

pTurboGFP-mito vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1545; 1750
AarI	CACCTGCNNNN!	1	1156
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1833; 2789; 4578
AatI	AGG!CCT	1	2583
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2864
Acc36I	ACCTGCNNNN!	4	883; 1156; 3030; 3480
Acc36I	!NNNNNNNNGCAGGT	1	2649
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	9	465; 759; 804; 852; 915; 1077; 1915; 2761; 2796
AccB7I	CCANNNN!NTGG	2	680; 890
AccBSI	CCG!CTC	2	2186; 3375
AccBSI	GAG!CGG	3	721; 2022; 3429
AceIII	CAGCTCNNNNNNN!	2	1235; 1718
AceIII	!NNNNNNNNNNGAGCTG	3	552; 771; 1326
AciI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 612; 660; 730; 749; 821; 983; 1034; 1049; 1124; 1190; 1307; 1310; 1409; 2077; 2080; 2094; 2184; 2432; 2444; 2453; 2465; 2475; 2486; 2532; 2671; 2734; 3236; 3281; 3347; 3373; 3498; 3501; 3649; 3781; 4088; 4232; 4728
AciI	G!CGG	33	370; 403; 528; 623; 647; 721; 793; 796; 928; 967; 1006; 1213; 1405; 2022; 2049; 2137; 2247; 2828; 2892; 2993; 2996; 3276; 3331; 3429; 3567; 3714; 3854; 4097; 4342; 4463; 4482; 4609; 4637
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	9	694; 1330; 2630; 2941; 3187; 3579; 3938; 4036; 4122
AcIWI	!NNNNNGATCC	7	580; 665; 681; 3006; 3550; 3937; 4034
AcoI	Y!GGCCR	6	1046; 1406; 2668; 2842; 3233; 3260
AcsI	R!AATY	3	1576; 1680; 1691
AcuI	CTGAAGNNNNNNNNNNNNNNN!	2	2908; 3340
AcuI	!NNNNNNNNNNNNNNCTTCAG	4	848; 1010; 1181; 4138
AcvI	CAC!GTG	2	887; 1019
AcyI	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
AdeI	CACNNN!GTG	1	1878
AfaI	GT!AC	9	219; 244; 299; 332; 383; 540; 996; 1356; 3068
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	21	49; 680; 815; 890; 1040; 1313; 1774; 2100; 2492; 2743; 3287; 3568; 3600; 3732; 3767; 3817; 3849; 4202; 4481; 4647; 4665
AfIII	C!TTAAG	1	1644
AfIII	A!CRYGT	1	4680
AgeI	A!CCGGT	1	692
AgsI	TTS!AA	8	1067; 1253; 1370; 2173; 2217; 2227; 2640; 4216
AhdI	GACNNN!NNGTC	0	
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	11	88; 281; 2296; 2351; 2368; 3147; 3726; 3829; 4519; 4532; 4653
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	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2336; 2408
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2302; 2374
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1844
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1812
AluI	AG!CT	18	566; 785; 1024; 1030; 1183; 1225; 1340; 1541; 1708; 1965; 2260; 2548; 2868; 3326; 4123; 4380; 4426; 4516
AluBI	AG!CT	18	566; 785; 1024; 1030; 1183; 1225; 1340; 1541; 1708; 1965; 2260; 2548; 2868; 3326; 4123; 4380; 4426; 4516
AlwI	GGATCNNNN!	9	694; 1330; 2630; 2941; 3187; 3579; 3938; 4036; 4122
AlwI	!NNNNNGATCC	7	580; 665; 681; 3006; 3550; 3937; 4034
Alw21I	GWGCW!C	5	846; 1147; 2875; 3065; 4370
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	4	2186; 2604; 3623; 3751
Alw44I	G!TGCAC	1	4366
AlwNI	CAGNN!CTG	2	3863; 4271
Ama87I	C!YCGRG	2	810; 1089
Aor13HI	T!CCGGA	0	
Aor51HI	AG!GCT	0	
ApaI	GGGCC!C	1	1293
ApaBI	GCANNNNN!TGC	3	2330; 2402; 3864
ApaLI	G!TGCAC	1	4366
ApeKI	G!CWGC	19	614; 617; 620; 1013; 1126; 1180; 1538; 2057; 2722; 2823; 2865; 2906; 2999; 3386; 3839; 4065; 4271; 4274; 4339
ApoI	R!AATTY	3	1576; 1680; 1691
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3277
ApyPI	!NNNNNNNNNNNNNNNNNNGTCGAT	3	3071; 3724; 4562
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3161
AquII	!NNNNNNNNNNNNNNNNNNGTNCGGC	0	
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	2	1342; 2590
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	2	1067; 3332
ArsI	GACNNNNNNNTTYGNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	26	586; 671; 687; 740; 1055; 1103; 1118; 1170; 1323; 1420; 2600; 2604; 2623; 2934; 3012; 3093; 3102; 3180; 3556; 3572; 3931; 3943; 4021; 4029; 4040; 4115
AsiGI	A!CCGGT	1	692
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2880
Asp700I	GAANN!NNTTC	1	942
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2584; 3599
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	25	664; 666; 855; 1207; 1260; 2028; 2036; 2062; 2084; 2093; 2106; 2137; 2756; 2764; 2828; 2865; 3131; 3391; 3567; 3653; 4056; 4165; 4339; 4439; 4506
AspS9I	G!GNCC	11	83; 276; 641; 818; 1290; 1869; 3278; 3723; 3769; 3827; 3860
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	3444
AsuC2I	CC!SGG	6	644; 1377; 2766; 2926; 3539; 4303
AsuHPI	GGTGANNNNNNNNN!	5	376; 1082; 1404; 3833; 3949
AsuHPI	!NNNNNNNTCACC	5	746; 1100; 1178; 1879; 2940
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	810; 1089
AvaII	G!GWCC	2	3278; 3723
AviII	TGC!GCA	1	2864
AvrII	C!CTAGG	2	2584; 3599
AxyI	CC!TNAGG	2	2242; 3874

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI:C	6	807; 1080; 1293; 2708; 2801; 4370
BalI	TGG!CCA	1	2844
BamHI	G!GATCC	1	686
BanI	G!GYRCC	9	465; 759; 804; 852; 915; 1077; 1915; 2761; 2796
BanII	GRGCY!C	4	1293; 1953; 3127; 3837
BanIII	AT!CGAT	1	2602
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	2	680; 890
BauI	C!ACGAG	2	3480; 4507
BauI	C!TCGTG	1	3354
BbeI	GGCGC!C	2	856; 2765
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	2	887; 1019
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2332; 2404; 3167
BbvI	GCAGCNNNNNN!	8	1138; 1192; 1550; 2835; 2877; 3398; 3851; 4351
BbvI	!NNNNNNNNNNNGCTGC	8	601; 1000; 2044; 2709; 2893; 2986; 4052; 4258
Bbv12I	GWGCW!C	5	846; 1147; 2875; 3065; 4370
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	6	963; 1269; 1892; 2456; 2982; 3484
BccI	!NNNNNGATGG	6	884; 1067; 1170; 1860; 2640; 3068
BceAI	ACGGCNNNNNNNNNN!	7	785; 914; 980; 1019; 1226; 3188; 3675
BceAI	!NNNNNNNNNNNGGCCGT	3	1903; 2721; 4180
Bcefl	ACGGCNNNNNNNNNN!	7	785; 914; 980; 1019; 1226; 3188; 3675
Bcefl	!NNNNNNNNNNNGGCCGT	3	1904; 2722; 4181
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNN!	3	2191; 2981; 4482
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	6	644; 1377; 2766; 2926; 3539; 4303
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	1	4615
BdaI	!NNNNNNNNNNTGANNNNNNNTCA	1	4581
BfaI	C!TAG	8	592; 1417; 1611; 2029; 2585; 3600; 3934; 4187
BfiI	ACTGGGNNNNN!	1	2711
BfiI	!NNNNCCCAGT	3	289; 648; 2463
BfmI	C!TRYAG	5	1220; 1278; 2097; 4224; 4415
BfoI	RGCGC!Y	6	856; 1261; 2029; 2037; 2765; 4440
BfrI	C!TTAAG	1	1644
BfuI	GTATCCNNNNN!	3	2191; 2981; 4482
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	4	883; 1156; 3030; 3480
BfuAI	!NNNNNNNGCAGGT	1	2649
BfuCI	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2537
BglII	A!GATCT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BisI	GC!NGC	47	612; 615; 618; 621; 648; 660; 722; 749; 794; 821; 929; 968; 1007; 1014; 1049; 1127; 1181; 1214; 1310; 1409; 1539; 2058; 2080; 2094; 2532; 2671; 2723; 2734; 2824; 2829; 2866; 2907; 2994; 3000; 3236; 3332; 3373; 3387; 3501; 3840; 3855; 4066; 4272; 4275; 4340; 4483; 4638
BlnI	C!CTAGG	2	2584; 3599
BlpI	GC!TNAGC	1	879
BlsI	GCN!GC	47	613; 616; 619; 622; 649; 661; 723; 750; 795; 822; 930; 969; 1008; 1015; 1050; 1128; 1182; 1215; 1311; 1410; 1540; 2059; 2081; 2095; 2533; 2672; 2724; 2735; 2825; 2830; 2867; 2908; 2995; 3001; 3237; 3333; 3374; 3388; 3502; 3841; 3856; 4067; 4273; 4276; 4341; 4484; 4639
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	2	3278; 3723
Bme1390I	CC!NGG	17	90; 283; 644; 1377; 2298; 2353; 2370; 2766; 2926; 3149; 3539; 3728; 3831; 4303; 4521; 4534; 4655
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	810; 1089
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	11	84; 277; 642; 819; 1291; 1870; 3279; 3724; 3770; 3828; 3861
BmiI	GGN!NCC	22	467; 651; 688; 761; 806; 854; 917; 1079; 1290; 1917; 1938; 1950; 2141; 2302; 2374; 2763; 2798; 3646; 3725; 3770; 4613; 4652
BmrI	ACTGGGNNNNN!	1	2711
BmrI	!NNNNCCCAGT	3	289; 648; 2463
BmrFI	CC!NGG	17	90; 283; 644; 1377; 2298; 2353; 2370; 2766; 2926; 3149; 3539; 3728; 3831; 4303; 4521; 4534; 4655
BmsI	GCATCNNNNN!	10	760; 994; 1282; 1354; 1578; 2341; 2413; 3061; 3125; 3400
BmsI	!NNNNNNNNNGATGC	6	357; 1370; 2720; 2975; 3191; 4583
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2711
BmuI	!NNNNCCCAGT	3	289; 648; 2463
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2551; 3450
BpI	!NNNNNNNNGAGNNNNNCTC	2	2519; 3418
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3602
BpmI	!NNNNNNNNNNNNNNCTCCAG	1	3545
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3444
Bpu1102I	GC!TNAGC	1	879
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4056; 4595
BpuEI	!NNNNNNNNNNNNNNCTCAAG	2	3138; 4297
BpuMI	CC!SGG	6	644; 1377; 2766; 2926; 3539; 4303
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	3751
Bsa29I	AT!CGAT	1	2602
BsaAI	YAC!GTR	5	340; 887; 1019; 1878; 3066
BsaBI	GATNN!NNATC	3	1168; 1424; 2621
BsaHI	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
BsaJI	C!CNNGG	22	360; 703; 733; 1090; 1138; 1156; 1228; 1375; 2296; 2368; 2491; 2526; 2535; 2584; 2925; 3194; 3599; 3726; 3727; 3829; 3830; 4520
BsaMI	GAATGCN!	1	1513
BsaMI	G!CATTC	1	1606
BsaWI	W!CCGGW	5	692; 2793; 3637; 4327; 4474
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	2	1239; 1842
BsaXI	!NNNNNNNNGGAGNNNNNNGT	1	729
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	1	759
BsaXI	!NNNNNNNNNACNNNNNCTCC	2	1209; 1812

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	2	1003; 1357
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1763; 3670
Bsc4I	CCNNNNN!NNGG	21	49; 680; 815; 890; 1040; 1313; 1774; 2100; 2492; 2743; 3287; 3568; 3600; 3732; 3767; 3817; 3849; 4202; 4481; 4647; 4665
BscAI	GCATCNNNN!	10	759; 993; 1281; 1353; 1577; 2340; 2412; 3060; 3124; 3399
BscAI	!NNNNNNGATGC	6	360; 1373; 2723; 2978; 3194; 4586
Bse1I	ACTGGN!	3	2706; 2907; 4153
Bse1I	C!CAGT	6	295; 654; 1791; 2469; 4265; 4278
Bse8I	GATNN!NNATC	3	1168; 1424; 2621
Bse21I	CC!TNAGG	2	2242; 3874
Bse118I	R!CCGGY	9	692; 756; 1044; 1080; 1389; 1979; 3081; 3262; 3545
BseAI	T!CCGGA	0	
BseBI	CC!WGG	11	90; 283; 2298; 2353; 2370; 3149; 3728; 3831; 4521; 4534; 4655
BseCI	AT!CGAT	1	2602
BseDI	C!CNNGG	22	360; 703; 733; 1090; 1138; 1156; 1228; 1375; 2296; 2368; 2491; 2526; 2535; 2584; 2925; 3194; 3599; 3726; 3727; 3829; 3830; 4520
Bse3DI	GCAATGNN!	1	2995
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	6	1181; 1385; 2622; 3079; 3104; 3558
BseGI	!CATCC	4	1120; 1261; 1273; 2448
BseJI	GATNN!NNATC	3	1168; 1424; 2621
BseLI	CCNNNNN!NNGG	21	49; 680; 815; 890; 1040; 1313; 1774; 2100; 2492; 2743; 3287; 3568; 3600; 3732; 3767; 3817; 3849; 4202; 4481; 4647; 4665
BseMI	GCAATGNN!	1	2995
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3888
BseMII	!NNNNNNNNNCTGAG	6	870; 2233; 2535; 3416; 3988; 4397
BseNI	ACTGGN!	3	2706; 2907; 4153
BseNI	C!CAGT	6	295; 654; 1791; 2469; 4265; 4278
BsePI	G!CGCGC	1	662
BseRI	GAGGAGNNNNNNNNNN!	2	1332; 2580
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	6	807; 1080; 1293; 2708; 2801; 4370
BseXI	GCAGCNNNNNNNN!	8	1138; 1192; 1550; 2835; 2877; 3398; 3851; 4351
BseXI	!NNNNNNNNNNNGCTGC	8	601; 1000; 2044; 2709; 2893; 2986; 4052; 4258
BseX3I	C!GGCCG	3	1046; 1406; 2668
BseYI	C!CCAGC	5	924; 1269; 2305; 2377; 4376
BseYI	G!CTGGG	2	1340; 3266
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNNCTGCAC	3	933; 999; 1134
Bsh1236I	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
Bsh1285I	CGRY!CG	5	697; 1049; 1409; 2671; 4346
BshFI	GG!CC	26	84; 277; 642; 724; 820; 1044; 1048; 1291; 1408; 1728; 1870; 2525; 2531; 2540; 2583; 2670; 2844; 3235; 3262; 3771; 3828; 3861; 4206; 4640; 4658; 4669
BshNI	G!GYRCC	9	465; 759; 804; 852; 915; 1077; 1915; 2761; 2796
BshTI	A!CCGGT	1	692
BshVI	AT!CGAT	1	2602
BsiEI	CGRY!CG	5	697; 1049; 1409; 2671; 4346
BsiHKAI	GWGCW!C	5	846; 1147; 2875; 3065; 4370
BsiHKCI	C!YCGRG	2	810; 1089
BsiSI	C!CGG	23	644; 693; 757; 1045; 1081; 1377; 1390; 1980; 2667; 2744; 2766; 2794; 2925; 3015; 3082; 3263; 3538; 3546; 3638; 4112; 4302; 4328; 4475
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	21	49; 680; 815; 890; 1040; 1313; 1774; 2100; 2492; 2743; 3287; 3568; 3600; 3732; 3767; 3817; 3849; 4202; 4481; 4647; 4665
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2913; 3445; 3554
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2278; 2350; 2414; 3709
BsmI	GAATGCN!	1	1513
BsmI	G!CATTC	1	1606
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	4	2186; 2604; 3623; 3751
BsmBI	CGTCTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2913; 3445; 3554
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2278; 2350; 2414; 3709
BsnI	GG!CC	26	84; 277; 642; 724; 820; 1044; 1048; 1291; 1408; 1728; 1870; 2525; 2531; 2540; 2583; 2670; 2844; 3235; 3262; 3771; 3828; 3861; 4206; 4640; 4658; 4669
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	1	3751
BsoBI	C!YCGRG	2	810; 1089
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	6	360; 703; 733; 1156; 2491; 3194
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3565
Bsp24I	!NNNNNNCCANNNNNGTC	2	3986; 4164
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	4018; 4196
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3533
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3444
Bsp120I	G!GGCCC	1	1289
Bsp143I	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
Bsp1286I	GDGCH!C	13	807; 846; 1080; 1147; 1293; 1953; 2708; 2801; 2875; 3065; 3127; 3837; 4370
Bsp1407I	T!GTACA	0	
Bsp1720I	GC!TNAGC	1	879
BspACI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 612; 660; 730; 749; 821; 983; 1034; 1049; 1124; 1190; 1307; 1310; 1409; 2077; 2080; 2094; 2184; 2432; 2444; 2453; 2465; 2475; 2486; 2532; 2671; 2734; 3236; 3281; 3347; 3373; 3498; 3501; 3649; 3781; 4088; 4232; 4728
BspACI	G!CGG	33	370; 403; 528; 623; 647; 721; 793; 796; 928; 967; 1006; 1213; 1405; 2022; 2049; 2137; 2247; 2828; 2892; 2993; 2996; 3276; 3331; 3429; 3567; 3714; 3854; 4097; 4342; 4463; 4482; 4609; 4637
BspCNI	CTCAGNNNNNNNN!	1	3887
BspCNI	!NNNNNNNCTGAG	6	871; 2234; 2536; 3417; 3989; 4398
BspDI	AT!CGAT	1	2602
BspD6I	GACTCNNNN!	5	418; 1421; 1835; 3441; 4318
BspD6I	!NNNNNGAGTC	2	1798; 2230
BspEI	T!CCGGA	0	
BspFNI	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
BspHI	T!CATGA	2	2188; 3960
BspLI	GGN!NCC	22	467; 651; 688; 761; 806; 854; 917; 1079; 1290; 1917; 1938; 1950; 2141; 2302; 2374; 2763; 2798; 3646; 3725; 3770; 4613; 4652
BspMI	ACCTGCNNNN!	4	883; 1156; 3030; 3480
BspMI	!NNNNNNNGCAGGT	1	2649
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	694; 1330; 2630; 2941; 3187; 3579; 3938; 4036; 4122
BspPI	!NNNNNGATCC	7	580; 665; 681; 3006; 3550; 3937; 4034
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	3	834; 3106; 3316
BspTI	C!TTAAG	1	1644
BspT104I	TT!CGAA	1	3444
BspT107I	G!GYRCC	9	465; 759; 804; 852; 915; 1077; 1915; 2761; 2796
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	1	3751
BsrI	ACTGGN!	3	2706; 2907; 4153
BsrI	C!CAGT	6	295; 654; 1791; 2469; 4265; 4278
BsrBI	CCG!CTC	2	2186; 3375
BsrBI	GAG!CGG	3	721; 2022; 3429
BsrDI	GCAATGNN!	1	2995
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	9	692; 756; 1044; 1080; 1389; 1979; 3081; 3262; 3545
BsrGI	T!GTACA	0	
BsrSI	ACTGGN!	3	2706; 2907; 4153

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsrSI	C!CAGT	6	295; 654; 1791; 2469; 4265; 4278
BssAI	R!CCGGY	9	692; 756; 1044; 1080; 1389; 1979; 3081; 3262; 3545
BssECI	C!CNNGG	22	360; 703; 733; 1090; 1138; 1156; 1228; 1375; 2296; 2368; 2491; 2526; 2535; 2584; 2925; 3194; 3599; 3726; 3727; 3829; 3830; 4520
BssHII	G!CGCGC	1	662
BssKI	!CCNGG	17	88; 281; 642; 1375; 2296; 2351; 2368; 2764; 2924; 3147; 3537; 3726; 3829; 4301; 4519; 4532; 4653
BssMI	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
BssNI	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	3480; 4507
BssSI	C!TCGTG	1	3354
BssT1I	C!CWWGG	8	360; 703; 733; 1156; 2491; 2584; 3194; 3599
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	4	834; 2229; 3106; 3316
Bst98I	C!TTAAG	1	1644
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
BstAFI	C!TTAAG	1	1644
BstAPI	GCANNNN!NTGC	3	2329; 2401; 3863
BstAUI	T!GTACA	0	
BstBI	TT!CGAA	1	3444
Bst2BI	C!ACGAG	2	3480; 4507
Bst2BI	C!TCGTG	1	3354
BstBAI	YAC!GTR	5	340; 887; 1019; 1878; 3066
Bst4CI	ACN!GT	14	76; 198; 269; 543; 581; 1139; 1853; 3142; 3258; 3366; 3689; 4180; 4650; 4721
BstC8I	GCN!NGC	34	86; 279; 593; 664; 730; 952; 1011; 1046; 1203; 1363; 1981; 2024; 2038; 2311; 2330; 2383; 2402; 2656; 2842; 3061; 3127; 3133; 3165; 3206; 3210; 3264; 3547; 3734; 3781; 3837; 3859; 4070; 4630; 4667
BstDEI	C!TNAG	7	879; 2242; 2544; 3425; 3874; 3997; 4406
BstDSI	C!CRYGG	8	360; 703; 733; 1138; 1156; 1228; 2491; 3194
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	6	1181; 1385; 2622; 3079; 3104; 3558
BstF5I	!CATCC	4	1120; 1261; 1273; 2448
BstFNI	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
BstH2I	RGCGC!Y	6	856; 1261; 2029; 2037; 2765; 4440
BstHHI	GCG!C	25	664; 666; 855; 1207; 1260; 2028; 2036; 2062; 2084; 2093; 2106; 2137; 2756; 2764; 2828; 2865; 3131; 3391; 3567; 3653; 4056; 4165; 4339; 4439; 4506
BstKTI	GAT!C	26	588; 673; 689; 742; 1057; 1105; 1120; 1172; 1325; 1422; 2602; 2606; 2625; 2936; 3014; 3095; 3104; 3182; 3558; 3574; 3933; 3945; 4023; 4031; 4042; 4117
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	4	2186; 2604; 3623; 3751
BstMBI	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
BstMCI	CGRY!CG	5	697; 1049; 1409; 2671; 4346
BstMWI	GCNNNNN!NNGC	35	90; 212; 244; 283; 376; 400; 617; 634; 656; 718; 757; 802; 850; 1057; 1189; 1213; 1989; 2019; 2046; 2088; 2329; 2401; 2452; 2531; 2753; 2837; 2860; 2999; 3122; 3205; 3472; 3659; 3863; 4062; 4634
BstNI	CC!WGG	11	90; 283; 2298; 2353; 2370; 3149; 3728; 3831; 4521; 4534; 4655
BstNSI	RCATG!Y	6	599; 1247; 2332; 2404; 3167; 4684
BstOI	CC!WGG	11	90; 283; 2298; 2353; 2370; 3149; 3728; 3831; 4521; 4534; 4655
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	17	88; 281; 642; 1375; 2296; 2351; 2368; 2764; 2924; 3147; 3537; 3726; 3829; 4301; 4519; 4532; 4653
BstSFI	C!TRYAG	5	1220; 1278; 2097; 4224; 4415

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSLI	GKGCMIIC	6	807; 1080; 1293; 2708; 2801; 4370
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
Bst2UI	CC!WGG	11	90; 283; 2298; 2353; 2370; 3149; 3728; 3831; 4521; 4534; 4655
BstV1I	GCAGCNNNNNNNN!	8	1138; 1192; 1550; 2835; 2877; 3398; 3851; 4351
BstV1I	!NNNNNNNNNNNGCTGC	8	601; 1000; 2044; 2709; 2893; 2986; 4052; 4258
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	10	585; 670; 686; 2933; 3179; 3571; 3930; 3942; 4028; 4039
BstYI	R!GATCY	10	585; 670; 686; 2933; 3179; 3571; 3930; 3942; 4028; 4039
BstZI	C!GGCCG	3	1046; 1406; 2668
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2191; 2981; 4482
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2602
Bsu36I	CC!TNAGG	2	2242; 3874
BsuRI	GG!CC	26	84; 277; 642; 724; 820; 1044; 1048; 1291; 1408; 1728; 1870; 2525; 2531; 2540; 2583; 2670; 2844; 3235; 3262; 3771; 3828; 3861; 4206; 4640; 4658; 4669
BsuTUI	AT!CGAT	1	2602
BtgI	C!CRYGG	8	360; 703; 733; 1138; 1156; 1228; 2491; 3194
BtgZI	GCGATGNNNNNNNNNN!	2	1879; 3214
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3033; 3377
BthCI	GCNG!C	47	614; 617; 620; 623; 650; 662; 724; 751; 796; 823; 931; 970; 1009; 1016; 1051; 1129; 1183; 1216; 1312; 1411; 1541; 2060; 2082; 2096; 2534; 2673; 2725; 2736; 2826; 2831; 2868; 2909; 2996; 3002; 3238; 3334; 3375; 3389; 3503; 3842; 3857; 4068; 4274; 4277; 4342; 4485; 4640
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1601
BtsCI	GGATGNN!	6	1181; 1385; 2622; 3079; 3104; 3558
BtsCI	!CATCC	4	1120; 1261; 1273; 2448
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	4	883; 1156; 3030; 3480
BveI	!NNNNNNNNNGCAGGT	1	2649
Cac8I	GCN!NGC	34	86; 279; 593; 664; 730; 952; 1011; 1046; 1203; 1363; 1981; 2024; 2038; 2311; 2330; 2383; 2402; 2656; 2842; 3061; 3127; 3133; 3165; 3206; 3210; 3264; 3547; 3734; 3781; 3837; 3859; 4070; 4630; 4667
CaiI	CAGNNN!CTG	2	3863; 4271
CciI	T!CATGA	2	2188; 3960
CciNI	GC!GGCCGC	1	1406
CdiI	CATC!G	7	352; 989; 1349; 3051; 3056; 3254; 3395
CdiI	C!GATG	2	1865; 3200
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	2	821; 4634
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2423; 2465
CelII	GC!TNAGC	1	879
CfoI	GCG!C	25	664; 666; 855; 1207; 1260; 2028; 2036; 2062; 2084; 2093; 2106; 2137; 2756; 2764; 2828; 2865; 3131; 3391; 3567; 3653; 4056; 4165; 4339; 4439; 4506
CfrI	Y!GGCCR	6	1046; 1406; 2668; 2842; 3233; 3260
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	9	692; 756; 1044; 1080; 1389; 1979; 3081; 3262; 3545
Cfr13I	G!GNCC	11	83; 276; 641; 818; 1290; 1869; 3278; 3723; 3769; 3827; 3860
Cfr42I	CCGC!GG	0	
ChaI	GATC!	26	589; 674; 690; 743; 1058; 1106; 1121; 1173; 1326; 1423; 2603; 2607; 2626; 2937; 3015; 3096; 3105; 3183; 3559; 3575; 3934; 3946; 4024; 4032; 4043; 4118
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	4	2579; 4019; 4119; 4197
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2246; 2341; 3533; 4083; 4638
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2280; 2375; 3567; 4117; 4672
CjeI	!NNNNNNNNCCANNNNNNGT	4	2545; 3985; 4085; 4163

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	2	4019; 4197
CjePI	!NNNNNNNGANNNNNNNTGG	3	257; 3533; 4132
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	3	290; 3566; 4165
CjePI	!NNNNNNNCCANNNNNNTC	2	3986; 4164
Clal	AT!CGAT	1	2602
CpoI	CG!GWCCG	1	3278
CseI	GACGCNNNNN!	4	526; 617; 3472; 3551
CseI	!NNNNNNNNNGCGTC	3	2095; 3990; 4568
CsiI	A!CCWGGT	1	2351
CspI	CG!GWCCG	1	3278
Csp6I	G!TAC	9	218; 243; 298; 331; 382; 539; 995; 1355; 3067
Csp45I	TT!CGAA	1	3444
CspAI	A!CCGGT	1	692
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2042; 3651
CstMI	!NNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	22	301; 361; 596; 704; 734; 824; 1157; 1244; 1295; 2189; 2329; 2401; 2492; 2633; 2978; 3164; 3195; 3221; 3577; 3961; 4681; 4732
CviJI	RG!CY	97	42; 84; 93; 277; 566; 628; 637; 642; 650; 724; 785; 820; 868; 883; 895; 901; 931; 970; 1024; 1030; 1044; 1048; 1084; 1183; 1201; 1216; 1225; 1240; 1291; 1340; 1408; 1431; 1541; 1708; 1728; 1870; 1951; 1965; 1979; 2260; 2301; 2373; 2496; 2525; 2531; 2540; 2548; 2571; 2583; 2589; 2670; 2687; 2695; 2722; 2747; 2831; 2840; 2844; 2868; 2906; 2982; 2999; 3018; 3081; 3125; 3135; 3152; 3235; 3262; 3266; 3303; 3326; 3342; 3522; 3549; 3610; 3732; 3771; 3828; 3835; 3842; 3861; 3872; 4123; 4152; 4195; 4206; 4271; 4350; 4375; 4380; 4426; 4516; 4614; 4640; 4658; 4669
CviKI-1	RG!CY	97	42; 84; 93; 277; 566; 628; 637; 642; 650; 724; 785; 820; 868; 883; 895; 901; 931; 970; 1024; 1030; 1044; 1048; 1084; 1183; 1201; 1216; 1225; 1240; 1291; 1340; 1408; 1431; 1541; 1708; 1728; 1870; 1951; 1965; 1979; 2260; 2301; 2373; 2496; 2525; 2531; 2540; 2548; 2571; 2583; 2589; 2670; 2687; 2695; 2722; 2747; 2831; 2840; 2844; 2868; 2906; 2982; 2999; 3018; 3081; 3125; 3135; 3152; 3235; 3262; 3266; 3303; 3326; 3342; 3522; 3549; 3610; 3732; 3771; 3828; 3835; 3842; 3861; 3872; 4123; 4152; 4195; 4206; 4271; 4350; 4375; 4380; 4426; 4516; 4614; 4640; 4658; 4669
CviQI	G!TAC	9	218; 243; 298; 331; 382; 539; 995; 1355; 3067
DdeI	C!TNAG	7	879; 2242; 2544; 3425; 3874; 3997; 4406
DinI	GGC!GCC	2	854; 2763
DpnI	GA!TC	26	587; 672; 688; 741; 1056; 1104; 1119; 1171; 1324; 1421; 2601; 2605; 2624; 2935; 3013; 3094; 3103; 3181; 3557; 3573; 3932; 3944; 4022; 4030; 4041; 4116
DpnII	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
DraI	TTT!AAA	3	1464; 3906; 3925
DraII	RG!GNCCY	2	1289; 3860
DraIII	CACNN!GTG	1	1878
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4242
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1833; 2789; 4578
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1833; 2789; 4578
EaeI	Y!GGCCR	6	1046; 1406; 2668; 2842; 3233; 3260
EagI	C!GGCCG	3	1046; 1406; 2668
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	4	834; 2229; 3106; 3316
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	4	834; 2229; 3106; 3316

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EciI	GGCGGANNNNNNNNNN!	5	811; 2262; 3291; 4478; 4624
EciI	!NNNNNNNNNTCCGCC	5	496; 1296; 2433; 2454; 2475
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	3	1046; 1406; 2668
Eco24I	GRGCY!C	4	1293; 1953; 3127; 3837
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	1	3751
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	2	3278; 3723
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	3	1046; 1406; 2668
Eco57I	CTGAAGNNNNNNNNNNNNNN!	2	2908; 3340
Eco57I	!NNNNNNNNNNNNNNCTTCAG	4	848; 1010; 1181; 4138
Eco72I	CAC!GTG	2	887; 1019
Eco81I	CC!TNAGG	2	2242; 3874
Eco88I	C!YCGRG	2	810; 1089
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	8	360; 703; 733; 1156; 2491; 2584; 3194; 3599
Eco147I	AGG!CCT	1	2583
EcoHI	!CCSGG	6	642; 1375; 2764; 2924; 3537; 4301
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNN!	3	2908; 3340; 3602
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	5	848; 1010; 1181; 3545; 4138
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	2	1289; 3860
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	11	88; 281; 2296; 2351; 2368; 3147; 3726; 3829; 4519; 4532; 4653
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	8	360; 703; 733; 1156; 2491; 2584; 3194; 3599
EcoT22I	ATGCA!T	3	2334; 2406; 4737
EcoT38I	GRGCY!C	4	1293; 1953; 3127; 3837
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	2	854; 2763
EheI	GGC!GCC	2	854; 2763
ErhI	C!CWWGG	8	360; 703; 733; 1156; 2491; 2584; 3194; 3599
EsaBC3I	TC!GA	14	743; 782; 989; 1912; 2603; 2876; 3032; 3056; 3092; 3254; 3445; 3490; 3745; 4583
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	22	304; 364; 599; 707; 737; 827; 1160; 1247; 1298; 2192; 2332; 2404; 2495; 2636; 2981; 3167; 3198; 3224; 3580; 3964; 4684; 4735
Fail	YA!TR	58	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 705; 735; 825; 1158; 1245; 1296; 1424; 1434; 1500; 1545; 1750; 2178; 2190; 2321; 2330; 2393; 2402; 2426; 2493; 2517; 2634; 2698; 2979; 3004; 3165; 3196; 3222; 3294; 3510; 3578; 3656; 3708; 3869; 3886; 3888; 3890; 3962; 4240; 4429; 4545; 4618; 4682; 4733
FalI	AAGNNNNNCTNNNNNNNNNNNN!	1	3102
FalI	!NNNNNNNNAAGNNNNNCTT	1	3070
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2913; 3445; 3554
FaqI	!NNNNNNNNNNNNNGTCCC	4	2278; 2350; 2414; 3709
FatI	!CATG	22	300; 360; 595; 703; 733; 823; 1156; 1243; 1294; 2188; 2328; 2400; 2491; 2632; 2977; 3163; 3194; 3220; 3576; 3960; 4680; 4731
FauI	CCCGCNNNN!	11	93; 119; 286; 737; 990; 1197; 2084; 2439; 2460; 3656; 3788
FauI	!NNNNNNNGCGGG	6	616; 2015; 2885; 3422; 3560; 3707
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FbII	GT!MKAC	0	
FmuI	GGNC!C	11	86; 279; 644; 821; 1293; 1872; 3281; 3726; 3772; 3830; 3863

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 722; 749; 794; 821; 929; 968; 1007; 1014; 1049; 1127; 1181; 1214; 1310; 1409; 1539; 2058; 2080; 2094; 2532; 2671; 2723; 2734; 2824; 2829; 2866; 2907; 2994; 3000; 3236; 3332; 3373; 3387; 3501; 3840; 3855; 4066; 4272; 4275; 4340; 4483; 4638
FokI	GGATGNNNNNNNNNN!	6	1188; 1392; 2629; 3086; 3111; 3565
FokI	!NNNNNNNNNNNNNNCATCC	3	1107; 1248; 2435
FriOI	GRGCY!C	4	1293; 1953; 3127; 3837
FseI	GGCCGG!CC	1	1048
FspI	TGC!GCA	1	2864
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1417; 1611; 2029; 2585; 3600; 3934; 4187
FspEI	CCNNNNNNNNNNNN!	161	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 673; 687; 703; 738; 762; 776; 821; 842; 860; 875; 897; 921; 936; 954; 968; 989; 1047; 1062; 1094; 1124; 1148; 1167; 1202; 1241; 1274; 1290; 1305; 1320; 1349; 1371; 1388; 1403; 1422; 1445; 1484; 1498; 1639; 1734; 1758; 1781; 1804; 1822; 1844; 1865; 1884; 1903; 1932; 1953; 1967; 1993; 2081; 2107; 2156; 2197; 2215; 2254; 2270; 2308; 2365; 2380; 2437; 2457; 2471; 2488; 2502; 2539; 2554; 2597; 2680; 2747; 2778; 2798; 2813; 2858; 2872; 2938; 2952; 2971; 2987; 3028; 3048; 3095; 3145; 3161; 3181; 3206; 3226; 3249; 3276; 3294; 3320; 3360; 3386; 3410; 3466; 3480; 3508; 3551; 3572; 3607; 3651; 3739; 3763; 3785; 3805; 3821; 3842; 3856; 3875; 3959; 3979; 4007; 4022; 4056; 4098; 4125; 4140; 4185; 4209; 4223; 4245; 4271; 4291; 4315; 4341; 4389; 4408; 4427; 4453; 4488; 4533; 4563; 4577; 4628; 4642; 4667; 4683; 4704; 4733
FspEI	!NNNNNNNNNNNNNNNGG	129	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 690; 720; 742; 771; 801; 835; 876; 898; 949; 984; 1026; 1053; 1077; 1125; 1143; 1162; 1195; 1215; 1270; 1299; 1326; 1362; 1390; 1433; 1533; 1602; 1632; 1710; 1759; 1781; 1809; 1845; 1890; 1919; 1955; 1974; 2002; 2022; 2085; 2108; 2216; 2248; 2266; 2295; 2338; 2367; 2478; 2507; 2550; 2571; 2599; 2632; 2652; 2677; 2704; 2729; 2751; 2779; 2805; 2826; 2877; 2898; 2916; 2964; 3000; 3056; 3081; 3105; 3134; 3157; 3181; 3207; 3229; 3248; 3273; 3313; 3349; 3414; 3499; 3523; 3552; 3586; 3607; 3627; 3672; 3699; 3718; 3751; 3803; 3834; 3861; 3913; 4011; 4082; 4127; 4188; 4253; 4287; 4313; 4331; 4367; 4437; 4460; 4482; 4506; 4539; 4587; 4622; 4640; 4697
Fsp4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 722; 749; 794; 821; 929; 968; 1007; 1014; 1049; 1127; 1181; 1214; 1310; 1409; 1539; 2058; 2080; 2094; 2532; 2671; 2723; 2734; 2824; 2829; 2866; 2907; 2994; 3000; 3236; 3332; 3373; 3387; 3501; 3840; 3855; 4066; 4272; 4275; 4340; 4483; 4638
GdiII	C!GGCCR	3	1046; 1406; 2668
GdiII	Y!GGCCG	5	1046; 1406; 2668; 3233; 3260
GlaI	GC!GC	25	663; 665; 854; 1206; 1259; 2027; 2035; 2061; 2083; 2092; 2105; 2136; 2755; 2763; 2827; 2864; 3130; 3390; 3566; 3652; 4055; 4164; 4338; 4438; 4505
GluI	GC!NGC	47	612; 615; 618; 621; 648; 660; 722; 749; 794; 821; 929; 968; 1007; 1014; 1049; 1127; 1181; 1214; 1310; 1409; 1539; 2058; 2080; 2094; 2532; 2671; 2723; 2734; 2824; 2829; 2866; 2907; 2994; 3000; 3236; 3332; 3373; 3387; 3501; 3840; 3855; 4066; 4272; 4275; 4340; 4483; 4638
GsaI	CCCAG!C	5	928; 1273; 2309; 2381; 4380
GsaI	GCTGG!G	2	1344; 3270
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3602
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3545
HaeI	WGG!CCW	5	2583; 2844; 4206; 4658; 4669
HaeII	RGCG!Y	6	856; 1261; 2029; 2037; 2765; 4440
HaeIII	GG!CC	26	84; 277; 642; 724; 820; 1044; 1048; 1291; 1408; 1728; 1870; 2525; 2531; 2540; 2583; 2670; 2844; 3235; 3262; 3771; 3828; 3861; 4206; 4640; 4658; 4669
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	2	1437; 2958
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1403; 2924
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	2	1436; 2957
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1405; 2926

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HapII	C!CGG	23	644; 693; 757; 1045; 1081; 1377; 1390; 1980; 2667; 2744; 2766; 2794; 2925; 3015; 3082; 3263; 3538; 3546; 3638; 4112; 4302; 4328; 4475
HgaI	GACGCNNNNN!	4	526; 617; 3472; 3551
HgaI	!NNNNNNNNNGCGTC	3	2095; 3990; 4568
HhaI	GCG!C	25	664; 666; 855; 1207; 1260; 2028; 2036; 2062; 2084; 2093; 2106; 2137; 2756; 2764; 2828; 2865; 3131; 3391; 3567; 3653; 4056; 4165; 4339; 4439; 4506
HinI	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
HinIII	CATG!	22	304; 364; 599; 707; 737; 827; 1160; 1247; 1298; 2192; 2332; 2404; 2495; 2636; 2981; 3167; 3198; 3224; 3580; 3964; 4684; 4735
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1436; 2957
Hin4I	!NNNNNNNGABNNNNNRTC	3	1404; 2925; 2955
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1436; 2957; 2987
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1404; 2925
Hin6I	G!CGC	25	662; 664; 853; 1205; 1258; 2026; 2034; 2060; 2082; 2091; 2104; 2135; 2754; 2762; 2826; 2863; 3129; 3389; 3565; 3651; 4054; 4163; 4337; 4437; 4504
HinP1I	G!CGC	25	662; 664; 853; 1205; 1258; 2026; 2034; 2060; 2082; 2091; 2104; 2135; 2754; 2762; 2826; 2863; 3129; 3389; 3565; 3651; 4054; 4163; 4337; 4437; 4504
HincII	GTY!RAC	1	1525
HindII	GTY!RAC	1	1525
HindIII	A!AGCTT	0	
HinfI	G!ANTC	12	410; 1413; 1805; 1827; 2237; 3247; 3381; 3433; 3491; 3528; 4310; 4706
HpaI	GTT!AAC	1	1525
HpaII	C!CGG	23	644; 693; 757; 1045; 1081; 1377; 1390; 1980; 2667; 2744; 2766; 2794; 2925; 3015; 3082; 3263; 3538; 3546; 3638; 4112; 4302; 4328; 4475
HphI	GGTGANNNNNNN!	5	376; 1082; 1404; 3833; 3949
HphI	!NNNNNNNTCACC	5	746; 1100; 1178; 1879; 2940
Hpy8I	GTN!NAC	9	201; 539; 577; 1235; 1525; 1809; 1826; 1881; 4368
Hpy99I	CGWCG!	9	717; 1212; 2852; 2880; 3174; 3189; 3466; 3851; 4584
Hpy166I	GTN!NAC	9	201; 539; 577; 1235; 1525; 1809; 1826; 1881; 4368
Hpy188I	TCN!GA	11	585; 1936; 2545; 2729; 3073; 3426; 3527; 4006; 4140; 4493; 4571
Hpy188III	TC!NNGA	25	605; 989; 1173; 1253; 1370; 1417; 2189; 2241; 2554; 2607; 2780; 3096; 3105; 3188; 3244; 3288; 3378; 3411; 3480; 3961; 4035; 4118; 4216; 4314; 4448
HpyAV	CCTCANNNNN!	8	872; 953; 1205; 1313; 1376; 3407; 3514; 4193
HpyAV	!NNNNNGAAGG	7	1995; 2890; 3619; 3635; 3818; 4135; 4445
HpyCH4III	ACN!GT	14	76; 198; 269; 543; 581; 1139; 1853; 3142; 3258; 3366; 3689; 4180; 4650; 4721
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 886; 1018; 1822; 1834; 1877; 1987; 2878; 3065; 3846; 3979
HpyCH4V	TG!CA	22	950; 1016; 1151; 1247; 1280; 1383; 1511; 1538; 1606; 2323; 2332; 2395; 2404; 2519; 2595; 2654; 2813; 2988; 3002; 4072; 4368; 4735
HpyF3I	C!TNAG	7	879; 2242; 2544; 3425; 3874; 3997; 4406
HpyF10VI	GCNNNNN!NNGC	35	90; 212; 244; 283; 376; 400; 617; 634; 656; 718; 757; 802; 850; 1057; 1189; 1213; 1989; 2019; 2046; 2088; 2329; 2401; 2452; 2531; 2753; 2837; 2860; 2999; 3122; 3205; 3472; 3659; 3863; 4062; 4634
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 609; 853; 2762; 3464; 3543
Hsp92II	CATG!	22	304; 364; 599; 707; 737; 827; 1160; 1247; 1298; 2192; 2332; 2404; 2495; 2636; 2981; 3167; 3198; 3224; 3580; 3964; 4684; 4735
HspAI	G!CGC	25	662; 664; 853; 1205; 1258; 2026; 2034; 2060; 2082; 2091; 2104; 2135; 2754; 2762; 2826; 2863; 3129; 3389; 3565; 3651; 4054; 4163; 4337; 4437; 4504
KasI	G!GCGCC	2	852; 2761
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
KspAI	GTT!AAC	1	1525
Kzo9I	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	3	834; 3106; 3316
LpnI	RGCI!GCY	6	854; 1259; 2027; 2035; 2763; 4438
LpnPI	CCDGNNNNNNNNN!	62	102; 295; 618; 657; 706; 738; 770; 870; 888; 938; 960; 1058; 1094; 1161; 1215; 1283; 1371; 1390; 1499; 1804; 1993; 2216; 2254; 2270; 2310; 2365; 2382; 2482; 2567; 2680; 2757; 2779; 2802; 2938; 2952; 2971; 3028; 3095; 3145; 3161; 3218; 3276; 3485; 3551; 3575; 3651; 3740; 3843; 3876; 4107; 4125; 4271; 4291; 4315; 4341; 4390; 4488; 4533; 4563; 4642; 4667; 4704
LpnPI	!NNNNNNNNNNNNNNCHGG	54	75; 268; 552; 619; 678; 742; 771; 801; 1030; 1066; 1158; 1326; 1362; 1845; 1965; 2022; 2085; 2283; 2295; 2355; 2367; 2599; 2644; 2687; 2729; 2751; 2779; 2826; 2888; 2910; 3000; 3067; 3090; 3134; 3229; 3248; 3273; 3422; 3523; 3566; 3623; 3713; 3816; 3843; 3861; 4097; 4134; 4287; 4313; 4453; 4471; 4506; 4587; 4640
Lsp1109I	GCAGCNNNNNNNN!	8	1138; 1192; 1550; 2835; 2877; 3398; 3851; 4351
Lsp1109I	!NNNNNNNNNNNNNGCTGC	8	601; 1000; 2044; 2709; 2893; 2986; 4052; 4258
LweI	GCATCNNNNN!	10	760; 994; 1282; 1354; 1578; 2341; 2413; 3061; 3125; 3400
LweI	!NNNNNNNNNGATGC	6	357; 1370; 2720; 2975; 3191; 4583
MabI	A!CCWGGT	1	2351
MaeI	C!TAG	8	592; 1417; 1611; 2029; 2585; 3600; 3934; 4187
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 886; 1018; 1822; 1834; 1877; 1987; 2878; 3065; 3846; 3979
MaeIII	!GTNAC	12	61; 148; 497; 1550; 2051; 2063; 2882; 3188; 3878; 4144; 4260; 4323
MaiI	GA!TC	26	587; 672; 688; 741; 1056; 1104; 1119; 1171; 1324; 1421; 2601; 2605; 2624; 2935; 3013; 3094; 3103; 3181; 3557; 3573; 3932; 3944; 4022; 4030; 4041; 4116
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2186; 3375
MbiI	GAG!CGG	3	721; 2022; 3429
MboI	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
MboII	GAAGANNNNNNNN!	7	851; 1407; 2018; 2246; 3123; 3333; 3952
MboII	!NNNNNNNTCTTC	5	1097; 3413; 3580; 3780; 4023
McaTI	GCGC!GC	1	665
MfeI	C!AATTG	1	1512
MfII	R!GATCY	10	585; 670; 686; 2933; 3179; 3571; 3930; 3942; 4028; 4039
MhII	GDGCH!C	13	807; 846; 1080; 1147; 1293; 1953; 2708; 2801; 2875; 3065; 3127; 3837; 4370
MisI	TGG!CCA	1	2844
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	2844
MlyI	GAGTCNNNNN!	2	1814; 2246
MlyI	!NNNNNGACTC	5	404; 1407; 1821; 3427; 4304
Mly113I	GG!CGCC	2	853; 2762
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	1855
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	2	4287; 4471
MnII	CCTCNNNNNN!	7	1481; 2545; 3363; 3569; 3883; 4253; 4577
MnII	!NNNNNGAGG	18	541; 794; 992; 1034; 1085; 1310; 1441; 1906; 2237; 2515; 2558; 2573; 2613; 2677; 2813; 3170; 3600; 4503
Mph1103I	ATGCA!T	3	2334; 2406; 4737
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	4	1044; 1979; 3262; 3545
MroXI	GAANN!NNTTC	1	942
MscI	TGG!CCA	1	2844
MseI	T!TAA	15	7; 1463; 1524; 1645; 1666; 1677; 1689; 1700; 1717; 1815; 2086; 3905; 3919; 3924; 3976
MslI	CAYNN!NNRTG	2	365; 3199

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspI	C!CGG	23	644; 693; 757; 1045; 1081; 1377; 1390; 1980; 2667; 2744; 2766; 2794; 2925; 3015; 3082; 3263; 3538; 3546; 3638; 4112; 4302; 4328; 4475
Msp20I	TGG!CCA	1	2844
MspA1I	CMG!CKG	6	614; 928; 2260; 2868; 4097; 4342
MspCI	C!TTAAG	1	1644
MspJI	CNNRRNNNNNNNN!	239	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; 617; 636; 650; 665; 679; 705; 728; 741; 755; 769; 785; 798; 822; 836; 859; 883; 897; 931; 947; 963; 988; 1001; 1022; 1052; 1079; 1093; 1112; 1127; 1151; 1167; 1185; 1201; 1214; 1241; 1254; 1281; 1298; 1323; 1338; 1353; 1370; 1388; 1402; 1422; 1435; 1450; 1469; 1486; 1499; 1540; 1554; 1567; 1585; 1623; 1638; 1656; 1697; 1721; 1741; 1759; 1780; 1803; 1835; 1850; 1872; 1890; 1903; 1924; 1941; 1954; 1967; 1983; 1996; 2026; 2041; 2066; 2084; 2097; 2112; 2136; 2150; 2174; 2199; 2215; 2253; 2269; 2308; 2322; 2336; 2364; 2380; 2394; 2408; 2437; 2450; 2471; 2480; 2502; 2532; 2548; 2566; 2596; 2619; 2643; 2667; 2686; 2714; 2740; 2756; 2769; 2792; 2806; 2826; 2839; 2853; 2872; 2886; 2899; 2915; 2930; 2943; 2959; 2974; 2990; 3015; 3034; 3050; 3063; 3076; 3094; 3108; 3122; 3138; 3160; 3176; 3195; 3217; 3233; 3256; 3275; 3289; 3305; 3319; 3339; 3355; 3368; 3390; 3423; 3437; 3457; 3470; 3484; 3538; 3551; 3574; 3587; 3606; 3623; 3650; 3686; 3719; 3738; 3763; 3784; 3811; 3824; 3841; 3855; 3870; 3886; 3946; 3971; 3987; 4009; 4022; 4036; 4067; 4081; 4106; 4124; 4139; 4152; 4171; 4184; 4199; 4228; 4247; 4265; 4290; 4305; 4324; 4340; 4359; 4377; 4393; 4407; 4426; 4453; 4476; 4498; 4517; 4532; 4545; 4562; 4582; 4609; 4622; 4641; 4666; 4689; 4703; 4716; 4733
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; 591; 608; 625; 647; 667; 690; 711; 729; 750; 768; 796; 819; 843; 861; 878; 898; 919; 937; 968; 996; 1013; 1031; 1053; 1075; 1101; 1125; 1143; 1175; 1192; 1213; 1230; 1256; 1281; 1299; 1323; 1344; 1362; 1396; 1414; 1443; 1472; 1514; 1597; 1632; 1659; 1682; 1711; 1755; 1777; 1809; 1845; 1862; 1883; 1920; 1940; 1957; 1974; 2009; 2027; 2045; 2062; 2086; 2108; 2135; 2163; 2189; 2227; 2248; 2265; 2283; 2306; 2327; 2355; 2378; 2399; 2417; 2438; 2455; 2478; 2502; 2522; 2540; 2562; 2593; 2615; 2641; 2660; 2677; 2705; 2724; 2743; 2761; 2779; 2800; 2822; 2846; 2879; 2899; 2917; 2938; 2964; 2991; 3008; 3025; 3042; 3068; 3090; 3112; 3130; 3150; 3169; 3191; 3229; 3249; 3273; 3293; 3313; 3340; 3364; 3397; 3416; 3444; 3466; 3495; 3523; 3548; 3567; 3586; 3607; 3624; 3641; 3672; 3699; 3719; 3742; 3762; 3799; 3816; 3835; 3861; 3881; 3920; 3947; 3966; 3984; 4021; 4039; 4080; 4098; 4124; 4141; 4173; 4202; 4230; 4251; 4274; 4293; 4314; 4332; 4349; 4367; 4393; 4414; 4434; 4454; 4472; 4493; 4519; 4536; 4555; 4574; 4603; 4622; 4640; 4659; 4677; 4695; 4718
MspR9I	CC!NGG	17	90; 283; 644; 1377; 2298; 2353; 2370; 2766; 2926; 3149; 3539; 3728; 3831; 4303; 4521; 4534; 4655
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1512
MvaI	CC!WGG	11	90; 283; 2298; 2353; 2370; 3149; 3728; 3831; 4521; 4534; 4655
Mva1269I	GAATGCN!	1	1513
Mva1269I	G!CATTC	1	1606
MvnI	CG!CG	20	60; 662; 664; 1051; 1207; 1312; 1411; 1686; 2062; 2082; 2106; 2137; 2828; 3129; 3567; 3651; 3714; 3783; 4056; 4637
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	35	90; 212; 244; 283; 376; 400; 617; 634; 656; 718; 757; 802; 850; 1057; 1189; 1213; 1989; 2019; 2046; 2088; 2329; 2401; 2452; 2531; 2753; 2837; 2860; 2999; 3122; 3205; 3472; 3659; 3863; 4062; 4634
NaeI	GCC!GGC	4	1046; 1981; 3264; 3547
NarI	GG!CGCC	2	853; 2762
NciI	CC!SGG	6	644; 1377; 2766; 2926; 3539; 4303
NcoI	C!CATGG	6	360; 703; 733; 1156; 2491; 3194
NdeI	CA!TATG	1	234
NdeII	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoAVIII	GACNNNNNTGANNNNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	4	1044; 1979; 3262; 3545
NheI	G!CTAGC	1	591
NlaIII	CATG!	22	304; 364; 599; 707; 737; 827; 1160; 1247; 1298; 2192; 2332; 2404; 2495; 2636; 2981; 3167; 3198; 3224; 3580; 3964; 4684; 4735
NlaIV	GGN!NCC	22	467; 651; 688; 761; 806; 854; 917; 1079; 1290; 1917; 1938; 1950; 2141; 2302; 2374; 2763; 2798; 3646; 3725; 3770; 4613; 4652
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	4	776; 1594; 1909; 3501
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	4	347; 870; 1053; 4573
Nli3877I	CYCGR!G	2	814; 1093
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2551; 2987
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	618; 2516
NmeDI	RCCGGYNNNNNNNN!	9	704; 768; 1056; 1092; 1401; 1991; 3093; 3274; 3557
NmeDI	!NNNNNNNNNNNNRCCGGY	9	679; 743; 1031; 1067; 1376; 1966; 3068; 3249; 3532
NmuCI	!GTSAC	3	2051; 2882; 3188
NotI	GC!GGCCGC	1	1406
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2864
NsiI	ATGCA!T	3	2334; 2406; 4737
NspI	RCATG!Y	6	599; 1247; 2332; 2404; 3167; 4684
NspV	TT!CGAA	1	3444
OliI	CACNN!NNGTG	0	
PabI	GTA!C	9	220; 245; 300; 333; 384; 541; 997; 1357; 3069
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2332; 2404; 3167
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2188; 3960
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3727; 3830
PauI	G!CGCGC	1	662
PceI	AGG!CCT	1	2583
PciI	A!CATGT	1	4680
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	3	834; 3106; 3316
PcsI	WCGNNNN!NNNCGW	7	994; 3056; 3133; 3376; 3450; 3843; 4361
PctI	GAATGCN!	1	1513
PctI	G!CATTC	1	1606
PdiI	GCC!GGC	4	1046; 1981; 3264; 3547
PdmI	GAANN!NNTTC	1	942
PfeI	G!AWTC	5	3247; 3381; 3491; 3528; 4706
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2880
PfIMI	CCANNNN!NTGG	2	680; 890
PfoI	T!CCNGGA	1	3537
PhoI	GG!CC	26	84; 277; 642; 724; 820; 1044; 1048; 1291; 1408; 1728; 1870; 2525; 2531; 2540; 2583; 2670; 2844; 3235; 3262; 3771; 3828; 3861; 4206; 4640; 4658; 4669
PinAI	A!CCGGT	1	692
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3143
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2708; 2963
PleI	GAGTCNNNN!	2	1813; 2245
PleI	!NNNNNGACTC	5	404; 1407; 1821; 3427; 4304
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	2	887; 1019
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	2	887; 1019
PpiI	GAACNNNNNNCTCNNNNNNNNNNNN!	1	1844
PpiI	!NNNNNNNNNGAGNNNNNGTTC	1	3974
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4006
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1812

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PpsI	GAGTCNNNN!	2	1813; 2245
Ppsi	!NNNNNGACTC	5	404; 1407; 1821; 3427; 4304
Ppu10I	A!TGCAT	3	2330; 2402; 4733
Ppu21I	YAC!GTR	5	340; 887; 1019; 1878; 3066
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4680
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1545; 1750
Psp03I	GGWC!C	2	3281; 3726
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	11	88; 281; 2296; 2351; 2368; 3147; 3726; 3829; 4519; 4532; 4653
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	2	887; 1019
PspEI	G!GTNACC	0	
PspGI	!CCWGG	11	88; 281; 2296; 2351; 2368; 3147; 3726; 3829; 4519; 4532; 4653
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	22	467; 651; 688; 761; 806; 854; 917; 1079; 1290; 1917; 1938; 1950; 2141; 2302; 2374; 2763; 2798; 3646; 3725; 3770; 4613; 4652
PspOMI	G!GGCCC	1	1289
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNN!	3	125; 2492; 3491
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2894
PspPI	G!GNCC	11	83; 276; 641; 818; 1290; 1869; 3278; 3723; 3769; 3827; 3860
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	5	943; 1288; 2315; 2387; 3893
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	2	2228; 3423
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGNC!CY	2	1292; 3863
PstI	CTGCA!G	1	1282
PstNI	CAGNN!CTG	2	3863; 4271
PsuI	R!GATCY	10	585; 670; 686; 2933; 3179; 3571; 3930; 3942; 4028; 4039
Psyl	GACN!NNGTC	1	2880
PteI	G!CGCGC	1	662
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2260; 2868
RcaI	T!CATGA	2	2188; 3960
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3277
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	1	1048
RleAI	CCCACANNNNNNNNNNNNNN!	1	1491
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	1	602
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	2	1024; 1117
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	9	219; 244; 299; 332; 383; 540; 996; 1356; 3068
RsaNI	G!TAC	9	218; 243; 298; 331; 382; 539; 995; 1355; 3067
RseI	CAYNN!NNRTG	2	365; 3199
RsrII	CG!GWCCG	1	3278
Rsr2I	CG!GWCCG	1	3278
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SaI	G!TCGAC	0	
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	3	834; 3106; 3316
SaqAI	T!TAA	15	7; 1463; 1524; 1645; 1666; 1677; 1689; 1700; 1717; 1815; 2086; 3905; 3919; 3924; 3976

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	47	612; 615; 618; 621; 648; 660; 722; 749; 794; 821; 929; 968; 1007; 1014; 1049; 1127; 1181; 1214; 1310; 1409; 1539; 2058; 2080; 2094; 2532; 2671; 2723; 2734; 2824; 2829; 2866; 2907; 2994; 3000; 3236; 3332; 3373; 3387; 3501; 3840; 3855; 4066; 4272; 4275; 4340; 4483; 4638
Sau96I	G!GNCC	11	83; 276; 641; 818; 1290; 1869; 3278; 3723; 3769; 3827; 3860
Sau3AI	!GATC	26	585; 670; 686; 739; 1054; 1102; 1117; 1169; 1322; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1814; 2246
SchI	!NNNNNGACTC	5	404; 1407; 1821; 3427; 4304
SciI	CTC!GAG	0	
ScrFI	CC!NGG	17	90; 283; 644; 1377; 2298; 2353; 2370; 2766; 2926; 3149; 3539; 3728; 3831; 4303; 4521; 4534; 4655
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	4	2340; 2412; 2581; 4523
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2917; 3402
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	13	807; 846; 1080; 1147; 1293; 1953; 2708; 2801; 2875; 3065; 3127; 3837; 4370
SelI	!CGCG	20	58; 660; 662; 1049; 1205; 1310; 1409; 1684; 2060; 2080; 2104; 2135; 2826; 3127; 3565; 3649; 3712; 3781; 4054; 4635
SetI	ASST!	63	125; 137; 178; 261; 308; 342; 447; 552; 568; 787; 864; 877; 889; 921; 1021; 1026; 1032; 1072; 1150; 1185; 1197; 1227; 1342; 1452; 1473; 1482; 1494; 1543; 1710; 1825; 1837; 1880; 1917; 1967; 1990; 2114; 2262; 2357; 2550; 2663; 2791; 2870; 2881; 2953; 3024; 3068; 3328; 3474; 3518; 3849; 3880; 3939; 3982; 4125; 4146; 4245; 4382; 4397; 4416; 4428; 4472; 4518; 4569
SexAI	A!CCWGGT	1	2351
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	760; 994; 1282; 1354; 1578; 2341; 2413; 3061; 3125; 3400
SfaNI	!NNNNNNNNNGATGC	6	357; 1370; 2720; 2975; 3191; 4583
SfiI	C!TRYAG	5	1220; 1278; 2097; 4224; 4415
SfiI	GGCCNNNN!NGGCC	1	2537
SfoI	GGC!GCC	2	854; 2763
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3444
SgeI	CNNGNNNNNNNN!	192	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 705; 728; 741; 755; 769; 785; 798; 822; 836; 869; 887; 937; 959; 994; 1010; 1029; 1052; 1079; 1093; 1112; 1127; 1151; 1169; 1185; 1201; 1214; 1241; 1256; 1282; 1298; 1323; 1349; 1370; 1388; 1402; 1422; 1469; 1498; 1540; 1623; 1697; 1781; 1803; 1835; 1872; 1890; 1909; 1924; 1966; 1983; 2000; 2035; 2049; 2066; 2088; 2112; 2136; 2201; 2215; 2253; 2269; 2309; 2322; 2341; 2364; 2381; 2394; 2413; 2443; 2464; 2481; 2504; 2539; 2566; 2597; 2619; 2645; 2667; 2686; 2714; 2750; 2769; 2792; 2806; 2826; 2839; 2853; 2872; 2886; 2905; 2937; 2951; 2964; 2990; 3021; 3034; 3051; 3068; 3082; 3099; 3117; 3132; 3160; 3176; 3195; 3217; 3233; 3256; 3275; 3300; 3319; 3339; 3366; 3390; 3423; 3442; 3470; 3484; 3550; 3574; 3589; 3612; 3633; 3650; 3698; 3725; 3739; 3768; 3792; 3825; 3842; 3862; 3875; 3888; 3946; 3973; 3992; 4022; 4047; 4067; 4081; 4106; 4124; 4161; 4199; 4228; 4256; 4270; 4290; 4305; 4326; 4340; 4359; 4377; 4393; 4433; 4453; 4480; 4498; 4519; 4532; 4545; 4562; 4586; 4609; 4641; 4666; 4693; 4715

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	166	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 679; 702; 720; 743; 768; 796; 819; 843; 861; 911; 933; 968; 996; 1026; 1053; 1075; 1101; 1125; 1143; 1175; 1192; 1215; 1239; 1256; 1281; 1299; 1323; 1344; 1362; 1396; 1443; 1472; 1514; 1597; 1671; 1755; 1777; 1809; 1846; 1864; 1883; 1940; 1957; 1974; 2009; 2027; 2047; 2067; 2086; 2110; 2175; 2227; 2283; 2315; 2338; 2355; 2387; 2417; 2438; 2455; 2478; 2513; 2540; 2571; 2593; 2619; 2641; 2660; 2688; 2724; 2743; 2766; 2787; 2805; 2822; 2846; 2879; 2911; 2938; 2964; 2995; 3025; 3042; 3068; 3091; 3112; 3134; 3154; 3174; 3191; 3230; 3249; 3274; 3293; 3313; 3340; 3364; 3397; 3416; 3444; 3466; 3524; 3548; 3567; 3586; 3607; 3624; 3672; 3699; 3719; 3742; 3766; 3799; 3816; 3836; 3862; 3920; 3947; 3966; 3996; 4021; 4041; 4080; 4098; 4135; 4173; 4202; 4230; 4251; 4279; 4300; 4333; 4351; 4407; 4427; 4454; 4472; 4493; 4519; 4536; 4560; 4583; 4615; 4640; 4667; 4689; 4718
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1909; 3696; 4489
SimI	!GACCC	5	106; 1372; 3190; 3758; 4006
SinI	G!GWCC	2	3278; 3723
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	2	365; 3199
SmII	C!TYRAG	5	1644; 3153; 4035; 4312; 4574
SmoI	C!TYRAG	5	1644; 3153; 4035; 4312; 4574
SmuI	CCCGCNNNN!	11	93; 119; 286; 737; 990; 1197; 2084; 2439; 2460; 3656; 3788
SmuI	!NNNNNNGCGGG	6	616; 2015; 2885; 3422; 3560; 3707
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2332; 2404; 3167
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 1512; 1576; 1654; 1680; 1691; 2338; 2410; 2502; 3920
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	2583
SsiI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 612; 660; 730; 749; 821; 983; 1034; 1049; 1124; 1190; 1307; 1310; 1409; 2077; 2080; 2094; 2184; 2432; 2444; 2453; 2465; 2475; 2486; 2532; 2671; 2734; 3236; 3281; 3347; 3373; 3498; 3501; 3649; 3781; 4088; 4232; 4728
SsiI	G!CGG	33	370; 403; 528; 623; 647; 721; 793; 796; 928; 967; 1006; 1213; 1405; 2022; 2049; 2137; 2247; 2828; 2892; 2993; 2996; 3276; 3331; 3429; 3567; 3714; 3854; 4097; 4342; 4463; 4482; 4609; 4637
SspI	AAT!ATT	2	1670; 2223
SspDI	G!GCGCC	2	852; 2761
SspD5I	GGTGANNNNNNNN!	5	376; 1082; 1404; 3833; 3949
SspD5I	!NNNNNNNNNTCACC	5	745; 1099; 1177; 1878; 2939
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	22	92; 118; 285; 650; 736; 817; 989; 1096; 1196; 1383; 1961; 2083; 2438; 2459; 2772; 3175; 3314; 3385; 3655; 3787; 4017; 4455
Sth132I	!NNNNNNNNNCGGG	20	15; 407; 470; 615; 1277; 1962; 2014; 2115; 2842; 2884; 2917; 3421; 3530; 3559; 3706; 3810; 3841; 4294; 4338; 4546
Sth302II	CC!GG	23	645; 694; 758; 1046; 1082; 1378; 1391; 1981; 2668; 2745; 2767; 2795; 2926; 3016; 3083; 3264; 3539; 3547; 3639; 4113; 4303; 4329; 4476
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	6	1189; 1393; 2630; 3087; 3112; 3566
StsI	!NNNNNNNNNNNNNNCATCC	3	1106; 1247; 2434

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StuI	AGG CCT	1	2583
StyI	C CWGG	8	360; 703; 733; 1156; 2491; 2584; 3194; 3599
StyD4I	!CCNGG	17	88; 281; 642; 1375; 2296; 2351; 2368; 2764; 2924; 3147; 3537; 3726; 3829; 4301; 4519; 4532; 4653
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	14	76; 198; 269; 543; 581; 1139; 1853; 3142; 3258; 3366; 3689; 4180; 4650; 4721
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 889; 1021; 1825; 1837; 1880; 1990; 2881; 3068; 3849; 3982
TaqI	T!CGA	14	742; 781; 988; 1911; 2602; 2875; 3031; 3055; 3091; 3253; 3444; 3489; 3744; 4582
TaqII	GACCGANNNNNNNNNN!	3	1782; 2799; 3467
TaqII	!NNNNNNNNNTCGGTC	1	3711
TaqII	CACCCANNNNNNNNNN!	0	
TaqII	!NNNNNNNNNTGGGTG	3	172; 2666; 3258
TasI	!AATT	10	18; 1512; 1576; 1654; 1680; 1691; 2338; 2410; 2502; 3920
TatI	W!GTACW	4	217; 297; 330; 381
TauI	GCSG!C	29	614; 650; 662; 724; 751; 796; 823; 931; 970; 1009; 1051; 1216; 1312; 1411; 2082; 2096; 2534; 2673; 2736; 2831; 2996; 2999; 3238; 3334; 3375; 3503; 3857; 4485; 4640
TfiI	G!AWTC	5	3247; 3381; 3491; 3528; 4706
TliI	C!TCGAG	0	
TruII	T!TAA	15	7; 1463; 1524; 1645; 1666; 1677; 1689; 1700; 1717; 1815; 2086; 3905; 3919; 3924; 3976
Tru9I	T!TAA	15	7; 1463; 1524; 1645; 1666; 1677; 1689; 1700; 1717; 1815; 2086; 3905; 3919; 3924; 3976
TscAI	CASTGNN!	6	661; 1608; 2891; 4001; 4272; 4285
TseI	G!CWGC	19	614; 617; 620; 1013; 1126; 1180; 1538; 2057; 2722; 2823; 2865; 2906; 2999; 3386; 3839; 4065; 4271; 4274; 4339
TsoI	TARCCANNNNNNNNNN!	2	1734; 2081
TsoI	!NNNNNNNNNTGGYTA	2	1539; 3291
Tsp45I	!GTSAC	3	2051; 2882; 3188
Tsp509I	!AATT	10	18; 1512; 1576; 1654; 1680; 1691; 2338; 2410; 2502; 3920
TspDTI	ATGAANNNNNNNNNN!	4	852; 1520; 2821; 3525
TspDTI	!NNNNNNNNNTTCAT	4	26; 3239; 3695; 3902
TspEI	!AATT	10	18; 1512; 1576; 1654; 1680; 1691; 2338; 2410; 2502; 3920
TspGWI	ACGGANNNNNNNNNN!	1	3637
TspGWI	!NNNNNNNNNTCCGT	2	590; 1217
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	6	661; 1608; 2891; 4001; 4272; 4285
TstI	CACNNNNNNNTCCNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	1	729
TstI	GGANNNNNNGTGNNNNNNNNNNN!	1	761
TstI	!NNNNNNNCCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2880
Tth111II	CAARCANNNNNNNNNN!	1	4089
Tth111III	!NNNNNNNNNTGYTTG	3	3197; 4057; 4096
UnbI	!GGNCC	11	82; 275; 640; 817; 1289; 1868; 3277; 3722; 3768; 3826; 3859
Van9II	CCANNNN!NTGG	2	680; 890
Vha464I	C!TTAAG	1	1644
VneI	G!TGCAC	1	4366
VpaK11AI	!GGWCC	2	3277; 3722
VpaK11BI	G!GWCC	2	3278; 3723
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATY	3	1576; 1680; 1691
XbaI	T!CTAGA	1	1416
XceI	RCATG!Y	6	599; 1247; 2332; 2404; 3167; 4684
XcmI	CCANNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	10	585; 670; 686; 2933; 3179; 3571; 3930; 3942; 4028; 4039
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2584; 3599
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	1	942
XspI	C!TAG	8	592; 1417; 1611; 2029; 2585; 3600; 3934; 4187

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2334; 2406; 4737