

## pKillerRed-dMito vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1659; 1864
AarI	CACCTGCNNNN!	1	1155
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1947; 2903; 4692
AatI	AGG!CCT	1	2697
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2978
Acc36I	ACCTGCNNNN!	3	1155; 3144; 3594
Acc36I	!NNNNNNNNGCAGGT	1	2763
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	5	465; 1107; 2029; 2875; 2910
AccB7I	CCANNNN!NTGG	4	680; 773; 970; 1220
AccBSI	CCG!CTC	2	2300; 3489
AccBSI	GAG!CGG	2	2136; 3543
AceIII	CAGCTCNNNNNNN!	1	1832
AceIII	!NNNNNNNNNNNGAGCTG	3	552; 956; 1122
Acil	C!CGC	43	58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 817; 1019; 1082; 1160; 1303; 1361; 1481; 1523; 2191; 2194; 2208; 2298; 2546; 2558; 2567; 2579; 2589; 2600; 2646; 2785; 2848; 3350; 3395; 3461; 3487; 3612; 3615; 3763; 3895; 4202; 4346; 4842
Acil	G!CGG	30	370; 403; 528; 623; 647; 716; 740; 811; 1312; 1519; 2136; 2163; 2251; 2361; 2942; 3006; 3107; 3110; 3390; 3445; 3543; 3681; 3828; 3968; 4211; 4456; 4577; 4596; 4723; 4751
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	9	694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236
AcIWI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148
AcoI	Y!GGCCR	7	872; 892; 1520; 2782; 2956; 3347; 3374
AcsI	R!AATTY	3	1690; 1794; 1805
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	2	3022; 3454
AcuI	!NNNNNNNNNNNNNNNCTTCAG	1	4252
AcvI	CAC!GTG	1	1442
AcyI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
AdeI	CACNNN!GTG	4	941; 1391; 1475; 1992
Afal	GT!AC	8	219; 244; 299; 332; 383; 540; 999; 3182
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	22	49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779
AfiII	C!TTAAG	1	1758
AfiIII	A!CRYGT	3	1246; 1441; 4794
AgeI	A!CCGGT	1	785
AgsI	TTS!AA	8	845; 929; 1352; 2287; 2331; 2341; 2754; 4330
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	12	88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767
AjuI	GAANNNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNNTTC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjuI	CCAANNNNNNNNTTCNNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	
AleI	CACNN!NNGTG	2	888; 1149
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2450; 2522
AlfI	!NNNNNNNNNNNGCANNNNNNNTGC	2	2416; 2488
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	1958
AloI	!NNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	1926
AluI	AG!CT	17	566; 959; 970; 1136; 1217; 1280; 1655; 1822; 2079; 2374; 2662; 2982; 3440; 4237; 4494; 4540; 4630
AluBI	AG!CT	17	566; 959; 970; 1136; 1217; 1280; 1655; 1822; 2079; 2374; 2662; 2982; 3440; 4237; 4494; 4540; 4630
AlwI	GGATCNNNN!	9	694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236
AlwI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148
Alw21I	GWGCW!C	4	937; 2989; 3179; 4484
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	6	942; 1233; 2300; 2718; 3737; 3865
Alw44I	G!TGCAC	2	933; 4480
AlwNI	CAGNNN!CTG	2	3977; 4385
Ama87I	C!YCGRG	1	1062
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	2444; 2516; 3978
ApaLI	G!TGCAC	2	933; 4480
ApeKI	G!CWGC	23	614; 617; 620; 707; 710; 713; 901; 904; 959; 1357; 1652; 2171; 2836; 2937; 2979; 3020; 3113; 3500; 3953; 4179; 4385; 4388; 4453
ApoI	R!AATTY	3	1690; 1794; 1805
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	3	880; 1102; 3391
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3185; 3838; 4676
AquI	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3275
AquI	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	979
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2704
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	2	1040; 3446
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 671; 687; 764; 780; 992; 1373; 1534; 2714; 2718; 2737; 3048; 3126; 3207; 3216; 3294; 3670; 3686; 4045; 4057; 4135; 4143; 4154; 4229
AsiGI	A!CCGGT	1	785
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2994
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2698; 3713
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	31	664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620
AspS9I	G!GNCC	16	83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	3558
AsuC2I	CC!SGG	7	644; 737; 1378; 2880; 3040; 3653; 4417
AsuHPI	GGTGANNNNNNNN!	5	376; 878; 1166; 3947; 4063
AsuHPI	!NNNNNNNTCACC	7	875; 1157; 1289; 1394; 1478; 1993; 3054
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	1	1062

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AvaII	G!GWCC	2	3392; 3837
AviII	TGC!GCA	1	2978
AvrII	C!CTAGG	2	2698; 3713
AxyI	CC!TNAGG	2	2356; 3988
BaeI	ACNNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGC!C	5	937; 1480; 2822; 2915; 4484
BalI	TGG!CCA	1	2958
BamHI	G!GATCC	1	779
BanI	G!GYRCC	5	465; 1107; 2029; 2875; 2910
BanII	GRGCY!C	4	1009; 2067; 3241; 3951
BanIII	AT!CGAT	1	2716
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	4	680; 773; 970; 1220
BauI	C!ACGAG	2	3594; 4621
BauI	C!TCGTG	1	3468
BbeI	GGCG!C	1	2879
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	1	1442
BbsI	GAAGACNN!	0	
BbsI	!NNNNNGTCTTC	0	
BbuI	GCATG!C	3	2446; 2518; 3281
BbvI	GCAGCNNNNNNNN!	8	913; 1369; 1664; 2949; 2991; 3512; 3965; 4465
BbvI	!NNNNNNNNNNNGCTGC	9	601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372
Bbv12I	GWGCW!C	4	937; 2989; 3179; 4484
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	10	894; 987; 1209; 1374; 1404; 1503; 2006; 2570; 3096; 3598
BccI	!NNNNNGATGG	4	1316; 1974; 2754; 3182
BceAI	ACGGCNNNNNNNNNN!	12	875; 914; 935; 1016; 1046; 1121; 1196; 1274; 1325; 1370; 3302; 3789
BceAI	!NNNNNNNNNNNGCCGT	5	924; 1254; 2017; 2835; 4294
Bcefl	ACGGCNNNNNNNNNN!	12	875; 914; 935; 1016; 1046; 1121; 1196; 1274; 1325; 1370; 3302; 3789
Bcefl	!NNNNNNNNNNNGCCGT	5	925; 1255; 2018; 2836; 4295
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2305; 3095; 4596
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	7	644; 737; 1378; 2880; 3040; 3653; 4417
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNN!	3	1179; 1416; 4729
BdaI	!NNNNNNNNNTGANNNNNNTCA	3	1145; 1382; 4695
BfaI	C!TAG	8	592; 1531; 1725; 2143; 2699; 3714; 4048; 4301
BfiI	ACTGGGNNNN!	1	2825
BfiI	!NNNNCCCAGT	4	289; 648; 741; 2577
BfmI	C!TRYAG	3	2211; 4338; 4529
BfoI	RGCG!Y	5	1495; 2143; 2151; 2879; 4554
BfrI	C!TTAAG	1	1758
BfuI	GTATCCNNNNNN!	3	2305; 3095; 4596
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1155; 3144; 3594
BfuAI	!NNNNNNNGCAGGT	1	2763
BfuCI	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BglI	GCCNNNN!NGGC	4	90; 212; 283; 2651
BglII	A!GATCT	0	
BisI	GC!NGC	47	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752
BlnI	C!CTAGG	2	2698; 3713
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	47	613; 616; 619; 622; 649; 661; 706; 709; 712; 715; 742; 754; 813; 903; 906; 961; 1161; 1314; 1362; 1524; 1654; 2173; 2195; 2209; 2647; 2786; 2838; 2849; 2939; 2944; 2981; 3022; 3109; 3115; 3351; 3447; 3488; 3502; 3616; 3955; 3970; 4181; 4387; 4390; 4455; 4598; 4753
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	2	3392; 3837
Bme1390I	CC!NGG	19	90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	1	1062
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	16	84; 277; 642; 735; 814; 1068; 1198; 1261; 1326; 1381; 1984; 3393; 3838; 3884; 3942; 3975
BmiI	GGN!NCC	21	467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766
BmrI	ACTGGGNNNNN!	1	2825
BmrI	!NNNNCCCACT	4	289; 648; 741; 2577
BmrFI	CC!NGG	19	90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769
BmsI	GCATCNNNNN!	10	1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514
BmsI	!NNNNNNNNNGATGC	5	357; 2834; 3089; 3305; 4697
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	2825
BmuI	!NNNNCCCACT	4	289; 648; 741; 2577
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2665; 3564
BpI	!NNNNNNNNGAGNNNNNCTC	2	2633; 3532
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3716
BpmI	!NNNNNNNNNNNNNNNCTCCAG	1	3659
Bpu10I	CC!TNAGC	1	1071
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3558
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4170; 4709
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	2	3252; 4411
BpuMI	CC!SGG	7	644; 737; 1378; 2880; 3040; 3653; 4417
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	3	942; 1233; 3865
Bsa29I	AT!CGAT	1	2716
BsaAI	YAC!GTR	4	340; 1442; 1992; 3180
BsaBI	GATNN!NNATC	2	1538; 2735
BsaHI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
BsaJI	C!CNNGG	21	360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634
BsaMI	GAATGCN!	1	1627
BsaMI	G!CATTC	1	1720
BsaWI	W!CCGGW	5	785; 2907; 3751; 4441; 4588
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1956
BsaXI	!NNNNNNNNGGAGNNNNNNGT	0	

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BsaXI	GGAGNNNNNGTNNNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1926
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1877; 3784
Bsc4I	CCNNNNN!NNGG	22	49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779
BscAI	GCATCNNNN!	10	1041; 1083; 1170; 1491; 1691; 2454; 2526; 3174; 3238; 3513
BscAI	!NNNNNNGATGC	5	360; 2837; 3092; 3308; 4700
BseI	ACTGGN!	3	2820; 3021; 4267
BseI	C!CAGT	8	295; 654; 747; 995; 1905; 2583; 4379; 4392
Bse8I	GATNN!NNATC	2	1538; 2735
Bse21I	CC!TNAGG	2	2356; 3988
Bse118I	R!CCGGY	6	785; 951; 2093; 3195; 3376; 3659
BseAI	T!CCGGA	0	
BseBI	CC!WGG	12	90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769
BseCI	AT!CGAT	1	2716
BseDI	C!CNNGG	21	360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634
Bse3DI	GCAATGNN!	1	3109
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2736; 3193; 3218; 3672
BseGI	!CATCC	2	1225; 2562
BseJI	GATNN!NNATC	2	1538; 2735
BseLI	CCNNNNN!NNGG	22	49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779
BseMI	GCAATGNN!	1	3109
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	4002
BseMII	!NNNNNNNNCTGAG	6	1062; 2347; 2649; 3530; 4102; 4511
BseNI	ACTGGN!	3	2820; 3021; 4267
BseNI	C!CAGT	8	295; 654; 747; 995; 1905; 2583; 4379; 4392
BsePI	G!CGCGC	2	662; 755
BseRI	GAGGAGNNNNNNNNNN!	1	2694
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGC!C	5	937; 1480; 2822; 2915; 4484
BseXI	GCAGCNNNNNNNN!	8	913; 1369; 1664; 2949; 2991; 3512; 3965; 4465
BseXI	!NNNNNNNNNNNGCTGC	9	601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372
BseX3I	C!GGCCG	2	1520; 2782
BseYI	C!CCAGC	3	2419; 2491; 4490
BseYI	G!CTGGG	1	3380
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
Bsh1285I	CGRY!CG	5	790; 1082; 1523; 2785; 4460
BshFI	GG!CC	33	84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783
BshNI	G!GYRCC	5	465; 1107; 2029; 2875; 2910
BshTI	A!CCGGT	1	785
BshVI	AT!CGAT	1	2716
BsiEI	CGRY!CG	5	790; 1082; 1523; 2785; 4460
BsiHKAI	GWGCW!C	4	937; 2989; 3179; 4484
BsiHKCI	C!YCGRG	1	1062
BsiSI	C!CGG	21	644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	22	49; 680; 773; 970; 1220; 1322; 1454; 1888; 2214; 2606; 2857; 3401; 3682; 3714; 3846; 3881; 3931; 3963; 4316; 4595; 4761; 4779
BsIFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1431; 3027; 3559; 3668

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BsIF1	!NNNNNNNNNNNNNGTCCC	4	2392; 2464; 2528; 3823
BsmI	GAATGCN!	1	1627
BsmI	G!CATTC	1	1720
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	6	942; 1233; 2300; 2718; 3737; 3865
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1431; 3027; 3559; 3668
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2392; 2464; 2528; 3823
BsnI	GG!CC	33	84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	3	942; 1233; 3865
BsoBI	C!YCGRG	1	1062
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 796; 2605; 3308
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3679
Bsp24I	!NNNNNNCCANNNNNGTC	2	4100; 4278
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4132; 4310
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3647
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3558
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
Bsp1286I	GDGCH!C	11	937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484
Bsp1407I	T!GTACA	0	
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	43	58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 817; 1019; 1082; 1160; 1303; 1361; 1481; 1523; 2191; 2194; 2208; 2298; 2546; 2558; 2567; 2579; 2589; 2600; 2646; 2785; 2848; 3350; 3395; 3461; 3487; 3612; 3615; 3763; 3895; 4202; 4346; 4842
BspACI	G!CGG	30	370; 403; 528; 623; 647; 716; 740; 811; 1312; 1519; 2136; 2163; 2251; 2361; 2942; 3006; 3107; 3110; 3390; 3445; 3543; 3681; 3828; 3968; 4211; 4456; 4577; 4596; 4723; 4751
BspCNI	CTCAGNNNNNNNN!	1	4001
BspCNI	!NNNNNNNCTGAG	6	1063; 2348; 2650; 3531; 4103; 4512
BspDI	AT!CGAT	1	2716
BspD6I	GACTCNNNN!	5	418; 1535; 1949; 3555; 4432
BspD6I	!NNNNNGAGTC	2	1912; 2344
BspEI	T!CCGGA	0	
BspFNI	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
BspHI	T!CATGA	2	2302; 4074
BspLI	GGN!NCC	21	467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766
BspMI	ACCTGCNNNN!	3	1155; 3144; 3594
BspMI	!NNNNNNNGCAGGT	1	2763
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	694; 787; 2744; 3055; 3301; 3693; 4052; 4150; 4236
BspPI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1367; 3120; 3664; 4051; 4148
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3220; 3430
BspTI	C!TTAAG	1	1758
BspT104I	TT!CGAA	1	3558
BspT107I	G!GYRCC	5	465; 1107; 2029; 2875; 2910
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	3	942; 1233; 3865
BsrI	ACTGGN!	3	2820; 3021; 4267
BsrI	C!CAGT	8	295; 654; 747; 995; 1905; 2583; 4379; 4392
BsrBI	CCG!CTC	2	2300; 3489

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsrBI	GAG!CGG	2	2136; 3543
BsrDI	GCAATGNN!	1	3109
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	6	785; 951; 2093; 3195; 3376; 3659
BsrGI	T!GTACA	0	
BsrSI	ACTGGN!	3	2820; 3021; 4267
BsrSI	C!CAGT	8	295; 654; 747; 995; 1905; 2583; 4379; 4392
BssAI	R!CCGGY	6	785; 951; 2093; 3195; 3376; 3659
BssECl	C!CNNGG	21	360; 796; 917; 1048; 1063; 1256; 1376; 2410; 2482; 2605; 2640; 2649; 2698; 3039; 3308; 3713; 3840; 3841; 3943; 3944; 4634
BssHII	G!CGCGC	2	662; 755
BssKI	!CCNGG	19	88; 281; 642; 735; 1048; 1376; 2410; 2465; 2482; 2878; 3038; 3261; 3651; 3840; 3943; 4415; 4633; 4646; 4767
BssMI	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
BssNI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	3594; 4621
BssSI	C!TCGTG	1	3468
BssTII	C!CWWGG	6	360; 796; 2605; 2698; 3308; 3713
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	2343; 3220; 3430
Bst98I	C!TTAAG	1	1758
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
BstAFI	C!TTAAG	1	1758
BstAPI	GCANNNN!NTGC	3	2443; 2515; 3977
BstAUI	T!GTACA	0	
BstBI	TT!CGAA	1	3558
Bst2BI	C!ACGAG	2	3594; 4621
Bst2BI	C!TCGTG	1	3468
BstBAI	YAC!GTR	4	340; 1442; 1992; 3180
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 1088; 1169; 1967; 3256; 3372; 3480; 3803; 4294; 4764; 4835
BstC8I	GCN!NGC	38	86; 279; 593; 664; 757; 937; 957; 1005; 1019; 1278; 1282; 1449; 1476; 2095; 2138; 2152; 2425; 2444; 2497; 2516; 2770; 2956; 3175; 3241; 3247; 3275; 3279; 3320; 3324; 3378; 3661; 3848; 3895; 3951; 3973; 4184; 4744; 4781
BstDEI	C!TNAG	7	1071; 2356; 2658; 3539; 3988; 4111; 4520
BstDSI	C!CRYGG	6	360; 796; 917; 1256; 2605; 3308
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2736; 3193; 3218; 3672
BstF5I	!CATCC	2	1225; 2562
BstFNI	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
BstH2I	RGCGC!Y	5	1495; 2143; 2151; 2879; 4554
BstHHI	GCG!C	31	664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620
BstKTI	GAT!C	24	588; 673; 689; 766; 782; 994; 1375; 1536; 2716; 2720; 2739; 3050; 3128; 3209; 3218; 3296; 3672; 3688; 4047; 4059; 4137; 4145; 4156; 4231
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNNGAGAC	6	942; 1233; 2300; 2718; 3737; 3865
BstMBI	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
BstMCI	CGRY!CG	5	790; 1082; 1523; 2785; 4460
BstMWI	GCNNNNN!NNGC	37	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstNI	CC!WGG	12	90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769
BstNSI	RCATG!Y	6	599; 1250; 2446; 2518; 3281; 4798
BstOI	CC!WGG	12	90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	19	88; 281; 642; 735; 1048; 1376; 2410; 2465; 2482; 2878; 3038; 3261; 3651; 3840; 3943; 4415; 4633; 4646; 4767
BstSFI	C!TRYAG	3	2211; 4338; 4529
BstSLI	GKGC!M!C	5	937; 1480; 2822; 2915; 4484
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
Bst2UI	CC!WGG	12	90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769
BstVII	GCAGC!NNNNNNNN!	8	913; 1369; 1664; 2949; 2991; 3512; 3965; 4465
BstVII	!NNNNNNNNNNNNGCTGC	9	601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANN!NN!NTGG	0	
BstX2I	R!GATCY	13	585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153
BstYI	R!GATCY	13	585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153
BstZI	C!GGCCG	2	1520; 2782
BstZ17I	GTA!TAC	0	
BsuI	GTATCC!NNNNNN!	3	2305; 3095; 4596
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2716
Bsu36I	CC!TNAGG	2	2356; 3988
BsuRI	GG!CC	33	84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783
BsuTUI	AT!CGAT	1	2716
BtgI	C!CRYGG	6	360; 796; 917; 1256; 2605; 3308
BtgZI	GCGATG!NNNNNNNNNN!	2	1993; 3328
BtgZI	!NNNNNNNNNNNNNCATCGC	3	334; 3147; 3491
BthCI	GCNG!C	47	614; 617; 620; 623; 650; 662; 707; 710; 713; 716; 743; 755; 814; 904; 907; 962; 1162; 1315; 1363; 1525; 1655; 2174; 2196; 2210; 2648; 2787; 2839; 2850; 2940; 2945; 2982; 3023; 3110; 3116; 3352; 3448; 3489; 3503; 3617; 3956; 3971; 4182; 4388; 4391; 4456; 4599; 4754
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	1715
BtsCI	GGATGNN!	4	2736; 3193; 3218; 3672
BtsCI	!CATCC	2	1225; 2562
BtuMI	TCG!CGA	0	
BveI	ACCTGC!NNNN!	3	1155; 3144; 3594
BveI	!NNNNNNNNGCAGGT	1	2763
Cac8I	GCN!NGC	38	86; 279; 593; 664; 757; 937; 957; 1005; 1019; 1278; 1282; 1449; 1476; 2095; 2138; 2152; 2425; 2444; 2497; 2516; 2770; 2956; 3175; 3241; 3247; 3275; 3279; 3320; 3324; 3378; 3661; 3848; 3895; 3951; 3973; 4184; 4744; 4781
CaiI	CAGNN!CTG	2	3977; 4385
CciI	T!CATGA	2	2302; 4074
CciNI	GC!GGCCGC	1	1520
CdiI	CATC!G	11	352; 857; 890; 1079; 1292; 1370; 1499; 3165; 3170; 3368; 3509
CdiI	C!GATG	2	1979; 3314
CdpI	GCGGAG!NNNNNNNNNNNNNNNNNNNNNN!	1	4748
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2537; 2579
CelII	GC!TNAGC	0	



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CfoI	GCG!C	31	664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620
CfrI	Y!GGCCR	7	872; 892; 1520; 2782; 2956; 3347; 3374
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	6	785; 951; 2093; 3195; 3376; 3659
Cfr13I	G!GNCC	16	83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974
Cfr42I	CCGC!GG	0	
ChaI	GATC!	24	589; 674; 690; 767; 783; 995; 1376; 1537; 2717; 2721; 2740; 3051; 3129; 3210; 3219; 3297; 3673; 3689; 4048; 4060; 4138; 4146; 4157; 4232
CjeI	CCANNNNNNGTNNNNNNNNNNNNNN!	6	818; 1408; 2693; 4133; 4233; 4311
CjeI	!NNNNNNNNNACNNNNNTGG	7	64; 257; 2360; 2455; 3647; 4197; 4752
CjeI	ACNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 2394; 2489; 3681; 4231; 4786
CjeI	!NNNNNNNNCCANNNNNNGT	6	784; 1374; 2659; 4099; 4199; 4277
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	2	4133; 4311
CjePI	!NNNNNNNGANNNNNNNTGG	3	257; 3647; 4246
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	3	290; 3680; 4279
CjePI	!NNNNNNNCCANNNNNNTC	2	4100; 4278
ClaI	AT!CGAT	1	2716
CpoI	CG!GWCCG	1	3392
CseI	GACGCNNNNN!	5	526; 617; 710; 3586; 3665
CseI	!NNNNNNNNNGCGTC	3	2209; 4104; 4682
CsiI	A!CCWGGT	1	2465
CspI	CG!GWCCG	1	3392
Csp6I	G!TAC	8	218; 243; 298; 331; 382; 539; 998; 3181
Csp45I	TT!CGAA	1	3558
CspAI	A!CCGGT	1	785
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2156; 3765
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	22	301; 361; 596; 797; 836; 965; 1112; 1205; 1247; 2303; 2443; 2515; 2606; 2747; 3092; 3278; 3309; 3335; 3691; 4075; 4795; 4846
CviJI	RG!CY	105	42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 814; 874; 894; 959; 970; 977; 1007; 1039; 1069; 1120; 1136; 1159; 1183; 1190; 1198; 1217; 1261; 1280; 1284; 1294; 1315; 1327; 1360; 1381; 1461; 1522; 1545; 1655; 1822; 1842; 1984; 2065; 2079; 2093; 2374; 2415; 2487; 2610; 2639; 2645; 2654; 2662; 2685; 2697; 2703; 2784; 2801; 2809; 2836; 2861; 2945; 2954; 2958; 2982; 3020; 3096; 3113; 3132; 3195; 3239; 3249; 3266; 3349; 3376; 3380; 3417; 3440; 3456; 3636; 3663; 3724; 3846; 3885; 3942; 3949; 3956; 3975; 3986; 4237; 4266; 4309; 4320; 4385; 4464; 4489; 4494; 4540; 4630; 4728; 4754; 4772; 4783
CviKI-1	RG!CY	105	42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 814; 874; 894; 959; 970; 977; 1007; 1039; 1069; 1120; 1136; 1159; 1183; 1190; 1198; 1217; 1261; 1280; 1284; 1294; 1315; 1327; 1360; 1381; 1461; 1522; 1545; 1655; 1822; 1842; 1984; 2065; 2079; 2093; 2374; 2415; 2487; 2610; 2639; 2645; 2654; 2662; 2685; 2697; 2703; 2784; 2801; 2809; 2836; 2861; 2945; 2954; 2958; 2982; 3020; 3096; 3113; 3132; 3195; 3239; 3249; 3266; 3349; 3376; 3380; 3417; 3440; 3456; 3636; 3663; 3724; 3846; 3885; 3942; 3949; 3956; 3975; 3986; 4237; 4266; 4309; 4320; 4385; 4464; 4489; 4494; 4540; 4630; 4728; 4754; 4772; 4783
CviQI	G!TAC	8	218; 243; 298; 331; 382; 539; 998; 3181
DdeI	C!TNAG	7	1071; 2356; 2658; 3539; 3988; 4111; 4520
DinI	GGC!GCC	1	2877
DpnI	GA!TC	24	587; 672; 688; 765; 781; 993; 1374; 1535; 2715; 2719; 2738; 3049; 3127; 3208; 3217; 3295; 3671; 3687; 4046; 4058; 4136; 4144; 4155; 4230
DpnII	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
DraI	TTT!AAA	3	1578; 4020; 4039
DraII	RG!GNCCY	2	1067; 3974
DraIII	CACNNN!GTG	4	941; 1391; 1475; 1992
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNNNN!	2	266; 4356
DraRI	!NNNNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1947; 2903; 4692
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1947; 2903; 4692
EaeI	Y!GGCCR	7	872; 892; 1520; 2782; 2956; 3347; 3374
EagI	C!GGCCG	2	1520; 2782
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2343; 3220; 3430
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2343; 3220; 3430
EciI	GGCGGANNNNNNNNNNNN!	4	2376; 3405; 4592; 4738
EciI	!NNNNNNNNNTCCGCC	4	496; 2547; 2568; 2589
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	1520; 2782
Eco24I	GRGCY!C	4	1009; 2067; 3241; 3951
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNGAGAGACC	3	942; 1233; 3865
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	2	3392; 3837
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	2	1520; 2782
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	2	3022; 3454
Eco57I	!NNNNNNNNNNNNNNNNCTTCAG	1	4252
Eco72I	CAC!GTG	1	1442
Eco81I	CC!TNAGG	2	2356; 3988
Eco88I	C!YCGRG	1	1062
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 796; 2605; 2698; 3308; 3713
Eco147I	AGG!CCT	1	2697
EcoHI	!CCSGG	7	642; 735; 1376; 2878; 3038; 3651; 4415
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	3	3022; 3454; 3716
Eco57MI	!NNNNNNNNNNNNNNNNCTYCAG	2	3659; 4252
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	2	1067; 3974
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	12	88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 796; 2605; 2698; 3308; 3713
EcoT22I	ATGCA!T	3	2448; 2520; 4851
EcoT38I	GRGCY!C	4	1009; 2067; 3241; 3951
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2877
EheI	GGC!GCC	1	2877
ErhI	C!CWWGG	6	360; 796; 2605; 2698; 3308; 3713
EsaBC3I	TC!GA	16	857; 1079; 1097; 1334; 1370; 2026; 2717; 2990; 3146; 3170; 3206; 3368; 3559; 3604; 3859; 4697
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNGAGACG	0	
FaeI	CATG!	22	304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FaI	YA!TR	58	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 798; 837; 966; 1113; 1206; 1248; 1538; 1548; 1614; 1659; 1864; 2292; 2304; 2435; 2444; 2507; 2516; 2540; 2607; 2631; 2748; 2812; 3093; 3118; 3279; 3310; 3336; 3408; 3624; 3692; 3770; 3822; 3983; 4000; 4002; 4004; 4076; 4354; 4543; 4659; 4732; 4796; 4847
FaII	AAGNNNNNCTTNNNNNNNNNNNN!	2	1364; 3216
FaII	!NNNNNNNNAAGNNNNNCTT	2	1332; 3184
FaqI	GGGACNNNNNNNNNN!	7	175; 326; 494; 1431; 3027; 3559; 3668
FaqI	!NNNNNNNNNNNNNGTCCC	4	2392; 2464; 2528; 3823
FatI	!CATG	22	300; 360; 595; 796; 835; 964; 1111; 1204; 1246; 2302; 2442; 2514; 2605; 2746; 3091; 3277; 3308; 3334; 3690; 4074; 4794; 4845
FauI	CCCGCNNNN!	11	93; 119; 286; 824; 1026; 1488; 2198; 2553; 2574; 3770; 3902
FauI	!NNNNNNGCGGG	7	616; 709; 2129; 2999; 3536; 3674; 3821
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	0	
FmuI	GGNC!C	16	86; 279; 644; 737; 816; 1070; 1200; 1263; 1328; 1383; 1986; 3395; 3840; 3886; 3944; 3977
Fnu4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752
FokI	GGATGNNNNNNNNNN!	4	2743; 3200; 3225; 3679
FokI	!NNNNNNNNNNNNNCATCC	2	1212; 2549
FriOI	GRGCY!C	4	1009; 2067; 3241; 3951
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2978
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 1531; 1725; 2143; 2699; 3714; 4048; 4301
FspEI	CCNNNNNNNNNNNN!	171	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 673; 687; 707; 749; 766; 780; 796; 828; 854; 888; 908; 927; 953; 976; 991; 1008; 1022; 1038; 1053; 1074; 1095; 1124; 1142; 1160; 1181; 1200; 1214; 1242; 1256; 1275; 1290; 1313; 1329; 1361; 1379; 1395; 1409; 1436; 1452; 1475; 1492; 1508; 1536; 1559; 1598; 1612; 1753; 1848; 1872; 1895; 1918; 1936; 1958; 1979; 1998; 2017; 2046; 2067; 2081; 2107; 2195; 2221; 2270; 2311; 2329; 2368; 2384; 2422; 2479; 2494; 2551; 2571; 2585; 2602; 2616; 2653; 2668; 2711; 2794; 2861; 2892; 2912; 2927; 2972; 2986; 3052; 3066; 3085; 3101; 3142; 3162; 3209; 3259; 3275; 3295; 3320; 3340; 3363; 3390; 3408; 3434; 3474; 3500; 3524; 3580; 3594; 3622; 3665; 3686; 3721; 3765; 3853; 3877; 3899; 3919; 3935; 3956; 3970; 3989; 4073; 4093; 4121; 4136; 4170; 4212; 4239; 4254; 4299; 4323; 4337; 4359; 4385; 4405; 4429; 4455; 4503; 4522; 4541; 4567; 4602; 4647; 4677; 4691; 4742; 4756; 4781; 4797; 4818; 4847
FspEI	!NNNNNNNNNNNNNNGG	131	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 701; 722; 759; 783; 844; 876; 904; 937; 956; 985; 1015; 1035; 1090; 1122; 1165; 1203; 1243; 1266; 1294; 1339; 1363; 1400; 1440; 1483; 1504; 1547; 1647; 1716; 1746; 1824; 1873; 1895; 1923; 1959; 2004; 2033; 2069; 2088; 2116; 2136; 2199; 2222; 2330; 2362; 2380; 2409; 2452; 2481; 2592; 2621; 2664; 2685; 2713; 2746; 2766; 2791; 2818; 2843; 2865; 2893; 2919; 2940; 2991; 3012; 3030; 3078; 3114; 3170; 3195; 3219; 3248; 3271; 3295; 3321; 3343; 3362; 3387; 3427; 3463; 3528; 3613; 3637; 3666; 3700; 3721; 3741; 3786; 3813; 3832; 3865; 3917; 3948; 3975; 4027; 4125; 4196; 4241; 4302; 4367; 4401; 4427; 4445; 4481; 4551; 4574; 4596; 4620; 4653; 4701; 4736; 4754; 4811
Fsp4HI	GC!NGC	47	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752
GdiII	C!GGCCR	3	872; 1520; 2782
GdiII	Y!GGCCG	5	892; 1520; 2782; 3347; 3374

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
GlaI	GC!GC	31	663; 665; 756; 758; 1092; 1209; 1275; 1364; 1434; 1452; 1493; 2141; 2149; 2175; 2197; 2206; 2219; 2250; 2869; 2877; 2941; 2978; 3244; 3504; 3680; 3766; 4169; 4278; 4452; 4552; 4619
GluI	GC!NGC	47	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752
GsaI	CCCAG!C	3	2423; 2495; 4494
GsaI	GCTGG!G	1	3384
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3716
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3659
HaeI	WGG!CCW	7	1284; 1461; 2697; 2958; 4320; 4772; 4783
HaeII	RGCGC!Y	5	1495; 2143; 2151; 2879; 4554
HaeIII	GG!CC	33	84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1551; 3072
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1517; 3038
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1550; 3071
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1519; 3040
HapII	C!CGG	21	644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589
HgaI	GACGCNNNNN!	5	526; 617; 710; 3586; 3665
HgaI	!NNNNNNNNNNNGCGTC	3	2209; 4104; 4682
HhaI	GCG!C	31	664; 666; 757; 759; 1093; 1210; 1276; 1365; 1435; 1453; 1494; 2142; 2150; 2176; 2198; 2207; 2220; 2251; 2870; 2878; 2942; 2979; 3245; 3505; 3681; 3767; 4170; 4279; 4453; 4553; 4620
HinI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
HinIII	CATG!	22	304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849
Hin4I	GAYNNNNVTCNNNNNNNNNNNNNN!	2	1550; 3071
Hin4I	!NNNNNNNNNGABNNNNNRTC	3	1518; 3039; 3069
Hin4I	GABNNNNNRTCNNNNNNNNNNNNNN!	3	1550; 3071; 3101
Hin4I	!NNNNNNNNNGAYNNNNNVTC	2	1518; 3039
Hin6I	G!CGC	31	662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618
HinP1I	G!CGC	31	662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618
HincII	GTY!RAC	1	1639
HindII	GTY!RAC	1	1639
HindIII	A!AGCTT	0	
Hinfl	G!ANTC	12	410; 1527; 1919; 1941; 2351; 3361; 3495; 3547; 3605; 3642; 4424; 4820
HpaI	GTT!AAC	1	1639
HpaII	C!CGG	21	644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589
HphI	GGTGANNNNNNNN!	5	376; 878; 1166; 3947; 4063
HphI	!NNNNNNNTCACC	7	875; 1157; 1289; 1394; 1478; 1993; 3054
Hpy8I	GTN!NAC	13	201; 539; 577; 869; 883; 935; 1172; 1223; 1639; 1923; 1940; 1995; 4482
Hpy99I	CGWCG!	15	861; 900; 1032; 1107; 1182; 1197; 1311; 1509; 2966; 2994; 3288; 3303; 3580; 3965; 4698
Hpy166II	GTN!NAC	13	201; 539; 577; 869; 883; 935; 1172; 1223; 1639; 1923; 1940; 1995; 4482
Hpy188I	TCN!GA	12	585; 806; 2050; 2659; 2843; 3187; 3540; 3641; 4120; 4254; 4607; 4685
Hpy188III	TC!NNGA	26	605; 698; 827; 1097; 1370; 1391; 1531; 2303; 2355; 2668; 2721; 2894; 3210; 3219; 3302; 3358; 3402; 3492; 3525; 3594; 4075; 4149; 4232; 4330; 4428; 4562
HpyAV	CCTCANNNNNN!	7	851; 1019; 1295; 1358; 3521; 3628; 4307
HpyAV	!NNNNNGAAGG	7	2109; 3004; 3733; 3749; 3932; 4249; 4559
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 1088; 1169; 1967; 3256; 3372; 3480; 3803; 4294; 4764; 4835

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 931; 1441; 1936; 1948; 1991; 2101; 2992; 3179; 3960; 4093
HpyCH4V	TG!CA	17	935; 1625; 1652; 1720; 2437; 2446; 2509; 2518; 2633; 2709; 2768; 2927; 3102; 3116; 4186; 4482; 4849
HpyF3I	C!TNAG	7	1071; 2356; 2658; 3539; 3988; 4111; 4520
HpyF10VI	GCNNNNN!NNGC	37	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 609; 702; 2876; 3578; 3657
Hsp92II	CATG!	22	304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849
HspAI	G!CGC	31	662; 664; 755; 757; 1091; 1208; 1274; 1363; 1433; 1451; 1492; 2140; 2148; 2174; 2196; 2205; 2218; 2249; 2868; 2876; 2940; 2977; 3243; 3503; 3679; 3765; 4168; 4277; 4451; 4551; 4618
KasI	G!GCGCC	1	2875
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	1639
Kzo9I	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3220; 3430
LpnI	RG!GCGY	5	1493; 2141; 2149; 2877; 4552
LpnPI	CCDGNNNNNNNNN!	68	102; 295; 618; 657; 711; 750; 799; 834; 888; 965; 1002; 1062; 1083; 1130; 1160; 1200; 1227; 1242; 1290; 1329; 1391; 1436; 1461; 1502; 1613; 1918; 2107; 2330; 2368; 2384; 2424; 2479; 2496; 2596; 2681; 2794; 2871; 2893; 2916; 3052; 3066; 3085; 3142; 3209; 3259; 3275; 3332; 3390; 3599; 3665; 3689; 3765; 3854; 3957; 3990; 4221; 4239; 4385; 4405; 4429; 4455; 4504; 4602; 4647; 4677; 4756; 4781; 4818
LpnPI	!NNNNNNNNNNNNNCHGG	54	75; 268; 552; 619; 712; 771; 937; 956; 1035; 1122; 1203; 1266; 1363; 1959; 2079; 2136; 2199; 2397; 2409; 2469; 2481; 2713; 2758; 2801; 2843; 2865; 2893; 2940; 3002; 3024; 3114; 3181; 3204; 3248; 3343; 3362; 3387; 3536; 3637; 3680; 3737; 3827; 3930; 3957; 3975; 4211; 4248; 4401; 4427; 4567; 4585; 4620; 4701; 4754
Lsp1109I	GCAGCNNNNNNNN!	8	913; 1369; 1664; 2949; 2991; 3512; 3965; 4465
Lsp1109I	!NNNNNNNNNNNGCTGC	9	601; 694; 946; 2158; 2823; 3007; 3100; 4166; 4372
LweI	GCATCNNNNN!	10	1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514
LweI	!NNNNNNNNNGATGC	5	357; 2834; 3089; 3305; 4697
MabI	A!CCWGGT	1	2465
MaeI	C!TAG	8	592; 1531; 1725; 2143; 2699; 3714; 4048; 4301
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 931; 1441; 1936; 1948; 1991; 2101; 2992; 3179; 3960; 4093
MaeIII	!GTNAC	13	61; 148; 497; 1391; 1664; 2165; 2177; 2996; 3302; 3992; 4258; 4374; 4437
MalI	GA!TC	24	587; 672; 688; 765; 781; 993; 1374; 1535; 2715; 2719; 2738; 3049; 3127; 3208; 3217; 3295; 3671; 3687; 4046; 4058; 4136; 4144; 4155; 4230
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2300; 3489
MbiI	GAG!CGG	2	2136; 3543
MboI	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
MboII	GAAGANNNNNNNN!	5	2132; 2360; 3237; 3447; 4066
MboII	!NNNNNNNTCTTC	6	842; 1004; 3527; 3694; 3894; 4137
McaTI	GCGC!GC	2	665; 758
MfeI	C!AATTG	1	1626

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MfII	R!GATCY	13	585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153
MhII	GDGCH!C	11	937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484
MIsI	TGG!CCA	1	2958
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	2958
MlyI	GAGTCNNNNN!	2	1928; 2360
MlyI	!NNNNNGACTC	5	404; 1521; 1935; 3541; 4418
Mly113I	GG!CGCC	1	2876
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	1969
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	2	4401; 4585
MnlI	CCTCNNNNNNN!	7	1595; 2659; 3477; 3683; 3997; 4367; 4691
MnlI	!NNNNNGAGG	19	541; 800; 857; 1058; 1408; 1448; 1502; 1555; 2020; 2351; 2629; 2672; 2687; 2727; 2791; 2927; 3284; 3714; 4617
Mph1103I	ATGCA!T	3	2448; 2520; 4851
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	2093; 3376; 3659
MroXI	GAANN!NN TTC	0	
MscI	TGG!CCA	1	2958
MseI	T!TAA	16	7; 1514; 1577; 1638; 1759; 1780; 1791; 1803; 1814; 1831; 1929; 2200; 4019; 4033; 4038; 4090
MslI	CAYNN!NNRTG	5	365; 888; 1149; 1167; 3313
MspI	C!CGG	21	644; 737; 786; 952; 1378; 2094; 2781; 2858; 2880; 2908; 3039; 3129; 3196; 3377; 3652; 3660; 3752; 4226; 4416; 4442; 4589
Msp20I	TGG!CCA	1	2958
MspA1I	CMG!CKG	8	614; 707; 1217; 1280; 2374; 2982; 4211; 4456
MspCI	C!TTAAG	1	1758
MspJI	CNNRRNNNNNNNN!	247	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; 710; 729; 743; 758; 772; 798; 817; 833; 848; 875; 888; 902; 920; 944; 959; 975; 990; 1007; 1030; 1060; 1074; 1095; 1109; 1124; 1137; 1159; 1173; 1199; 1212; 1226; 1241; 1255; 1269; 1283; 1318; 1352; 1374; 1389; 1403; 1417; 1435; 1452; 1466; 1480; 1494; 1520; 1536; 1549; 1564; 1583; 1600; 1613; 1654; 1668; 1681; 1699; 1737; 1752; 1770; 1811; 1835; 1855; 1873; 1894; 1917; 1949; 1964; 1986; 2004; 2017; 2038; 2055; 2068; 2081; 2097; 2110; 2140; 2155; 2180; 2198; 2211; 2226; 2250; 2264; 2288; 2313; 2329; 2367; 2383; 2422; 2436; 2450; 2478; 2494; 2508; 2522; 2551; 2564; 2585; 2594; 2616; 2646; 2662; 2680; 2710; 2733; 2757; 2781; 2800; 2828; 2854; 2870; 2883; 2906; 2920; 2940; 2953; 2967; 2986; 3000; 3013; 3029; 3044; 3057; 3073; 3088; 3104; 3129; 3148; 3164; 3177; 3190; 3208; 3222; 3236; 3252; 3274; 3290; 3309; 3331; 3347; 3370; 3389; 3403; 3419; 3433; 3453; 3469; 3482; 3504; 3537; 3551; 3571; 3584; 3598; 3652; 3665; 3688; 3701; 3720; 3737; 3764; 3800; 3833; 3852; 3877; 3898; 3925; 3938; 3955; 3969; 3984; 4000; 4060; 4085; 4101; 4123; 4136; 4150; 4181; 4195; 4220; 4238; 4253; 4266; 4285; 4298; 4313; 4342; 4361; 4379; 4404; 4419; 4438; 4454; 4473; 4491; 4507; 4521; 4540; 4567; 4590; 4612; 4631; 4646; 4659; 4676; 4696; 4723; 4736; 4755; 4780; 4803; 4817; 4830; 4847

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	!NNNNNNNNNNNNNNYNGG	208	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; 684; 701; 718; 740; 760; 783; 802; 822; 849; 876; 894; 918; 938; 957; 975; 1000; 1022; 1048; 1074; 1098; 1117; 1135; 1155; 1173; 1191; 1215; 1233; 1257; 1277; 1302; 1326; 1348; 1375; 1392; 1409; 1426; 1450; 1475; 1494; 1517; 1542; 1586; 1628; 1711; 1746; 1773; 1796; 1825; 1869; 1891; 1923; 1959; 1976; 1997; 2034; 2054; 2071; 2088; 2123; 2141; 2159; 2176; 2200; 2222; 2249; 2277; 2303; 2341; 2362; 2379; 2397; 2420; 2441; 2469; 2492; 2513; 2531; 2552; 2569; 2592; 2616; 2636; 2654; 2676; 2707; 2729; 2755; 2774; 2791; 2819; 2838; 2857; 2875; 2893; 2914; 2936; 2960; 2993; 3013; 3031; 3052; 3078; 3105; 3122; 3139; 3156; 3182; 3204; 3226; 3244; 3264; 3283; 3305; 3343; 3363; 3387; 3407; 3427; 3454; 3478; 3511; 3530; 3558; 3580; 3609; 3637; 3662; 3681; 3700; 3721; 3738; 3755; 3786; 3813; 3833; 3856; 3876; 3913; 3930; 3949; 3975; 3995; 4034; 4061; 4080; 4098; 4135; 4153; 4194; 4212; 4238; 4255; 4287; 4316; 4344; 4365; 4388; 4407; 4428; 4446; 4463; 4481; 4507; 4528; 4548; 4568; 4586; 4607; 4633; 4650; 4669; 4688; 4717; 4736; 4754; 4773; 4791; 4809; 4832
MspR9I	CC!NGG	19	90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1626
MvaI	CC!WGG	12	90; 283; 1050; 2412; 2467; 2484; 3263; 3842; 3945; 4635; 4648; 4769
Mva1269I	GAATGCN!	1	1627
Mva1269I	G!CATTC	1	1720
MvnI	CG!CG	23	60; 662; 664; 755; 757; 1210; 1363; 1435; 1453; 1525; 1800; 2176; 2196; 2220; 2251; 2942; 3243; 3681; 3765; 3828; 3897; 4170; 4751
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	37	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 952; 1081; 1156; 1214; 1432; 1480; 2103; 2133; 2160; 2202; 2443; 2515; 2566; 2645; 2867; 2951; 2974; 3113; 3236; 3319; 3586; 3773; 3977; 4176; 4748
NaeI	GCC!GGC	3	2095; 3378; 3661
NarI	GG!CGCC	1	2876
NciI	CC!SGG	7	644; 737; 1378; 2880; 3040; 3653; 4417
NcoI	C!CATGG	4	360; 796; 2605; 3308
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	2093; 3376; 3659
NheI	G!CTAGC	1	591
NlaIII	CATG!	22	304; 364; 599; 800; 839; 968; 1115; 1208; 1250; 2306; 2446; 2518; 2609; 2750; 3095; 3281; 3312; 3338; 3694; 4078; 4798; 4849
NlaIV	GGN!NCC	21	467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	6	1187; 1424; 1508; 1708; 2023; 3615
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	2	347; 4687
Nli3877I	CYCGR!G	1	1066
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2665; 3101
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	3	618; 711; 2630
NmeDI	RCCGGYNNNNNNNN!	6	797; 963; 2105; 3207; 3388; 3671
NmeDI	!NNNNNNNNNNNNRCCGGY	6	772; 938; 2080; 3182; 3363; 3646
NmuCI	!GTSAC	4	1391; 2165; 2996; 3302
NotI	GC!GGCCGC	1	1520
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2978
NsiI	ATGCA!T	3	2448; 2520; 4851
NspI	RCATG!Y	6	599; 1250; 2446; 2518; 3281; 4798
NspV	TT!CGAA	1	3558

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
OliI	CACNN!NNGTG	2	888; 1149
PabI	GTA!C	8	220; 245; 300; 333; 384; 541; 1000; 3183
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2446; 2518; 3281
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2302; 4074
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	3841; 3944
PauI	G!CGCGC	2	662; 755
PceI	AGG!CCT	1	2697
PciI	A!CATGT	2	1246; 4794
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3220; 3430
PcsI	WCGNNNN!NNNCGW	11	937; 1084; 1138; 1471; 1504; 3170; 3247; 3490; 3564; 3957; 4475
PctI	GAATGCN!	1	1627
PctI	G!CATTC	1	1720
PdiI	GCC!GGC	3	2095; 3378; 3661
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	5	3361; 3495; 3605; 3642; 4820
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2994
PfIMI	CCANNNN!NTGG	4	680; 773; 970; 1220
PfoI	T!CCNGGA	1	3651
PhoI	GG!CC	33	84; 277; 642; 735; 814; 874; 894; 1069; 1198; 1261; 1284; 1315; 1327; 1381; 1461; 1522; 1842; 1984; 2639; 2645; 2654; 2697; 2784; 2958; 3349; 3376; 3885; 3942; 3975; 4320; 4754; 4772; 4783
PinAI	A!CCGGT	1	785
PlaDI	CATCAGNNNNNNNNNNNNNNNNNNNNNNNN!	2	1060; 3257
PlaDI	!NNNNNNNNNNNNNNNNNNNNNNNNCTGATG	3	1297; 2822; 3077
PleI	GAGTCNNNN!	2	1927; 2359
PleI	!NNNNNGACTC	5	404; 1521; 1935; 3541; 4418
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	1	1442
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	1	1442
PpiI	GAACNNNNNCTCNNNNNNNNNNNNNNNN!	1	1958
PpiI	!NNNNNNNNNGAGNNNNNGTTC	1	4088
PpiI	GAGNNNNNGTTCNNNNNNNNNNNNNNNN!	1	4120
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1926
PpsI	GAGTCNNNN!	2	1927; 2359
PpsI	!NNNNNGACTC	5	404; 1521; 1935; 3541; 4418
Ppu10I	A!TGCAT	3	2444; 2516; 4847
Ppu21I	YAC!GTR	4	340; 1442; 1992; 3180
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	2	1246; 4794
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1659; 1864
Psp03I	GGWC!C	2	3395; 3840
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	12	88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	1	1442
PspEI	G!GTNACC	0	
PspGI	!CCWGG	12	88; 281; 1048; 2410; 2465; 2482; 3261; 3840; 3943; 4633; 4646; 4767
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	21	467; 651; 744; 781; 815; 1109; 1199; 1262; 2031; 2052; 2064; 2255; 2416; 2488; 2877; 2912; 3760; 3839; 3884; 4727; 4766
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNNNN!	4	125; 1072; 2606; 3605
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	3008



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PspPI	G!GNCC	16	83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2429; 2501; 4007
PspPRI	!NNNNNNNNNNNNNNCTGRGG	2	2342; 3537
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	2	1070; 3977
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	2	3977; 4385
PsuI	R!GATCY	13	585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153
PsyI	GACN!NNGTC	1	2994
PteI	G!CGCGC	2	662; 755
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	4	1217; 1280; 2374; 2982
RcaI	T!CATGA	2	2302; 4074
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	3	880; 1102; 3391
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	4	1260; 1399; 1485; 1605
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	2	602; 695
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	8	219; 244; 299; 332; 383; 540; 999; 3182
RsaNI	G!TAC	8	218; 243; 298; 331; 382; 539; 998; 3181
RseI	CAYNN!NNRTG	5	365; 888; 1149; 1167; 3313
RsrII	CG!GWCCG	1	3392
Rsr2I	CG!GWCCG	1	3392
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3220; 3430
SaqAI	T!TAA	16	7; 1514; 1577; 1638; 1759; 1780; 1791; 1803; 1814; 1831; 1929; 2200; 4019; 4033; 4038; 4090
SatI	GC!NGC	47	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 812; 902; 905; 960; 1160; 1313; 1361; 1523; 1653; 2172; 2194; 2208; 2646; 2785; 2837; 2848; 2938; 2943; 2980; 3021; 3108; 3114; 3350; 3446; 3487; 3501; 3615; 3954; 3969; 4180; 4386; 4389; 4454; 4597; 4752
Sau96I	G!GNCC	16	83; 276; 641; 734; 813; 1067; 1197; 1260; 1325; 1380; 1983; 3392; 3837; 3883; 3941; 3974
Sau3AI	!GATC	24	585; 670; 686; 763; 779; 991; 1372; 1533; 2713; 2717; 2736; 3047; 3125; 3206; 3215; 3293; 3669; 3685; 4044; 4056; 4134; 4142; 4153; 4228
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1928; 2360
SchI	!NNNNNGACTC	5	404; 1521; 1935; 3541; 4418
SciI	CTC!GAG	0	
ScrFI	CC!NGG	19	90; 283; 644; 737; 1050; 1378; 2412; 2467; 2484; 2880; 3040; 3263; 3653; 3842; 3945; 4417; 4635; 4648; 4769
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	902; 1076; 2454; 2526; 2695; 4637
SdeAI	!NNNNNNNNNNNNNNNNNNCTYCTG	2	3031; 3516
SdeOSI	GACNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	11	937; 1009; 1480; 2067; 2822; 2915; 2989; 3179; 3241; 3951; 4484
SelI	!CGCG	23	58; 660; 662; 753; 755; 1208; 1361; 1433; 1451; 1523; 1798; 2174; 2194; 2218; 2249; 2940; 3241; 3679; 3763; 3826; 3895; 4168; 4749
SetI	ASST!	63	125; 137; 178; 261; 308; 342; 447; 552; 568; 843; 868; 934; 961; 972; 991; 1131; 1138; 1149; 1219; 1282; 1350; 1444; 1459; 1566; 1587; 1596; 1608; 1657; 1824; 1939; 1951; 1994; 2031; 2081; 2104; 2228; 2376; 2471; 2664; 2777; 2905; 2984; 2995; 3067; 3138; 3182; 3442; 3588; 3632; 3963; 3994; 4053; 4096; 4239; 4260; 4359; 4496; 4511; 4530; 4542; 4586; 4632; 4683
SexAI	A!CCWGGT	1	2465
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	1042; 1084; 1171; 1492; 1692; 2455; 2527; 3175; 3239; 3514
SfaNI	!NNNNNNNNNGATGC	5	357; 2834; 3089; 3305; 4697
SfiI	C!TRYAG	3	2211; 4338; 4529
SfiI	GGCCNNNN!NGGCC	1	2651
SfoI	GGC!GCC	1	2877
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3558
SgeI	CNNGNNNNNNNN!	199	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 710; 729; 743; 759; 773; 798; 828; 848; 875; 902; 920; 944; 959; 977; 1001; 1016; 1030; 1061; 1074; 1100; 1124; 1145; 1159; 1181; 1199; 1217; 1230; 1250; 1269; 1283; 1328; 1352; 1374; 1389; 1403; 1418; 1435; 1452; 1466; 1487; 1501; 1520; 1536; 1583; 1612; 1654; 1737; 1811; 1895; 1917; 1949; 1986; 2004; 2023; 2038; 2080; 2097; 2114; 2149; 2163; 2180; 2202; 2226; 2250; 2315; 2329; 2367; 2383; 2423; 2436; 2455; 2478; 2495; 2508; 2527; 2557; 2578; 2595; 2618; 2653; 2680; 2711; 2733; 2759; 2781; 2800; 2828; 2864; 2883; 2906; 2920; 2940; 2953; 2967; 2986; 3000; 3019; 3051; 3065; 3078; 3104; 3135; 3148; 3165; 3182; 3196; 3213; 3231; 3246; 3274; 3290; 3309; 3331; 3347; 3370; 3389; 3414; 3433; 3453; 3480; 3504; 3537; 3556; 3584; 3598; 3664; 3688; 3703; 3726; 3747; 3764; 3812; 3839; 3853; 3882; 3906; 3939; 3956; 3976; 3989; 4002; 4060; 4087; 4106; 4136; 4161; 4181; 4195; 4220; 4238; 4275; 4313; 4342; 4370; 4384; 4404; 4419; 4440; 4454; 4473; 4491; 4507; 4547; 4567; 4594; 4612; 4633; 4646; 4659; 4676; 4700; 4723; 4755; 4780; 4807; 4829
SgeI	!NNNNNNNNNNNNCNG	172	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 684; 703; 722; 740; 772; 802; 822; 849; 876; 894; 918; 938; 957; 975; 1004; 1035; 1056; 1074; 1098; 1119; 1137; 1155; 1173; 1191; 1215; 1233; 1257; 1302; 1326; 1348; 1377; 1409; 1426; 1461; 1494; 1517; 1557; 1586; 1628; 1711; 1785; 1869; 1891; 1923; 1960; 1978; 1997; 2054; 2071; 2088; 2123; 2141; 2161; 2181; 2200; 2224; 2289; 2341; 2397; 2429; 2452; 2469; 2501; 2531; 2552; 2569; 2592; 2627; 2654; 2685; 2707; 2733; 2755; 2774; 2802; 2838; 2857; 2880; 2901; 2919; 2936; 2960; 2993; 3025; 3052; 3078; 3109; 3139; 3156; 3182; 3205; 3226; 3248; 3268; 3288; 3305; 3344; 3363; 3388; 3407; 3427; 3454; 3478; 3511; 3530; 3558; 3580; 3638; 3662; 3681; 3700; 3721; 3738; 3786; 3813; 3833; 3856; 3880; 3913; 3930; 3950; 3976; 4034; 4061; 4080; 4110; 4135; 4155; 4194; 4212; 4249; 4287; 4316; 4344; 4365; 4393; 4414; 4447; 4465; 4521; 4541; 4568; 4586; 4607; 4633; 4650; 4674; 4697; 4729; 4754; 4781; 4803; 4832
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; 2023; 3810; 4603
SimI	!GACCC	5	106; 1240; 3304; 3872; 4120
SinI	G!GWCC	2	3392; 3837
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
TseI	G!CWGC	23	614; 617; 620; 707; 710; 713; 901; 904; 959; 1357; 1652; 2171; 2836; 2937; 2979; 3020; 3113; 3500; 3953; 4179; 4385; 4388; 4453
TsoI	TARCCANNNNNNNNNN!	2	1848; 2195
TsoI	!NNNNNNNNNTGGYTA	2	1653; 3405
Tsp45I	!GTSAC	4	1391; 2165; 2996; 3302
Tsp509I	!AATT	10	18; 1626; 1690; 1768; 1794; 1805; 2452; 2524; 2616; 4034
TspDTI	ATGAANNNNNNNNNN!	3	1634; 2935; 3639
TspDTI	!NNNNNNNNNTTCAT	6	26; 842; 1277; 3353; 3809; 4016
TspEI	!AATT	10	18; 1626; 1690; 1768; 1794; 1805; 2452; 2524; 2616; 4034
TspGWI	ACGGANNNNNNNNNN!	1	3751
TspGWI	!NNNNNNNNNTCCGT	2	590; 683
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	7	661; 754; 1722; 3005; 4115; 4386; 4399
TstI	CACNNNNNNNTCCNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2994
Tth111II	CAARCANNNNNNNNNN!	2	1422; 4203
Tth111II	!NNNNNNNNNTGYTTG	3	3311; 4171; 4210
UnbI	!GGNCC	16	82; 275; 640; 733; 812; 1066; 1196; 1259; 1324; 1379; 1982; 3391; 3836; 3882; 3940; 3973
Van91I	CCANNNN!NTGG	4	680; 773; 970; 1220
Vha464I	C!TTAAG	1	1758
VneI	G!TGCAC	2	933; 4480
VpaK11AI	!GGWCC	2	3391; 3836
VpaK11BI	G!GWCC	2	3392; 3837
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	1690; 1794; 1805
XbaI	T!CTAGA	1	1530
XceI	RCATG!Y	6	599; 1250; 2446; 2518; 3281; 4798
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	13	585; 670; 686; 763; 779; 1372; 3047; 3293; 3685; 4044; 4056; 4142; 4153
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2698; 3713
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	8	592; 1531; 1725; 2143; 2699; 3714; 4048; 4301
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2448; 2520; 4851