
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	5	693; 2626; 3083; 3108; 3562
BseGI	!CATCC	2	1115; 2452
BseJI	GATNN!NNATC	2	1428; 2625
BseLI	CCNNNNN!NNGG	20	49; 860; 1110; 1212; 1344; 1778; 2104; 2496; 2747; 3291; 3572; 3604; 3736; 3771; 3821; 3853; 4206; 4485; 4651; 4669
BseMI	GCAATGNN!	1	2999
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 3892
BseMII	!NNNNNNNNCTGAG	6	952; 2237; 2539; 3420; 3992; 4401
BseNI	ACTGGN!	3	2710; 2911; 4157
BseNI	C!CAGT	6	295; 885; 1795; 2473; 4269; 4282
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2584
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	6	657; 827; 1370; 2712; 2805; 4374
BseXI	GCAGCNNNNNNNN!	8	803; 1259; 1554; 2839; 2881; 3402; 3855; 4355
BseXI	!NNNNNNNNNNNGCTGC	7	836; 2048; 2713; 2897; 2990; 4056; 4262
BseX3I	C!GGCCG	2	1410; 2672
BseYI	C!CCAGC	3	2309; 2381; 4380
BseYI	G!CTGGG	1	3270
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	20	60; 651; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
Bsh1285I	CGRY!CG	5	671; 972; 1413; 2675; 4350
BshFI	GG!CC	31	84; 277; 655; 704; 764; 784; 959; 1088; 1151; 1174; 1205; 1217; 1271; 1412; 1732; 1874; 2529; 2535; 2544; 2587; 2674; 2848; 3239; 3266; 3775; 3832; 3865; 4210; 4644; 4662; 4673
BshNI	G!GYRCC	7	465; 645; 997; 1033; 1919; 2765; 2800
BshTI	A!CCGGT	1	666
BshVI	AT!CGAT	1	2606
BsiEI	CGRY!CG	5	671; 972; 1413; 2675; 4350
BsiHKAI	GWGCW!C	5	620; 827; 2879; 3069; 4374
BsiHKCI	C!YCGRG	3	613; 656; 952
BsiSI	C!CGG	21	601; 657; 667; 842; 1268; 1984; 2671; 2748; 2770; 2798; 2929; 3019; 3086; 3267; 3542; 3550; 3642; 4116; 4306; 4332; 4479
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	20	49; 860; 1110; 1212; 1344; 1778; 2104; 2496; 2747; 3291; 3572; 3604; 3736; 3771; 3821; 3853; 4206; 4485; 4651; 4669
BsIFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1321; 2917; 3449; 3558
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2282; 2354; 2418; 3713
BsmI	GAATGCN!	1	1517
BsmI	G!CATTC	1	1610
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	6	832; 1123; 2190; 2608; 3627; 3755
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	

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BsmFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1321; 2917; 3449; 3558
BsmFI	!NNNNNNNNNNNGTCCC	4	2282; 2354; 2418; 3713
BsnI	GG!CC	31	84; 277; 655; 704; 764; 784; 959; 1088; 1151; 1174; 1205; 1217; 1271; 1412; 1732; 1874; 2529; 2535; 2544; 2587; 2674; 2848; 3239; 3266; 3775; 3832; 3865; 4210; 4644; 4662; 4673
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	3	832; 1123; 3755
BsoBI	C!YCGRG	3	613; 656; 952
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 677; 2495; 3198
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3569
Bsp24I	!NNNNNNCCANNNNNGTC	2	3990; 4168
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4022; 4200
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3537
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 3448
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
Bsp1286I	GDGCH!C	13	620; 657; 827; 899; 1370; 1957; 2712; 2805; 2879; 3069; 3131; 3841; 4374
Bsp1407I	T!GTACA	0	
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 707; 909; 972; 1050; 1193; 1251; 1371; 1413; 2081; 2084; 2098; 2188; 2436; 2448; 2457; 2469; 2479; 2490; 2536; 2675; 2738; 3240; 3285; 3351; 3377; 3502; 3505; 3653; 3785; 4092; 4236; 4732
BspACI	G!CGG	27	370; 403; 528; 651; 701; 1202; 1409; 2026; 2053; 2141; 2251; 2832; 2896; 2997; 3000; 3280; 3335; 3433; 3571; 3718; 3858; 4101; 4346; 4467; 4486; 4613; 4641
BspCNI	CTCAGNNNNNNNN!	2	619; 3891
BspCNI	!NNNNNNNCTGAG	6	953; 2238; 2540; 3421; 3993; 4402
BspDI	AT!CGAT	1	2606
BspD6I	GACTCNNNN!	6	418; 612; 1425; 1839; 3445; 4322
BspD6I	!NNNNNGAGTC	2	1802; 2234
BspEI	T!CCGGA	0	
BspFNI	CG!CG	20	60; 651; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
BspHI	T!CATGA	2	2192; 3964
BspLI	GGN!NCC	23	467; 647; 655; 662; 705; 999; 1035; 1089; 1152; 1272; 1921; 1942; 1954; 2145; 2306; 2378; 2767; 2802; 3650; 3729; 3774; 4617; 4656
BspMI	ACCTGCNNNN!	3	1045; 3034; 3484
BspMI	!NNNNNNNGCAGGT	1	2653
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	668; 2634; 2945; 3191; 3583; 3942; 4040; 4126
BspPI	!NNNNNGATCC	8	580; 655; 876; 1257; 3010; 3554; 3941; 4038
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3110; 3320
BspTI	C!TTAAG	1	1648
BspT104I	TT!CGAA	2	627; 3448
BspT107I	G!GYRCC	7	465; 645; 997; 1033; 1919; 2765; 2800
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	832; 1123; 3755
BsrI	ACTGGN!	3	2710; 2911; 4157
BsrI	C!CAGT	6	295; 885; 1795; 2473; 4269; 4282
BsrBI	CCG!CTC	2	2190; 3379
BsrBI	GAG!CGG	2	2026; 3433
BsrDI	GCAATGNN!	1	2999
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	6	666; 841; 1983; 3085; 3266; 3549
BsrGI	T!GTACA	0	
BsrSI	ACTGGN!	3	2710; 2911; 4157
BsrSI	C!CAGT	6	295; 885; 1795; 2473; 4269; 4282
BssAI	R!CCGGY	6	666; 841; 1983; 3085; 3266; 3549

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNNGG	23	360; 649; 656; 677; 807; 938; 953; 1146; 1266; 2300; 2372; 2495; 2530; 2539; 2588; 2929; 3198; 3603; 3730; 3731; 3833; 3834; 4524
BssHII	G!CGCGC	0	
BssKI	!CCNGG	19	88; 281; 655; 656; 938; 1266; 2300; 2355; 2372; 2768; 2928; 3151; 3541; 3730; 3833; 4305; 4523; 4536; 4657
BssMI	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
BssNI	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	3484; 4511
BssSI	C!TCGTG	1	3358
BssTII	C!CWWGG	6	360; 677; 2495; 2588; 3198; 3603
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2233; 3110; 3320
Bst98I	C!TTAAG	1	1648
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547
BstAFI	C!TTAAG	1	1648
BstAPI	GCANNNN!NTGC	3	2333; 2405; 3867
BstAUI	T!GTACA	0	
BstBI	TT!CGAA	2	627; 3448
Bst2BI	C!ACGAG	2	3484; 4511
Bst2BI	C!TCGTG	1	3358
BstBAI	YAC!GTR	4	340; 1332; 1882; 3070
Bst4CI	ACN!GT	16	76; 198; 269; 543; 581; 645; 978; 1059; 1857; 3146; 3262; 3370; 3693; 4184; 4654; 4725
BstC8I	GCN!NGC	37	86; 279; 593; 653; 827; 847; 895; 909; 1168; 1172; 1339; 1366; 1985; 2028; 2042; 2315; 2334; 2387; 2406; 2660; 2846; 3065; 3131; 3137; 3165; 3169; 3210; 3214; 3268; 3551; 3738; 3785; 3841; 3863; 4074; 4634; 4671
BstDEI	C!TNAG	8	606; 961; 2246; 2548; 3429; 3878; 4001; 4410
BstDSI	C!CRYGG	7	360; 649; 677; 807; 1146; 2495; 3198
BstEII	G!GTNACC	1	1347
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	5	693; 2626; 3083; 3108; 3562
BstF5I	!CATCC	2	1115; 2452
BstFNI	CG!CG	20	60; 651; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
BstH2I	RGCGC!Y	6	598; 1385; 2033; 2041; 2769; 4444
BstHHI	GCG!C	28	597; 983; 1100; 1166; 1255; 1325; 1343; 1384; 2032; 2040; 2066; 2088; 2097; 2110; 2141; 2760; 2768; 2832; 2869; 3135; 3395; 3571; 3657; 4060; 4169; 4343; 4443; 4510
BstKTI	GAT!C	22	588; 612; 663; 884; 1265; 1426; 2606; 2610; 2629; 2940; 3018; 3099; 3108; 3186; 3562; 3578; 3937; 3949; 4027; 4035; 4046; 4121
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	6	832; 1123; 2190; 2608; 3627; 3755
BstMBI	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
BstMCI	CGRY!CG	5	671; 972; 1413; 2675; 4350
BstMWI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 842; 971; 1046; 1104; 1322; 1370; 1993; 2023; 2050; 2092; 2333; 2405; 2456; 2535; 2757; 2841; 2864; 3003; 3126; 3209; 3476; 3663; 3867; 4066; 4638
BstNI	CC!WGG	12	90; 283; 940; 2302; 2357; 2374; 3153; 3732; 3835; 4525; 4538; 4659
BstNSI	RCATG!Y	5	1140; 2336; 2408; 3171; 4688
BstOI	CC!WGG	12	90; 283; 940; 2302; 2357; 2374; 3153; 3732; 3835; 4525; 4538; 4659
BstPI	G!GTNACC	1	1347
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	19	88; 281; 655; 656; 938; 1266; 2300; 2355; 2372; 2768; 2928; 3151; 3541; 3730; 3833; 4305; 4523; 4536; 4657
BstSFI	C!TRYAG	4	634; 2101; 4228; 4419
BstSLI	GKGCML!C	6	657; 827; 1370; 2712; 2805; 4374

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; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
Bst2UI	CC!WGG	12	90; 283; 940; 2302; 2357; 2374; 3153; 3732; 3835; 4525; 4538; 4659
BstV1I	GCAGCNNNNNNNN!	8	803; 1259; 1554; 2839; 2881; 3402; 3855; 4355
BstV1I	!NNNNNNNNNNNGCTGC	7	836; 2048; 2713; 2897; 2990; 4056; 4262
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 609; 660; 1262; 2937; 3183; 3575; 3934; 3946; 4032; 4043
BstYI	R!GATCY	11	585; 609; 660; 1262; 2937; 3183; 3575; 3934; 3946; 4032; 4043
BstZI	C!GGCCG	2	1410; 2672
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2195; 2985; 4486
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2606
Bsu36I	CC!TNAGG	2	2246; 3878
BsuRI	GG!CC	31	84; 277; 655; 704; 764; 784; 959; 1088; 1151; 1174; 1205; 1217; 1271; 1412; 1732; 1874; 2529; 2535; 2544; 2587; 2674; 2848; 3239; 3266; 3775; 3832; 3865; 4210; 4644; 4662; 4673
BsuTUI	AT!CGAT	1	2606
BtgI	C!CRYGG	7	360; 649; 677; 807; 1146; 2495; 3198
BtgZI	GCGATGNNNNNNNNNN!	2	1883; 3218
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3037; 3381
BthCI	GCNG!C	38	704; 794; 797; 852; 1052; 1205; 1250; 1253; 1412; 1415; 1545; 2064; 2086; 2100; 2538; 2677; 2729; 2740; 2830; 2835; 2872; 2913; 3000; 3003; 3006; 3242; 3338; 3379; 3393; 3507; 3846; 3861; 4072; 4278; 4281; 4346; 4489; 4644
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1605
BtsCI	GGATGNN!	5	693; 2626; 3083; 3108; 3562
BtsCI	!CATCC	2	1115; 2452
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	1045; 3034; 3484
BveI	!NNNNNNNNNGCAGGT	1	2653
Cac8I	GCN!NGC	37	86; 279; 593; 653; 827; 847; 895; 909; 1168; 1172; 1339; 1366; 1985; 2028; 2042; 2315; 2334; 2387; 2406; 2660; 2846; 3065; 3131; 3137; 3165; 3169; 3210; 3214; 3268; 3551; 3738; 3785; 3841; 3863; 4074; 4634; 4671
CaiI	CAGNNN!CTG	2	3867; 4275
CciI	T!CATGA	2	2192; 3964
CciNI	GC!GGCCGC	1	1410
CdiI	CATC!G	10	352; 747; 780; 969; 1182; 1389; 3055; 3060; 3258; 3399
CdiI	C!GATG	2	1869; 3204
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4638
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2427; 2469
CelII	GC!TNAGC	0	
CfoI	GCG!C	28	597; 983; 1100; 1166; 1255; 1325; 1343; 1384; 2032; 2040; 2066; 2088; 2097; 2110; 2141; 2760; 2768; 2832; 2869; 3135; 3395; 3571; 3657; 4060; 4169; 4343; 4443; 4510
CfrI	Y!GGCCR	7	762; 782; 1410; 2672; 2846; 3237; 3264
Cfr9I	C!CCGGG	1	656
Cfr10I	R!CCGGY	6	666; 841; 1983; 3085; 3266; 3549
Cfr13I	G!GNCC	15	83; 276; 654; 703; 957; 1087; 1150; 1215; 1270; 1873; 3282; 3727; 3773; 3831; 3864
Cfr42I	CCGC!GG	1	652
ChaI	GATC!	22	589; 613; 664; 885; 1266; 1427; 2607; 2611; 2630; 2941; 3019; 3100; 3109; 3187; 3563; 3579; 3938; 3950; 4028; 4036; 4047; 4122
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	4	2583; 4023; 4123; 4201
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2250; 2345; 3537; 4087; 4642
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2284; 2379; 3571; 4121; 4676
CjeI	!NNNNNNNNCCANNNNNNGT	4	2549; 3989; 4089; 4167
CjePI	CCANNNNNNNNTCNNNNNNNNNNNNNNNN!	2	4023; 4201

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	!NNNNNNNNGANNNNNNNTGG	3	257; 3537; 4136
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	3	290; 3570; 4169
CjePI	!NNNNNNNCCANNNNNNNTC	2	3990; 4168
Clal	AT!CGAT	1	2606
CpoI	CG!GWCCG	1	3282
CseI	GACGCNNNNN!	3	526; 3476; 3555
CseI	!NNNNNNNNNNGCGTC	3	2099; 3994; 4572
CsiI	A!CCWGGT	1	2355
CspI	CG!GWCCG	1	3282
Csp6I	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 888; 3071
Csp45I	TT!CGAA	2	627; 3448
CspAI	A!CCGGT	1	666
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2046; 3655
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	21	301; 361; 678; 726; 855; 1002; 1095; 1137; 2193; 2333; 2405; 2496; 2637; 2982; 3168; 3199; 3225; 3581; 3965; 4685; 4736
CviJI	RG!CY	99	42; 84; 93; 277; 566; 618; 624; 655; 704; 764; 784; 849; 860; 867; 897; 929; 959; 1010; 1026; 1049; 1073; 1080; 1088; 1107; 1151; 1170; 1174; 1184; 1205; 1217; 1250; 1271; 1412; 1435; 1545; 1712; 1732; 1874; 1955; 1969; 1983; 2264; 2305; 2377; 2500; 2529; 2535; 2544; 2552; 2575; 2587; 2593; 2674; 2691; 2699; 2726; 2751; 2835; 2844; 2848; 2872; 2910; 2986; 3003; 3022; 3085; 3129; 3139; 3156; 3239; 3266; 3270; 3307; 3330; 3346; 3526; 3553; 3614; 3736; 3775; 3832; 3839; 3846; 3865; 3876; 4127; 4156; 4199; 4210; 4275; 4354; 4379; 4384; 4430; 4520; 4618; 4644; 4662; 4673
CviKI-1	RG!CY	99	42; 84; 93; 277; 566; 618; 624; 655; 704; 764; 784; 849; 860; 867; 897; 929; 959; 1010; 1026; 1049; 1073; 1080; 1088; 1107; 1151; 1170; 1174; 1184; 1205; 1217; 1250; 1271; 1412; 1435; 1545; 1712; 1732; 1874; 1955; 1969; 1983; 2264; 2305; 2377; 2500; 2529; 2535; 2544; 2552; 2575; 2587; 2593; 2674; 2691; 2699; 2726; 2751; 2835; 2844; 2848; 2872; 2910; 2986; 3003; 3022; 3085; 3129; 3139; 3156; 3239; 3266; 3270; 3307; 3330; 3346; 3526; 3553; 3614; 3736; 3775; 3832; 3839; 3846; 3865; 3876; 4127; 4156; 4199; 4210; 4275; 4354; 4379; 4384; 4430; 4520; 4618; 4644; 4662; 4673
CviQI	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 888; 3071
DdeI	C!TNAG	8	606; 961; 2246; 2548; 3429; 3878; 4001; 4410
DinI	GGC!GCC	1	2767
DpnI	GA!TC	22	587; 611; 662; 883; 1264; 1425; 2605; 2609; 2628; 2939; 3017; 3098; 3107; 3185; 3561; 3577; 3936; 3948; 4026; 4034; 4045; 4120
DpnII	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
DraI	TTT!AAA	3	1468; 3910; 3929
DraII	RG!GNCCY	2	957; 3864
DraIII	CACNNN!GTG	4	831; 1281; 1365; 1882
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4246
DraRI	!NNNNNNNNNNNNNNNNNGTCTTG	0	
DrdI	GACNNN!NNGTC	3	1837; 2793; 4582
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1837; 2793; 4582
EaeI	Y!GGCCR	7	762; 782; 1410; 2672; 2846; 3237; 3264
EagI	C!GGCCG	2	1410; 2672
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2233; 3110; 3320
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2233; 3110; 3320
EciI	GGCGGANNNNNNNNNNNN!	4	2266; 3295; 4482; 4628
EciI	!NNNNNNNNNTCCGCC	4	496; 2437; 2458; 2479

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	2	1410; 2672
Eco24I	GRGCY!C	6	620; 657; 899; 1957; 3131; 3841
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	3	832; 1123; 3755
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	2	3282; 3727
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	2	1410; 2672
Eco57I	CTGAAGNNNNNNNNNNNNNN!	2	2912; 3344
Eco57I	!NNNNNNNNNNNNNCTTCAG	1	4142
Eco72I	CAC!GTG	1	1332
Eco81I	CC!TNAGG	2	2246; 3878
Eco88I	C!YCGRG	3	613; 656; 952
Eco91I	G!GTNACC	1	1347
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 677; 2495; 2588; 3198; 3603
Eco147I	AGG!CCT	1	2587
EcoHI	!CCSGG	7	655; 656; 1266; 2768; 2928; 3541; 4305
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	3	2912; 3344; 3606
Eco57MI	!NNNNNNNNNNNNNCTYCAG	2	3549; 4142
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	1	1347
Eco0109I	RG!GNCCY	2	957; 3864
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	12	88; 281; 938; 2300; 2355; 2372; 3151; 3730; 3833; 4523; 4536; 4657
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 677; 2495; 2588; 3198; 3603
EcoT22I	ATGCA!T	3	2338; 2410; 4741
EcoT38I	GRGCY!C	6	620; 657; 899; 1957; 3131; 3841
Eco53kI	GAG!CTC	1	618
EgeI	GGC!GCC	1	2767
EheI	GGC!GCC	1	2767
ErhI	C!CWWGG	6	360; 677; 2495; 2588; 3198; 3603
EsaBC3I	TC!GA	18	615; 628; 641; 747; 969; 987; 1224; 1916; 2607; 2880; 3036; 3060; 3096; 3258; 3449; 3494; 3749; 4587
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	21	304; 364; 681; 729; 858; 1005; 1098; 1140; 2196; 2336; 2408; 2499; 2640; 2985; 3171; 3202; 3228; 3584; 3968; 4688; 4739
Fail	YA!TR	57	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 679; 727; 856; 1003; 1096; 1138; 1428; 1438; 1504; 1549; 1754; 2182; 2194; 2325; 2334; 2397; 2406; 2430; 2497; 2521; 2638; 2702; 2983; 3008; 3169; 3200; 3226; 3298; 3514; 3582; 3660; 3712; 3873; 3890; 3892; 3894; 3966; 4244; 4433; 4549; 4622; 4686; 4737
FalI	AAGNNNNCTTNNNNNNNNNNNN!	2	1254; 3106
FalI	!NNNNNNNNAAGNNNNNCTT	2	1222; 3074
FaqI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1321; 2917; 3449; 3558
FaqI	!NNNNNNNNNNNNNGTCCC	4	2282; 2354; 2418; 3713
FatI	!CATG	21	300; 360; 677; 725; 854; 1001; 1094; 1136; 2192; 2332; 2404; 2495; 2636; 2981; 3167; 3198; 3224; 3580; 3964; 4684; 4735
FauI	CCCGCNNNN!	11	93; 119; 286; 714; 916; 1378; 2088; 2443; 2464; 3660; 3792
FauI	!NNNNNGCGGG	6	644; 2019; 2889; 3426; 3564; 3711
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	640
FmuI	GGNC!C	15	86; 279; 657; 706; 960; 1090; 1153; 1218; 1273; 1876; 3285; 3730; 3776; 3834; 3867
Fnu4HI	GC!NGC	38	702; 792; 795; 850; 1050; 1203; 1248; 1251; 1410; 1413; 1543; 2062; 2084; 2098; 2536; 2675; 2727; 2738; 2828; 2833; 2870; 2911; 2998; 3001; 3004; 3240; 3336; 3377; 3391; 3505; 3844; 3859; 4070; 4276; 4279; 4344; 4487; 4642
FokI	GGATGNNNNNNNN!	5	700; 2633; 3090; 3115; 3569

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FokI	!NNNNNNNNNNNNNNCATCC	2	1102; 2439
FriOI	GRGCY!C	6	620; 657; 899; 1957; 3131; 3841
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2868
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1421; 1615; 2033; 2589; 3604; 3938; 4191
FspEI	CCNNNNNNNNNNNN!	165	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 662; 677; 718; 744; 778; 798; 817; 843; 866; 881; 898; 912; 928; 943; 964; 985; 1014; 1032; 1050; 1071; 1090; 1104; 1132; 1146; 1165; 1180; 1203; 1219; 1251; 1269; 1285; 1299; 1326; 1342; 1365; 1382; 1398; 1426; 1449; 1488; 1502; 1643; 1738; 1762; 1785; 1808; 1826; 1848; 1869; 1888; 1907; 1936; 1957; 1971; 1997; 2085; 2111; 2160; 2201; 2219; 2258; 2274; 2312; 2369; 2384; 2441; 2461; 2475; 2492; 2506; 2543; 2558; 2601; 2684; 2751; 2782; 2802; 2817; 2862; 2876; 2942; 2956; 2975; 2991; 3032; 3052; 3099; 3149; 3165; 3185; 3210; 3230; 3253; 3280; 3298; 3324; 3364; 3390; 3414; 3470; 3484; 3512; 3555; 3576; 3611; 3655; 3743; 3767; 3789; 3809; 3825; 3846; 3860; 3879; 3963; 3983; 4011; 4026; 4060; 4102; 4129; 4144; 4189; 4213; 4227; 4249; 4275; 4295; 4319; 4345; 4393; 4412; 4431; 4457; 4492; 4537; 4567; 4581; 4632; 4646; 4671; 4687; 4708; 4737
FspEI	!NNNNNNNNNNNNNNNGG	128	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 628; 652; 670; 734; 766; 794; 827; 846; 875; 905; 925; 980; 1012; 1055; 1093; 1133; 1156; 1184; 1229; 1253; 1290; 1330; 1373; 1394; 1437; 1537; 1606; 1636; 1714; 1763; 1785; 1813; 1849; 1894; 1923; 1959; 1978; 2006; 2026; 2089; 2112; 2220; 2252; 2270; 2299; 2342; 2371; 2482; 2511; 2554; 2575; 2603; 2636; 2656; 2681; 2708; 2733; 2755; 2783; 2809; 2830; 2881; 2902; 2920; 2968; 3004; 3060; 3085; 3109; 3138; 3161; 3185; 3211; 3233; 3252; 3277; 3317; 3353; 3418; 3503; 3527; 3556; 3590; 3611; 3631; 3676; 3703; 3722; 3755; 3807; 3838; 3865; 3917; 4015; 4086; 4131; 4192; 4257; 4291; 4317; 4335; 4371; 4441; 4464; 4486; 4510; 4543; 4591; 4626; 4644; 4701
Fsp4HI	GC!NGC	38	702; 792; 795; 850; 1050; 1203; 1248; 1251; 1410; 1413; 1543; 2062; 2084; 2098; 2536; 2675; 2727; 2738; 2828; 2833; 2870; 2911; 2998; 3001; 3004; 3240; 3336; 3377; 3391; 3505; 3844; 3859; 4070; 4276; 4279; 4344; 4487; 4642
GdiII	C!GGCCR	3	762; 1410; 2672
GdiII	Y!GGCCG	5	782; 1410; 2672; 3237; 3264
GlaI	GC!GC	28	596; 982; 1099; 1165; 1254; 1324; 1342; 1383; 2031; 2039; 2065; 2087; 2096; 2109; 2140; 2759; 2767; 2831; 2868; 3134; 3394; 3570; 3656; 4059; 4168; 4342; 4442; 4509
GluI	GC!NGC	38	702; 792; 795; 850; 1050; 1203; 1248; 1251; 1410; 1413; 1543; 2062; 2084; 2098; 2536; 2675; 2727; 2738; 2828; 2833; 2870; 2911; 2998; 3001; 3004; 3240; 3336; 3377; 3391; 3505; 3844; 3859; 4070; 4276; 4279; 4344; 4487; 4642
GsaI	CCCAG!C	3	2313; 2385; 4384
GsaI	GCTGG!G	1	3274
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3606
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3549
HaeI	WGG!CCW	6	1174; 2587; 2848; 4210; 4662; 4673
HaeII	RGCGC!Y	6	598; 1385; 2033; 2041; 2769; 4444
HaeIII	GG!CC	31	84; 277; 655; 704; 764; 784; 959; 1088; 1151; 1174; 1205; 1217; 1271; 1412; 1732; 1874; 2529; 2535; 2544; 2587; 2674; 2848; 3239; 3266; 3775; 3832; 3865; 4210; 4644; 4662; 4673
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1441; 2962
HaeIV	!NNNNNNNNNGAYNNNNNNRTCC	2	1407; 2928
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1440; 2961
HaeIV	!NNNNNNNGAYNNNNNNRTCC	2	1409; 2930
HapII	C!CGG	21	601; 657; 667; 842; 1268; 1984; 2671; 2748; 2770; 2798; 2929; 3019; 3086; 3267; 3542; 3550; 3642; 4116; 4306; 4332; 4479
HgaI	GACGCNNNNN!	3	526; 3476; 3555
HgaI	!NNNNNNNNNNNGCGTC	3	2099; 3994; 4572
HhaI	GCG!C	28	597; 983; 1100; 1166; 1255; 1325; 1343; 1384; 2032; 2040; 2066; 2088; 2097; 2110; 2141; 2760; 2768; 2832; 2869; 3135; 3395; 3571; 3657; 4060; 4169; 4343; 4443; 4510
HinII	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Hin1III	CATG!	21	304; 364; 681; 729; 858; 1005; 1098; 1140; 2196; 2336; 2408; 2499; 2640; 2985; 3171; 3202; 3228; 3584; 3968; 4688; 4739
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1440; 2961
Hin4I	!NNNNNNNGABNNNNNRTC	3	1408; 2929; 2959
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1440; 2961; 2991
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1408; 2929
Hin6I	G!CGC	28	595; 981; 1098; 1164; 1253; 1323; 1341; 1382; 2030; 2038; 2064; 2086; 2095; 2108; 2139; 2758; 2766; 2830; 2867; 3133; 3393; 3569; 3655; 4058; 4167; 4341; 4441; 4508
HinP1I	G!CGC	28	595; 981; 1098; 1164; 1253; 1323; 1341; 1382; 2030; 2038; 2064; 2086; 2095; 2108; 2139; 2758; 2766; 2830; 2867; 3133; 3393; 3569; 3655; 4058; 4167; 4341; 4441; 4508
HincII	GTY!RAC	2	641; 1529
HindII	GTY!RAC	2	641; 1529
HindIII	A!AGCTT	1	622
HinfI	G!ANTC	13	410; 604; 1417; 1809; 1831; 2241; 3251; 3385; 3437; 3495; 3532; 4314; 4710
HpaI	GTT!AAC	1	1529
HpaII	C!CGG	21	601; 657; 667; 842; 1268; 1984; 2671; 2748; 2770; 2798; 2929; 3019; 3086; 3267; 3542; 3550; 3642; 4116; 4306; 4332; 4479
HphI	GGTGANNNNNNNN!	5	376; 768; 1359; 3837; 3953
HphI	!NNNNNNNTCACC	7	765; 1047; 1179; 1284; 1368; 1883; 2944
Hpy8I	GTN!NAC	14	201; 539; 577; 641; 759; 773; 825; 1062; 1113; 1529; 1813; 1830; 1885; 4372
Hpy99I	CGWCG!	15	645; 751; 790; 997; 1072; 1087; 1201; 1399; 2856; 2884; 3178; 3193; 3470; 3855; 4588
Hpy166II	GTN!NAC	14	201; 539; 577; 641; 759; 773; 825; 1062; 1113; 1529; 1813; 1830; 1885; 4372
Hpy188I	TCN!GA	13	585; 609; 696; 1940; 2549; 2733; 3077; 3430; 3531; 4010; 4144; 4497; 4575
Hpy188III	TC!NNGA	25	613; 717; 987; 1260; 1281; 1421; 2193; 2245; 2558; 2611; 2784; 3100; 3109; 3192; 3248; 3292; 3382; 3415; 3484; 3965; 4039; 4122; 4220; 4318; 4452
HpyAV	CCTCANNNNNN!	7	741; 909; 1185; 1248; 3411; 3518; 4197
HpyAV	!NNNNNGAAGG	7	1999; 2894; 3623; 3639; 3822; 4139; 4449
HpyCH4III	ACN!GT	16	76; 198; 269; 543; 581; 645; 978; 1059; 1857; 3146; 3262; 3370; 3693; 4184; 4654; 4725
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 821; 1331; 1826; 1838; 1881; 1991; 2882; 3069; 3850; 3983
HpyCH4V	TG!CA	18	636; 825; 1515; 1542; 1610; 2327; 2336; 2399; 2408; 2523; 2599; 2658; 2817; 2992; 3006; 4076; 4372; 4739
HpyF3I	C!TNAG	8	606; 961; 2246; 2548; 3429; 3878; 4001; 4410
HpyF10VI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 842; 971; 1046; 1104; 1322; 1370; 1993; 2023; 2050; 2092; 2333; 2405; 2456; 2535; 2757; 2841; 2864; 3003; 3126; 3209; 3476; 3663; 3867; 4066; 4638
Hsp92I	GR!CGYC	7	122; 175; 258; 444; 2766; 3468; 3547
Hsp92II	CATG!	21	304; 364; 681; 729; 858; 1005; 1098; 1140; 2196; 2336; 2408; 2499; 2640; 2985; 3171; 3202; 3228; 3584; 3968; 4688; 4739
HspAI	G!CGC	28	595; 981; 1098; 1164; 1253; 1323; 1341; 1382; 2030; 2038; 2064; 2086; 2095; 2108; 2139; 2758; 2766; 2830; 2867; 3133; 3393; 3569; 3655; 4058; 4167; 4341; 4441; 4508
KasI	G!GCGCC	1	2765
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	1529
Kzo9I	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3110; 3320
LpnI	RGC!GCV	6	596; 1383; 2031; 2039; 2767; 4442

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	CCDGNNNNNNNNN!	65	102; 295; 614; 670; 724; 778; 855; 892; 952; 973; 1020; 1050; 1090; 1117; 1132; 1180; 1219; 1281; 1326; 1351; 1392; 1503; 1808; 1997; 2220; 2258; 2274; 2314; 2369; 2386; 2486; 2571; 2684; 2761; 2783; 2806; 2942; 2956; 2975; 3032; 3099; 3149; 3165; 3222; 3280; 3489; 3555; 3579; 3655; 3744; 3847; 3880; 4111; 4129; 4275; 4295; 4319; 4345; 4394; 4492; 4537; 4567; 4646; 4671; 4708
LpnPI	!NNNNNNNNNNNNNCHGG	53	75; 268; 552; 586; 642; 827; 846; 925; 1012; 1093; 1156; 1253; 1849; 1969; 2026; 2089; 2287; 2299; 2359; 2371; 2603; 2648; 2691; 2733; 2755; 2783; 2830; 2892; 2914; 3004; 3071; 3094; 3138; 3233; 3252; 3277; 3426; 3527; 3570; 3627; 3717; 3820; 3847; 3865; 4101; 4138; 4291; 4317; 4457; 4475; 4510; 4591; 4644
Lsp1109I	GCAGCNNNNNNNN!	8	803; 1259; 1554; 2839; 2881; 3402; 3855; 4355
Lsp1109I	!NNNNNNNNNNNNNGCTGC	7	836; 2048; 2713; 2897; 2990; 4056; 4262
LweI	GCATCNNNNN!	10	932; 974; 1061; 1382; 1582; 2345; 2417; 3065; 3129; 3404
LweI	!NNNNNNNNNNNGATGC	5	357; 2724; 2979; 3195; 4587
MabI	A!CCWGGT	1	2355
MaeI	C!TAG	8	592; 1421; 1615; 2033; 2589; 3604; 3938; 4191
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 821; 1331; 1826; 1838; 1881; 1991; 2882; 3069; 3850; 3983
MaeIII	!GTNAC	14	61; 148; 497; 1281; 1347; 1554; 2055; 2067; 2886; 3192; 3882; 4148; 4264; 4327
MaiI	GA!TC	22	587; 611; 662; 883; 1264; 1425; 2605; 2609; 2628; 2939; 3017; 3098; 3107; 3185; 3561; 3577; 3936; 3948; 4026; 4034; 4045; 4120
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2190; 3379
MbiI	GAG!CGG	2	2026; 3433
MboI	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
MboII	GAAGANNNNNNNN!	5	2022; 2250; 3127; 3337; 3956
MboII	!NNNNNNNTCTTC	6	732; 894; 3417; 3584; 3784; 4027
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1516
MfiI	R!GATCY	11	585; 609; 660; 1262; 2937; 3183; 3575; 3934; 3946; 4032; 4043
MhiI	GDGCH!C	13	620; 657; 827; 899; 1370; 1957; 2712; 2805; 2879; 3069; 3131; 3841; 4374
MisI	TGG!CCA	1	2848
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	2848
MlyI	GAGTCNNNNN!	2	1818; 2250
MlyI	!NNNNNGACTC	6	404; 598; 1411; 1825; 3431; 4308
Mly113I	GG!CGCC	1	2766
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	1859
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4291; 4475
MnII	CCTCNNNNNNN!	7	1485; 2549; 3367; 3573; 3887; 4257; 4581
MnII	!NNNNNNNGAGG	20	541; 678; 690; 747; 948; 1298; 1338; 1392; 1445; 1910; 2241; 2519; 2562; 2577; 2617; 2681; 2817; 3174; 3604; 4507
Mph1103I	ATGCA!T	3	2338; 2410; 4741
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1983; 3266; 3549
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	1	2848
MseI	T!TAA	16	7; 1404; 1467; 1528; 1649; 1670; 1681; 1693; 1704; 1721; 1819; 2090; 3909; 3923; 3928; 3980
MslI	CAYNN!NNRTG	5	365; 778; 1039; 1057; 3203
MspI	C!CGG	21	601; 657; 667; 842; 1268; 1984; 2671; 2748; 2770; 2798; 2929; 3019; 3086; 3267; 3542; 3550; 3642; 4116; 4306; 4332; 4479
Msp20I	TGG!CCA	1	2848
MspA1I	CMG!CKG	7	651; 1107; 1170; 2264; 2872; 4101; 4346
MspCI	C!TTAAG	1	1648

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	241	36; 50; 71; 97; 113; 127; 147; 167; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 627; 640; 662; 679; 696; 718; 738; 765; 778; 792; 810; 834; 849; 865; 880; 897; 920; 950; 964; 985; 999; 1014; 1027; 1049; 1063; 1089; 1102; 1116; 1131; 1145; 1159; 1173; 1208; 1242; 1264; 1279; 1293; 1307; 1325; 1342; 1356; 1370; 1384; 1410; 1426; 1439; 1454; 1473; 1490; 1503; 1544; 1558; 1571; 1589; 1627; 1642; 1660; 1701; 1725; 1745; 1763; 1784; 1807; 1839; 1854; 1876; 1894; 1907; 1928; 1945; 1958; 1971; 1987; 2000; 2030; 2045; 2070; 2088; 2101; 2116; 2140; 2154; 2178; 2203; 2219; 2257; 2273; 2312; 2326; 2340; 2368; 2384; 2398; 2412; 2441; 2454; 2475; 2484; 2506; 2536; 2552; 2570; 2600; 2623; 2647; 2671; 2690; 2718; 2744; 2760; 2773; 2796; 2810; 2830; 2843; 2857; 2876; 2890; 2903; 2919; 2934; 2947; 2963; 2978; 2994; 3019; 3038; 3054; 3067; 3080; 3098; 3112; 3126; 3142; 3164; 3180; 3199; 3221; 3237; 3260; 3279; 3293; 3309; 3323; 3343; 3359; 3372; 3394; 3427; 3441; 3461; 3474; 3488; 3542; 3555; 3578; 3591; 3610; 3627; 3654; 3690; 3723; 3742; 3767; 3788; 3815; 3828; 3845; 3859; 3874; 3890; 3950; 3975; 3991; 4013; 4026; 4040; 4071; 4085; 4110; 4128; 4143; 4156; 4175; 4188; 4203; 4232; 4251; 4269; 4294; 4309; 4328; 4344; 4363; 4381; 4397; 4411; 4430; 4457; 4480; 4502; 4521; 4536; 4549; 4566; 4586; 4613; 4626; 4645; 4670; 4693; 4707; 4720; 4737
MspJI	!NNNNNNNNNNNNYNG	202	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 593; 612; 636; 653; 670; 692; 712; 739; 766; 784; 808; 828; 847; 865; 890; 912; 938; 964; 988; 1007; 1025; 1045; 1063; 1081; 1105; 1123; 1147; 1167; 1192; 1216; 1238; 1265; 1282; 1299; 1316; 1340; 1365; 1384; 1407; 1432; 1476; 1518; 1601; 1636; 1663; 1686; 1715; 1759; 1781; 1813; 1849; 1866; 1887; 1924; 1944; 1961; 1978; 2013; 2031; 2049; 2066; 2090; 2112; 2139; 2167; 2193; 2231; 2252; 2269; 2287; 2310; 2331; 2359; 2382; 2403; 2421; 2442; 2459; 2482; 2506; 2526; 2544; 2566; 2597; 2619; 2645; 2664; 2681; 2709; 2728; 2747; 2765; 2783; 2804; 2826; 2850; 2883; 2903; 2921; 2942; 2968; 2995; 3012; 3029; 3046; 3072; 3094; 3116; 3134; 3154; 3173; 3195; 3233; 3253; 3277; 3297; 3317; 3344; 3368; 3401; 3420; 3448; 3470; 3499; 3527; 3552; 3571; 3590; 3611; 3628; 3645; 3676; 3703; 3723; 3746; 3766; 3803; 3820; 3839; 3865; 3885; 3924; 3951; 3970; 3988; 4025; 4043; 4084; 4102; 4128; 4145; 4177; 4206; 4234; 4255; 4278; 4297; 4318; 4336; 4353; 4371; 4397; 4418; 4438; 4458; 4476; 4497; 4523; 4540; 4559; 4578; 4607; 4626; 4644; 4663; 4681; 4699; 4722
MspR9I	CC!NGG	19	90; 283; 657; 658; 940; 1268; 2302; 2357; 2374; 2770; 2930; 3153; 3543; 3732; 3835; 4307; 4525; 4538; 4659
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1516
MvaI	CC!WGG	12	90; 283; 940; 2302; 2357; 2374; 3153; 3732; 3835; 4525; 4538; 4659
Mva1269I	GAATGCN!	1	1517
Mva1269I	G!CATTC	1	1610
MvnI	CG!CG	20	60; 651; 1100; 1253; 1325; 1343; 1415; 1690; 2066; 2086; 2110; 2141; 2832; 3133; 3571; 3655; 3718; 3787; 4060; 4641
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	31	90; 212; 244; 283; 376; 400; 842; 971; 1046; 1104; 1322; 1370; 1993; 2023; 2050; 2092; 2333; 2405; 2456; 2535; 2757; 2841; 2864; 3003; 3126; 3209; 3476; 3663; 3867; 4066; 4638
NaeI	GCC!GGC	3	1985; 3268; 3551
NarI	GG!CGCC	1	2766
NciI	CC!SGG	7	657; 658; 1268; 2770; 2930; 3543; 4307
NcoI	C!CATGG	4	360; 677; 2495; 3198
NdeI	CA!TATG	1	234
NdeII	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
NgoAVIII	GACNNNNNTGANNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1983; 3266; 3549

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NheI	G!CTAGC	1	591
NlaIII	CATG!	21	304; 364; 681; 729; 858; 1005; 1098; 1140; 2196; 2336; 2408; 2499; 2640; 2985; 3171; 3202; 3228; 3584; 3968; 4688; 4739
NlaIV	GGN!NCC	23	467; 647; 655; 662; 705; 999; 1035; 1089; 1152; 1272; 1921; 1942; 1954; 2145; 2306; 2378; 2767; 2802; 3650; 3729; 3774; 4617; 4656
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	6	1077; 1314; 1398; 1598; 1913; 3505
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	2	347; 4577
Nli3877I	CYCGR!G	3	617; 660; 956
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2555; 2991
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	2520
NmeDI	RCCGGYNNNNNNNN!	6	678; 853; 1995; 3097; 3278; 3561
NmeDI	!NNNNNNNNNNNNRCCGGY	6	653; 828; 1970; 3072; 3253; 3536
NmuCI	!GTSAC	5	1281; 1347; 2055; 2886; 3192
NotI	GC!GGCCGC	1	1410
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2868
NsiI	ATGCA!T	3	2338; 2410; 4741
NspI	RCATG!Y	5	1140; 2336; 2408; 3171; 4688
NspV	TT!CGAA	2	627; 3448
OliI	CACNN!NNGTG	2	778; 1039
PabI	GTA!C	9	220; 245; 300; 333; 384; 541; 648; 890; 3073
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2336; 2408; 3171
PaeR7I	C!TCGAG	1	613
PagI	T!CATGA	2	2192; 3964
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3731; 3834
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2587
PciI	A!CATGT	2	1136; 4684
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3110; 3320
PcsI	WCGNNNN!NNNCGW	11	827; 974; 1037; 1361; 1394; 3060; 3137; 3380; 3454; 3847; 4365
PctI	GAATGCN!	1	1517
PctI	G!CATTC	1	1610
PdiI	GCC!GGC	3	1985; 3268; 3551
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	5	3251; 3385; 3495; 3532; 4710
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2884
PfIMI	CCANNNN!NTGG	2	860; 1110
PfoI	T!CCNGGA	1	3541
PhoI	GG!CC	31	84; 277; 655; 704; 764; 784; 959; 1088; 1151; 1174; 1205; 1217; 1271; 1412; 1732; 1874; 2529; 2535; 2544; 2587; 2674; 2848; 3239; 3266; 3775; 3832; 3865; 4210; 4644; 4662; 4673
PinAI	A!CCGGT	1	666
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	2	950; 3147
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	3	1187; 2712; 2967
PleI	GAGTCNNNN!	2	1817; 2249
PleI	!NNNNNGACTC	6	404; 598; 1411; 1825; 3431; 4308
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	1	1332
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	1	1332
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1848
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	3978
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4010
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1816
Ppsi	GAGTCNNNN!	2	1817; 2249
Ppsi	!NNNNNGACTC	6	404; 598; 1411; 1825; 3431; 4308
Ppu10I	A!TGCAT	3	2334; 2406; 4737
Ppu21I	YAC!GTR	4	340; 1332; 1882; 3070
PpuMI	RG!GWCCY	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PscI	A!CATGT	2	1136; 4684
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1549; 1754
Psp03I	GGWC!C	2	3285; 3730
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	12	88; 281; 938; 2300; 2355; 2372; 3151; 3730; 3833; 4523; 4536; 4657
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	1	1332
PspEI	G!GTNACC	1	1347
PspGI	!CCWGG	12	88; 281; 938; 2300; 2355; 2372; 3151; 3730; 3833; 4523; 4536; 4657
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	23	467; 647; 655; 662; 705; 999; 1035; 1089; 1152; 1272; 1921; 1942; 1954; 2145; 2306; 2378; 2767; 2802; 3650; 3729; 3774; 4617; 4656
PspOMI	G!GGCCC	1	653
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	4	125; 962; 2496; 3495
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2898
PspPI	G!GNCC	15	83; 276; 654; 703; 957; 1087; 1150; 1215; 1270; 1873; 3282; 3727; 3773; 3831; 3864
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNNNN!	3	2319; 2391; 3897
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	2	2232; 3427
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	2	960; 3867
PstI	CTGCA!G	1	638
PstNI	CAGNNN!CTG	2	3867; 4275
PsuI	R!GATCY	11	585; 609; 660; 1262; 2937; 3183; 3575; 3934; 3946; 4032; 4043
PsyI	GACN!NNGTC	1	2884
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	4	1107; 1170; 2264; 2872
RcaI	T!CATGA	2	2192; 3964
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	3	770; 992; 3281
RceI	!NNNNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNNNNNN!	3	1150; 1375; 1495
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	9	219; 244; 299; 332; 383; 540; 647; 889; 3072
RsaNI	G!TAC	9	218; 243; 298; 331; 382; 539; 646; 888; 3071
RseI	CAYNN!NNRTG	5	365; 778; 1039; 1057; 3203
RsrII	CG!GWCCG	1	3282
Rsr2I	CG!GWCCG	1	3282
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SalI	G!TCGAC	1	639
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3110; 3320
SaqAI	T!TAA	16	7; 1404; 1467; 1528; 1649; 1670; 1681; 1693; 1704; 1721; 1819; 2090; 3909; 3923; 3928; 3980

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	38	702; 792; 795; 850; 1050; 1203; 1248; 1251; 1410; 1413; 1543; 2062; 2084; 2098; 2536; 2675; 2727; 2738; 2828; 2833; 2870; 2911; 2998; 3001; 3004; 3240; 3336; 3377; 3391; 3505; 3844; 3859; 4070; 4276; 4279; 4344; 4487; 4642
Sau96I	G!GNCC	15	83; 276; 654; 703; 957; 1087; 1150; 1215; 1270; 1873; 3282; 3727; 3773; 3831; 3864
Sau3AI	!GATC	22	585; 609; 660; 881; 1262; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1818; 2250
SchI	!NNNNNGACTC	6	404; 598; 1411; 1825; 3431; 4308
SciI	CTC!GAG	1	615
ScrFI	CC!NGG	19	90; 283; 657; 658; 940; 1268; 2302; 2357; 2374; 2770; 2930; 3153; 3543; 3732; 3835; 4307; 4525; 4538; 4659
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	792; 966; 2344; 2416; 2585; 4527
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2921; 3406
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	13	620; 657; 827; 899; 1370; 1957; 2712; 2805; 2879; 3069; 3131; 3841; 4374
SelI	!CGCG	20	58; 649; 1098; 1251; 1323; 1341; 1413; 1688; 2064; 2084; 2108; 2139; 2830; 3131; 3569; 3653; 3716; 3785; 4058; 4639
SetI	ASST!	66	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 733; 758; 824; 851; 862; 881; 1021; 1028; 1039; 1109; 1172; 1240; 1334; 1349; 1354; 1456; 1477; 1486; 1498; 1547; 1714; 1829; 1841; 1884; 1921; 1971; 1994; 2118; 2266; 2361; 2554; 2667; 2795; 2874; 2885; 2957; 3028; 3072; 3332; 3478; 3522; 3853; 3884; 3943; 3986; 4129; 4150; 4249; 4386; 4401; 4420; 4432; 4476; 4522; 4573
SexAI	A!CCWGGT	1	2355
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	932; 974; 1061; 1382; 1582; 2345; 2417; 3065; 3129; 3404
SfaNI	!NNNNNNNNNGATGC	5	357; 2724; 2979; 3195; 4587
SfiI	C!TRYAG	4	634; 2101; 4228; 4419
SfiI	GGCCNNNN!NGGCC	1	2541
SfoI	GGC!GCC	1	2767
Sfr274I	C!TCGAG	1	613
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 3448
SgeI	CNNGNNNNNNNNN!	192	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 662; 679; 696; 718; 738; 765; 792; 810; 834; 849; 867; 891; 906; 920; 951; 964; 990; 1014; 1035; 1049; 1071; 1089; 1107; 1120; 1140; 1159; 1173; 1218; 1242; 1264; 1279; 1293; 1308; 1325; 1342; 1356; 1377; 1391; 1410; 1426; 1473; 1502; 1544; 1627; 1701; 1785; 1807; 1839; 1876; 1894; 1913; 1928; 1970; 1987; 2004; 2039; 2053; 2070; 2092; 2116; 2140; 2205; 2219; 2257; 2273; 2313; 2326; 2345; 2368; 2385; 2398; 2417; 2447; 2468; 2485; 2508; 2543; 2570; 2601; 2623; 2649; 2671; 2690; 2718; 2754; 2773; 2796; 2810; 2830; 2843; 2857; 2876; 2890; 2909; 2941; 2955; 2968; 2994; 3025; 3038; 3055; 3072; 3086; 3103; 3121; 3136; 3164; 3180; 3199; 3221; 3237; 3260; 3279; 3304; 3323; 3343; 3370; 3394; 3427; 3446; 3474; 3488; 3554; 3578; 3593; 3616; 3637; 3654; 3702; 3729; 3743; 3772; 3796; 3829; 3846; 3866; 3879; 3892; 3950; 3977; 3996; 4026; 4051; 4071; 4085; 4110; 4128; 4165; 4203; 4232; 4260; 4274; 4294; 4309; 4330; 4344; 4363; 4381; 4397; 4437; 4457; 4484; 4502; 4523; 4536; 4549; 4566; 4590; 4613; 4645; 4670; 4697; 4719

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; 670; 692; 712; 739; 766; 784; 808; 828; 847; 865; 894; 925; 946; 964; 988; 1009; 1027; 1045; 1063; 1081; 1105; 1123; 1147; 1192; 1216; 1238; 1267; 1299; 1316; 1351; 1384; 1407; 1447; 1476; 1518; 1601; 1675; 1759; 1781; 1813; 1850; 1868; 1887; 1944; 1961; 1978; 2013; 2031; 2051; 2071; 2090; 2114; 2179; 2231; 2287; 2319; 2342; 2359; 2391; 2421; 2442; 2459; 2482; 2517; 2544; 2575; 2597; 2623; 2645; 2664; 2692; 2728; 2747; 2770; 2791; 2809; 2826; 2850; 2883; 2915; 2942; 2968; 2999; 3029; 3046; 3072; 3095; 3116; 3138; 3158; 3178; 3195; 3234; 3253; 3278; 3297; 3317; 3344; 3368; 3401; 3420; 3448; 3470; 3528; 3552; 3571; 3590; 3611; 3628; 3676; 3703; 3723; 3746; 3770; 3803; 3820; 3840; 3866; 3924; 3951; 3970; 4000; 4025; 4045; 4084; 4102; 4139; 4177; 4206; 4234; 4255; 4283; 4304; 4337; 4355; 4411; 4431; 4458; 4476; 4497; 4523; 4540; 4564; 4587; 4619; 4644; 4671; 4693; 4722
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; 1913; 3700; 4493
SimI	!GACCC	5	106; 1130; 3194; 3762; 4010
SinI	G!GWCC	2	3282; 3727
Slal	C!TCGAG	1	613
SmaI	CCC!GGG	1	658
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 778; 1039; 1057; 3203
SmlI	C!TYRAG	7	613; 619; 1648; 3157; 4039; 4316; 4578
SmoI	C!TYRAG	7	613; 619; 1648; 3157; 4039; 4316; 4578
SmuI	CCCGCNNNN!	11	93; 119; 286; 714; 916; 1378; 2088; 2443; 2464; 3660; 3792
SmuI	!NNNNNNNGCGGG	6	644; 2019; 2889; 3426; 3564; 3711
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2336; 2408; 3171
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 629; 1516; 1580; 1658; 1684; 1695; 2342; 2414; 2506; 3924
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2587
SsiI	C!CGC	40	58; 86; 98; 112; 279; 507; 589; 649; 707; 909; 972; 1050; 1193; 1251; 1371; 1413; 2081; 2084; 2098; 2188; 2436; 2448; 2457; 2469; 2479; 2490; 2536; 2675; 2738; 3240; 3285; 3351; 3377; 3502; 3505; 3653; 3785; 4092; 4236; 4732
SsiI	G!CGG	27	370; 403; 528; 651; 701; 1202; 1409; 2026; 2053; 2141; 2251; 2832; 2896; 2997; 3000; 3280; 3335; 3433; 3571; 3718; 3858; 4101; 4346; 4467; 4486; 4613; 4641
SspI	AAT!ATT	2	1674; 2227
SspDI	G!GCGCC	1	2765
SspD5I	GGTGANNNNNNNN!	5	376; 768; 1359; 3837; 3953
SspD5I	!NNNNNNNNNTCACC	7	764; 1046; 1178; 1283; 1367; 1882; 2943
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	22	92; 118; 285; 663; 713; 915; 959; 1088; 1274; 1377; 1965; 2087; 2442; 2463; 2776; 3179; 3318; 3389; 3659; 3791; 4021; 4459
Sth132I	!NNNNNNNNCCGGG	19	15; 407; 470; 643; 1966; 2018; 2119; 2846; 2888; 2921; 3425; 3534; 3563; 3710; 3814; 3845; 4298; 4342; 4550
Sth302II	CC!GG	21	602; 658; 668; 843; 1269; 1985; 2672; 2749; 2771; 2799; 2930; 3020; 3087; 3268; 3543; 3551; 3643; 4117; 4307; 4333; 4480
StrI	C!TCGAG	1	613
StsI	GGATGNNNNNNNNNN!	5	701; 2634; 3091; 3116; 3570
StsI	!NNNNNNNNNNNNNNCATCC	2	1101; 2438
StuI	AGG!CCT	1	2587
StyI	C!CWWGG	6	360; 677; 2495; 2588; 3198; 3603

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	19	88; 281; 655; 656; 938; 1266; 2300; 2355; 2372; 2768; 2928; 3151; 3541; 3730; 3833; 4305; 4523; 4536; 4657
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	16	76; 198; 269; 543; 581; 645; 978; 1059; 1857; 3146; 3262; 3370; 3693; 4184; 4654; 4725
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 824; 1334; 1829; 1841; 1884; 1994; 2885; 3072; 3853; 3986
TaqI	T!CGA	18	614; 627; 640; 746; 968; 986; 1223; 1915; 2606; 2879; 3035; 3059; 3095; 3257; 3448; 3493; 3748; 4586
TaqII	GACCGANNNNNNNNNNN!	3	1786; 2803; 3471
TaqII	!NNNNNNNNNTCGGTC	1	3715
TaqII	CACCCANNNNNNNNNNN!	0	
TaqII	!NNNNNNNNNTGGGTG	3	172; 2670; 3262
TasI	!AATT	11	18; 629; 1516; 1580; 1658; 1684; 1695; 2342; 2414; 2506; 3924
TatI	W!GTACW	4	217; 297; 330; 381
TauI	GCSG!C	21	704; 1052; 1205; 1253; 1412; 1415; 2086; 2100; 2538; 2677; 2740; 2835; 3000; 3003; 3242; 3338; 3379; 3507; 3861; 4489; 4644
TfiI	G!AWTC	5	3251; 3385; 3495; 3532; 4710
ThiI	C!TCGAG	1	613
TruII	T!TAA	16	7; 1404; 1467; 1528; 1649; 1670; 1681; 1693; 1704; 1721; 1819; 2090; 3909; 3923; 3928; 3980
Tru9I	T!TAA	16	7; 1404; 1467; 1528; 1649; 1670; 1681; 1693; 1704; 1721; 1819; 2090; 3909; 3923; 3928; 3980
TscAI	CASTGNN!	5	1612; 2895; 4005; 4276; 4289
TseI	G!CWGC	17	791; 794; 849; 1247; 1542; 2061; 2726; 2827; 2869; 2910; 3003; 3390; 3843; 4069; 4275; 4278; 4343
TsoI	TARCCANNNNNNNNNNN!	2	1738; 2085
TsoI	!NNNNNNNNNTGGYTA	2	1543; 3295
Tsp45I	!GTSAC	5	1281; 1347; 2055; 2886; 3192
Tsp509I	!AATT	11	18; 629; 1516; 1580; 1658; 1684; 1695; 2342; 2414; 2506; 3924
TspDTI	ATGAANNNNNNNNNNN!	3	1524; 2825; 3529
TspDTI	!NNNNNNNNNTTCAT	6	26; 732; 1167; 3243; 3699; 3906
TspEI	!AATT	11	18; 629; 1516; 1580; 1658; 1684; 1695; 2342; 2414; 2506; 3924
TspGWI	ACGGANNNNNNNNNNN!	1	3641
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	656
TspRI	CASTGNN!	5	1612; 2895; 4005; 4276; 4289
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2884
Tth111II	CAARCANNNNNNNNNNN!	2	1312; 4093
Tth111II	!NNNNNNNNNTGYTTG	3	3201; 4061; 4100
UnbI	!GGNCC	15	82; 275; 653; 702; 956; 1086; 1149; 1214; 1269; 1872; 3281; 3726; 3772; 3830; 3863
Van9II	CCANNNN!NTGG	2	860; 1110
Vha464I	C!TTAAG	1	1648
VneI	G!TGCAC	2	823; 4370
VpaK11AI	!GGWCC	2	3281; 3726
VpaK11BI	G!GWCC	2	3282; 3727
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	629; 1580; 1684; 1695
XbaI	T!CTAGA	1	1420
XceI	RCATG!Y	5	1140; 2336; 2408; 3171; 4688
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	1	613
XhoII	R!GATCY	11	585; 609; 660; 1262; 2937; 3183; 3575; 3934; 3946; 4032; 4043
XmaI	C!CCGGG	1	656
XmaJI	C!CTAGG	2	2588; 3603
XmiI	GT!MKAC	1	640
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	8	592; 1421; 1615; 2033; 2589; 3604; 3938; 4191
ZraI	GAC!GTC	4	123; 176; 259; 445

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2338; 2410; 4741