

pHyPer-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	2373; 2578
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	2661; 3617; 5406
AatI	AGG!CCT	1	3411
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465
AccIII	T!CCGGA	1	828
Acc16I	TGC!GCA	3	1995; 2148; 3692
Acc36I	ACCTGCNNNN!	3	880; 3858; 4308
Acc36I	!NNNNNNNNGCAGGT	2	2001; 3477
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	7	465; 1485; 1523; 1923; 2743; 3589; 3624
AccB7I	CCANNNN!NTGG	3	680; 773; 956
AccBSI	CCG!CTC	2	3014; 4203
AccBSI	GAG!CGG	2	2850; 4257
AceIII	CAGCTCNNNNNNN!	2	1293; 2546
AceIII	!NNNNNNNNNNGAGCTG	5	552; 1443; 1494; 1527; 1848
Acil	C!CGC	53	58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 834; 879; 1091; 1177; 1253; 1426; 1429; 1706; 1747; 1814; 1853; 1970; 2049; 2108; 2142; 2153; 2180; 2237; 2905; 2908; 2922; 3012; 3260; 3272; 3281; 3293; 3303; 3314; 3360; 3499; 3562; 4064; 4109; 4175; 4201; 4326; 4329; 4477; 4609; 4916; 5060; 5556
Acil	G!CGG	35	370; 403; 528; 623; 647; 716; 740; 973; 1474; 1480; 1950; 2007; 2017; 2223; 2233; 2850; 2877; 2965; 3075; 3656; 3720; 3821; 3824; 4104; 4159; 4257; 4395; 4542; 4682; 4925; 5170; 5291; 5310; 5437; 5465
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	11	694; 787; 1443; 2028; 3458; 3769; 4015; 4407; 4766; 4864; 4950
AcIWI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1244; 3834; 4378; 4765; 4862
AcoI	Y!GGCCR	9	1108; 1210; 1559; 2195; 2234; 3496; 3670; 4061; 4088
AcsI	R!AATY	3	2404; 2508; 2519
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	5	1641; 1713; 1884; 3736; 4168
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4966
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
AdeI	CACNNN!GTG	1	2706
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 870; 1102; 1461; 1917; 3896
AfeI	AGC!GCT	1	2038
AfiI	CCNNNNN!NNGG	24	49; 680; 773; 861; 956; 1001; 1432; 1657; 1820; 2602; 2928; 3320; 3571; 4115; 4396; 4428; 4560; 4595; 4645; 4677; 5030; 5309; 5475; 5493
AfII	C!TTAAG	1	2472
AfIII	A!CRYGT	1	5508
AgeI	A!CCGGT	2	785; 1926
AgsI	TTS!AA	11	1029; 1247; 1742; 1790; 1880; 1941; 3001; 3045; 3055; 3468; 5044
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjnI	!CCWGG	19	88; 281; 1531; 1656; 1768; 1843; 1897; 1981; 2119; 2132; 3124; 3179; 3196; 3975; 4554; 4657; 5347; 5360; 5481
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	
AleI	CACNN!NNGTG	3	1518; 1668; 1845
AlfI	GCANNNNNNTGCNNNNNNNNNN!	2	3164; 3236
AlfI	!NNNNNNNNNGCANNNNNNNTGC	2	3130; 3202
AloI	GAACNNNNNTCCNNNNNNNNNN!	1	2672
AloI	!NNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	2640
AluI	AG!CT	24	566; 917; 1283; 1357; 1457; 1508; 1541; 1613; 1625; 1646; 1862; 1910; 2165; 2369; 2536; 2793; 3088; 3376; 3696; 4154; 4951; 5208; 5254; 5344
AluBI	AG!CT	24	566; 917; 1283; 1357; 1457; 1508; 1541; 1613; 1625; 1646; 1862; 1910; 2165; 2369; 2536; 2793; 3088; 3376; 3696; 4154; 4951; 5208; 5254; 5344
AlwI	GGATCNNNN!	11	694; 787; 1443; 2028; 3458; 3769; 4015; 4407; 4766; 4864; 4950
AlwI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1244; 3834; 4378; 4765; 4862
Alw21I	GWGCW!C	3	3703; 3893; 5198
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	813; 3014; 3432; 4451; 4579
Alw44I	G!TGCAC	1	5194
AlwNI	CAGNNN!CTG	3	956; 4691; 5099
Ama87I	C!YCGRG	0	
Aor13HI	T!CCGGA	1	828
Aor51HI	AGC!GCT	1	2038
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	3158; 3230; 4692
ApaLI	G!TGCAC	1	5194
ApeKI	G!CWGC	31	614; 617; 620; 707; 710; 713; 836; 896; 1273; 1280; 1331; 1334; 1492; 1646; 1727; 2144; 2149; 2162; 2366; 2885; 3550; 3651; 3693; 3734; 3827; 4214; 4667; 4893; 5099; 5102; 5167
ApoI	R!AATY	3	2404; 2508; 2519
ApyPI	ATCGACNNNNNNNNNNNNNNNNNN!	1	4105
ApyPI	!NNNNNNNNNNNNNNNNNGTCGAT	3	3899; 4552; 5390
AquII	GCCGNACNNNNNNNNNNNNNNNNNN!	2	2133; 3989
AquII	!NNNNNNNNNNNNNNNNNGTNCGGC	1	1558
AquIII	GAGGAGNNNNNNNNNNNNNNNNNN!	2	1528; 3418
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNCTCCYC	1	4160
ArsI	GACNNNNNTTYGNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	1	1750
ArsI	CRAANNNNNNNGTCNNNNNNNNNN!	1	1782
ArsI	!NNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	31	586; 671; 687; 764; 780; 992; 1074; 1113; 1164; 1250; 1398; 1436; 1628; 2021; 2248; 3428; 3432; 3451; 3762; 3840; 3921; 3930; 4008; 4384; 4400; 4759; 4771; 4849; 4857; 4868; 4943
AsiGI	A!CCGGT	2	785; 1926
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	3	824; 1197; 3708
Asp700I	GAANN!NNTTC	1	1698
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	3412; 4427
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	36	664; 666; 757; 759; 962; 1001; 1162; 1396; 1777; 1818; 1974; 1996; 2039; 2059; 2149; 2184; 2856; 2864; 2890; 2912; 2921; 2934; 2965; 3584; 3592; 3656; 3693; 3959; 4219; 4395; 4481; 4884; 4993; 5167; 5267; 5334

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AspS9I	G!GNCC	15	83; 276; 641; 734; 831; 864; 1323; 1406; 1660; 2697; 4106; 4551; 4597; 4655; 4688
AssI	AGT!ACT	0	
AsuII	TT!CGAA	1	4272
AsuC2I	CC!SGG	9	644; 737; 1433; 1517; 1946; 3594; 3754; 4367; 5131
AsuHPI	GGTANNNNNNNN!	6	376; 1016; 1835; 1859; 4661; 4777
AsuHPI	!NNNNNNNTCACC	5	1068; 1505; 2131; 2707; 3768
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	0	
AvaII	G!GWCC	5	831; 864; 1406; 4106; 4551
AviII	TGC!GCA	3	1995; 2148; 3692
AvrII	C!CTAGG	2	3412; 4427
AxyI	CC!TNAGG	2	3070; 4702
BaeI	ACNNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	6	1528; 1657; 1906; 3536; 3629; 5198
BalI	TGG!CCA	2	2197; 3672
BamHI	G!GATCC	1	779
BanI	G!GYRCC	7	465; 1485; 1523; 1923; 2743; 3589; 3624
BanII	GRGCY!C	3	2781; 3955; 4665
BanIII	AT!CGAT	1	3430
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	3	680; 773; 956
BauI	C!ACGAG	2	4308; 5335
BauI	C!TCGTG	2	1668; 4182
BbeI	GGCG!C	1	3593
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNNGTCTTC	0	
BbuI	GCATG!C	3	3160; 3232; 3995
BbvI	GCAGCNNNNNNNN!	11	1285; 1504; 1739; 2161; 2174; 2378; 3663; 3705; 4226; 4679; 5179
BbvI	!NNNNNNNNNNNGCTGC	13	601; 694; 823; 883; 1318; 1633; 2131; 2872; 3537; 3721; 3814; 4880; 5086
Bbv12I	GWGCW!C	3	3703; 3893; 5198
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	8	1320; 1536; 1788; 2184; 2720; 3284; 3810; 4312
BccI	!NNNNNGATGG	9	794; 1100; 1140; 1464; 2061; 2187; 2688; 3468; 3896
BceAI	ACGGCNNNNNNNNNN!	11	1244; 1286; 1337; 1562; 1622; 1703; 1814; 1904; 1937; 4016; 4503
BceAI	!NNNNNNNNNNNNNGCCGT	5	1019; 2069; 2731; 3549; 5008
Bcefl	ACGGCNNNNNNNNNN!	11	1244; 1286; 1337; 1562; 1622; 1703; 1814; 1904; 1937; 4016; 4503
Bcefl	!NNNNNNNNNNNNNGCCGT	5	1020; 2070; 2732; 3550; 5009
BcgI	CGANNNNNNTGCNNNNNNNNNN!	1	1612
BcgI	!NNNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	1	1578
BciVI	GTATCCNNNNNN!	3	3019; 3809; 5310
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	9	644; 737; 1433; 1517; 1946; 3594; 3754; 4367; 5131
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNN!	1	5443
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	5409
BfaI	C!TAG	8	592; 2245; 2439; 2857; 3413; 4428; 4762; 5015
BfiI	ACTGGGNNNN!	1	3539

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BfiI	!NNNNCCCAGT	4	289; 648; 741; 3291
BfmI	C!TRYAG	3	2925; 5052; 5243
BfoI	RGCGC!Y	5	2040; 2857; 2865; 3593; 5268
BfrI	C!TTAAG	1	2472
BfuI	GATCCNNNNNN!	3	3019; 3809; 5310
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	880; 3858; 4308
BfuAI	!NNNNNNNGCAGGT	2	2001; 3477
BfuCI	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
BglI	GCCNNNN!NGGC	6	90; 212; 283; 814; 1116; 3365
BglII	A!GATCT	0	
BisI	GC!NGC	57	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 837; 897; 974; 1274; 1281; 1332; 1335; 1429; 1493; 1647; 1728; 2008; 2049; 2108; 2145; 2153; 2163; 2237; 2367; 2886; 2908; 2922; 3360; 3499; 3551; 3562; 3652; 3657; 3694; 3735; 3822; 3828; 4064; 4160; 4201; 4215; 4329; 4668; 4683; 4894; 5100; 5103; 5168; 5311; 5466
BlnI	C!CTAGG	2	3412; 4427
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	57	613; 616; 619; 622; 649; 661; 706; 709; 712; 715; 742; 754; 838; 898; 975; 1275; 1282; 1333; 1336; 1430; 1494; 1648; 1729; 2009; 2050; 2109; 2146; 2154; 2164; 2238; 2368; 2887; 2909; 2923; 3361; 3500; 3552; 3563; 3653; 3658; 3695; 3736; 3823; 3829; 4065; 4161; 4202; 4216; 4330; 4669; 4684; 4895; 5101; 5104; 5169; 5312; 5467
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	5	831; 864; 1406; 4106; 4551
Bme1390I	CC!NGG	28	90; 283; 644; 737; 1433; 1517; 1533; 1658; 1770; 1845; 1899; 1946; 1983; 2121; 2134; 3126; 3181; 3198; 3594; 3754; 3977; 4367; 4556; 4659; 5131; 5349; 5362; 5483
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	0	
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	15	84; 277; 642; 735; 832; 865; 1324; 1407; 1661; 2698; 4107; 4552; 4598; 4656; 4689
BmiI	GGN!NCC	22	467; 651; 744; 781; 1325; 1487; 1525; 1925; 2101; 2745; 2766; 2778; 2969; 3130; 3202; 3591; 3626; 4474; 4553; 4598; 5441; 5480
BmrI	ACTGGGNNNNN!	1	3539
BmrI	!NNNNCCCAGT	4	289; 648; 741; 3291
BmrFI	CC!NGG	28	90; 283; 644; 737; 1433; 1517; 1533; 1658; 1770; 1845; 1899; 1946; 1983; 2121; 2134; 3126; 3181; 3198; 3594; 3754; 3977; 4367; 4556; 4659; 5131; 5349; 5362; 5483
BmsI	GCATCNNNNN!	9	1240; 1864; 1879; 2406; 3169; 3241; 3889; 3953; 4228
BmsI	!NNNNNNNNNGATGC	7	357; 1126; 1586; 3548; 3803; 4019; 5411
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	3539
BmuI	!NNNNCCCAGT	4	289; 648; 741; 3291
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpII	GAGNNNNCTCNNNNNNNNNNNN!	2	3379; 4278
BpII	!NNNNNNNGAGNNNNNCTC	2	3347; 4246
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	3	1434; 1932; 4430
BpmI	!NNNNNNNNNNNNNNNNCTCCAG	1	4373
Bpu10I	CC!TNAGC	2	1353; 1371
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	4272
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4884; 5423
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	2	3966; 5125
BpuMI	CC!SGG	9	644; 737; 1433; 1517; 1946; 3594; 3754; 4367; 5131

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	4579
Bsa29I	AT!CGAT	1	3430
BsaAI	YAC!GTR	3	340; 2706; 3894
BsaBI	GATNN!NNATC	2	2252; 3449
BsaHI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
BsaJI	C!CNNGG	23	360; 1080; 1516; 1656; 1679; 1819; 1843; 1898; 1945; 3124; 3196; 3319; 3354; 3363; 3412; 3753; 4022; 4427; 4554; 4555; 4657; 4658; 5348
BsaMI	GAATGCN!	2	1101; 2341
BsaMI	G!CATTC	2	1020; 2434
BsaWI	W!CCGGW	7	785; 828; 1926; 3621; 4465; 5155; 5302
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	2670
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	2640
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	2591; 4498
Bsc4I	CCNNNNN!NNGG	24	49; 680; 773; 861; 956; 1001; 1432; 1657; 1820; 2602; 2928; 3320; 3571; 4115; 4396; 4428; 4560; 4595; 4645; 4677; 5030; 5309; 5475; 5493
BscAI	GCATCNNNN!	9	1239; 1863; 1878; 2405; 3168; 3240; 3888; 3952; 4227
BscAI	!NNNNNNGATGC	7	360; 1129; 1589; 3551; 3806; 4022; 5414
BseI	ACTGGN!	5	961; 970; 3534; 3735; 4981
BseI	C!CAGT	9	295; 654; 747; 950; 1361; 2619; 3297; 5093; 5106
Bse8I	GATNN!NNATC	2	2252; 3449
Bse21I	CC!TNAGG	2	3070; 4702
Bse118I	R!CCGGY	9	785; 1179; 1488; 1638; 1926; 2807; 3909; 4090; 4373
BseAI	T!CCGGA	1	828
BseBI	CC!WGG	19	90; 283; 1533; 1658; 1770; 1845; 1899; 1983; 2121; 2134; 3126; 3181; 3198; 3977; 4556; 4659; 5349; 5362; 5483
BseCI	AT!CGAT	1	3430
BseDI	C!CNNGG	23	360; 1080; 1516; 1656; 1679; 1819; 1843; 1898; 1945; 3124; 3196; 3319; 3354; 3363; 3412; 3753; 4022; 4427; 4554; 4555; 4657; 4658; 5348
Bse3DI	GCAATGNN!	2	1177; 3823
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	7	1475; 1958; 2198; 3450; 3907; 3932; 4386
BseGI	!CATCC	4	1528; 1894; 2176; 3276
BseJI	GATNN!NNATC	2	2252; 3449
BseLI	CCNNNNN!NNGG	24	49; 680; 773; 861; 956; 1001; 1432; 1657; 1820; 2602; 2928; 3320; 3571; 4115; 4396; 4428; 4560; 4595; 4645; 4677; 5030; 5309; 5475; 5493
BseMI	GCAATGNN!	2	1177; 3823
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	4716
BseMII	!NNNNNNNNCTGAG	7	1344; 1362; 3061; 3363; 4244; 4816; 5225
BseNI	ACTGGN!	5	961; 970; 3534; 3735; 4981
BseNI	C!CAGT	9	295; 654; 747; 950; 1361; 2619; 3297; 5093; 5106
BsePI	G!CGCGC	2	662; 755
BseRI	GAGGAGNNNNNNNNNN!	2	1518; 3408
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGC!C	6	1528; 1657; 1906; 3536; 3629; 5198
BseXI	GCAGCNNNNNNNN!	11	1285; 1504; 1739; 2161; 2174; 2378; 3663; 3705; 4226; 4679; 5179
BseXI	!NNNNNNNNNNNGCTGC	13	601; 694; 823; 883; 1318; 1633; 2131; 2872; 3537; 3721; 3814; 4880; 5086
BseX3I	C!GGCCG	2	2234; 3496
BseYI	C!CCAGC	3	3133; 3205; 5204
BseYI	G!CTGGG	1	4094
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	1	1299
BsgI	!NNNNNNNNNNNNNNCTGCAC	3	822; 882; 1616
Bsh1236I	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bsh1285I	CGRY!CG	4	790; 2237; 3499; 5174
BshFI	GG!CC	32	84; 277; 642; 735; 1110; 1212; 1239; 1324; 1561; 1661; 1690; 2119; 2175; 2197; 2236; 2556; 2698; 3353; 3359; 3368; 3411; 3498; 3672; 4063; 4090; 4599; 4656; 4689; 5034; 5468; 5486; 5497
BshNI	G!GYRCC	7	465; 1485; 1523; 1923; 2743; 3589; 3624
BshTI	A!CCGGT	2	785; 1926
BshVI	AT!CGAT	1	3430
BsiEI	CGRY!CG	4	790; 2237; 3499; 5174
BsiHKAI	GWGCW!C	3	3703; 3893; 5198
BsiHKCI	C!YCGRG	0	
BsiSI	C!CGG	30	644; 737; 786; 829; 1180; 1432; 1489; 1516; 1579; 1639; 1927; 1945; 2052; 2097; 2808; 3495; 3572; 3594; 3622; 3753; 3843; 3910; 4091; 4366; 4374; 4466; 4940; 5130; 5156; 5303
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	24	49; 680; 773; 861; 956; 1001; 1432; 1657; 1820; 2602; 2928; 3320; 3571; 4115; 4396; 4428; 4560; 4595; 4645; 4677; 5030; 5309; 5475; 5493
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3741; 4273; 4382
BsIFI	!NNNNNNNNNNNNNGTCCC	4	3106; 3178; 3242; 4537
BsmI	GAATGCN!	2	1101; 2341
BsmI	G!CATTC	2	1020; 2434
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	813; 3014; 3432; 4451; 4579
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	1	813
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3741; 4273; 4382
BsmFI	!NNNNNNNNNNNNNGTCCC	4	3106; 3178; 3242; 4537
BsnI	GG!CC	32	84; 277; 642; 735; 1110; 1212; 1239; 1324; 1561; 1661; 1690; 2119; 2175; 2197; 2236; 2556; 2698; 3353; 3359; 3368; 3411; 3498; 3672; 4063; 4090; 4599; 4656; 4689; 5034; 5468; 5486; 5497
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	1	4579
BsoBI	C!YCGRG	0	
Bsp13I	T!CCGGA	1	828
Bsp19I	C!CATGG	3	360; 3319; 4022
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 4393
Bsp24I	!NNNNNNCCANNNNNGTC	2	4814; 4992
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	4846; 5024
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 4361
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	4272
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
Bsp1286I	GDGCH!C	11	1528; 1657; 1906; 2781; 3536; 3629; 3703; 3893; 3955; 4665; 5198
Bsp1407I	T!GTACA	1	1459
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	53	58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 834; 879; 1091; 1177; 1253; 1426; 1429; 1706; 1747; 1814; 1853; 1970; 2049; 2108; 2142; 2153; 2180; 2237; 2905; 2908; 2922; 3012; 3260; 3272; 3281; 3293; 3303; 3314; 3360; 3499; 3562; 4064; 4109; 4175; 4201; 4326; 4329; 4477; 4609; 4916; 5060; 5556
BspACI	G!CGG	35	370; 403; 528; 623; 647; 716; 740; 973; 1474; 1480; 1950; 2007; 2017; 2223; 2233; 2850; 2877; 2965; 3075; 3656; 3720; 3821; 3824; 4104; 4159; 4257; 4395; 4542; 4682; 4925; 5170; 5291; 5310; 5437; 5465
BspCNI	CTCAGNNNNNNNN!	1	4715
BspCNI	!NNNNNNNCTGAG	7	1345; 1363; 3062; 3364; 4245; 4817; 5226
BspDI	AT!CGAT	1	3430
BspD6I	GACTNNNN!	5	418; 2249; 2663; 4269; 5146
BspD6I	!NNNNNGAGTC	2	2626; 3058
BspEI	T!CCGGA	1	828

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BspFNI	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465
BspHI	T!CATGA	2	3016; 4788
BspLI	GGN!NCC	22	467; 651; 744; 781; 1325; 1487; 1525; 1925; 2101; 2745; 2766; 2778; 2969; 3130; 3202; 3591; 3626; 4474; 4553; 4598; 5441; 5480
BspMI	ACCTGCNNNN!	3	880; 3858; 4308
BspMI	!NNNNNNNNGCAGGT	2	2001; 3477
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	11	694; 787; 1443; 2028; 3458; 3769; 4015; 4407; 4766; 4864; 4950
BspPI	!NNNNNGATCC	10	580; 665; 758; 774; 986; 1244; 3834; 4378; 4765; 4862
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3934; 4144
BspTI	C!TTAAG	1	2472
BspT104I	TT!CGAA	1	4272
BspT107I	G!GYRCC	7	465; 1485; 1523; 1923; 2743; 3589; 3624
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	1	4579
BsrI	ACTGGN!	5	961; 970; 3534; 3735; 4981
BsrI	C!CAGT	9	295; 654; 747; 950; 1361; 2619; 3297; 5093; 5106
BsrBI	CCG!CTC	2	3014; 4203
BsrBI	GAG!CGG	2	2850; 4257
BsrDI	GCAATGNN!	2	1177; 3823
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	9	785; 1179; 1488; 1638; 1926; 2807; 3909; 4090; 4373
BsrGI	T!GTACA	1	1459
BsrSI	ACTGGN!	5	961; 970; 3534; 3735; 4981
BsrSI	C!CAGT	9	295; 654; 747; 950; 1361; 2619; 3297; 5093; 5106
BssAI	R!CCGGY	9	785; 1179; 1488; 1638; 1926; 2807; 3909; 4090; 4373
BssECI	C!CNNGG	23	360; 1080; 1516; 1656; 1679; 1819; 1843; 1898; 1945; 3124; 3196; 3319; 3354; 3363; 3412; 3753; 4022; 4427; 4554; 4555; 4657; 4658; 5348
BssHII	G!CGCGC	2	662; 755
BssKI	!CCNNGG	28	88; 281; 642; 735; 1431; 1515; 1531; 1656; 1768; 1843; 1897; 1944; 1981; 2119; 2132; 3124; 3179; 3196; 3592; 3752; 3975; 4365; 4554; 4657; 5129; 5347; 5360; 5481
BssMI	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
BssNI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	4308; 5335
BssSI	C!TCGTG	2	1668; 4182
BssTII	C!CWWGG	5	360; 3319; 3412; 4022; 4427
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	3057; 3934; 4144
Bst98I	C!TTAAG	1	2472
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
BstAFI	C!TTAAG	1	2472
BstAPI	GCANNNN!NTGC	3	3157; 3229; 4691
BstAUI	T!GTACA	1	1459
BstBI	TT!CGAA	1	4272
Bst2BI	C!ACGAG	2	4308; 5335
Bst2BI	C!TCGTG	2	1668; 4182
BstBAI	YAC!GTR	3	340; 2706; 3894
Bst4CI	ACN!GT	16	76; 198; 269; 543; 581; 860; 868; 1155; 2681; 3970; 4086; 4194; 4517; 5008; 5478; 5549
BstC8I	GCN!NGC	41	86; 279; 593; 664; 757; 806; 810; 1060; 1181; 1278; 1285; 1611; 1644; 1706; 2035; 2041; 2167; 2809; 2852; 2866; 3139; 3158; 3211; 3230; 3484; 3670; 3889; 3955; 3961; 3993; 4034; 4038; 4092; 4375; 4562; 4609; 4665; 4687; 4898; 5458; 5495
BstDEI	C!TNAG	8	1353; 1371; 3070; 3372; 4253; 4702; 4825; 5234
BstDSI	C!CRYGG	4	360; 1080; 3319; 4022
BstEII	G!GTNACC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	7	1475; 1958; 2198; 3450; 3907; 3932; 4386
BstF5I	!CATCC	4	1528; 1894; 2176; 3276
BstFNI	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465
BstH2I	RGCGC!Y	5	2040; 2857; 2865; 3593; 5268
BstHHI	GCG!C	36	664; 666; 757; 759; 962; 1001; 1162; 1396; 1777; 1818; 1974; 1996; 2039; 2059; 2149; 2184; 2856; 2864; 2890; 2912; 2921; 2934; 2965; 3584; 3592; 3656; 3693; 3959; 4219; 4395; 4481; 4884; 4993; 5167; 5267; 5334
BstKTI	GAT!C	31	588; 673; 689; 766; 782; 994; 1076; 1115; 1166; 1252; 1400; 1438; 1630; 2023; 2250; 3430; 3434; 3453; 3764; 3842; 3923; 3932; 4010; 4386; 4402; 4761; 4773; 4851; 4859; 4870; 4945
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNNGAGAC	5	813; 3014; 3432; 4451; 4579
BstMBI	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
BstMCI	CGRY!CG	4	790; 2237; 3499; 5174
BstMWI	GCNNNNN!NNGC	45	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 814; 1055; 1116; 1176; 1189; 1492; 1579; 1639; 1652; 1696; 1978; 2045; 2116; 2181; 2817; 2847; 2874; 2916; 3157; 3229; 3280; 3359; 3581; 3665; 3688; 3827; 3950; 4033; 4300; 4487; 4691; 4890; 5462
BstNI	CC!WGG	19	90; 283; 1533; 1658; 1770; 1845; 1899; 1983; 2121; 2134; 3126; 3181; 3198; 3977; 4556; 4659; 5349; 5362; 5483
BstNSI	RCATG!Y	5	599; 3160; 3232; 3995; 5512
BstOI	CC!WGG	19	90; 283; 1533; 1658; 1770; 1845; 1899; 1983; 2121; 2134; 3126; 3181; 3198; 3977; 4556; 4659; 5349; 5362; 5483
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	28	88; 281; 642; 735; 1431; 1515; 1531; 1656; 1768; 1843; 1897; 1944; 1981; 2119; 2132; 3124; 3179; 3196; 3592; 3752; 3975; 4365; 4554; 4657; 5129; 5347; 5360; 5481
BstSFI	C!TRYAG	3	2925; 5052; 5243
BstSLI	GKGC M!C	6	1528; 1657; 1906; 3536; 3629; 5198
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465
Bst2UI	CC!WGG	19	90; 283; 1533; 1658; 1770; 1845; 1899; 1983; 2121; 2134; 3126; 3181; 3198; 3977; 4556; 4659; 5349; 5362; 5483
BstV1I	GCAGC N N N N N N N N!	11	1285; 1504; 1739; 2161; 2174; 2378; 3663; 3705; 4226; 4679; 5179
BstV1I	! N N N N N N N N N N N N G C T G C	13	601; 694; 823; 883; 1318; 1633; 2131; 2872; 3537; 3721; 3814; 4880; 5086
BstV2I	GAAGACNN!	0	
BstV2I	! N N N N N N G T C T T C	0	
BstXI	CCANNNNN!NTGG	1	800
BstX2I	R!GATCY	13	585; 670; 686; 763; 779; 1249; 3761; 4007; 4399; 4758; 4770; 4856; 4867
BstYI	R!GATCY	13	585; 670; 686; 763; 779; 1249; 3761; 4007; 4399; 4758; 4770; 4856; 4867
BstZI	C!GGCCG	2	2234; 3496
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	3019; 3809; 5310
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	3430
Bsu36I	CC!TNAGG	2	3070; 4702
BsuRI	GG!CC	32	84; 277; 642; 735; 1110; 1212; 1239; 1324; 1561; 1661; 1690; 2119; 2175; 2197; 2236; 2556; 2698; 3353; 3359; 3368; 3411; 3498; 3672; 4063; 4090; 4599; 4656; 4689; 5034; 5468; 5486; 5497
BsuTUI	AT!CGAT	1	3430
BtgI	C!CRYGG	4	360; 1080; 3319; 4022
BtgZI	GCGATGNNNNNNNNNN!	4	1609; 2080; 2707; 4042
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3861; 4205

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BthCI	GCNG!C	57	614; 617; 620; 623; 650; 662; 707; 710; 713; 716; 743; 755; 839; 899; 976; 1276; 1283; 1334; 1337; 1431; 1495; 1649; 1730; 2010; 2051; 2110; 2147; 2155; 2165; 2239; 2369; 2888; 2910; 2924; 3362; 3501; 3553; 3564; 3654; 3659; 3696; 3737; 3824; 3830; 4066; 4162; 4203; 4217; 4331; 4670; 4685; 4896; 5102; 5105; 5170; 5313; 5468
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	2429
BtsCI	GGATGNN!	7	1475; 1958; 2198; 3450; 3907; 3932; 4386
BtsCI	!CATCC	4	1528; 1894; 2176; 3276
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	880; 3858; 4308
BveI	!NNNNNNNNNGCAGGT	2	2001; 3477
Cac8I	GCN!NGC	41	86; 279; 593; 664; 757; 806; 810; 1060; 1181; 1278; 1285; 1611; 1644; 1706; 2035; 2041; 2167; 2809; 2852; 2866; 3139; 3158; 3211; 3230; 3484; 3670; 3889; 3955; 3961; 3993; 4034; 4038; 4092; 4375; 4562; 4609; 4665; 4687; 4898; 5458; 5495
CaiI	CAGNNN!CTG	3	956; 4691; 5099
CciI	T!CATGA	2	3016; 4788
CciNI	GC!GGCCGC	1	2234
CdiI	CATC!G	8	352; 1316; 1859; 1874; 3879; 3884; 4082; 4223
CdiI	C!GATG	6	823; 1105; 1595; 2066; 2693; 4028
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	5462
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 3251; 3293
CelII	GC!TNAGC	0	
CfoI	GCG!C	36	664; 666; 757; 759; 962; 1001; 1162; 1396; 1777; 1818; 1974; 1996; 2039; 2059; 2149; 2184; 2856; 2864; 2890; 2912; 2921; 2934; 2965; 3584; 3592; 3656; 3693; 3959; 4219; 4395; 4481; 4884; 4993; 5167; 5267; 5334
CfrI	Y!GGCCR	9	1108; 1210; 1559; 2195; 2234; 3496; 3670; 4061; 4088
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	9	785; 1179; 1488; 1638; 1926; 2807; 3909; 4090; 4373
Cfr13I	G!GNCC	15	83; 276; 641; 734; 831; 864; 1323; 1406; 1660; 2697; 4106; 4551; 4597; 4655; 4688
Cfr42I	CCGC!GG	0	
ChaI	GATC!	31	589; 674; 690; 767; 783; 995; 1077; 1116; 1167; 1253; 1401; 1439; 1631; 2024; 2251; 3431; 3435; 3454; 3765; 3843; 3924; 3933; 4011; 4387; 4403; 4762; 4774; 4852; 4860; 4871; 4946
CjeI	CCANNNNNNGTNNNNNNNNNNNNNN!	4	3407; 4847; 4947; 5025
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 3074; 3169; 4361; 4911; 5466
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	7	98; 291; 3108; 3203; 4395; 4945; 5500
CjeI	!NNNNNNNNCCANNNNNNGT	4	3373; 4813; 4913; 4991
CjePI	CCANNNNNNNNTCNNNNNNNNNNNNNN!	2	4847; 5025
CjePI	!NNNNNNNNGANNNNNNNTGG	4	257; 1065; 4361; 4960
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	4	290; 1098; 4394; 4993
CjePI	!NNNNNNNNCCANNNNNNNNTC	2	4814; 4992
Clal	AT!CGAT	1	3430
CpoI	CG!GWCCG	2	831; 4106
CseI	GACGCNNNNN!	5	526; 617; 710; 4300; 4379
CseI	!NNNNNNNNNNNGCGTC	3	2923; 4818; 5396
CsiI	A!CCWGGT	1	3179
CspI	CG!GWCCG	2	831; 4106
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 869; 1101; 1460; 1916; 3895
Csp45I	TT!CGAA	1	4272
CspAI	A!CCGGT	2	785; 1926
CspCI	CAANNNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNNNN!	3	1906; 2870; 4479
CstMI	!NNNNNNNNNNNNNNNNNNNNCTCCT	0	
CviAII	C!ATG	23	301; 361; 596; 933; 1208; 1403; 1448; 1721; 1751; 2000; 3017; 3157; 3229; 3320; 3461; 3806; 3992; 4023; 4049; 4405; 4789; 5509; 5560

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CviJI	RG!CY	115	42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 808; 917; 1049; 1062; 1110; 1183; 1212; 1239; 1283; 1324; 1357; 1457; 1508; 1541; 1561; 1613; 1625; 1646; 1661; 1684; 1690; 1762; 1862; 1876; 1910; 1944; 1981; 2043; 2096; 2119; 2137; 2152; 2165; 2175; 2197; 2236; 2259; 2369; 2536; 2556; 2698; 2779; 2793; 2807; 3088; 3129; 3201; 3324; 3353; 3359; 3368; 3376; 3399; 3411; 3417; 3498; 3515; 3523; 3550; 3575; 3659; 3668; 3672; 3696; 3734; 3810; 3827; 3846; 3909; 3953; 3963; 3980; 4063; 4090; 4094; 4131; 4154; 4170; 4350; 4377; 4438; 4560; 4599; 4656; 4663; 4670; 4689; 4700; 4951; 4980; 5023; 5034; 5099; 5178; 5203; 5208; 5254; 5344; 5442; 5468; 5486; 5497
CviKI-1	RG!CY	115	42; 84; 93; 277; 566; 628; 637; 642; 650; 721; 730; 735; 743; 808; 917; 1049; 1062; 1110; 1183; 1212; 1239; 1283; 1324; 1357; 1457; 1508; 1541; 1561; 1613; 1625; 1646; 1661; 1684; 1690; 1762; 1862; 1876; 1910; 1944; 1981; 2043; 2096; 2119; 2137; 2152; 2165; 2175; 2197; 2236; 2259; 2369; 2536; 2556; 2698; 2779; 2793; 2807; 3088; 3129; 3201; 3324; 3353; 3359; 3368; 3376; 3399; 3411; 3417; 3498; 3515; 3523; 3550; 3575; 3659; 3668; 3672; 3696; 3734; 3810; 3827; 3846; 3909; 3953; 3963; 3980; 4063; 4090; 4094; 4131; 4154; 4170; 4350; 4377; 4438; 4560; 4599; 4656; 4663; 4670; 4689; 4700; 4951; 4980; 5023; 5034; 5099; 5178; 5203; 5208; 5254; 5344; 5442; 5468; 5486; 5497
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 869; 1101; 1460; 1916; 3895
DdeI	C!TNAG	8	1353; 1371; 3070; 3372; 4253; 4702; 4825; 5234
DinI	GGC!GCC	1	3591
DpnI	GA!TC	31	587; 672; 688; 765; 781; 993; 1075; 1114; 1165; 1251; 1399; 1437; 1629; 2022; 2249; 3429; 3433; 3452; 3763; 3841; 3922; 3931; 4009; 4385; 4401; 4760; 4772; 4850; 4858; 4869; 4944
DpnII	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
DraI	TTT!AAA	5	2215; 2229; 2292; 4734; 4753
DraII	RG!GNCCY	1	4688
DraIII	CACNNN!GTG	1	2706
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNNNN!	3	266; 1816; 5070
DraRI	!NNNNNNNNNNNNNNNNNGTCTTG	0	
DrdI	GACNNN!NNGTC	3	2661; 3617; 5406
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	2661; 3617; 5406
EaeI	Y!GGCCR	9	1108; 1210; 1559; 2195; 2234; 3496; 3670; 4061; 4088
EagI	C!GGCCG	2	2234; 3496
Eam1104I	CTCTCN!	0	
Eam1104I	!NNNNGAAGAG	3	3057; 3934; 4144
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	3	3057; 3934; 4144
EciI	GGCGANNNNNNNNNNNNNN!	5	1965; 3090; 4119; 5306; 5452
EciI	!NNNNNNNNNTCCGCC	7	496; 1166; 1242; 1736; 3261; 3282; 3303
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	2234; 3496
Eco24I	GRGCY!C	3	2781; 3955; 4665
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	1	4579
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	5	831; 864; 1406; 4106; 4551
Eco47III	AGC!GCT	1	2038
Eco52I	C!GGCCG	2	2234; 3496
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	5	1641; 1713; 1884; 3736; 4168
Eco57I	!NNNNNNNNNNNNNNNCTTCAG	1	4966
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	2	3070; 4702
Eco88I	C!YCGRG	0	
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eco130I	C!CWGG	5	360; 3319; 3412; 4022; 4427
Eco147I	AGG!CCT	1	3411
EcoHI	!CCSGG	9	642; 735; 1431; 1515; 1944; 3592; 3752; 4365; 5129
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	8	1434; 1641; 1713; 1884; 1932; 3736; 4168; 4430
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	2	4373; 4966
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	4688
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	19	88; 281; 1531; 1656; 1768; 1843; 1897; 1981; 2119; 2132; 3124; 3179; 3196; 3975; 4554; 4657; 5347; 5360; 5481
EcoRV	GAT!ATC	0	
EcoT14I	C!CWGG	5	360; 3319; 3412; 4022; 4427
EcoT22I	ATGCA!T	3	3162; 3234; 5565
EcoT38I	GRGCY!C	3	2781; 3955; 4665
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	3591
EheI	GGC!GCC	1	3591
ErhI	C!CWGG	5	360; 3319; 3412; 4022; 4427
EsaBC3I	TC!GA	17	983; 1265; 1538; 1832; 1859; 2204; 2740; 3431; 3704; 3860; 3884; 3920; 4082; 4273; 4318; 4573; 5411
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	1	813
FaeI	CATG!	23	304; 364; 599; 936; 1211; 1406; 1451; 1724; 1754; 2003; 3020; 3160; 3232; 3323; 3464; 3809; 3995; 4026; 4052; 4408; 4792; 5512; 5563
Fail	YA!TR	64	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 883; 894; 934; 1069; 1204; 1209; 1404; 1449; 1722; 1752; 2001; 2158; 2252; 2262; 2328; 2373; 2578; 3006; 3018; 3149; 3158; 3221; 3230; 3254; 3321; 3345; 3462; 3526; 3807; 3832; 3993; 4024; 4050; 4122; 4338; 4406; 4484; 4536; 4697; 4714; 4716; 4718; 4790; 5068; 5257; 5373; 5446; 5510; 5561
FaII	AAGNNNNNCTTNNNNNNNNNNNN!	2	1259; 3930
FaII	!NNNNNNNNNAAGNNNNNNCTT	2	1227; 3898
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3741; 4273; 4382
FaqI	!NNNNNNNNNNNNNGTCCC	4	3106; 3178; 3242; 4537
FatI	!CATG	23	300; 360; 595; 932; 1207; 1402; 1447; 1720; 1750; 1999; 3016; 3156; 3228; 3319; 3460; 3805; 3991; 4022; 4048; 4404; 4788; 5508; 5559
FauI	CCCGCNNNN!	10	93; 119; 286; 1713; 1821; 2912; 3267; 3288; 4484; 4616
FauI	!NNNNNGCGGG	8	616; 709; 2010; 2843; 3713; 4250; 4388; 4535
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FbII	GT!MKAC	0	
FmuI	GGNC!C	15	86; 279; 644; 737; 834; 867; 1326; 1409; 1663; 2700; 4109; 4554; 4600; 4658; 4691
Fnu4HI	GC!NGC	57	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 837; 897; 974; 1274; 1281; 1332; 1335; 1429; 1493; 1647; 1728; 2008; 2049; 2108; 2145; 2153; 2163; 2237; 2367; 2886; 2908; 2922; 3360; 3499; 3551; 3562; 3652; 3657; 3694; 3735; 3822; 3828; 4064; 4160; 4201; 4215; 4329; 4668; 4683; 4894; 5100; 5103; 5168; 5311; 5466
FokI	GGATGNNNNNNNN!	7	1482; 1965; 2205; 3457; 3914; 3939; 4393
FokI	!NNNNNNNNNNNNNCATCC	4	1515; 1881; 2163; 3263
FriOI	GRGCY!C	3	2781; 3955; 4665
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	3	1995; 2148; 3692
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	8	592; 2245; 2439; 2857; 3413; 4428; 4762; 5015

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FspEI	CCNNNNNNNNNNNN!	188	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; 822; 842; 868; 885; 903; 920; 959; 1008; 1048; 1063; 1092; 1117; 1190; 1226; 1253; 1269; 1301; 1322; 1338; 1352; 1374; 1395; 1422; 1439; 1502; 1529; 1545; 1575; 1592; 1613; 1631; 1649; 1663; 1679; 1704; 1718; 1760; 1782; 1826; 1856; 1911; 1940; 1958; 1983; 2047; 2062; 2098; 2116; 2133; 2155; 2189; 2211; 2250; 2273; 2312; 2326; 2467; 2562; 2586; 2609; 2632; 2650; 2672; 2693; 2712; 2731; 2760; 2781; 2795; 2821; 2909; 2935; 2984; 3025; 3043; 3082; 3098; 3136; 3193; 3208; 3265; 3285; 3299; 3316; 3330; 3367; 3382; 3425; 3508; 3575; 3606; 3626; 3641; 3686; 3700; 3766; 3780; 3799; 3815; 3856; 3876; 3923; 3973; 3989; 4009; 4034; 4054; 4077; 4104; 4122; 4148; 4188; 4214; 4238; 4294; 4308; 4336; 4379; 4400; 4435; 4479; 4567; 4591; 4613; 4633; 4649; 4670; 4684; 4703; 4787; 4807; 4835; 4850; 4884; 4926; 4953; 4968; 5013; 5037; 5051; 5073; 5099; 5119; 5143; 5169; 5217; 5236; 5255; 5281; 5316; 5361; 5391; 5405; 5456; 5470; 5495; 5511; 5532; 5561
FspEI	!NNNNNNNNNNNNNNNGG	153	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 701; 722; 759; 786; 814; 847; 903; 942; 987; 1044; 1067; 1092; 1125; 1152; 1194; 1213; 1251; 1300; 1389; 1417; 1452; 1474; 1501; 1527; 1564; 1591; 1624; 1643; 1666; 1744; 1776; 1806; 1830; 1851; 1869; 1896; 1930; 1968; 1986; 2025; 2053; 2082; 2101; 2119; 2151; 2175; 2205; 2261; 2361; 2430; 2460; 2538; 2587; 2609; 2637; 2673; 2718; 2747; 2783; 2802; 2830; 2850; 2913; 2936; 3044; 3076; 3094; 3123; 3166; 3195; 3306; 3335; 3378; 3399; 3427; 3460; 3480; 3505; 3532; 3557; 3579; 3607; 3633; 3654; 3705; 3726; 3744; 3792; 3828; 3884; 3909; 3933; 3962; 3985; 4009; 4035; 4057; 4076; 4101; 4141; 4177; 4242; 4327; 4351; 4380; 4414; 4435; 4455; 4500; 4527; 4546; 4579; 4631; 4662; 4689; 4741; 4839; 4910; 4955; 5016; 5081; 5115; 5141; 5159; 5195; 5265; 5288; 5310; 5334; 5367; 5415; 5450; 5468; 5525
Fsp4HI	GC!NGC	57	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 837; 897; 974; 1274; 1281; 1332; 1335; 1429; 1493; 1647; 1728; 2008; 2049; 2108; 2145; 2153; 2163; 2237; 2367; 2886; 2908; 2922; 3360; 3499; 3551; 3562; 3652; 3657; 3694; 3735; 3822; 3828; 4064; 4160; 4201; 4215; 4329; 4668; 4683; 4894; 5100; 5103; 5168; 5311; 5466
GdiII	C!GGCCR	3	1559; 2234; 3496
GdiII	Y!GGCCG	6	1108; 1210; 2234; 3496; 4061; 4088
GlaI	GC!GC	36	663; 665; 756; 758; 961; 1000; 1161; 1395; 1776; 1817; 1973; 1995; 2038; 2058; 2148; 2183; 2855; 2863; 2889; 2911; 2920; 2933; 2964; 3583; 3591; 3655; 3692; 3958; 4218; 4394; 4480; 4883; 4992; 5166; 5266; 5333
GluI	GC!NGC	57	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 837; 897; 974; 1274; 1281; 1332; 1335; 1429; 1493; 1647; 1728; 2008; 2049; 2108; 2145; 2153; 2163; 2237; 2367; 2886; 2908; 2922; 3360; 3499; 3551; 3562; 3652; 3657; 3694; 3735; 3822; 3828; 4064; 4160; 4201; 4215; 4329; 4668; 4683; 4894; 5100; 5103; 5168; 5311; 5466
GsaI	CCCAG!C	3	3137; 3209; 5208
GsaI	GCTGG!G	1	4098
GsuI	CTGGAGNNNNNNNNNNNNNN!	3	1434; 1932; 4430
GsuI	!NNNNNNNNNNNNNCTCCAG	1	4373
HaeI	WGG!CCW	9	1239; 2119; 2175; 2197; 3411; 3672; 5034; 5486; 5497
HaeII	RGCGC!Y	5	2040; 2857; 2865; 3593; 5268
HaeIII	GG!CC	32	84; 277; 642; 735; 1110; 1212; 1239; 1324; 1561; 1661; 1690; 2119; 2175; 2197; 2236; 2556; 2698; 3353; 3359; 3368; 3411; 3498; 3672; 4063; 4090; 4599; 4656; 4689; 5034; 5468; 5486; 5497
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	3	1130; 2265; 3786
HaeIV	!NNNNNNNNNGAYNNNNNRTC	3	1096; 2231; 3752
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	3	1129; 2264; 3785
HaeIV	!NNNNNNNGAYNNNNNRTC	3	1098; 2233; 3754
HapII	C!CGG	30	644; 737; 786; 829; 1180; 1432; 1489; 1516; 1579; 1639; 1927; 1945; 2052; 2097; 2808; 3495; 3572; 3594; 3622; 3753; 3843; 3910; 4091; 4366; 4374; 4466; 4940; 5130; 5156; 5303
HgaI	GACGCNNNNN!	5	526; 617; 710; 4300; 4379
HgaI	!NNNNNNNNNGCGTC	3	2923; 4818; 5396

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	36	664; 666; 757; 759; 962; 1001; 1162; 1396; 1777; 1818; 1974; 1996; 2039; 2059; 2149; 2184; 2856; 2864; 2890; 2912; 2921; 2934; 2965; 3584; 3592; 3656; 3693; 3959; 4219; 4395; 4481; 4884; 4993; 5167; 5267; 5334
HinI	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
Hin1II	CATG!	23	304; 364; 599; 936; 1211; 1406; 1451; 1724; 1754; 2003; 3020; 3160; 3232; 3323; 3464; 3809; 3995; 4026; 4052; 4408; 4792; 5512; 5563
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	3	1129; 2264; 3785
Hin4I	!NNNNNNNGABNNNNNRTC	5	810; 1097; 2232; 3753; 3783
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	5	842; 1129; 2264; 3785; 3815
Hin4I	!NNNNNNNGAYNNNNNVTC	3	1097; 2232; 3753
Hin6I	G!CGC	36	662; 664; 755; 757; 960; 999; 1160; 1394; 1775; 1816; 1972; 1994; 2037; 2057; 2147; 2182; 2854; 2862; 2888; 2910; 2919; 2932; 2963; 3582; 3590; 3654; 3691; 3957; 4217; 4393; 4479; 4882; 4991; 5165; 5265; 5332
HinP1I	G!CGC	36	662; 664; 755; 757; 960; 999; 1160; 1394; 1775; 1816; 1972; 1994; 2037; 2057; 2147; 2182; 2854; 2862; 2888; 2910; 2919; 2932; 2963; 3582; 3590; 3654; 3691; 3957; 4217; 4393; 4479; 4882; 4991; 5165; 5265; 5332
HincII	GTY!RAC	1	2353
HindII	GTY!RAC	1	2353
HindIII	A!AGCTT	0	
Hinfi	G!ANTC	13	410; 851; 2241; 2633; 2655; 3065; 4075; 4209; 4261; 4319; 4356; 5138; 5534
HpaI	GTT!AAC	1	2353
HpaII	C!CGG	30	644; 737; 786; 829; 1180; 1432; 1489; 1516; 1579; 1639; 1927; 1945; 2052; 2097; 2808; 3495; 3572; 3594; 3622; 3753; 3843; 3910; 4091; 4366; 4374; 4466; 4940; 5130; 5156; 5303
HphI	GGTGANNNNNNN!	6	376; 1016; 1835; 1859; 4661; 4777
HphI	!NNNNNNNTCACC	5	1068; 1505; 2131; 2707; 3768
Hpy8I	GTN!NAC	11	201; 539; 577; 1513; 1556; 1850; 2353; 2637; 2654; 2709; 5196
Hpy99I	CGWCG!	11	1266; 1323; 1554; 1800; 3680; 3708; 4002; 4017; 4294; 4679; 5412
Hpy166II	GTN!NAC	11	201; 539; 577; 1513; 1556; 1850; 2353; 2637; 2654; 2709; 5196
Hpy188I	TCN!GA	11	585; 2764; 3373; 3557; 3901; 4254; 4355; 4834; 4968; 5321; 5399
Hpy188III	TC!NNGA	27	605; 698; 829; 1247; 1370; 1421; 1670; 2245; 3017; 3069; 3382; 3435; 3608; 3924; 3933; 4016; 4072; 4116; 4206; 4239; 4308; 4789; 4863; 4946; 5044; 5142; 5276
HpyAV	CCTCANNNNNN!	3	4235; 4342; 5021
HpyAV	!NNNNNGAAGG	9	1752; 1859; 2823; 3718; 4447; 4463; 4646; 4963; 5273
HpyCH4III	ACN!GT	16	76; 198; 269; 543; 581; 860; 868; 1155; 2681; 3970; 4086; 4194; 4517; 5008; 5478; 5549
HpyCH4IV	A!CGT	19	122; 134; 175; 258; 339; 444; 1198; 1261; 1465; 1552; 1765; 2650; 2662; 2705; 2815; 3706; 3893; 4674; 4807
HpyCH4V	TG!CA	22	839; 899; 932; 1280; 1633; 2089; 2339; 2366; 2434; 3151; 3160; 3223; 3232; 3347; 3423; 3482; 3641; 3816; 3830; 4900; 5196; 5563
HpyF3I	C!TNAG	8	1353; 1371; 3070; 3372; 4253; 4702; 4825; 5234
HpyF10VI	GCNNNNN!NNGC	45	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 814; 1055; 1116; 1176; 1189; 1492; 1579; 1639; 1652; 1696; 1978; 2045; 2116; 2181; 2817; 2847; 2874; 2916; 3157; 3229; 3280; 3359; 3581; 3665; 3688; 3827; 3950; 4033; 4300; 4487; 4691; 4890; 5462
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 609; 702; 3590; 4292; 4371
Hsp92II	CATG!	23	304; 364; 599; 936; 1211; 1406; 1451; 1724; 1754; 2003; 3020; 3160; 3232; 3323; 3464; 3809; 3995; 4026; 4052; 4408; 4792; 5512; 5563
HspAI	G!CGC	36	662; 664; 755; 757; 960; 999; 1160; 1394; 1775; 1816; 1972; 1994; 2037; 2057; 2147; 2182; 2854; 2862; 2888; 2910; 2919; 2932; 2963; 3582; 3590; 3654; 3691; 3957; 4217; 4393; 4479; 4882; 4991; 5165; 5265; 5332
KasI	G!GCGCC	1	3589
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	1	828
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	2353
Kzo9I	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3934; 4144
LpnI	RGCI!GCY	5	2038; 2855; 2863; 3591; 5266
LpnPI	CCDGNNNNNNNNNNN!	80	102; 295; 618; 657; 711; 750; 799; 822; 842; 885; 915; 963; 1193; 1311; 1365; 1383; 1422; 1445; 1502; 1529; 1545; 1592; 1632; 1652; 1670; 1704; 1782; 1857; 1911; 1940; 1958; 1991; 2047; 2065; 2110; 2133; 2327; 2632; 2821; 3044; 3082; 3098; 3138; 3193; 3210; 3310; 3395; 3508; 3585; 3607; 3630; 3766; 3780; 3799; 3856; 3923; 3973; 3989; 4046; 4104; 4313; 4379; 4403; 4479; 4568; 4671; 4704; 4935; 4953; 5099; 5119; 5143; 5169; 5218; 5316; 5361; 5391; 5470; 5495; 5532
LpnPI	!NNNNNNNNNNNNNNCHGG	75	75; 268; 552; 619; 712; 771; 798; 903; 942; 987; 1044; 1101; 1125; 1152; 1398; 1417; 1474; 1501; 1527; 1564; 1624; 1643; 1755; 1830; 1884; 1912; 1930; 1968; 1996; 2025; 2082; 2106; 2151; 2205; 2673; 2793; 2850; 2913; 3111; 3123; 3183; 3195; 3427; 3472; 3515; 3557; 3579; 3607; 3654; 3716; 3738; 3828; 3895; 3918; 3962; 4057; 4076; 4101; 4250; 4351; 4394; 4451; 4541; 4644; 4671; 4689; 4925; 4962; 5115; 5141; 5281; 5299; 5334; 5415; 5468
Lsp1109I	GCAGCNNNNNNNN!	11	1285; 1504; 1739; 2161; 2174; 2378; 3663; 3705; 4226; 4679; 5179
Lsp1109I	!NNNNNNNNNNNNNGCTGC	13	601; 694; 823; 883; 1318; 1633; 2131; 2872; 3537; 3721; 3814; 4880; 5086
LweI	GCATCNNNNN!	9	1240; 1864; 1879; 2406; 3169; 3241; 3889; 3953; 4228
LweI	!NNNNNNNNNNNGATGC	7	357; 1126; 1586; 3548; 3803; 4019; 5411
MabI	A!CCWGGT	1	3179
MaeI	C!TAG	8	592; 2245; 2439; 2857; 3413; 4428; 4762; 5015
MaeII	A!CGT	19	122; 134; 175; 258; 339; 444; 1198; 1261; 1465; 1552; 1765; 2650; 2662; 2705; 2815; 3706; 3893; 4674; 4807
MaeIII	!GTNAC	16	61; 148; 497; 952; 1149; 1421; 1670; 2378; 2879; 2891; 3710; 4016; 4706; 4972; 5088; 5151
MaiI	GA!TC	31	587; 672; 688; 765; 781; 993; 1075; 1114; 1165; 1251; 1399; 1437; 1629; 2022; 2249; 3429; 3433; 3452; 3763; 3841; 3922; 3931; 4009; 4385; 4401; 4760; 4772; 4850; 4858; 4869; 4944
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	3014; 4203
MbiI	GAG!CGG	2	2850; 4257
MboI	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
MboII	GAAGANNNNNNNN!	9	1083; 1155; 1235; 1968; 2846; 3074; 3951; 4161; 4780
MboII	!NNNNNNNTCTTC	6	1730; 1775; 4241; 4408; 4608; 4851
McaTI	GCGC!GC	2	665; 758
MfeI	C!AATTG	1	2340
MfiI	R!GATCY	13	585; 670; 686; 763; 779; 1249; 3761; 4007; 4399; 4758; 4770; 4856; 4867
MhII	GDGCH!C	11	1528; 1657; 1906; 2781; 3536; 3629; 3703; 3893; 3955; 4665; 5198
MIsI	TGG!CCA	2	2197; 3672
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	2197; 3672
MlyI	GAGTCNNNNN!	2	2642; 3074
MlyI	!NNNNNGACTC	5	404; 2235; 2649; 4255; 5132
Mly113I	GG!CGCC	1	3590
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	2683
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	3	842; 5115; 5299
MnII	CCTCNNNNNNN!	10	1005; 1677; 1689; 2309; 3373; 4191; 4397; 4711; 5081; 5405
MnII	!NNNNNGAGG	20	541; 1259; 1496; 1577; 1814; 1826; 1877; 2165; 2269; 2734; 3065; 3343; 3386; 3401; 3441; 3505; 3641; 3998; 4428; 5331
Mph1103I	ATGCA!T	3	3162; 3234; 5565
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	828

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MroNI	G!CCGGC	4	1179; 2807; 4090; 4373
MroXI	GAANN!NNTTC	1	1698
MscI	TGG!CCA	2	2197; 3672
MseI	T!TAA	18	7; 2092; 2214; 2228; 2291; 2352; 2473; 2494; 2505; 2517; 2528; 2545; 2643; 2914; 4733; 4747; 4752; 4804
MslI	CAYNN!NNRTG	7	365; 798; 1029; 1518; 1668; 1845; 4027
MspI	C!CGG	30	644; 737; 786; 829; 1180; 1432; 1489; 1516; 1579; 1639; 1927; 1945; 2052; 2097; 2808; 3495; 3572; 3594; 3622; 3753; 3843; 3910; 4091; 4366; 4374; 4466; 4940; 5130; 5156; 5303
Msp20I	TGG!CCA	2	2197; 3672
MspA1I	CMG!CKG	10	614; 707; 836; 973; 2144; 2165; 3088; 3696; 4925; 5170
MspCI	C!TTAAG	1	2472
MspJI	CNNRNNNNNNNNN!	286	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; 830; 852; 867; 880; 894; 914; 930; 945; 958; 973; 989; 1008; 1028; 1062; 1091; 1104; 1123; 1146; 1173; 1192; 1220; 1233; 1247; 1269; 1289; 1310; 1323; 1338; 1351; 1364; 1382; 1395; 1413; 1433; 1455; 1478; 1501; 1514; 1528; 1544; 1565; 1586; 1601; 1615; 1631; 1651; 1664; 1680; 1703; 1717; 1731; 1754; 1767; 1781; 1802; 1820; 1844; 1857; 1871; 1892; 1910; 1923; 1939; 1957; 1975; 1990; 2007; 2023; 2046; 2064; 2098; 2116; 2132; 2145; 2160; 2178; 2193; 2232; 2250; 2263; 2278; 2297; 2314; 2327; 2368; 2382; 2395; 2413; 2451; 2466; 2484; 2525; 2549; 2569; 2587; 2608; 2631; 2663; 2678; 2700; 2718; 2731; 2752; 2769; 2782; 2795; 2811; 2824; 2854; 2869; 2894; 2912; 2925; 2940; 2964; 2978; 3002; 3027; 3043; 3081; 3097; 3136; 3150; 3164; 3192; 3208; 3222; 3236; 3265; 3278; 3299; 3308; 3330; 3360; 3376; 3394; 3424; 3447; 3471; 3495; 3514; 3542; 3568; 3584; 3597; 3620; 3634; 3654; 3667; 3681; 3700; 3714; 3727; 3743; 3758; 3771; 3787; 3802; 3818; 3843; 3862; 3878; 3891; 3904; 3922; 3936; 3950; 3966; 3988; 4004; 4023; 4045; 4061; 4084; 4103; 4117; 4133; 4147; 4167; 4183; 4196; 4218; 4251; 4265; 4285; 4298; 4312; 4366; 4379; 4402; 4415; 4434; 4451; 4478; 4514; 4547; 4566; 4591; 4612; 4639; 4652; 4669; 4683; 4698; 4714; 4774; 4799; 4815; 4837; 4850; 4864; 4895; 4909; 4934; 4952; 4967; 4980; 4999; 5012; 5027; 5056; 5075; 5093; 5118; 5133; 5152; 5168; 5187; 5205; 5221; 5235; 5254; 5281; 5304; 5326; 5345; 5360; 5373; 5390; 5410; 5437; 5450; 5469; 5494; 5517; 5531; 5544; 5561
MspJI	!NNNNNNNNNNNNYNG	240	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; 804; 830; 848; 879; 904; 936; 967; 984; 1027; 1045; 1065; 1084; 1101; 1126; 1143; 1162; 1194; 1221; 1238; 1263; 1284; 1301; 1324; 1347; 1374; 1395; 1418; 1440; 1475; 1502; 1519; 1551; 1569; 1591; 1616; 1636; 1654; 1672; 1691; 1717; 1737; 1755; 1776; 1794; 1816; 1845; 1866; 1884; 1913; 1931; 1955; 1977; 1997; 2020; 2038; 2055; 2072; 2090; 2107; 2132; 2152; 2171; 2188; 2206; 2224; 2242; 2271; 2300; 2342; 2425; 2460; 2487; 2510; 2539; 2583; 2605; 2637; 2673; 2690; 2711; 2748; 2768; 2785; 2802; 2837; 2855; 2873; 2890; 2914; 2936; 2963; 2991; 3017; 3055; 3076; 3093; 3111; 3134; 3155; 3183; 3206; 3227; 3245; 3266; 3283; 3306; 3330; 3350; 3368; 3390; 3421; 3443; 3469; 3488; 3505; 3533; 3552; 3571; 3589; 3607; 3628; 3650; 3674; 3707; 3727; 3745; 3766; 3792; 3819; 3836; 3853; 3870; 3896; 3918; 3940; 3958; 3978; 3997; 4019; 4057; 4077; 4101; 4121; 4141; 4168; 4192; 4225; 4244; 4272; 4294; 4323; 4351; 4376; 4395; 4414; 4435; 4452; 4469; 4500; 4527; 4547; 4570; 4590; 4627; 4644; 4663; 4689; 4709; 4748; 4775; 4794; 4812; 4849; 4867; 4908; 4926; 4952; 4969; 5001; 5030; 5058; 5079; 5102; 5121; 5142; 5160; 5177; 5195; 5221; 5242; 5262; 5282; 5300; 5321; 5347; 5364; 5383; 5402; 5431; 5450; 5468; 5487; 5505; 5523; 5546
MspR9I	CC!NGG	28	90; 283; 644; 737; 1433; 1517; 1533; 1658; 1770; 1845; 1899; 1946; 1983; 2121; 2134; 3126; 3181; 3198; 3594; 3754; 3977; 4367; 4556; 4659; 5131; 5349; 5362; 5483
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	2340
MvaI	CC!WGG	19	90; 283; 1533; 1658; 1770; 1845; 1899; 1983; 2121; 2134; 3126; 3181; 3198; 3977; 4556; 4659; 5349; 5362; 5483
Mva1269I	GAATGCN!	2	1101; 2341

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Mva1269I	G!CATTC	2	1020; 2434
MvnI	CG!CG	28	60; 662; 664; 755; 757; 999; 1093; 1162; 1396; 1816; 1972; 1974; 2065; 2182; 2239; 2514; 2890; 2910; 2934; 2965; 3656; 3957; 4395; 4479; 4542; 4611; 4884; 5465
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	45	90; 212; 244; 283; 376; 400; 617; 634; 656; 710; 727; 749; 814; 1055; 1116; 1176; 1189; 1492; 1579; 1639; 1652; 1696; 1978; 2045; 2116; 2181; 2817; 2847; 2874; 2916; 3157; 3229; 3280; 3359; 3581; 3665; 3688; 3827; 3950; 4033; 4300; 4487; 4691; 4890; 5462
NaeI	GCC!GGC	4	1181; 2809; 4092; 4375
NarI	GG!CGCC	1	3590
NciI	CC!SGG	9	644; 737; 1433; 1517; 1946; 3594; 3754; 4367; 5131
NcoI	C!CATGG	3	360; 3319; 4022
NdeI	CA!TATG	1	234
NdeII	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	4	1179; 2807; 4090; 4373
NheI	G!CTAGC	1	591
NlaIII	CATG!	23	304; 364; 599; 936; 1211; 1406; 1451; 1724; 1754; 2003; 3020; 3160; 3232; 3323; 3464; 3809; 3995; 4026; 4052; 4408; 4792; 5512; 5563
NlaIV	GGN!NCC	22	467; 651; 744; 781; 1325; 1487; 1525; 1925; 2101; 2745; 2766; 2778; 2969; 3130; 3202; 3591; 3626; 4474; 4553; 4598; 5441; 5480
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	2422; 2737; 4329
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	2	347; 5401
Nli3877I	CYCGR!G	0	
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	3	1844; 3379; 3815
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	5	618; 711; 1423; 1660; 3344
NmeDI	RCCGGYNNNNNN!	9	797; 1191; 1500; 1650; 1938; 2819; 3921; 4102; 4385
NmeDI	!NNNNNNNNNNNNRCCGGY	9	772; 1166; 1475; 1625; 1913; 2794; 3896; 4077; 4360
NmuCI	!GTSAC	6	1149; 1421; 1670; 2879; 3710; 4016
NotI	GC!GGCCGC	1	2234
NruI	TCG!CGA	0	
NsbI	TGC!GCA	3	1995; 2148; 3692
NsiI	ATGCA!T	3	3162; 3234; 5565
NspI	RCATG!Y	5	599; 3160; 3232; 3995; 5512
NspV	TT!CGAA	1	4272
OliI	CACNN!NNGTG	3	1518; 1668; 1845
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 871; 1103; 1462; 1918; 3897
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	3160; 3232; 3995
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	3016; 4788
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	4555; 4658
PauI	G!CGCGC	2	662; 755
PceI	AGG!CCT	1	3411
PciI	A!CATGT	1	5508
PciSI	GCTCTTCN!	0	
PciSI	!NNNNGAAGAGC	2	3934; 4144
PcsI	WCGNNNN!NNNCGW	8	1393; 1450; 3884; 3961; 4204; 4278; 4671; 5189
PctI	GAATGCN!	2	1101; 2341
PctI	G!CATTC	2	1020; 2434
PdiI	GCC!GGC	4	1181; 2809; 4092; 4375
PdmI	GAANN!NNTTC	1	1698
PfeI	G!AWTC	6	851; 4075; 4209; 4319; 4356; 5534
Pfl23II	C!GTACG	0	
PfIF1	GACN!NNGTC	3	824; 1197; 3708
PfIMI	CCANNNN!NTGG	3	680; 773; 956

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PfoI	T!CCNGGA	2	1768; 4365
PhoI	GG!CC	32	84; 277; 642; 735; 1110; 1212; 1239; 1324; 1561; 1661; 1690; 2119; 2175; 2197; 2236; 2556; 2698; 3353; 3359; 3368; 3411; 3498; 3672; 4063; 4090; 4599; 4656; 4689; 5034; 5468; 5486; 5497
PinAI	A!CCGGT	2	785; 1926
PlaDI	CATCAGNNNNNNNNNNNNNNNNNNNN!	1	3971
PlaDI	!NNNNNNNNNNNNNNNNNNNNCTGATG	3	1114; 3536; 3791
PleI	GAGTCNNNN!	2	2641; 3073
PleI	!NNNNNGACTC	5	404; 2235; 2649; 4255; 5132
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNNNCTCNNNNNNNNNNNN!	1	2672
PpiI	!NNNNNNNGAGNNNNNGTTC	3	1494; 1812; 4802
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	3	1526; 1844; 4834
PpiI	!NNNNNNNGAACNNNNNNNNCTC	1	2640
PpsI	GAGTCNNNN!	2	2641; 3073
PpsI	!NNNNNGACTC	5	404; 2235; 2649; 4255; 5132
Ppu10I	A!TGCAT	3	3158; 3230; 5561
Ppu21I	YAC!GTR	3	340; 2706; 3894
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	5508
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	2373; 2578
Psp03I	GGWC!C	5	834; 867; 1409; 4109; 4554
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	19	88; 281; 1531; 1656; 1768; 1843; 1897; 1981; 2119; 2132; 3124; 3179; 3196; 3975; 4554; 4657; 5347; 5360; 5481
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	19	88; 281; 1531; 1656; 1768; 1843; 1897; 1981; 2119; 2132; 3124; 3179; 3196; 3975; 4554; 4657; 5347; 5360; 5481
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	22	467; 651; 744; 781; 1325; 1487; 1525; 1925; 2101; 2745; 2766; 2778; 2969; 3130; 3202; 3591; 3626; 4474; 4553; 4598; 5441; 5480
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	3	125; 3320; 4319
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	3722
PspPI	G!GNCC	15	83; 276; 641; 734; 831; 864; 1323; 1406; 1660; 2697; 4106; 4551; 4597; 4655; 4688
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	3143; 3215; 4721
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	3	1885; 3056; 4251
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	4691
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	3	956; 4691; 5099
PsuI	R!GATCY	13	585; 670; 686; 763; 779; 1249; 3761; 4007; 4399; 4758; 4770; 4856; 4867
PsyI	GACN!NNGTC	3	824; 1197; 3708
PteI	G!CGCGC	2	662; 755
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	3	2165; 3088; 3696
RcaI	T!CATGA	2	3016; 4788
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	4105
RceI	!NNNNNNNNNNNNNNNNNNNGTCGATG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
RgaI	GCGAT!CGC	0	
RgiI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	2	872; 2319
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	2	602; 695
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNNNN!	1	1291
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	11	219; 244; 299; 332; 383; 540; 870; 1102; 1461; 1917; 3896
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 869; 1101; 1460; 1916; 3895
RseI	CAYNN!NNRTG	7	365; 798; 1029; 1518; 1668; 1845; 4027
RsrII	CG!GWCCG	2	831; 4106
Rsr2I	CG!GWCCG	2	831; 4106
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SaI	G!TCGAC	0	
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3934; 4144
SaqAI	T!TAA	18	7; 2092; 2214; 2228; 2291; 2352; 2473; 2494; 2505; 2517; 2528; 2545; 2643; 2914; 4733; 4747; 4752; 4804
SatI	GC!NGC	57	612; 615; 618; 621; 648; 660; 705; 708; 711; 714; 741; 753; 837; 897; 974; 1274; 1281; 1332; 1335; 1429; 1493; 1647; 1728; 2008; 2049; 2108; 2145; 2153; 2163; 2237; 2367; 2886; 2908; 2922; 3360; 3499; 3551; 3562; 3652; 3657; 3694; 3735; 3822; 3828; 4064; 4160; 4201; 4215; 4329; 4668; 4683; 4894; 5100; 5103; 5168; 5311; 5466
Sau96I	G!GNCC	15	83; 276; 641; 734; 831; 864; 1323; 1406; 1660; 2697; 4106; 4551; 4597; 4655; 4688
Sau3AI	!GATC	31	585; 670; 686; 763; 779; 991; 1073; 1112; 1163; 1249; 1397; 1435; 1627; 2020; 2247; 3427; 3431; 3450; 3761; 3839; 3920; 3929; 4007; 4383; 4399; 4758; 4770; 4848; 4856; 4867; 4942
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	2642; 3074
SchI	!NNNNNGACTC	5	404; 2235; 2649; 4255; 5132
SciI	CTC!GAG	0	
ScrFI	CC!NGG	28	90; 283; 644; 737; 1433; 1517; 1533; 1658; 1770; 1845; 1899; 1946; 1983; 2121; 2134; 3126; 3181; 3198; 3594; 3754; 3977; 4367; 4556; 4659; 5131; 5349; 5362; 5483
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	1247; 1796; 3168; 3240; 3409; 5351
SdeAI	!NNNNNNNNNNNNNNNNNNCTYCTG	2	3745; 4230
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	11	1528; 1657; 1906; 2781; 3536; 3629; 3703; 3893; 3955; 4665; 5198
SelI	!CGCG	28	58; 660; 662; 753; 755; 997; 1091; 1160; 1394; 1814; 1970; 1972; 2063; 2180; 2237; 2512; 2888; 2908; 2932; 2963; 3654; 3955; 4393; 4477; 4540; 4609; 4882; 5463
SetI	ASST!	72	125; 137; 178; 261; 308; 342; 447; 552; 568; 874; 909; 919; 1201; 1264; 1285; 1354; 1359; 1459; 1468; 1510; 1543; 1555; 1605; 1615; 1627; 1648; 1768; 1825; 1864; 1912; 2015; 2167; 2280; 2301; 2310; 2322; 2371; 2538; 2653; 2665; 2708; 2745; 2795; 2818; 2942; 3090; 3185; 3378; 3491; 3619; 3698; 3709; 3781; 3852; 3896; 4156; 4302; 4346; 4677; 4708; 4767; 4810; 4953; 4974; 5073; 5210; 5225; 5244; 5256; 5300; 5346; 5397
SexAI	A!CCWGGT	1	3179
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	9	1240; 1864; 1879; 2406; 3169; 3241; 3889; 3953; 4228
SfaNI	!NNNNNNNNNGATGC	7	357; 1126; 1586; 3548; 3803; 4019; 5411
SfiI	C!TRYAG	3	2925; 5052; 5243
SfiI	GGCCNNNN!NGGCC	1	3365
SfoI	GGC!GCC	1	3591
Sfr274I	C!TCGAG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sfr303I	CCGC!GG	0	
Sful	TT!CGAA	1	4272
SgeI	CNNGNNNNNNNNN!	231	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; 817; 830; 884; 914; 930; 945; 962; 978; 993; 1008; 1071; 1091; 1104; 1128; 1152; 1173; 1192; 1220; 1247; 1277; 1296; 1310; 1338; 1364; 1382; 1400; 1415; 1433; 1455; 1478; 1501; 1514; 1528; 1544; 1577; 1591; 1622; 1651; 1664; 1680; 1703; 1717; 1733; 1754; 1767; 1781; 1802; 1820; 1844; 1857; 1871; 1892; 1910; 1923; 1939; 1957; 1983; 2012; 2030; 2046; 2064; 2098; 2116; 2132; 2145; 2178; 2193; 2232; 2250; 2297; 2326; 2368; 2451; 2525; 2609; 2631; 2663; 2700; 2718; 2737; 2752; 2794; 2811; 2828; 2863; 2877; 2894; 2916; 2940; 2964; 3029; 3043; 3081; 3097; 3137; 3150; 3169; 3192; 3209; 3222; 3241; 3271; 3292; 3309; 3332; 3367; 3394; 3425; 3447; 3473; 3495; 3514; 3542; 3578; 3597; 3620; 3634; 3654; 3667; 3681; 3700; 3714; 3733; 3765; 3779; 3792; 3818; 3849; 3862; 3879; 3896; 3910; 3927; 3945; 3960; 3988; 4004; 4023; 4045; 4061; 4084; 4103; 4128; 4147; 4167; 4194; 4218; 4251; 4270; 4298; 4312; 4378; 4402; 4417; 4440; 4461; 4478; 4526; 4553; 4567; 4596; 4620; 4653; 4670; 4690; 4703; 4716; 4774; 4801; 4820; 4850; 4875; 4895; 4909; 4934; 4952; 4989; 5027; 5056; 5084; 5098; 5118; 5133; 5154; 5168; 5187; 5205; 5221; 5261; 5281; 5308; 5326; 5347; 5360; 5373; 5390; 5414; 5437; 5469; 5494; 5521; 5543
SgeI	!NNNNNNNNNNNNCNG	199	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 684; 703; 722; 740; 772; 791; 815; 858; 888; 919; 936; 967; 984; 1045; 1065; 1102; 1126; 1147; 1166; 1194; 1221; 1251; 1270; 1312; 1338; 1356; 1374; 1395; 1418; 1440; 1475; 1502; 1519; 1551; 1569; 1596; 1625; 1643; 1666; 1691; 1717; 1737; 1755; 1776; 1794; 1818; 1845; 1866; 1884; 1913; 1931; 1957; 1986; 2004; 2026; 2050; 2072; 2090; 2107; 2152; 2171; 2206; 2224; 2271; 2300; 2342; 2425; 2499; 2583; 2605; 2637; 2674; 2692; 2711; 2768; 2785; 2802; 2837; 2855; 2875; 2895; 2914; 2938; 3003; 3055; 3111; 3143; 3166; 3183; 3215; 3245; 3266; 3283; 3306; 3341; 3368; 3399; 3421; 3447; 3469; 3488; 3516; 3552; 3571; 3594; 3615; 3633; 3650; 3674; 3707; 3739; 3766; 3792; 3823; 3853; 3870; 3896; 3919; 3940; 3962; 3982; 4002; 4019; 4058; 4077; 4102; 4121; 4141; 4168; 4192; 4225; 4244; 4272; 4294; 4352; 4376; 4395; 4414; 4435; 4452; 4500; 4527; 4547; 4570; 4594; 4627; 4644; 4664; 4690; 4748; 4775; 4794; 4824; 4849; 4869; 4908; 4926; 4963; 5001; 5030; 5058; 5079; 5107; 5128; 5161; 5179; 5235; 5255; 5282; 5300; 5321; 5347; 5364; 5388; 5411; 5443; 5468; 5495; 5517; 5546
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; 2737; 4524; 5317
SimI	!GACCC	8	106; 943; 1379; 1615; 1810; 4018; 4586; 4834
SinI	G!GWCC	5	831; 864; 1406; 4106; 4551
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	7	365; 798; 1029; 1518; 1668; 1845; 4027
SmlI	C!TYRAG	5	2472; 3981; 4863; 5140; 5402
SmoI	C!TYRAG	5	2472; 3981; 4863; 5140; 5402
SmuI	CCCGCNNNN!	10	93; 119; 286; 1713; 1821; 2912; 3267; 3288; 4484; 4616
SmuI	!NNNNNNGCGGG	8	616; 709; 2010; 2843; 3713; 4250; 4388; 4535
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	3160; 3232; 3995
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 2340; 2404; 2482; 2508; 2519; 3166; 3238; 3330; 4748
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	3411

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SsiI	C!CGC	53	58; 86; 98; 112; 279; 507; 589; 612; 660; 705; 753; 834; 879; 1091; 1177; 1253; 1426; 1429; 1706; 1747; 1814; 1853; 1970; 2049; 2108; 2142; 2153; 2180; 2237; 2905; 2908; 2922; 3012; 3260; 3272; 3281; 3293; 3303; 3314; 3360; 3499; 3562; 4064; 4109; 4175; 4201; 4326; 4329; 4477; 4609; 4916; 5060; 5556
SsiI	G!CGG	35	370; 403; 528; 623; 647; 716; 740; 973; 1474; 1480; 1950; 2007; 2017; 2223; 2233; 2850; 2877; 2965; 3075; 3656; 3720; 3821; 3824; 4104; 4159; 4257; 4395; 4542; 4682; 4925; 5170; 5291; 5310; 5437; 5465
SspI	AAT!ATT	2	2498; 3051
SspDI	G!GCGCC	1	3589
SspD5I	GGTGANNNNNNNN!	6	376; 1016; 1835; 1859; 4661; 4777
SspD5I	!NNNNNNNNNTCACC	5	1067; 1504; 2130; 2706; 3767
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	25	92; 118; 285; 650; 743; 1086; 1333; 1345; 1657; 1712; 1720; 1762; 1820; 2789; 2911; 3266; 3287; 3600; 4003; 4142; 4213; 4483; 4615; 4845; 5283
Sth132I	!NNNNNNNNCCGGG	24	15; 407; 470; 615; 708; 1424; 1508; 1937; 2009; 2790; 2842; 2943; 3670; 3712; 3745; 4249; 4358; 4387; 4534; 4638; 4669; 5122; 5166; 5374
Sth302II	CC!GG	30	645; 738; 787; 830; 1181; 1433; 1490; 1517; 1580; 1640; 1928; 1946; 2053; 2098; 2809; 3496; 3573; 3595; 3623; 3754; 3844; 3911; 4092; 4367; 4375; 4467; 4941; 5131; 5157; 5304
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	7	1483; 1966; 2206; 3458; 3915; 3940; 4394
StsI	!NNNNNNNNNNNNNNNCATCC	4	1514; 1880; 2162; 3262
StuI	AGG!CCT	1	3411
StyI	C!CWVGG	5	360; 3319; 3412; 4022; 4427
StyD4I	!CCNGG	28	88; 281; 642; 735; 1431; 1515; 1531; 1656; 1768; 1843; 1897; 1944; 1981; 2119; 2132; 3124; 3179; 3196; 3592; 3752; 3975; 4365; 4554; 4657; 5129; 5347; 5360; 5481
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	16	76; 198; 269; 543; 581; 860; 868; 1155; 2681; 3970; 4086; 4194; 4517; 5008; 5478; 5549
TaiI	ACGT!	19	125; 137; 178; 261; 342; 447; 1201; 1264; 1468; 1555; 1768; 2653; 2665; 2708; 2818; 3709; 3896; 4677; 4810
TaqI	T!CGA	17	982; 1264; 1537; 1831; 1858; 2203; 2739; 3430; 3703; 3859; 3883; 3919; 4081; 4272; 4317; 4572; 5410
TaqII	GACCGANNNNNNNNNN!	3	2610; 3627; 4295
TaqII	!NNNNNNNNNTCGGTC	1	4539
TaqII	CACCCANNNNNNNNNN!	0	
TaqII	!NNNNNNNNNTGGGTG	3	172; 3494; 4086
TasI	!AATT	10	18; 2340; 2404; 2482; 2508; 2519; 3166; 3238; 3330; 4748
TatI	W!GTACW	6	217; 297; 330; 381; 1459; 1915
TauI	GCSG!C	28	614; 650; 662; 707; 743; 755; 976; 1431; 2010; 2051; 2110; 2155; 2239; 2910; 2924; 3362; 3501; 3564; 3659; 3824; 3827; 4066; 4162; 4203; 4331; 4685; 5313; 5468
TfiI	G!AWTC	6	851; 4075; 4209; 4319; 4356; 5534
TliI	C!TCGAG	0	
Tru1I	T!TAA	18	7; 2092; 2214; 2228; 2291; 2352; 2473; 2494; 2505; 2517; 2528; 2545; 2643; 2914; 4733; 4747; 4752; 4804
Tru9I	T!TAA	18	7; 2092; 2214; 2228; 2291; 2352; 2473; 2494; 2505; 2517; 2528; 2545; 2643; 2914; 4733; 4747; 4752; 4804
TscAI	CASTGNN!	8	661; 754; 1158; 2436; 3719; 4829; 5100; 5113
TseI	G!CWGC	31	614; 617; 620; 707; 710; 713; 836; 896; 1273; 1280; 1331; 1334; 1492; 1646; 1727; 2144; 2149; 2162; 2366; 2885; 3550; 3651; 3693; 3734; 3827; 4214; 4667; 4893; 5099; 5102; 5167
TsoI	TARCCANNNNNNNNNN!	2	2562; 2909
TsoI	!NNNNNNNNNTGGYTA	3	1050; 2367; 4119
Tsp45I	!GTSAC	6	1149; 1421; 1670; 2879; 3710; 4016
Tsp509I	!AATT	10	18; 2340; 2404; 2482; 2508; 2519; 3166; 3238; 3330; 4748
TspDTI	ATGAANNNNNNNNNN!	7	949; 1084; 1737; 1969; 2348; 3649; 4353
TspDTI	!NNNNNNNNNTTCAT	5	26; 1013; 4067; 4523; 4730
TspEI	!AATT	10	18; 2340; 2404; 2482; 2508; 2519; 3166; 3238; 3330; 4748
TspGWI	ACGGANNNNNNNNNN!	1	4465

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
TspGI	!NNNNNNNNNTCCGT	3	590; 683; 1355
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	8	661; 754; 1158; 2436; 3719; 4829; 5100; 5113
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	3	824; 1197; 3708
Tth111II	CAARCANNNNNNNNNN!	2	1233; 4917
Tth111II	!NNNNNNNNNTGYTTG	5	1029; 1145; 4025; 4885; 4924
UnbI	!GGNCC	15	82; 275; 640; 733; 830; 863; 1322; 1405; 1659; 2696; 4105; 4550; 4596; 4654; 4687
Van9II	CCANNNN!NTGG	3	680; 773; 956
Vha464I	C!TTAAG	1	2472
VneI	G!TGCAC	1	5194
VpaK11AI	!GGWCC	5	830; 863; 1405; 4105; 4550
VpaK11BI	G!GWCC	5	831; 864; 1406; 4106; 4551
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATY	3	2404; 2508; 2519
XbaI	T!CTAGA	1	2244
XceI	RCATG!Y	5	599; 3160; 3232; 3995; 5512
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	13	585; 670; 686; 763; 779; 1249; 3761; 4007; 4399; 4758; 4770; 4856; 4867
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	3412; 4427
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	1	1698
XspI	C!TAG	8	592; 2245; 2439; 2857; 3413; 4428; 4762; 5015
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	3162; 3234; 5565