

## pHcRed-Tandem-N2 vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	2210; 2415
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	2498; 3454; 5243
AatI	AGG!CCT	1	3248
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	640
AccII	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	3	713; 1409; 3529
Acc36I	ACCTGCNNNN!	4	1356; 2052; 3695; 4145
Acc36I	!NNNNNNNNGCAGGT	1	3314
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	15	465; 645; 734; 794; 827; 1052; 1185; 1430; 1490; 1523; 1748; 1881; 2580; 3426; 3461
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2851; 4040
AccBSI	GAG!CGG	6	690; 1095; 1386; 1791; 2687; 4094
AceIII	CAGCTCNNNNNNN!	1	2383
AceIII	!NNNNNNNNGAGCTG	3	552; 1301; 1997
Acil	C!CGC	39	58; 86; 98; 112; 279; 507; 589; 649; 903; 993; 1065; 1599; 1689; 1761; 2074; 2742; 2745; 2759; 2849; 3097; 3109; 3118; 3130; 3140; 3151; 3197; 3336; 3399; 3901; 3946; 4012; 4038; 4163; 4166; 4314; 4446; 4753; 4897; 5393
Acil	G!CGG	36	370; 403; 528; 651; 690; 981; 1095; 1098; 1149; 1288; 1386; 1677; 1791; 1794; 1845; 1984; 2687; 2714; 2802; 2912; 3493; 3557; 3658; 3661; 3941; 3996; 4094; 4232; 4379; 4519; 4762; 5007; 5128; 5147; 5274; 5302
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	8	668; 3295; 3606; 3852; 4244; 4603; 4701; 4787
AcIWI	!NNNNNGATCC	8	580; 655; 904; 1600; 3671; 4215; 4602; 4699
AcoI	Y!GGCCR	9	668; 745; 1150; 1441; 1846; 3333; 3507; 3898; 3925
AcsI	R!AATTY	4	629; 2241; 2345; 2356
AcuI	CTGAAGNNNNNNNNNNNNNNN!	6	719; 1190; 1415; 1886; 3573; 4005
AcuI	!NNNNNNNNNNNNNNCTTCAG	1	4803
AcvI	CAC!GTG	2	817; 1513
AcyI	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208
AdeI	CACNNN!GTG	1	2543
Afal	GT!AC	20	219; 244; 299; 332; 383; 540; 647; 725; 875; 1127; 1307; 1319; 1340; 1421; 1571; 1823; 2003; 2015; 2036; 3733
Afel	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	31	49; 670; 700; 791; 1070; 1136; 1174; 1215; 1272; 1396; 1487; 1766; 1832; 1870; 1911; 1968; 2439; 2765; 3157; 3408; 3952; 4233; 4265; 4397; 4432; 4482; 4514; 4867; 5146; 5312; 5330
AfiiI	C!TTAAG	1	2309
AfiiiI	A!CRYGT	1	5345
AgeI	A!CCGGT	0	
AgsI	TTS!AA	9	757; 925; 1453; 1621; 2838; 2882; 2892; 3305; 4881
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	19	88; 281; 855; 950; 999; 1011; 1551; 1646; 1695; 1707; 2961; 3016; 3033; 3812; 4391; 4494; 5184; 5197; 5318
AjuI	GAANNNNNNTTGGNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjuI	!NNNNNCCAANNNNNNTTC	0	
AjuI	CCAANNNNNNTTCNNNNNNNNNNNN!	0	
AjuI	!NNNNNNGAANNNNNNTTGG	0	
AleI	CACNN!NNGTG	3	683; 1118; 1814
AlfI	GCANNNNTTGCNNNNNNNNNNNN!	2	3001; 3073
AlfI	!NNNNNNNNNGCANNNNNNNTGC	2	2967; 3039
AloI	GAACNNNNNTCCNNNNNNNNNNNN!	1	2509
AloI	!NNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNGAACNNNNNNNTCC	1	2477
AluI	AG!CT	20	566; 618; 624; 933; 1212; 1315; 1629; 1908; 2011; 2206; 2373; 2630; 2925; 3213; 3533; 3991; 4788; 5045; 5091; 5181
AluBI	AG!CT	20	566; 618; 624; 933; 1212; 1315; 1629; 1908; 2011; 2206; 2373; 2630; 2925; 3213; 3533; 3991; 4788; 5045; 5091; 5181
AlwI	GGATCNNNN!	8	668; 3295; 3606; 3852; 4244; 4603; 4701; 4787
AlwI	!NNNNNGATCC	8	580; 655; 904; 1600; 3671; 4215; 4602; 4699
Alw21I	GWGCW!C	8	620; 897; 1050; 1593; 1746; 3540; 3730; 5035
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	4	2851; 3269; 4288; 4416
Alw44I	G!TGCAC	5	893; 1046; 1589; 1742; 5031
AlwNI	CAGNN!CTG	4	1285; 1981; 4528; 4936
Ama87I	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	1	596
ApaI	GGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2995; 3067; 4529
ApaLI	G!TGCAC	5	893; 1046; 1589; 1742; 5031
ApeKI	G!CWGC	19	867; 879; 1285; 1563; 1575; 1981; 2203; 2722; 3387; 3488; 3530; 3571; 3664; 4051; 4504; 4730; 4936; 4939; 5004
ApoI	R!AATTY	4	629; 2241; 2345; 2356
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3942
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3736; 4389; 5227
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3826
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	4	855; 1128; 1551; 1824
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	3255
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNNCTCCYC	5	916; 1042; 1612; 1738; 3997
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	2	1324; 2020
ArsI	!NNNNNCRANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	2	1292; 1988
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	27	586; 610; 661; 910; 1030; 1192; 1368; 1606; 1726; 1888; 2085; 3265; 3269; 3288; 3599; 3677; 3758; 3767; 3845; 4221; 4237; 4596; 4608; 4686; 4694; 4705; 4780
AsiGI	A!CCGGT	0	
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	3545
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	3249; 4264
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	29	597; 714; 830; 1236; 1238; 1410; 1526; 1932; 1934; 2693; 2701; 2727; 2749; 2758; 2771; 2802; 3421; 3429; 3493; 3530; 3796; 4056; 4232; 4318; 4721; 4830; 5004; 5104; 5171
AspS9I	G!GNCC	19	83; 276; 654; 859; 885; 1073; 1165; 1333; 1555; 1581; 1769; 1861; 2029; 2534; 3943; 4388; 4434; 4492; 4525
AssI	AGT!ACT	2	1307; 2003
AsuII	TT!CGAA	2	627; 4109
AsuC2I	CC!SGG	12	657; 658; 1251; 1336; 1374; 1375; 1947; 2032; 3431; 3591; 4204; 4968
AsuHPI	GGTGANNNNNNNN!	7	376; 697; 1051; 1393; 1747; 4498; 4614
AsuHPI	!NNNNNNNTCACC	6	940; 1255; 1636; 1951; 2544; 3605
AsuNHI	G!CTAGC	1	591

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AvaI	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
AvaII	G!GWCC	4	885; 1581; 3943; 4388
AviII	TGC!GCA	3	713; 1409; 3529
AvrII	C!CTAGG	2	3249; 4264
AxyI	CC!TNAGG	2	2907; 4539
BaeI	ACNNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCMI!C	10	657; 737; 897; 1050; 1433; 1593; 1746; 3373; 3466; 5035
BalI	TGG!CCA	1	3509
BamHI	G!GATCC	1	660
BanI	G!GYRCC	15	465; 645; 734; 794; 827; 1052; 1185; 1430; 1490; 1523; 1748; 1881; 2580; 3426; 3461
BanII	GRGCY!C	7	620; 657; 1110; 1806; 2618; 3792; 4502
BanIII	AT!CGAT	1	3267
BarI	GAAGNNNNNTACNNNNNNNNNN!	2	1321; 2017
BarI	!NNNNNNNGTANNNNNCTTC	0	
BarI	GTANNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	2	1289; 1985
BasI	CCANNN!NTGG	0	
BauI	C!ACGAG	2	4145; 5172
BauI	C!TCGTG	1	4019
BbeI	GGCGC!C	3	831; 1527; 3430
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	2	817; 1513
BbsI	GAAGACNN!	0	
BbsI	!NNNNNGTCTTC	0	
BbuI	GCATG!C	3	2997; 3069; 3832
BbvI	GCAGCNNNNNNNN!	8	891; 1587; 2215; 3500; 3542; 4063; 4516; 5016
BbvI	!NNNNNNNNNNNGCTGC	10	854; 1272; 1550; 1968; 2709; 3374; 3558; 3651; 4717; 4923
Bbv12I	GWGCW!C	8	620; 897; 1050; 1593; 1746; 3540; 3730; 5035
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	4	2557; 3121; 3647; 4149
BccI	!NNNNNGATGG	6	1156; 1372; 1852; 2525; 3305; 3733
BceAI	ACGGCNNNNNNNNNN!	16	760; 793; 892; 994; 1066; 1087; 1153; 1456; 1489; 1588; 1690; 1762; 1783; 1849; 3853; 4340
BceAI	!NNNNNNNNNNNGCCGT	5	1214; 1910; 2568; 3386; 4845
Bcefl	ACGGCNNNNNNNNNN!	16	760; 793; 892; 994; 1066; 1087; 1153; 1456; 1489; 1588; 1690; 1762; 1783; 1849; 3853; 4340
Bcefl	!NNNNNNNNNNNGCCGT	5	1215; 1911; 2569; 3387; 4846
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	4	769; 871; 1465; 1567
BcgI	GCANNNNNNTGCNNNNNNNNNN!	4	803; 905; 1499; 1601
BcgI	!NNNNNNNNNNNGCANNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2856; 3646; 5147
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	12	657; 658; 1251; 1336; 1374; 1375; 1947; 2032; 3431; 3591; 4204; 4968
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	1	5280
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	5246
BfaI	C!TAG	8	592; 2082; 2276; 2694; 3250; 4265; 4599; 4852
BfiI	ACTGGGNNNNN!	1	3376
BfiI	!NNNNCCCAGT	2	289; 3128
BfmI	C!TRYAG	4	634; 2762; 4889; 5080
BfoI	RGCGC!Y	7	598; 831; 1527; 2694; 2702; 3430; 5105
BfrI	C!TTAAG	1	2309
BfuI	GTATCCNNNNNN!	3	2856; 3646; 5147
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	4	1356; 2052; 3695; 4145
BfuAI	!NNNNNNNNNGCAGGT	1	3314

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BfuCI	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
BglI	GCCNNNN!NGGC	8	90; 212; 283; 1017; 1331; 1713; 2027; 3202
BglII	A!GATCT	2	609; 1367
BisI	GC!NGC	45	691; 868; 880; 982; 1096; 1099; 1150; 1286; 1387; 1564; 1576; 1678; 1792; 1795; 1846; 1982; 2074; 2204; 2723; 2745; 2759; 3197; 3336; 3388; 3399; 3489; 3494; 3531; 3572; 3659; 3662; 3665; 3901; 3997; 4038; 4052; 4166; 4505; 4520; 4731; 4937; 4940; 5005; 5148; 5303
BlnI	C!CTAGG	2	3249; 4264
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	45	692; 869; 881; 983; 1097; 1100; 1151; 1287; 1388; 1565; 1577; 1679; 1793; 1796; 1847; 1983; 2075; 2205; 2724; 2746; 2760; 3198; 3337; 3389; 3400; 3490; 3495; 3532; 3573; 3660; 3663; 3666; 3902; 3998; 4039; 4053; 4167; 4506; 4521; 4732; 4938; 4941; 5006; 5149; 5304
BmcAI	AGT!ACT	2	1307; 2003
Bme18I	G!GWCC	4	885; 1581; 3943; 4388
Bme1390I	CC!NGG	31	90; 283; 657; 658; 857; 952; 1001; 1013; 1251; 1336; 1374; 1375; 1553; 1648; 1697; 1709; 1947; 2032; 2963; 3018; 3035; 3431; 3591; 3814; 4204; 4393; 4496; 4968; 5186; 5199; 5320
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	19	84; 277; 655; 860; 886; 1074; 1166; 1334; 1556; 1582; 1770; 1862; 2030; 2535; 3944; 4389; 4435; 4493; 4526
BmiI	GGN!NCC	35	467; 647; 655; 662; 736; 796; 829; 861; 1054; 1075; 1107; 1187; 1277; 1432; 1492; 1525; 1557; 1750; 1771; 1803; 1883; 1973; 2582; 2603; 2615; 2806; 2967; 3039; 3428; 3463; 4311; 4390; 4435; 5278; 5317
BmrI	ACTGGGNNNNN!	1	3376
BmrI	!NNNNCCCAGT	2	289; 3128
BmrFI	CC!NGG	31	90; 283; 657; 658; 857; 952; 1001; 1013; 1251; 1336; 1374; 1375; 1553; 1648; 1697; 1709; 1947; 2032; 2963; 3018; 3035; 3431; 3591; 3814; 4204; 4393; 4496; 4968; 5186; 5199; 5320
BmsI	GCATCNNNNN!	10	723; 993; 1419; 1689; 2243; 3006; 3078; 3726; 3790; 4065
BmsI	!NNNNNNNNNGATGC	7	357; 1272; 1968; 3385; 3640; 3856; 5248
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	1	3376
BmuI	!NNNNCCCAGT	2	289; 3128
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	3216; 4115
BpI	!NNNNNNNNNGAGNNNNNNCTC	2	3184; 4083
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	3	1034; 1730; 4267
BpmI	!NNNNNNNNNNNNNNNNCTCCAG	3	1262; 1958; 4210
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 4109
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4721; 5260
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	3	604; 3803; 4962
BpuMI	CC!SGG	12	657; 658; 1251; 1336; 1374; 1375; 1947; 2032; 3431; 3591; 4204; 4968
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	4416
Bsa29I	AT!CGAT	1	3267
BsaAI	YAC!GTR	5	340; 817; 1513; 2543; 3731
BsaBI	GATNN!NNATC	2	2089; 3286
BsaHI	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208

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BsaJI	C!CNGGG	27	360; 649; 656; 681; 822; 939; 951; 1116; 1373; 1518; 1635; 1647; 1812; 2961; 3033; 3156; 3191; 3200; 3249; 3590; 3859; 4264; 4391; 4392; 4494; 4495; 5185
BsaMI	GAATGCN!	1	2178
BsaMI	G!CATTC	1	2271
BsaWI	W!CCGGW	7	600; 1215; 1911; 3458; 4302; 4992; 5139
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	2507
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	2477
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	2428; 4335
Bsc4I	CCNNNNN!NNGG	31	49; 670; 700; 791; 1070; 1136; 1174; 1215; 1272; 1396; 1487; 1766; 1832; 1870; 1911; 1968; 2439; 2765; 3157; 3408; 3952; 4233; 4265; 4397; 4432; 4482; 4514; 4867; 5146; 5312; 5330
BscAI	GCATCNNNN!	10	722; 992; 1418; 1688; 2242; 3005; 3077; 3725; 3789; 4064
BscAI	!NNNNNNGATGC	7	360; 1275; 1971; 3388; 3643; 3859; 5251
BseI	ACTGGN!	3	3371; 3572; 4818
BseI	C!CAGT	5	295; 2456; 3134; 4930; 4943
BseI	GATNN!NNATC	2	2089; 3286
Bse2II	CC!TNAGG	2	2907; 4539
Bse118I	R!CCGGY	10	666; 670; 791; 1182; 1487; 1878; 2644; 3746; 3927; 4210
BseAI	T!CCGGA	0	
BseBI	CC!WGG	19	90; 283; 857; 952; 1001; 1013; 1553; 1648; 1697; 1709; 2963; 3018; 3035; 3814; 4393; 4496; 5186; 5199; 5320
BseCI	AT!CGAT	1	3267
BseDI	C!CNGGG	27	360; 649; 656; 681; 822; 939; 951; 1116; 1373; 1518; 1635; 1647; 1812; 2961; 3033; 3156; 3191; 3200; 3249; 3590; 3859; 4264; 4391; 4392; 4494; 4495; 5185
Bse3DI	GCAATGNN!	1	3660
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	5	1383; 3287; 3744; 3769; 4223
BseGI	!CATCC	7	852; 984; 1269; 1548; 1680; 1965; 3113
BseJI	GATNN!NNATC	2	2089; 3286
BseLI	CCNNNNN!NNGG	31	49; 670; 700; 791; 1070; 1136; 1174; 1215; 1272; 1396; 1487; 1766; 1832; 1870; 1911; 1968; 2439; 2765; 3157; 3408; 3952; 4233; 4265; 4397; 4432; 4482; 4514; 4867; 5146; 5312; 5330
BseMI	GCAATGNN!	1	3660
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 4553
BseMII	!NNNNNNNCTGAG	5	2898; 3200; 4081; 4653; 5062
BseNI	ACTGGN!	3	3371; 3572; 4818
BseNI	C!CAGT	5	295; 2456; 3134; 4930; 4943
BsePI	G!CGCGC	2	1234; 1930
BseRI	GAGGAGNNNNNNNNNN!	1	3245
BseRI	!NNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	10	657; 737; 897; 1050; 1433; 1593; 1746; 3373; 3466; 5035
BseXI	GCAGCNNNNNNNN!	8	891; 1587; 2215; 3500; 3542; 4063; 4516; 5016
BseXI	!NNNNNNNNNNNGCTGC	10	854; 1272; 1550; 1968; 2709; 3374; 3558; 3651; 4717; 4923
BseX3I	C!GGCCG	4	668; 1150; 1846; 3333
BseYI	C!CCAGC	5	1109; 1805; 2970; 3042; 5041
BseYI	G!CTGGG	3	1101; 1797; 3931
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
Bsh1285I	CGRY!CG	8	671; 675; 1153; 1183; 1849; 1879; 3336; 5011
BshFI	GG!CC	42	84; 277; 655; 670; 693; 747; 860; 1074; 1152; 1166; 1229; 1325; 1334; 1361; 1389; 1443; 1556; 1770; 1848; 1862; 1925; 2021; 2030; 2057; 2073; 2393; 2535; 3190; 3196; 3205; 3248; 3335; 3509; 3900; 3927; 4436; 4493; 4526; 4871; 5305; 5323; 5334
BshNI	G!GYRCC	15	465; 645; 734; 794; 827; 1052; 1185; 1430; 1490; 1523; 1748; 1881; 2580; 3426; 3461
BshTI	A!CCGGT	0	
BshVI	AT!CGAT	1	3267
BsiEI	CGRY!CG	8	671; 675; 1153; 1183; 1849; 1879; 3336; 5011

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsiHKAI	GWGCW!C	8	620; 897; 1050; 1593; 1746; 3540; 3730; 5035
BsiHKCI	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
BsiSI	C!CGG	35	601; 657; 667; 671; 792; 1153; 1183; 1216; 1251; 1273; 1336; 1374; 1488; 1849; 1879; 1912; 1947; 1969; 2032; 2645; 3332; 3409; 3431; 3459; 3590; 3680; 3747; 3928; 4203; 4211; 4303; 4777; 4967; 4993; 5140
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	31	49; 670; 700; 791; 1070; 1136; 1174; 1215; 1272; 1396; 1487; 1766; 1832; 1870; 1911; 1968; 2439; 2765; 3157; 3408; 3952; 4233; 4265; 4397; 4432; 4482; 4514; 4867; 5146; 5312; 5330
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3578; 4110; 4219
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2943; 3015; 3079; 4374
BsmI	GAATGCN!	1	2178
BsmI	G!CATTC	1	2271
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	4	2851; 3269; 4288; 4416
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3578; 4110; 4219
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2943; 3015; 3079; 4374
BsnI	GG!CC	42	84; 277; 655; 670; 693; 747; 860; 1074; 1152; 1166; 1229; 1325; 1334; 1361; 1389; 1443; 1556; 1770; 1848; 1862; 1925; 2021; 2030; 2057; 2073; 2393; 2535; 3190; 3196; 3205; 3248; 3335; 3509; 3900; 3927; 4436; 4493; 4526; 4871; 5305; 5323; 5334
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	1	4416
BsoBI	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 681; 3156; 3859
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 4230
Bsp24I	!NNNNNNCCANNNNNGTC	2	4651; 4829
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	4683; 4861
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 4198
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 4109
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
Bsp1286I	GDGCH!C	18	620; 657; 737; 897; 1050; 1110; 1433; 1593; 1746; 1806; 2618; 3373; 3466; 3540; 3730; 3792; 4502; 5035
Bsp1407I	T!GTACA	2	723; 1419
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	39	58; 86; 98; 112; 279; 507; 589; 649; 903; 993; 1065; 1599; 1689; 1761; 2074; 2742; 2745; 2759; 2849; 3097; 3109; 3118; 3130; 3140; 3151; 3197; 3336; 3399; 3901; 3946; 4012; 4038; 4163; 4166; 4314; 4446; 4753; 4897; 5393
BspACI	G!CGG	36	370; 403; 528; 651; 690; 981; 1095; 1098; 1149; 1288; 1386; 1677; 1791; 1794; 1845; 1984; 2687; 2714; 2802; 2912; 3493; 3557; 3658; 3661; 3941; 3996; 4094; 4232; 4379; 4519; 4762; 5007; 5128; 5147; 5274; 5302
BspCNI	CTCAGNNNNNNNN!	2	619; 4552
BspCNI	!NNNNNNNCTGAG	5	2899; 3201; 4082; 4654; 5063
BspDI	AT!CGAT	1	3267
BspD6I	GACTCNNNN!	6	418; 612; 2086; 2500; 4106; 4983
BspD6I	!NNNNNNGAGTC	2	2463; 2895
BspEI	T!CCGGA	0	
BspFNI	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
BspHI	T!CATGA	2	2853; 4625
BspLI	GGN!NCC	35	467; 647; 655; 662; 736; 796; 829; 861; 1054; 1075; 1107; 1187; 1277; 1432; 1492; 1525; 1557; 1750; 1771; 1803; 1883; 1973; 2582; 2603; 2615; 2806; 2967; 3039; 3428; 3463; 4311; 4390; 4435; 5278; 5317
BspMI	ACCTGCNNNN!	4	1356; 2052; 3695; 4145
BspMI	!NNNNNNNNGCAGGT	1	3314

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	668; 3295; 3606; 3852; 4244; 4603; 4701; 4787
BspPI	!NNNNNGATCC	8	580; 655; 904; 1600; 3671; 4215; 4602; 4699
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3771; 3981
BspTI	C!TTAAG	1	2309
BspT104I	TT!CGAA	2	627; 4109
BspT107I	G!GYRCC	15	465; 645; 734; 794; 827; 1052; 1185; 1430; 1490; 1523; 1748; 1881; 2580; 3426; 3461
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	1	4416
BsrI	ACTGGN!	3	3371; 3572; 4818
BsrI	C!CAGT	5	295; 2456; 3134; 4930; 4943
BsrBI	CCG!CTC	2	2851; 4040
BsrBI	GAG!CGG	6	690; 1095; 1386; 1791; 2687; 4094
BsrDI	GCAATGNN!	1	3660
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	10	666; 670; 791; 1182; 1487; 1878; 2644; 3746; 3927; 4210
BsrGI	T!GTACA	2	723; 1419
BsrSI	ACTGGN!	3	3371; 3572; 4818
BsrSI	C!CAGT	5	295; 2456; 3134; 4930; 4943
BssAI	R!CCGGY	10	666; 670; 791; 1182; 1487; 1878; 2644; 3746; 3927; 4210
BssECI	C!CNNGG	27	360; 649; 656; 681; 822; 939; 951; 1116; 1373; 1518; 1635; 1647; 1812; 2961; 3033; 3156; 3191; 3200; 3249; 3590; 3859; 4264; 4391; 4392; 4494; 4495; 5185
BssHII	G!CGCGC	2	1234; 1930
BssKI	!CCNGG	31	88; 281; 655; 656; 855; 950; 999; 1011; 1249; 1334; 1372; 1373; 1551; 1646; 1695; 1707; 1945; 2030; 2961; 3016; 3033; 3429; 3589; 3812; 4202; 4391; 4494; 4966; 5184; 5197; 5318
BssMI	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
BssNI	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	4145; 5172
BssSI	C!TCGTG	1	4019
BssT1I	C!CWWGG	6	360; 681; 3156; 3249; 3859; 4264
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	2894; 3771; 3981
Bst98I	C!TTAAG	1	2309
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208
BstAFI	C!TTAAG	1	2309
BstAPI	GCANNNN!NTGC	3	2994; 3066; 4528
BstAUI	T!GTACA	2	723; 1419
BstBI	TT!CGAA	2	627; 4109
Bst2BI	C!ACGAG	2	4145; 5172
Bst2BI	C!TCGTG	1	4019
BstBAI	YAC!GTR	5	340; 817; 1513; 2543; 3731
Bst4CI	ACN!GT	16	76; 198; 269; 543; 581; 645; 739; 1435; 2518; 3807; 3923; 4031; 4354; 4845; 5315; 5386
BstC8I	GCN!NGC	38	86; 279; 593; 653; 695; 793; 1142; 1236; 1327; 1391; 1489; 1838; 1932; 2023; 2646; 2689; 2703; 2976; 2995; 3048; 3067; 3321; 3507; 3726; 3792; 3798; 3830; 3871; 3875; 3929; 4212; 4399; 4446; 4502; 4524; 4735; 5295; 5332
BstDEI	C!TNAG	7	606; 2907; 3209; 4090; 4539; 4662; 5071
BstDSI	C!CRYGG	5	360; 649; 681; 3156; 3859
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	2	698; 1394
BstF5I	GGATGNN!	5	1383; 3287; 3744; 3769; 4223
BstF5I	!CATCC	7	852; 984; 1269; 1548; 1680; 1965; 3113
BstFNI	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
BstH2I	RGCGC!Y	7	598; 831; 1527; 2694; 2702; 3430; 5105

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstHHI	GCG!C	29	597; 714; 830; 1236; 1238; 1410; 1526; 1932; 1934; 2693; 2701; 2727; 2749; 2758; 2771; 2802; 3421; 3429; 3493; 3530; 3796; 4056; 4232; 4318; 4721; 4830; 5004; 5104; 5171
BstKTI	GAT!C	27	588; 612; 663; 912; 1032; 1194; 1370; 1608; 1728; 1890; 2087; 3267; 3271; 3290; 3601; 3679; 3760; 3769; 3847; 4223; 4239; 4598; 4610; 4688; 4696; 4707; 4782
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNNGAGAC	4	2851; 3269; 4288; 4416
BstMBI	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
BstMCI	CGRY!CG	8	671; 675; 1153; 1183; 1849; 1879; 3336; 5011
BstMWI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 801; 876; 1017; 1146; 1218; 1235; 1282; 1331; 1497; 1572; 1713; 1842; 1914; 1931; 1978; 2027; 2654; 2684; 2711; 2753; 2994; 3066; 3117; 3196; 3418; 3502; 3525; 3664; 3787; 3870; 4137; 4324; 4528; 4727; 5299
BstNI	CC!WGG	19	90; 283; 857; 952; 1001; 1013; 1553; 1648; 1697; 1709; 2963; 3018; 3035; 3814; 4393; 4496; 5186; 5199; 5320
BstNSI	RCATG!Y	4	2997; 3069; 3832; 5349
BstOI	CC!WGG	19	90; 283; 857; 952; 1001; 1013; 1553; 1648; 1697; 1709; 2963; 3018; 3035; 3814; 4393; 4496; 5186; 5199; 5320
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	31	88; 281; 655; 656; 855; 950; 999; 1011; 1249; 1334; 1372; 1373; 1551; 1646; 1695; 1707; 1945; 2030; 2961; 3016; 3033; 3429; 3589; 3812; 4202; 4391; 4494; 4966; 5184; 5197; 5318
BstSFI	C!TRYAG	4	634; 2762; 4889; 5080
BstSLI	GKGC!C	10	657; 737; 897; 1050; 1433; 1593; 1746; 3373; 3466; 5035
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
Bst2UI	CC!WGG	19	90; 283; 857; 952; 1001; 1013; 1553; 1648; 1697; 1709; 2963; 3018; 3035; 3814; 4393; 4496; 5186; 5199; 5320
BstV1I	GCAGCNNNNNNN!	8	891; 1587; 2215; 3500; 3542; 4063; 4516; 5016
BstV1I	!NNNNNNNNNNNNGCTGC	10	854; 1272; 1550; 1968; 2709; 3374; 3558; 3651; 4717; 4923
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	13	585; 609; 660; 909; 1367; 1605; 3598; 3844; 4236; 4595; 4607; 4693; 4704
BstYI	R!GATCY	13	585; 609; 660; 909; 1367; 1605; 3598; 3844; 4236; 4595; 4607; 4693; 4704
BstZI	C!GGCCG	4	668; 1150; 1846; 3333
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2856; 3646; 5147
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	3267
Bsu36I	CC!TNAGG	2	2907; 4539
BsuRI	GG!CC	42	84; 277; 655; 670; 693; 747; 860; 1074; 1152; 1166; 1229; 1325; 1334; 1361; 1389; 1443; 1556; 1770; 1848; 1862; 1925; 2021; 2030; 2057; 2073; 2393; 2535; 3190; 3196; 3205; 3248; 3335; 3509; 3900; 3927; 4436; 4493; 4526; 4871; 5305; 5323; 5334
BsuTUI	AT!CGAT	1	3267
BtgI	C!CRYGG	5	360; 649; 681; 3156; 3859
BtgZI	GCGATGNNNNNNNNN!	2	2544; 3879
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3698; 4042
BthCI	GCNG!C	45	693; 870; 882; 984; 1098; 1101; 1152; 1288; 1389; 1566; 1578; 1680; 1794; 1797; 1848; 1984; 2076; 2206; 2725; 2747; 2761; 3199; 3338; 3390; 3401; 3491; 3496; 3533; 3574; 3661; 3664; 3667; 3903; 3999; 4040; 4054; 4168; 4507; 4522; 4733; 4939; 4942; 5007; 5150; 5305
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	2266
BtsCI	GGATGNN!	5	1383; 3287; 3744; 3769; 4223
BtsCI	!CATCC	7	852; 984; 1269; 1548; 1680; 1965; 3113



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	4	1356; 2052; 3695; 4145
BveI	!NNNNNNNNNGCAGGT	1	3314
Cac8I	GCN!NGC	38	86; 279; 593; 653; 695; 793; 1142; 1236; 1327; 1391; 1489; 1838; 1932; 2023; 2646; 2689; 2703; 2976; 2995; 3048; 3067; 3321; 3507; 3726; 3792; 3798; 3830; 3871; 3875; 3929; 4212; 4399; 4446; 4502; 4524; 4735; 5295; 5332
CaiI	CAGNNN!CTG	4	1285; 1981; 4528; 4936
CciI	T!CATGA	2	2853; 4625
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	5	352; 3716; 3721; 3919; 4060
CdiI	C!GATG	2	2530; 3865
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	5299
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 3088; 3130
CelII	GC!TNAGC	0	
CfoI	GCG!C	29	597; 714; 830; 1236; 1238; 1410; 1526; 1932; 1934; 2693; 2701; 2727; 2749; 2758; 2771; 2802; 3421; 3429; 3493; 3530; 3796; 4056; 4232; 4318; 4721; 4830; 5004; 5104; 5171
CfrI	Y!GGCCR	9	668; 745; 1150; 1441; 1846; 3333; 3507; 3898; 3925
Cfr9I	C!CCGGG	2	656; 1373
Cfr10I	R!CCGGY	10	666; 670; 791; 1182; 1487; 1878; 2644; 3746; 3927; 4210
Cfr13I	G!GNCC	19	83; 276; 654; 859; 885; 1073; 1165; 1333; 1555; 1581; 1769; 1861; 2029; 2534; 3943; 4388; 4434; 4492; 4525
Cfr42I	CCGC!GG	1	652
ChaI	GATC!	27	589; 613; 664; 913; 1033; 1195; 1371; 1609; 1729; 1891; 2088; 3268; 3272; 3291; 3602; 3680; 3761; 3770; 3848; 4224; 4240; 4599; 4611; 4689; 4697; 4708; 4783
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	4	3244; 4684; 4784; 4862
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2911; 3006; 4198; 4748; 5303
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2945; 3040; 4232; 4782; 5337
CjeI	!NNNNNNNNCCANNNNNNGT	4	3210; 4650; 4750; 4828
CjePI	CCANNNNNNNNTCNNNNNNNNNNNNNNNN!	4	1387; 2083; 4684; 4862
CjePI	!NNNNNNNNNGANNNNNNNTGG	3	257; 4198; 4797
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNNNN!	3	290; 4231; 4830
CjePI	!NNNNNNNNCCANNNNNNNNTC	4	1354; 2050; 4651; 4829
Clal	AT!CGAT	1	3267
CpoI	CG!GWCCG	1	3943
CseI	GACGCNNNNN!	3	526; 4137; 4216
CseI	!NNNNNNNNNNNGCGTC	3	2760; 4655; 5233
CsiI	A!CCWGGT	1	3016
CspI	CG!GWCCG	1	3943
Csp6I	G!TAC	20	218; 243; 298; 331; 382; 539; 646; 724; 874; 1126; 1306; 1318; 1339; 1420; 1570; 1822; 2002; 2014; 2035; 3732
Csp45I	TT!CGAA	2	627; 4109
CspAI	A!CCGGT	0	
CspCI	CAANNNNNNGTGGNNNNNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNNNN!	4	726; 1422; 2707; 4316
CstMI	!NNNNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	22	301; 361; 682; 727; 805; 1246; 1423; 1501; 1942; 2854; 2994; 3066; 3157; 3298; 3643; 3829; 3860; 3886; 4242; 4626; 5346; 5397
CviJI	RG!CY	114	42; 84; 93; 277; 566; 618; 624; 655; 670; 693; 747; 860; 933; 945; 1011; 1074; 1101; 1108; 1152; 1166; 1212; 1229; 1254; 1276; 1315; 1325; 1334; 1361; 1389; 1443; 1556; 1629; 1641; 1707; 1770; 1797; 1804; 1848; 1862; 1908; 1925; 1950; 1972; 2011; 2021; 2030; 2057; 2073; 2096; 2206; 2373; 2393; 2535; 2616; 2630; 2644; 2925; 2966; 3038; 3161; 3190; 3196; 3205; 3213; 3236; 3248; 3254; 3335; 3352; 3360; 3387; 3412; 3496; 3505; 3509; 3533; 3571; 3647; 3664; 3683; 3746; 3790; 3800; 3817; 3900; 3927; 3931; 3968; 3991; 4007; 4187; 4214; 4275; 4397; 4436; 4493; 4500; 4507; 4526; 4537; 4788; 4817; 4860; 4871; 4936; 5015; 5040; 5045; 5091; 5181; 5279; 5305; 5323; 5334

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CviKI-1	RG!CY	114	42; 84; 93; 277; 566; 618; 624; 655; 670; 693; 747; 860; 933; 945; 1011; 1074; 1101; 1108; 1152; 1166; 1212; 1229; 1254; 1276; 1315; 1325; 1334; 1361; 1389; 1443; 1556; 1629; 1641; 1707; 1770; 1797; 1804; 1848; 1862; 1908; 1925; 1950; 1972; 2011; 2021; 2030; 2057; 2073; 2096; 2206; 2373; 2393; 2535; 2616; 2630; 2644; 2925; 2966; 3038; 3161; 3190; 3196; 3205; 3213; 3236; 3248; 3254; 3335; 3352; 3360; 3387; 3412; 3496; 3505; 3509; 3533; 3571; 3647; 3664; 3683; 3746; 3790; 3800; 3817; 3900; 3927; 3931; 3968; 3991; 4007; 4187; 4214; 4275; 4397; 4436; 4493; 4500; 4507; 4526; 4537; 4788; 4817; 4860; 4871; 4936; 5015; 5040; 5045; 5091; 5181; 5279; 5305; 5323; 5334
CviQI	G!TAC	20	218; 243; 298; 331; 382; 539; 646; 724; 874; 1126; 1306; 1318; 1339; 1420; 1570; 1822; 2002; 2014; 2035; 3732
DdeI	C!TNAG	7	606; 2907; 3209; 4090; 4539; 4662; 5071
DinI	GGC!GCC	3	829; 1525; 3428
DpnI	GA!TC	27	587; 611; 662; 911; 1031; 1193; 1369; 1607; 1727; 1889; 2086; 3266; 3270; 3289; 3600; 3678; 3759; 3768; 3846; 4222; 4238; 4597; 4609; 4687; 4695; 4706; 4781
DpnII	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
DraI	TTT!AAA	3	2129; 4571; 4590
DraII	RG!GNCCY	3	885; 1581; 4525
DraIII	CACNNN!GTG	1	2543
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNNNNNN!	2	266; 4907
DraRI	!NNNNNNNNNNNNNNNNNNNGTCTTG	0	
DrdI	GACNNNN!NNGTC	3	2498; 3454; 5243
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNNN!NNGTC	3	2498; 3454; 5243
EaeI	Y!GGCCR	9	668; 745; 1150; 1441; 1846; 3333; 3507; 3898; 3925
EagI	C!GGCCG	4	668; 1150; 1846; 3333
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2894; 3771; 3981
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	3	2894; 3771; 3981
EciI	GGCGGANNNNNNNNNNNNNN!	4	2927; 3956; 5143; 5289
EciI	!NNNNNNNNNTCCGCC	4	496; 3098; 3119; 3140
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	4	668; 1150; 1846; 3333
Eco24I	GRGCY!C	7	620; 657; 1110; 1806; 2618; 3792; 4502
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	1	4416
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	4	885; 1581; 3943; 4388
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	4	668; 1150; 1846; 3333
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	6	719; 1190; 1415; 1886; 3573; 4005
Eco57I	!NNNNNNNNNNNNNNNNCTTCAG	1	4803
Eco72I	CAC!GTG	2	817; 1513
Eco81I	CC!TNAGG	2	2907; 4539
Eco88I	C!YCGRG	10	613; 656; 938; 1130; 1352; 1373; 1634; 1826; 2048; 2067
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWGGG	6	360; 681; 3156; 3249; 3859; 4264
Eco147I	AGG!CCT	1	3248
EcoHI	!CCSGG	12	655; 656; 1249; 1334; 1372; 1373; 1945; 2030; 3429; 3589; 4202; 4966
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	9	719; 1034; 1190; 1415; 1730; 1886; 3573; 4005; 4267
Eco57MI	!NNNNNNNNNNNNNNNNCTYCAG	4	1262; 1958; 4210; 4803
EcoNI	CCTNN!NNNAGG	2	698; 1394
EcoO65I	G!GTNACC	0	
EcoO109I	RG!GNCCY	3	885; 1581; 4525

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	19	88; 281; 855; 950; 999; 1011; 1551; 1646; 1695; 1707; 2961; 3016; 3033; 3812; 4391; 4494; 5184; 5197; 5318
EcoRV	GAT!ATC	0	
EcoT14I	C!CWGGG	6	360; 681; 3156; 3249; 3859; 4264
EcoT22I	ATGCA!T	3	2999; 3071; 5402
EcoT38I	GRGCY!C	7	620; 657; 1110; 1806; 2618; 3792; 4502
Eco53kI	GAG!CTC	1	618
EgeI	GGC!GCC	3	829; 1525; 3428
EheI	GGC!GCC	3	829; 1525; 3428
ErhI	C!CWGGG	6	360; 681; 3156; 3249; 3859; 4264
EsaBC3I	TC!GA	19	615; 628; 641; 850; 1312; 1546; 2008; 2069; 2577; 3268; 3541; 3697; 3721; 3757; 3919; 4110; 4155; 4410; 5248
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	22	304; 364; 685; 730; 808; 1249; 1426; 1504; 1945; 2857; 2997; 3069; 3160; 3301; 3646; 3832; 3863; 3889; 4245; 4629; 5349; 5400
Fail	YA!TR	60	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 683; 710; 728; 806; 1247; 1406; 1424; 1502; 1943; 2089; 2099; 2165; 2210; 2415; 2843; 2855; 2986; 2995; 3058; 3067; 3091; 3158; 3182; 3299; 3363; 3644; 3669; 3830; 3861; 3887; 3959; 4175; 4243; 4321; 4373; 4534; 4551; 4553; 4555; 4627; 4905; 5094; 5210; 5283; 5347; 5398
FalI	AAGNNNNNCTNNNNNNNNNNNN!	3	949; 1645; 3767
FalI	!NNNNNNNNAAGNNNNNCTT	3	917; 1613; 3735
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 3578; 4110; 4219
FaqI	!NNNNNNNNNNNNNGTCCC	4	2943; 3015; 3079; 4374
FatI	!CATG	22	300; 360; 681; 726; 804; 1245; 1422; 1500; 1941; 2853; 2993; 3065; 3156; 3297; 3642; 3828; 3859; 3885; 4241; 4625; 5345; 5396
FauI	CCCGCNNNN!	10	93; 119; 286; 1072; 1768; 2749; 3104; 3125; 4321; 4453
FauI	!NNNNNNGCGGG	6	644; 2680; 3550; 4087; 4225; 4372
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	640
FmuI	GGNC!C	19	86; 279; 657; 862; 888; 1076; 1168; 1336; 1558; 1584; 1772; 1864; 2032; 2537; 3946; 4391; 4437; 4495; 4528
Fnu4HI	GC!NGC	45	691; 868; 880; 982; 1096; 1099; 1150; 1286; 1387; 1564; 1576; 1678; 1792; 1795; 1846; 1982; 2074; 2204; 2723; 2745; 2759; 3197; 3336; 3388; 3399; 3489; 3494; 3531; 3572; 3659; 3662; 3665; 3901; 3997; 4038; 4052; 4166; 4505; 4520; 4731; 4937; 4940; 5005; 5148; 5303
FokI	GGATGNNNNNNNNN!	5	1390; 3294; 3751; 3776; 4230
FokI	!NNNNNNNNNNNNNCATCC	7	839; 971; 1256; 1535; 1667; 1952; 3100
FriOI	GRGCY!C	7	620; 657; 1110; 1806; 2618; 3792; 4502
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	3	713; 1409; 3529
FspAI	RTGC!GCAY	2	713; 1409
FspBI	C!TAG	8	592; 2082; 2276; 2694; 3250; 4265; 4599; 4852
FspEI	CCNNNNNNNNNNNN!	193	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 662; 677; 691; 707; 751; 797; 811; 827; 844; 859; 874; 901; 916; 950; 964; 979; 1001; 1021; 1040; 1069; 1088; 1122; 1142; 1166; 1180; 1196; 1211; 1229; 1243; 1258; 1279; 1339; 1361; 1375; 1403; 1447; 1493; 1507; 1523; 1540; 1555; 1570; 1597; 1612; 1646; 1660; 1675; 1697; 1717; 1736; 1765; 1784; 1818; 1838; 1862; 1876; 1892; 1907; 1925; 1939; 1954; 1975; 2035; 2057; 2071; 2087; 2110; 2149; 2163; 2304; 2399; 2423; 2446; 2469; 2487; 2509; 2530; 2549; 2568; 2597; 2618; 2632; 2658; 2746; 2772; 2821; 2862; 2880; 2919; 2935; 2973; 3030; 3045; 3102; 3122; 3136; 3153; 3167; 3204; 3219; 3262; 3345; 3412; 3443; 3463; 3478; 3523; 3537; 3603; 3617; 3636; 3652; 3693; 3713; 3760; 3810; 3826; 3846; 3871; 3891; 3914; 3941; 3959; 3985; 4025; 4051; 4075; 4131; 4145; 4173; 4216; 4237; 4272; 4316; 4404; 4428; 4450; 4470; 4486; 4507; 4521; 4540; 4624; 4644; 4672; 4687; 4721; 4763; 4790; 4805; 4850; 4874; 4888; 4910; 4936; 4956; 4980; 5006; 5054; 5073; 5092; 5118; 5153; 5198; 5228; 5242; 5293; 5307; 5332; 5348; 5369; 5398

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FspEI	!NNNNNNNNNNNNNNNNNGG	154	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 628; 652; 675; 686; 713; 749; 777; 809; 842; 861; 926; 959; 986; 1022; 1056; 1080; 1103; 1122; 1148; 1168; 1201; 1236; 1258; 1283; 1307; 1343; 1364; 1382; 1409; 1445; 1473; 1505; 1538; 1557; 1622; 1655; 1682; 1718; 1752; 1776; 1799; 1818; 1844; 1864; 1897; 1932; 1954; 1979; 2003; 2039; 2098; 2198; 2267; 2297; 2375; 2424; 2446; 2474; 2510; 2555; 2584; 2620; 2639; 2667; 2687; 2750; 2773; 2881; 2913; 2931; 2960; 3003; 3032; 3143; 3172; 3215; 3236; 3264; 3297; 3317; 3342; 3369; 3394; 3416; 3444; 3470; 3491; 3542; 3563; 3581; 3629; 3665; 3721; 3746; 3770; 3799; 3822; 3846; 3872; 3894; 3913; 3938; 3978; 4014; 4079; 4164; 4188; 4217; 4251; 4272; 4292; 4337; 4364; 4383; 4416; 4468; 4499; 4526; 4578; 4676; 4747; 4792; 4853; 4918; 4952; 4978; 4996; 5032; 5102; 5125; 5147; 5171; 5204; 5252; 5287; 5305; 5362
Fsp4HI	GC!NGC	45	691; 868; 880; 982; 1096; 1099; 1150; 1286; 1387; 1564; 1576; 1678; 1792; 1795; 1846; 1982; 2074; 2204; 2723; 2745; 2759; 3197; 3336; 3388; 3399; 3489; 3494; 3531; 3572; 3659; 3662; 3665; 3901; 3997; 4038; 4052; 4166; 4505; 4520; 4731; 4937; 4940; 5005; 5148; 5303
GdiII	C!GGCCR	6	668; 745; 1150; 1441; 1846; 3333
GdiII	Y!GGCCG	6	668; 1150; 1846; 3333; 3898; 3925
GlaI	GC!GC	29	596; 713; 829; 1235; 1237; 1409; 1525; 1931; 1933; 2692; 2700; 2726; 2748; 2757; 2770; 2801; 3420; 3428; 3492; 3529; 3795; 4055; 4231; 4317; 4720; 4829; 5003; 5103; 5170
Glul	GC!NGC	45	691; 868; 880; 982; 1096; 1099; 1150; 1286; 1387; 1564; 1576; 1678; 1792; 1795; 1846; 1982; 2074; 2204; 2723; 2745; 2759; 3197; 3336; 3388; 3399; 3489; 3494; 3531; 3572; 3659; 3662; 3665; 3901; 3997; 4038; 4052; 4166; 4505; 4520; 4731; 4937; 4940; 5005; 5148; 5303
GsaI	CCCAG!C	5	1113; 1809; 2974; 3046; 5045
GsaI	GCTGG!G	3	1105; 1801; 3935
GsuI	CTGGAGNNNNNNNNNNNNNN!	3	1034; 1730; 4267
GsuI	!NNNNNNNNNNNNNNCTCCAG	3	1262; 1958; 4210
HaeI	WGG!CCW	9	1325; 1361; 2021; 2057; 3248; 3509; 4871; 5323; 5334
HaeII	RGCGC!Y	7	598; 831; 1527; 2694; 2702; 3430; 5105
HaeIII	GG!CC	42	84; 277; 655; 670; 693; 747; 860; 1074; 1152; 1166; 1229; 1325; 1334; 1361; 1389; 1443; 1556; 1770; 1848; 1862; 1925; 2021; 2030; 2057; 2073; 2393; 2535; 3190; 3196; 3205; 3248; 3335; 3509; 3900; 3927; 4436; 4493; 4526; 4871; 5305; 5323; 5334
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	2	2102; 3623
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	2068; 3589
HaeIV	GAYNNNNNRTCNNNNNNNNNNNN!	2	2101; 3622
HaeIV	!NNNNNNNGAYNNNNNRTC	2	2070; 3591
HapII	C!CGG	35	601; 657; 667; 671; 792; 1153; 1183; 1216; 1251; 1273; 1336; 1374; 1488; 1849; 1879; 1912; 1947; 1969; 2032; 2645; 3332; 3409; 3431; 3459; 3590; 3680; 3747; 3928; 4203; 4211; 4303; 4777; 4967; 4993; 5140
HgaI	GACGCNNNNN!	3	526; 4137; 4216
HgaI	!NNNNNNNNNGCGTC	3	2760; 4655; 5233
HhaI	GCG!C	29	597; 714; 830; 1236; 1238; 1410; 1526; 1932; 1934; 2693; 2701; 2727; 2749; 2758; 2771; 2802; 3421; 3429; 3493; 3530; 3796; 4056; 4232; 4318; 4721; 4830; 5004; 5104; 5171
HinI	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208
Hin1II	CATG!	22	304; 364; 685; 730; 808; 1249; 1426; 1504; 1945; 2857; 2997; 3069; 3160; 3301; 3646; 3832; 3863; 3889; 4245; 4629; 5349; 5400
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	2101; 3622
Hin4I	!NNNNNNNNGABNNNNNRTC	3	2069; 3590; 3620
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	2101; 3622; 3652
Hin4I	!NNNNNNNNGAYNNNNNVTC	2	2069; 3590
Hin6I	G!CGC	29	595; 712; 828; 1234; 1236; 1408; 1524; 1930; 1932; 2691; 2699; 2725; 2747; 2756; 2769; 2800; 3419; 3427; 3491; 3528; 3794; 4054; 4230; 4316; 4719; 4828; 5002; 5102; 5169
HinP1I	G!CGC	29	595; 712; 828; 1234; 1236; 1408; 1524; 1930; 1932; 2691; 2699; 2725; 2747; 2756; 2769; 2800; 3419; 3427; 3491; 3528; 3794; 4054; 4230; 4316; 4719; 4828; 5002; 5102; 5169
HincII	GTY!RAC	2	641; 2190
HindII	GTY!RAC	2	641; 2190

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HindIII	A!AGCTT	1	622
HinfI	G!ANTC	15	410; 604; 810; 1506; 2078; 2470; 2492; 2902; 3912; 4046; 4098; 4156; 4193; 4975; 5371
HpaI	GTT!AAC	1	2190
HpaII	C!CGG	35	601; 657; 667; 671; 792; 1153; 1183; 1216; 1251; 1273; 1336; 1374; 1488; 1849; 1879; 1912; 1947; 1969; 2032; 2645; 3332; 3409; 3431; 3459; 3590; 3680; 3747; 3928; 4203; 4211; 4303; 4777; 4967; 4993; 5140
HphI	GGTGANNNNNNNN!	7	376; 697; 1051; 1393; 1747; 4498; 4614
HphI	!NNNNNNNTCACC	6	940; 1255; 1636; 1951; 2544; 3605
Hpy8I	GTN!NAC	17	201; 539; 577; 641; 742; 895; 1048; 1126; 1438; 1591; 1744; 1822; 2190; 2474; 2491; 2546; 5033
Hpy99I	CGWCG!	12	645; 779; 1073; 1475; 1769; 3517; 3545; 3839; 3854; 4131; 4516; 5249
Hpy166II	GTN!NAC	17	201; 539; 577; 641; 742; 895; 1048; 1126; 1438; 1591; 1744; 1822; 2190; 2474; 2491; 2546; 5033
Hpy188I	TCN!GA	12	585; 609; 2601; 3210; 3394; 3738; 4091; 4192; 4671; 4805; 5158; 5236
Hpy188III	TC!NNGA	27	613; 718; 988; 1279; 1414; 1684; 1975; 2082; 2854; 2906; 3219; 3272; 3445; 3761; 3770; 3853; 3909; 3953; 4043; 4076; 4145; 4626; 4700; 4783; 4881; 4979; 5113
HpyAV	CCTTCNNNNNN!	9	796; 850; 898; 1492; 1546; 1594; 4072; 4179; 4858
HpyAV	!NNNNNGAAGG	19	694; 1036; 1165; 1219; 1291; 1351; 1390; 1732; 1861; 1915; 1987; 2047; 2660; 3555; 4284; 4300; 4483; 4800; 5110
HpyCH4III	ACN!GT	16	76; 198; 269; 543; 581; 645; 739; 1435; 2518; 3807; 3923; 4031; 4354; 4845; 5315; 5386
HpyCH4IV	A!CGT	18	122; 134; 175; 258; 339; 444; 816; 1158; 1512; 1854; 2487; 2499; 2542; 2652; 3543; 3730; 4511; 4644
HpyCH4V	TG!CA	21	636; 895; 1048; 1591; 1744; 2176; 2203; 2271; 2988; 2997; 3060; 3069; 3184; 3260; 3319; 3478; 3653; 3667; 4737; 5033; 5400
HpyF3I	C!TNAG	7	606; 2907; 3209; 4090; 4539; 4662; 5071
HpyF10VI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 801; 876; 1017; 1146; 1218; 1235; 1282; 1331; 1497; 1572; 1713; 1842; 1914; 1931; 1978; 2027; 2654; 2684; 2711; 2753; 2994; 3066; 3117; 3196; 3418; 3502; 3525; 3664; 3787; 3870; 4137; 4324; 4528; 4727; 5299
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 828; 1524; 3427; 4129; 4208
Hsp92II	CATG!	22	304; 364; 685; 730; 808; 1249; 1426; 1504; 1945; 2857; 2997; 3069; 3160; 3301; 3646; 3832; 3863; 3889; 4245; 4629; 5349; 5400
HspAI	G!CGC	29	595; 712; 828; 1234; 1236; 1408; 1524; 1930; 1932; 2691; 2699; 2725; 2747; 2756; 2769; 2800; 3419; 3427; 3491; 3528; 3794; 4054; 4230; 4316; 4719; 4828; 5002; 5102; 5169
KasI	G!GCGCC	3	827; 1523; 3426
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	1	649
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	652
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	2190
Kzo9I	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3771; 3981
LpnI	RG!GCGY	7	596; 829; 1525; 2692; 2700; 3428; 5103
LpnPI	CCDGNNNNNNNNNN!	84	102; 295; 614; 670; 684; 707; 805; 848; 869; 964; 1001; 1021; 1040; 1123; 1166; 1181; 1196; 1222; 1253; 1286; 1339; 1361; 1387; 1403; 1501; 1544; 1565; 1660; 1697; 1717; 1736; 1819; 1862; 1877; 1892; 1918; 1949; 1982; 2035; 2057; 2164; 2469; 2658; 2881; 2919; 2935; 2975; 3030; 3047; 3147; 3232; 3345; 3422; 3444; 3467; 3603; 3617; 3636; 3693; 3760; 3810; 3826; 3883; 3941; 4150; 4216; 4240; 4316; 4405; 4508; 4541; 4772; 4790; 4936; 4956; 4980; 5006; 5055; 5153; 5198; 5228; 5307; 5332; 5369

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	!NNNNNNNNNNNNNNCHGG	71	75; 268; 552; 586; 642; 777; 842; 868; 937; 986; 1087; 1138; 1168; 1201; 1236; 1258; 1321; 1359; 1473; 1538; 1564; 1633; 1682; 1783; 1834; 1864; 1897; 1932; 1954; 2017; 2510; 2630; 2687; 2750; 2948; 2960; 3020; 3032; 3264; 3309; 3352; 3394; 3416; 3444; 3491; 3553; 3575; 3665; 3732; 3755; 3799; 3894; 3913; 3938; 4087; 4188; 4231; 4288; 4378; 4481; 4508; 4526; 4762; 4799; 4952; 4978; 5118; 5136; 5171; 5252; 5305
Lsp1109I	GCAGCNNNNNNNN!	8	891; 1587; 2215; 3500; 3542; 4063; 4516; 5016
Lsp1109I	!NNNNNNNNNNNNNGCTGC	10	854; 1272; 1550; 1968; 2709; 3374; 3558; 3651; 4717; 4923
LweI	GCATCNNNNN!	10	723; 993; 1419; 1689; 2243; 3006; 3078; 3726; 3790; 4065
LweI	!NNNNNNNNNGATGC	7	357; 1272; 1968; 3385; 3640; 3856; 5248
MabI	A!CCWGGT	1	3016
MaeI	C!TAG	8	592; 2082; 2276; 2694; 3250; 4265; 4599; 4852
MaeII	A!CGT	18	122; 134; 175; 258; 339; 444; 816; 1158; 1512; 1854; 2487; 2499; 2542; 2652; 3543; 3730; 4511; 4644
MaeIII	!GTNAC	14	61; 148; 497; 817; 1513; 2215; 2716; 2728; 3547; 3853; 4543; 4809; 4925; 4988
MalI	GA!TC	27	587; 611; 662; 911; 1031; 1193; 1369; 1607; 1727; 1889; 2086; 3266; 3270; 3289; 3600; 3678; 3759; 3768; 3846; 4222; 4238; 4597; 4609; 4687; 4695; 4706; 4781
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2851; 4040
MbiI	GAG!CGG	6	690; 1095; 1386; 1791; 2687; 4094
MboI	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
MboII	GAAGANNNNNNNN!	9	1096; 1303; 1792; 1999; 2683; 2911; 3788; 3998; 4617
MboII	!NNNNNNNTCTTC	6	913; 1609; 4078; 4245; 4445; 4688
McaTI	GCGC!GC	2	1237; 1933
MfeI	C!AATTG	1	2177
MfiI	R!GATCY	13	585; 609; 660; 909; 1367; 1605; 3598; 3844; 4236; 4595; 4607; 4693; 4704
MhiI	GDGCH!C	18	620; 657; 737; 897; 1050; 1110; 1433; 1593; 1746; 1806; 2618; 3373; 3466; 3540; 3730; 3792; 4502; 5035
MisI	TGG!CCA	1	3509
MluI	A!CGCGT	0	
MluNI	TGG!CCA	1	3509
MlyI	GAGTCNNNNN!	2	2479; 2911
MlyI	!NNNNNGACTC	6	404; 598; 2072; 2486; 4092; 4969
Mly113I	GG!CGCC	3	828; 1524; 3427
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	2520
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4952; 5136
MniI	CCTCNNNNNNN!	7	2146; 3210; 4028; 4234; 4548; 4918; 5242
MniI	!NNNNNNNGAGG	30	541; 724; 757; 817; 934; 967; 1009; 1111; 1315; 1420; 1453; 1513; 1630; 1663; 1705; 1807; 2011; 2063; 2106; 2571; 2902; 3180; 3223; 3238; 3278; 3342; 3478; 3835; 4265; 5168
Mph1103I	ATGCA!T	3	2999; 3071; 5402
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	5	791; 1487; 2644; 3927; 4210
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	1	3509
MseI	T!TAA	15	7; 2128; 2189; 2310; 2331; 2342; 2354; 2365; 2382; 2480; 2751; 4570; 4584; 4589; 4641
MslI	CAYNN!NNRTG	7	365; 683; 719; 1118; 1415; 1814; 3864
MspI	C!CGG	35	601; 657; 667; 671; 792; 1153; 1183; 1216; 1251; 1273; 1336; 1374; 1488; 1849; 1879; 1912; 1947; 1969; 2032; 2645; 3332; 3409; 3431; 3459; 3590; 3680; 3747; 3928; 4203; 4211; 4303; 4777; 4967; 4993; 5140
Msp20I	TGG!CCA	1	3509
MspA1I	CMG!CKG	5	651; 2925; 3533; 4762; 5007
MspCI	C!TTAAG	1	2309

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	281	36; 50; 71; 97; 113; 127; 147; 167; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 627; 640; 662; 679; 694; 710; 725; 739; 769; 804; 817; 834; 847; 868; 883; 904; 918; 937; 950; 963; 981; 1000; 1013; 1039; 1061; 1076; 1090; 1114; 1128; 1142; 1165; 1180; 1195; 1221; 1234; 1247; 1262; 1278; 1291; 1315; 1333; 1347; 1360; 1374; 1387; 1406; 1421; 1435; 1465; 1500; 1513; 1530; 1543; 1564; 1579; 1600; 1614; 1633; 1646; 1659; 1677; 1696; 1709; 1735; 1757; 1772; 1786; 1810; 1824; 1838; 1861; 1876; 1891; 1917; 1930; 1943; 1958; 1974; 1987; 2011; 2029; 2043; 2056; 2070; 2087; 2100; 2115; 2134; 2151; 2164; 2205; 2219; 2232; 2250; 2288; 2303; 2321; 2362; 2386; 2406; 2424; 2445; 2468; 2500; 2515; 2537; 2555; 2568; 2589; 2606; 2619; 2632; 2648; 2661; 2691; 2706; 2731; 2749; 2762; 2777; 2801; 2815; 2839; 2864; 2880; 2918; 2934; 2973; 2987; 3001; 3029; 3045; 3059; 3073; 3102; 3115; 3136; 3145; 3167; 3197; 3213; 3231; 3261; 3284; 3308; 3332; 3351; 3379; 3405; 3421; 3434; 3457; 3471; 3491; 3504; 3518; 3537; 3551; 3564; 3580; 3595; 3608; 3624; 3639; 3655; 3680; 3699; 3715; 3728; 3741; 3759; 3773; 3787; 3803; 3825; 3841; 3860; 3882; 3898; 3921; 3940; 3954; 3970; 3984; 4004; 4020; 4033; 4055; 4088; 4102; 4122; 4135; 4149; 4203; 4216; 4239; 4252; 4271; 4288; 4315; 4351; 4384; 4403; 4428; 4449; 4476; 4489; 4506; 4520; 4535; 4551; 4611; 4636; 4652; 4674; 4687; 4701; 4732; 4746; 4771; 4789; 4804; 4817; 4836; 4849; 4864; 4893; 4912; 4930; 4955; 4970; 4989; 5005; 5024; 5042; 5058; 5072; 5091; 5118; 5141; 5163; 5182; 5197; 5210; 5227; 5247; 5274; 5287; 5306; 5331; 5354; 5368; 5381; 5398
MspJI	!NNNNNNNNNNNNYNG	233	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 593; 612; 636; 653; 673; 695; 713; 725; 743; 774; 791; 809; 828; 850; 869; 893; 911; 937; 957; 974; 994; 1013; 1035; 1062; 1088; 1116; 1134; 1154; 1175; 1195; 1217; 1236; 1258; 1289; 1307; 1334; 1359; 1391; 1409; 1421; 1439; 1470; 1487; 1505; 1524; 1546; 1565; 1589; 1607; 1633; 1653; 1670; 1690; 1709; 1731; 1758; 1784; 1812; 1830; 1850; 1871; 1891; 1913; 1932; 1954; 1985; 2003; 2030; 2053; 2079; 2108; 2137; 2179; 2262; 2297; 2324; 2347; 2376; 2420; 2442; 2474; 2510; 2527; 2548; 2585; 2605; 2622; 2639; 2674; 2692; 2710; 2727; 2751; 2773; 2800; 2828; 2854; 2892; 2913; 2930; 2948; 2971; 2992; 3020; 3043; 3064; 3082; 3103; 3120; 3143; 3167; 3187; 3205; 3227; 3258; 3280; 3306; 3325; 3342; 3370; 3389; 3408; 3426; 3444; 3465; 3487; 3511; 3544; 3564; 3582; 3603; 3629; 3656; 3673; 3690; 3707; 3733; 3755; 3777; 3795; 3815; 3834; 3856; 3894; 3914; 3938; 3958; 3978; 4005; 4029; 4062; 4081; 4109; 4131; 4160; 4188; 4213; 4232; 4251; 4272; 4289; 4306; 4337; 4364; 4384; 4407; 4427; 4464; 4481; 4500; 4526; 4546; 4585; 4612; 4631; 4649; 4686; 4704; 4745; 4763; 4789; 4806; 4838; 4867; 4895; 4916; 4939; 4958; 4979; 4997; 5014; 5032; 5058; 5079; 5099; 5119; 5137; 5158; 5184; 5201; 5220; 5239; 5268; 5287; 5305; 5324; 5342; 5360; 5383
MspR9I	CC!NGG	31	90; 283; 657; 658; 857; 952; 1001; 1013; 1251; 1336; 1374; 1375; 1553; 1648; 1697; 1709; 1947; 2032; 2963; 3018; 3035; 3431; 3591; 3814; 4204; 4393; 4496; 4968; 5186; 5199; 5320
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	2177
MvaI	CC!WGG	19	90; 283; 857; 952; 1001; 1013; 1553; 1648; 1697; 1709; 2963; 3018; 3035; 3814; 4393; 4496; 5186; 5199; 5320
Mva1269I	GAATGCN!	1	2178
Mva1269I	G!CATTC	1	2271
MvnI	CG!CG	18	60; 651; 1236; 1932; 2076; 2351; 2727; 2747; 2771; 2802; 3493; 3794; 4232; 4316; 4379; 4448; 4721; 5302
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 801; 876; 1017; 1146; 1218; 1235; 1282; 1331; 1497; 1572; 1713; 1842; 1914; 1931; 1978; 2027; 2654; 2684; 2711; 2753; 2994; 3066; 3117; 3196; 3418; 3502; 3525; 3664; 3787; 3870; 4137; 4324; 4528; 4727; 5299
NaeI	GCC!GGC	5	793; 1489; 2646; 3929; 4212
NarI	GG!CGCC	3	828; 1524; 3427
NciI	CC!SGG	12	657; 658; 1251; 1336; 1374; 1375; 1947; 2032; 3431; 3591; 4204; 4968
NcoI	C!CATGG	4	360; 681; 3156; 3859

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NdeI	CA!TATG	1	234
NdeII	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	5	791; 1487; 2644; 3927; 4210
NheI	G!CTAGC	1	591
NlaIII	CATG!	22	304; 364; 685; 730; 808; 1249; 1426; 1504; 1945; 2857; 2997; 3069; 3160; 3301; 3646; 3832; 3863; 3889; 4245; 4629; 5349; 5400
NlaIV	GGN!NCC	35	467; 647; 655; 662; 736; 796; 829; 861; 1054; 1075; 1107; 1187; 1277; 1432; 1492; 1525; 1557; 1750; 1771; 1803; 1883; 1973; 2582; 2603; 2615; 2806; 2967; 3039; 3428; 3463; 4311; 4390; 4435; 5278; 5317
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	2259; 2574; 4166
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	6	347; 1061; 1142; 1757; 1838; 5238
Nli3877I	CYCGR!G	10	617; 660; 942; 1134; 1356; 1377; 1638; 1830; 2052; 2071
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	4	931; 1627; 3216; 3652
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	3181
NmeDI	RCCGGYNNNNNNNN!	9	678; 803; 1194; 1499; 1890; 2656; 3758; 3939; 4222
NmeDI	!NNNNNNNNNNNNRCCGGY	9	653; 778; 1169; 1474; 1865; 2631; 3733; 3914; 4197
NmuCI	!GTSAC	5	817; 1513; 2716; 3547; 3853
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	3	713; 1409; 3529
NsiI	ATGCA!T	3	2999; 3071; 5402
NspI	RCATG!Y	4	2997; 3069; 3832; 5349
NspV	TT!CGAA	2	627; 4109
OliI	CACNN!NNGTG	3	683; 1118; 1814
PabI	GTA!C	20	220; 245; 300; 333; 384; 541; 648; 726; 876; 1128; 1308; 1320; 1341; 1422; 1572; 1824; 2004; 2016; 2037; 3734
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2997; 3069; 3832
PaeR7I	C!TCGAG	2	613; 2067
PagI	T!CATGA	2	2853; 4625
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	4392; 4495
PauI	G!CGCGC	2	1234; 1930
PceI	AGG!CCT	1	3248
PciI	A!CATGT	1	5345
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3771; 3981
PcsI	WCGNNNN!NNNCGW	10	1308; 1326; 2004; 2022; 3721; 3798; 4041; 4115; 4508; 5026
PctI	GAATGCN!	1	2178
PctI	G!CATTC	1	2271
PdiI	GCC!GGC	5	793; 1489; 2646; 3929; 4212
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	810; 1506; 3912; 4046; 4156; 4193; 5371
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	3545
PfIMI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	1	4202
PhoI	GG!CC	42	84; 277; 655; 670; 693; 747; 860; 1074; 1152; 1166; 1229; 1325; 1334; 1361; 1389; 1443; 1556; 1770; 1848; 1862; 1925; 2021; 2030; 2057; 2073; 2393; 2535; 3190; 3196; 3205; 3248; 3335; 3509; 3900; 3927; 4436; 4493; 4526; 4871; 5305; 5323; 5334
PinAI	A!CCGGT	0	
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3808
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	3373; 3628
PleI	GAGTCNNNN!	2	2478; 2910
PleI	!NNNNNGACTC	6	404; 598; 2072; 2486; 4092; 4969
Ple19I	CGAT!CG	0	



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PmaCI	CAC!GTG	2	817; 1513
PmeI	GTTT!AAC	0	
PmII	CAC!GTG	2	817; 1513
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	2509
PpiI	!NNNNNNNGAGNNNNNGTTC	1	4639
PpiI	GAGNNNNGTTCNNNNNNNNNNNN!	1	4671
PpiI	!NNNNNNGAACNNNNNCTC	1	2477
PpsI	GAGTCNNNN!	2	2478; 2910
PpsI	!NNNNNGACTC	6	404; 598; 2072; 2486; 4092; 4969
Ppu10I	A!TGCAT	3	2995; 3067; 5398
Ppu21I	YAC!GTR	5	340; 817; 1513; 2543; 3731
PpuMI	RG!GWCCY	2	885; 1581
PscI	A!CATGT	1	5345
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	2210; 2415
Psp03I	GGWC!C	4	888; 1584; 3946; 4391
Psp5II	RG!GWCCY	2	885; 1581
Psp6I	!CCWGG	19	88; 281; 855; 950; 999; 1011; 1551; 1646; 1695; 1707; 2961; 3016; 3033; 3812; 4391; 4494; 5184; 5197; 5318
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	2	817; 1513
PspEI	G!GTNACC	0	
PspGI	!CCWGG	19	88; 281; 855; 950; 999; 1011; 1551; 1646; 1695; 1707; 2961; 3016; 3033; 3812; 4391; 4494; 5184; 5197; 5318
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	35	467; 647; 655; 662; 736; 796; 829; 861; 1054; 1075; 1107; 1187; 1277; 1432; 1492; 1525; 1557; 1750; 1771; 1803; 1883; 1973; 2582; 2603; 2615; 2806; 2967; 3039; 3428; 3463; 4311; 4390; 4435; 5278; 5317
PspOMI	G!GGCCC	1	653
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNN!	3	125; 3157; 4156
PspOMII	!NNNNNNNNNNNNNNNNNYTGGGCG	1	3559
PspPI	G!GNCC	19	83; 276; 654; 859; 885; 1073; 1165; 1333; 1555; 1581; 1769; 1861; 2029; 2534; 3943; 4388; 4434; 4492; 4525
PspPPI	RG!GWCCY	2	885; 1581
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2980; 3052; 4558
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	2	2893; 4088
PspXI	VC!TCGAGB	1	2067
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	2	766; 1462
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	2	734; 1430
PssI	RGNC!CY	3	888; 1584; 4528
PstI	CTGCA!G	1	638
PstNI	CAGNN!CTG	4	1285; 1981; 4528; 4936
PsuI	R!GATCY	13	585; 609; 660; 909; 1367; 1605; 3598; 3844; 4236; 4595; 4607; 4693; 4704
PsyI	GACN!NNGTC	1	3545
PteI	G!CGCGC	2	1234; 1930
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2925; 3533
RcaI	T!CATGA	2	2853; 4625
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	1	3942
RceI	!NNNNNNNNNNNNNNNNNGTCCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	2156
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNNNN!	2	999; 1695
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
RsaI	GT!AC	20	219; 244; 299; 332; 383; 540; 647; 725; 875; 1127; 1307; 1319; 1340; 1421; 1571; 1823; 2003; 2015; 2036; 3733
RsaNI	G!TAC	20	218; 243; 298; 331; 382; 539; 646; 724; 874; 1126; 1306; 1318; 1339; 1420; 1570; 1822; 2002; 2014; 2035; 3732
RseI	CAYNN!NNRTG	7	365; 683; 719; 1118; 1415; 1814; 3864
RsrII	CG!GWCCG	1	3943
Rsr2I	CG!GWCCG	1	3943
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SalI	G!TCGAC	1	639
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3771; 3981
SaqAI	T!TAA	15	7; 2128; 2189; 2310; 2331; 2342; 2354; 2365; 2382; 2480; 2751; 4570; 4584; 4589; 4641
SatI	GC!NGC	45	691; 868; 880; 982; 1096; 1099; 1150; 1286; 1387; 1564; 1576; 1678; 1792; 1795; 1846; 1982; 2074; 2204; 2723; 2745; 2759; 3197; 3336; 3388; 3399; 3489; 3494; 3531; 3572; 3659; 3662; 3665; 3901; 3997; 4038; 4052; 4166; 4505; 4520; 4731; 4937; 4940; 5005; 5148; 5303
Sau96I	G!GNCC	19	83; 276; 654; 859; 885; 1073; 1165; 1333; 1555; 1581; 1769; 1861; 2029; 2534; 3943; 4388; 4434; 4492; 4525
Sau3AI	!GATC	27	585; 609; 660; 909; 1029; 1191; 1367; 1605; 1725; 1887; 2084; 3264; 3268; 3287; 3598; 3676; 3757; 3766; 3844; 4220; 4236; 4595; 4607; 4685; 4693; 4704; 4779
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	2	1307; 2003
SchI	GAGTCNNNNN!	2	2479; 2911
SchI	!NNNNNGACTC	6	404; 598; 2072; 2486; 4092; 4969
SciI	CTC!GAG	2	615; 2069
ScrFI	CC!NGG	31	90; 283; 657; 658; 857; 952; 1001; 1013; 1251; 1336; 1374; 1375; 1553; 1648; 1697; 1709; 1947; 2032; 2963; 3018; 3035; 3431; 3591; 3814; 4204; 4393; 4496; 4968; 5186; 5199; 5320
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	4	3005; 3077; 3246; 5188
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	3582; 4067
SdeOSI	GACNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	18	620; 657; 737; 897; 1050; 1110; 1433; 1593; 1746; 1806; 2618; 3373; 3466; 3540; 3730; 3792; 4502; 5035
SelI	!CGCG	18	58; 649; 1234; 1930; 2074; 2349; 2725; 2745; 2769; 2800; 3491; 3792; 4230; 4314; 4377; 4446; 4719; 5300
SetI	ASST!	79	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 819; 890; 935; 953; 971; 1041; 1047; 1122; 1161; 1176; 1191; 1214; 1317; 1350; 1515; 1586; 1631; 1649; 1667; 1737; 1743; 1818; 1857; 1872; 1887; 1910; 2013; 2046; 2117; 2138; 2147; 2159; 2208; 2375; 2490; 2502; 2545; 2582; 2632; 2655; 2779; 2927; 3022; 3215; 3328; 3456; 3535; 3546; 3618; 3689; 3733; 3993; 4139; 4183; 4514; 4545; 4604; 4647; 4790; 4811; 4910; 5047; 5062; 5081; 5093; 5137; 5183; 5234
SexAI	A!CCWGGT	1	3016
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	723; 993; 1419; 1689; 2243; 3006; 3078; 3726; 3790; 4065
SfaNI	!NNNNNNNNNGATGC	7	357; 1272; 1968; 3385; 3640; 3856; 5248
SfcI	C!TRYAG	4	634; 2762; 4889; 5080
SfiI	GGCCNNNN!NGGCC	3	1331; 2027; 3202
SfoI	GGC!GCC	3	829; 1525; 3428
Sfr274I	C!TCGAG	2	613; 2067
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 4109

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	CNNGNNNNNNNNNN!	230	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 662; 679; 694; 706; 730; 751; 769; 804; 817; 835; 868; 883; 904; 919; 937; 950; 963; 985; 1000; 1013; 1039; 1061; 1076; 1090; 1114; 1129; 1142; 1165; 1180; 1195; 1221; 1234; 1247; 1262; 1285; 1315; 1333; 1347; 1360; 1385; 1402; 1426; 1447; 1465; 1500; 1513; 1531; 1564; 1579; 1600; 1615; 1633; 1646; 1659; 1681; 1696; 1709; 1735; 1757; 1772; 1786; 1810; 1825; 1838; 1861; 1876; 1891; 1917; 1930; 1943; 1958; 1981; 2011; 2029; 2043; 2056; 2079; 2094; 2134; 2163; 2205; 2288; 2362; 2446; 2468; 2500; 2537; 2555; 2574; 2589; 2631; 2648; 2665; 2700; 2714; 2731; 2753; 2777; 2801; 2866; 2880; 2918; 2934; 2974; 2987; 3006; 3029; 3046; 3059; 3078; 3108; 3129; 3146; 3169; 3204; 3231; 3262; 3284; 3310; 3332; 3351; 3379; 3415; 3434; 3457; 3471; 3491; 3504; 3518; 3537; 3551; 3570; 3602; 3616; 3629; 3655; 3686; 3699; 3716; 3733; 3747; 3764; 3782; 3797; 3825; 3841; 3860; 3882; 3898; 3921; 3940; 3965; 3984; 4004; 4031; 4055; 4088; 4107; 4135; 4149; 4215; 4239; 4254; 4277; 4298; 4315; 4363; 4390; 4404; 4433; 4457; 4490; 4507; 4527; 4540; 4553; 4611; 4638; 4657; 4687; 4712; 4732; 4746; 4771; 4789; 4826; 4864; 4893; 4921; 4935; 4955; 4970; 4991; 5005; 5024; 5042; 5058; 5098; 5118; 5145; 5163; 5184; 5197; 5210; 5227; 5251; 5274; 5306; 5331; 5358; 5380
SgeI	!NNNNNNNNNNNNCNG	194	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 599; 636; 653; 680; 704; 725; 743; 778; 801; 821; 842; 869; 893; 911; 937; 959; 986; 1013; 1035; 1062; 1088; 1116; 1139; 1169; 1195; 1217; 1236; 1259; 1289; 1307; 1334; 1359; 1376; 1400; 1421; 1439; 1474; 1497; 1517; 1538; 1565; 1589; 1607; 1633; 1655; 1682; 1709; 1731; 1758; 1784; 1812; 1835; 1865; 1891; 1913; 1932; 1955; 1985; 2003; 2030; 2053; 2108; 2137; 2179; 2262; 2336; 2420; 2442; 2474; 2511; 2529; 2548; 2605; 2622; 2639; 2674; 2692; 2712; 2732; 2751; 2775; 2840; 2892; 2948; 2980; 3003; 3020; 3052; 3082; 3103; 3120; 3143; 3178; 3205; 3236; 3258; 3284; 3306; 3325; 3353; 3389; 3408; 3431; 3452; 3470; 3487; 3511; 3544; 3576; 3603; 3629; 3660; 3690; 3707; 3733; 3756; 3777; 3799; 3819; 3839; 3856; 3895; 3914; 3939; 3958; 3978; 4005; 4029; 4062; 4081; 4109; 4131; 4189; 4213; 4232; 4251; 4272; 4289; 4337; 4364; 4384; 4407; 4431; 4464; 4481; 4501; 4527; 4585; 4612; 4631; 4661; 4686; 4706; 4745; 4763; 4800; 4838; 4867; 4895; 4916; 4944; 4965; 4998; 5016; 5072; 5092; 5119; 5137; 5158; 5184; 5201; 5225; 5248; 5280; 5305; 5332; 5354; 5383
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	652
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 2574; 4361; 5154
SimI	!GACCC	4	106; 3855; 4423; 4671
SinI	G!GWCC	4	885; 1581; 3943; 4388
SlaI	C!TCGAG	2	613; 2067
SmaI	CCC!GGG	2	658; 1375
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	7	365; 683; 719; 1118; 1415; 1814; 3864
SmlI	C!TYRAG	8	613; 619; 2067; 2309; 3818; 4700; 4977; 5239
SmoI	C!TYRAG	8	613; 619; 2067; 2309; 3818; 4700; 4977; 5239
SmuI	CCCGCNNNN!	10	93; 119; 286; 1072; 1768; 2749; 3104; 3125; 4321; 4453
SmuI	!NNNNNNGCGGG	6	644; 2680; 3550; 4087; 4225; 4372
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2997; 3069; 3832
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 629; 2177; 2241; 2319; 2345; 2356; 3003; 3075; 3167; 4585
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	2	885; 1581
SseBI	AGG!CCT	1	3248
SsiI	C!CGC	39	58; 86; 98; 112; 279; 507; 589; 649; 903; 993; 1065; 1599; 1689; 1761; 2074; 2742; 2745; 2759; 2849; 3097; 3109; 3118; 3130; 3140; 3151; 3197; 3336; 3399; 3901; 3946; 4012; 4038; 4163; 4166; 4314; 4446; 4753; 4897; 5393

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SsiI	G!CGG	36	370; 403; 528; 651; 690; 981; 1095; 1098; 1149; 1288; 1386; 1677; 1791; 1794; 1845; 1984; 2687; 2714; 2802; 2912; 3493; 3557; 3658; 3661; 3941; 3996; 4094; 4232; 4379; 4519; 4762; 5007; 5128; 5147; 5274; 5302
SspI	AAT!ATT	2	2335; 2888
SspDI	G!GCGCC	3	827; 1523; 3426
SspD5I	GGTGANNNNNNNN!	7	376; 697; 1051; 1393; 1747; 4498; 4614
SspD5I	!NNNNNNNNNTCACC	6	939; 1254; 1635; 1950; 2543; 3604
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	33	92; 118; 285; 663; 921; 945; 1071; 1083; 1137; 1257; 1342; 1359; 1380; 1617; 1641; 1767; 1779; 1833; 1953; 2038; 2055; 2626; 2748; 3103; 3124; 3437; 3840; 3979; 4050; 4320; 4452; 4682; 5120
Sth132I	!NNNNNNNNCCGGG	20	15; 407; 470; 643; 1366; 2627; 2679; 2780; 3507; 3549; 3582; 4086; 4195; 4224; 4371; 4475; 4506; 4959; 5003; 5211
Sth302II	CC!GG	35	602; 658; 668; 672; 793; 1154; 1184; 1217; 1252; 1274; 1337; 1375; 1489; 1850; 1880; 1913; 1948; 1970; 2033; 2646; 3333; 3410; 3432; 3460; 3591; 3681; 3748; 3929; 4204; 4212; 4304; 4778; 4968; 4994; 5141
StrI	C!TCGAG	2	613; 2067
StsI	GGATGNNNNNNNNNN!	5	1391; 3295; 3752; 3777; 4231
StsI	!NNNNNNNNNNNNNNCATCC	7	838; 970; 1255; 1534; 1666; 1951; 3099
StuI	AGG!CCT	1	3248
StyI	C!CWWGG	6	360; 681; 3156; 3249; 3859; 4264
StyD4I	!CCNGG	31	88; 281; 655; 656; 855; 950; 999; 1011; 1249; 1334; 1372; 1373; 1551; 1646; 1695; 1707; 1945; 2030; 2961; 3016; 3033; 3429; 3589; 3812; 4202; 4391; 4494; 4966; 5184; 5197; 5318
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	16	76; 198; 269; 543; 581; 645; 739; 1435; 2518; 3807; 3923; 4031; 4354; 4845; 5315; 5386
TaiI	ACGT!	18	125; 137; 178; 261; 342; 447; 819; 1161; 1515; 1857; 2490; 2502; 2545; 2655; 3546; 3733; 4514; 4647
TaqI	T!CGA	19	614; 627; 640; 849; 1311; 1545; 2007; 2068; 2576; 3267; 3540; 3696; 3720; 3756; 3918; 4109; 4154; 4409; 5247
TaqII	GACCGANNNNNNNNNN!	5	836; 1532; 2447; 3464; 4132
TaqII	!NNNNNNNNNTCGGTC	1	4376
TaqII	CACCCANNNNNNNNNN!	2	812; 1508
TaqII	!NNNNNNNNNTGGGTG	3	172; 3331; 3923
TasI	!AATT	11	18; 629; 2177; 2241; 2319; 2345; 2356; 3003; 3075; 3167; 4585
TatI	W!GTACW	8	217; 297; 330; 381; 723; 1305; 1419; 2001
TauI	GCSG!C	26	693; 984; 1098; 1101; 1152; 1389; 1680; 1794; 1797; 1848; 2076; 2747; 2761; 3199; 3338; 3401; 3496; 3661; 3664; 3903; 3999; 4040; 4168; 4522; 5150; 5305
TfiI	G!AWTC	7	810; 1506; 3912; 4046; 4156; 4193; 5371
TliI	C!TCGAG	2	613; 2067
TruII	T!TAA	15	7; 2128; 2189; 2310; 2331; 2342; 2354; 2365; 2382; 2480; 2751; 4570; 4584; 4589; 4641
Tru9I	T!TAA	15	7; 2128; 2189; 2310; 2331; 2342; 2354; 2365; 2382; 2480; 2751; 4570; 4584; 4589; 4641
TscAI	CASTGNN!	5	2273; 3556; 4666; 4937; 4950
TseI	G!CWGC	19	867; 879; 1285; 1563; 1575; 1981; 2203; 2722; 3387; 3488; 3530; 3571; 3664; 4051; 4504; 4730; 4936; 4939; 5004
TsoI	TARCCANNNNNNNNNN!	2	2399; 2746
TsoI	!NNNNNNNNNTGGYTA	2	2204; 3956
Tsp45I	!GTSAC	5	817; 1513; 2716; 3547; 3853
Tsp509I	!AATT	11	18; 629; 2177; 2241; 2319; 2345; 2356; 3003; 3075; 3167; 4585
TspDTI	ATGAANNNNNNNNNN!	5	1097; 1793; 2185; 3486; 4190
TspDTI	!NNNNNNNNNTTCAT	4	26; 3904; 4360; 4567
TspEI	!AATT	11	18; 629; 2177; 2241; 2319; 2345; 2356; 3003; 3075; 3167; 4585
TspGWI	ACGGANNNNNNNNNN!	1	4302
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	2	656; 1373
TspRI	CASTGNN!	5	2273; 3556; 4666; 4937; 4950
TstI	CACNNNNNNNTCCNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
TstI	!NNNNNNNGGANNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	3545
Tth111II	CAARCANNNNNNNNNN!	3	941; 1637; 4754
Tth111III	!NNNNNNNNNTGYTTG	3	3862; 4722; 4761
UnbI	!GGNCC	19	82; 275; 653; 858; 884; 1072; 1164; 1332; 1554; 1580; 1768; 1860; 2028; 2533; 3942; 4387; 4433; 4491; 4524
Van91I	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	1	2309
VneI	G!TGCAC	5	893; 1046; 1589; 1742; 5031
VpaK11AI	!GGWCC	4	884; 1580; 3942; 4387
VpaK11BI	G!GWCC	4	885; 1581; 3943; 4388
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	2	698; 1394
XapI	R!AATTY	4	629; 2241; 2345; 2356
XbaI	T!CTAGA	1	2081
XceI	RCATG!Y	4	2997; 3069; 3832; 5349
XcmI	CCANNNN!NNNTGG	2	1117; 1813
XhoI	C!TCGAG	2	613; 2067
XhoII	R!GATCY	13	585; 609; 660; 909; 1367; 1605; 3598; 3844; 4236; 4595; 4607; 4693; 4704
XmaI	C!CCGGG	2	656; 1373
XmaJI	C!CTAGG	2	3249; 4264
XmiI	GT!MKAC	1	640
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	8	592; 2082; 2276; 2694; 3250; 4265; 4599; 4852
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	2	1307; 2003
Zsp2I	ATGCA!T	3	2999; 3071; 5402