

## pTagGFP2-actin vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	2618; 2823
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	4	2077; 2906; 3862; 5651
AatI	AGG!CCT	1	3656
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	1370
AccII	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
AccIII	T!CCGGA	1	1321
Acc16I	TGC!GCA	1	3937
Acc36I	ACCTGCNNNN!	2	4103; 4553
Acc36I	!NNNNNNNNGCAGGT	1	3722
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	9	465; 1448; 1457; 1598; 2245; 2301; 2988; 3834; 3869
AccB7I	CCANNNN!NTGG	2	1026; 1302
AccBSI	CCG!CTC	2	3259; 4448
AccBSI	GAG!CGG	5	611; 1956; 2100; 3095; 4502
AceIII	CAGCTCNNNNNNN!	2	2049; 2791
AceIII	!NNNNNNNNNNGAGCTG	7	552; 610; 643; 964; 1297; 1606; 2050
AcI	C!CGC	43	58; 86; 98; 112; 279; 507; 589; 822; 930; 969; 1062; 1107; 1236; 1248; 1358; 1686; 2106; 2208; 2454; 3150; 3153; 3167; 3257; 3505; 3517; 3526; 3538; 3548; 3559; 3605; 3744; 3807; 4309; 4354; 4420; 4446; 4571; 4574; 4722; 4854; 5161; 5305; 5801
AcI	G!CGG	35	370; 403; 528; 595; 611; 695; 932; 1124; 1127; 1405; 1928; 1956; 2100; 2243; 2366; 3095; 3122; 3210; 3320; 3901; 3965; 4066; 4069; 4349; 4404; 4502; 4640; 4787; 4927; 5170; 5415; 5536; 5555; 5682; 5710
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	11	2368; 2416; 2478; 2487; 3703; 4014; 4260; 4652; 5011; 5109; 5195
AcIWI	!NNNNNGATCC	8	580; 1182; 1908; 2465; 4079; 4623; 5010; 5107
AcoI	Y!GGCCR	11	675; 1139; 1776; 1884; 1949; 2021; 2073; 3741; 3915; 4306; 4333
AcsI	R!AATTY	3	2649; 2753; 2764
AcuI	CTGAAGNNNNNNNNNNNNNNN!	4	1000; 1561; 3981; 4413
AcuI	!NNNNNNNNNNNNNCTTCAG	2	1260; 5211
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616
AdeI	CACNNN!GTG	5	1053; 1260; 1647; 1827; 2951
AfaI	GT!AC	18	219; 244; 299; 332; 383; 540; 922; 1033; 1057; 1315; 1546; 1738; 1768; 1782; 2221; 2257; 2350; 4141
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	28	49; 611; 773; 906; 936; 1026; 1071; 1242; 1302; 1445; 1811; 1872; 2145; 2847; 3173; 3565; 3816; 4360; 4641; 4673; 4805; 4840; 4890; 4922; 5275; 5554; 5720; 5738
AfiII	C!TTAAG	0	
AfiIII	A!CRYGT	3	1052; 2721; 5753
AgeI	A!CCGGT	0	
AgsI	TTS!AA	11	858; 996; 1041; 1101; 1722; 2178; 3246; 3290; 3300; 3713; 5289
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjiI	GAC!GTG	2	669; 2199
Ajnl	!CCWGG	31	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1453; 1460; 1748; 1877; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 4220; 4799; 4902; 5592; 5605; 5726
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	
AleI	CACNN!NNGTG	2	784; 961
AlfI	GCANNNNNTGCGNNNNNNNNNN!	2	3409; 3481
AlfI	!NNNNNNNNNGCANNNNNNNTGC	2	3375; 3447
AloI	GAACNNNNNTCCNNNNNNNNNN!	1	2917
AloI	!NNNNNNNGGANNNNNNGTTC	1	724
AloI	GGANNNNNGTTCNNNNNNNNNN!	1	756
AloI	!NNNNNNNGAACNNNNNNNTCC	1	2885
AluI	AG!CT	28	566; 624; 657; 729; 762; 978; 1026; 1037; 1137; 1311; 1339; 1620; 1937; 1986; 2039; 2057; 2064; 2614; 2781; 3038; 3333; 3621; 3941; 4399; 5196; 5453; 5499; 5589
AluBI	AG!CT	28	566; 624; 657; 729; 762; 978; 1026; 1037; 1137; 1311; 1339; 1620; 1937; 1986; 2039; 2057; 2064; 2614; 2781; 3038; 3333; 3621; 3941; 4399; 5196; 5453; 5499; 5589
AlwI	GGATCNNNN!	11	2368; 2416; 2478; 2487; 3703; 4014; 4260; 4652; 5011; 5109; 5195
AlwI	!NNNNNGATCC	8	580; 1182; 1908; 2465; 4079; 4623; 5010; 5107
Alw21I	GWGCW!C	9	674; 836; 1213; 1265; 1559; 1643; 3948; 4138; 5443
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1708; 3259; 3677; 4696; 4824
Alw44I	G!TGCAC	2	670; 5439
AlwNI	CAGNNN!CTG	3	1283; 4936; 5344
Ama87I	C!YCGRG	5	829; 871; 1334; 1421; 1633
Aor13HI	T!CCGGA	1	1321
Aor51HI	AGC!GCT	0	
ApaI	GGCC!C	0	
ApaBI	GCANNNNN!TGC	5	813; 1648; 3403; 3475; 4937
ApaLI	G!TGCAC	2	670; 5439
ApeKI	G!CWGC	21	762; 1134; 1286; 1620; 1650; 2029; 2064; 2108; 2611; 3130; 3795; 3896; 3938; 3979; 4072; 4459; 4912; 5138; 5344; 5347; 5412
ApoI	R!AATTY	3	2649; 2753; 2764
ApyPI	ATCGACNNNNNNNNNNNNNNNNNN!	1	4350
ApyPI	!NNNNNNNNNNNNNNNNNGTCGAT	3	4144; 4797; 5635
AquI	GCCGNACNNNNNNNNNNNNNNNNNN!	2	1804; 4234
AquI	!NNNNNNNNNNNNNNNNNGTNCGGC	1	2414
AquIII	GAGGAGNNNNNNNNNNNNNNNNNN!	3	644; 1661; 3663
AquIII	!NNNNNNNNNNNNNNNNNCTCCTC	2	2021; 2314
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNCTCCYC	2	1413; 4405
ArsI	GACNNNNNTTYGNNNNNNNNNN!	0	
ArsI	!NNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNGTCNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	32	586; 651; 735; 1188; 1224; 1331; 1704; 1914; 2289; 2319; 2325; 2361; 2409; 2471; 2480; 2493; 3673; 3677; 3696; 4007; 4085; 4166; 4175; 4253; 4629; 4645; 5004; 5016; 5094; 5102; 5113; 5188
AsiGI	A!CCGGT	0	
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	2	1813; 3953
Asp700I	GAANN!NNTTC	1	850
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	3657; 4672
AspEI	GACNNN!NNGTC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AspLEI	GCG!C	28	695; 865; 893; 1282; 1362; 1451; 1928; 2345; 3101; 3109; 3135; 3157; 3166; 3179; 3210; 3829; 3837; 3901; 3938; 4204; 4464; 4640; 4726; 5129; 5238; 5412; 5512; 5579
AspS9I	G!GNCC	20	83; 276; 776; 1017; 1177; 1233; 1245; 1319; 1424; 1512; 1662; 1875; 1890; 2437; 2942; 4351; 4796; 4842; 4900; 4933
AssI	AGT!ACT	1	2350
AsuII	TT!CGAA	1	4517
AsuC2I	CC!SGG	7	1422; 1423; 1888; 3839; 3999; 4612; 5376
AsuHPI	GGTGANNNNNNNN!	7	376; 798; 951; 975; 1819; 4906; 5022
AsuHPI	!NNNNNNNTCACC	8	1527; 1560; 1809; 1911; 1932; 2076; 2952; 4013
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	5	829; 871; 1334; 1421; 1633
AvaII	G!GWCC	6	1233; 1319; 1875; 1890; 4351; 4796
AviII	TGC!GCA	1	3937
AvrII	C!CTAGG	2	3657; 4672
AxyI	CC!TNAGG	3	2114; 3315; 4947
BaeI	ACNNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGC!C	8	644; 674; 773; 1166; 1832; 3781; 3874; 5443
BalI	TGG!CCA	2	2023; 3917
BamHI	G!GATCC	1	2470
BanI	G!GYRCC	9	465; 1448; 1457; 1598; 2245; 2301; 2988; 3834; 3869
BanII	GRGCY!C	3	3026; 4200; 4910
BanIII	AT!CGAT	1	3675
BarI	GAAGNNNNNTACNNNNNNNNNN!	1	2007
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	1	1975
BasI	CCANNNN!NTGG	2	1026; 1302
BauI	C!ACGAG	2	4553; 5580
BauI	C!TCGTG	1	4427
BbeI	GGCGC!C	2	1452; 3838
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	1	1417
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	1	1422
BbuI	GCATG!C	3	3405; 3477; 4240
BbvI	GCAGCNNNNNNNN!	7	1146; 2623; 3908; 3950; 4471; 4924; 5424
BbvI	!NNNNNNNNNNNGCTGC	13	749; 1273; 1607; 1637; 2016; 2051; 2095; 3117; 3782; 3966; 4059; 5125; 5331
Bbv12I	GWGCW!C	9	674; 836; 1213; 1265; 1559; 1643; 3948; 4138; 5443
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	13	904; 1201; 1447; 1558; 1840; 1870; 2191; 2380; 2452; 2965; 3529; 4055; 4557
BccI	!NNNNNGATGG	6	1464; 1791; 2013; 2933; 3713; 4141
BceAI	ACGGCNNNNNNNNNN!	15	678; 738; 819; 930; 1020; 1098; 1191; 1314; 1392; 1575; 1964; 2042; 2088; 4261; 4748
BceAI	!NNNNNNNNNNNNNGCCGT	5	1411; 1763; 2976; 3794; 5253
Bcefl	ACGGCNNNNNNNNNN!	15	678; 738; 819; 930; 1020; 1098; 1191; 1314; 1392; 1575; 1964; 2042; 2088; 4261; 4748
Bcefl	!NNNNNNNNNNNNNGCCGT	5	1412; 1764; 2977; 3795; 5254
BcgI	CGANNNNNTGCNNNNNNNNNN!	1	1862
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNTGC	1	1828
BciVI	GTATCCNNNNNN!	3	3264; 4054; 5555
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	2492
BcnI	CC!SGG	7	1422; 1423; 1888; 3839; 3999; 4612; 5376
BcuI	A!CTAGT	0	
BdaI	TGANNNNNTCANNNNNNNNNN!	5	1210; 1720; 1933; 2515; 5688
BdaI	!NNNNNNNNNTGANNNNNTCA	5	1176; 1686; 1899; 2481; 5654

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BfaI	C!TAG	9	592; 2466; 2483; 2684; 3102; 3658; 4673; 5007; 5260
BfiI	ACTGGGNNNNN!	2	1584; 3784
BfiI	!NNNNCCCAGT	2	289; 3536
BfmI	C!TRYAG	4	1932; 3170; 5297; 5488
BfoI	RGCGC!Y	7	866; 1283; 1452; 3102; 3110; 3838; 5513
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNN!	3	3264; 4054; 5555
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	4103; 4553
BfuAI	!NNNNNNNNGCAGGT	1	3722
BfuCI	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1423; 3610
BglII	A!GATCT	1	1330
BisI	GC!NGC	44	696; 763; 933; 1125; 1128; 1135; 1287; 1358; 1621; 1651; 1929; 2030; 2065; 2109; 2244; 2367; 2612; 3131; 3153; 3167; 3605; 3744; 3796; 3807; 3897; 3902; 3939; 3980; 4067; 4070; 4073; 4309; 4405; 4446; 4460; 4574; 4913; 4928; 5139; 5345; 5348; 5413; 5556; 5711
BlnI	C!CTAGG	2	3657; 4672
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	44	697; 764; 934; 1126; 1129; 1136; 1288; 1359; 1622; 1652; 1930; 2031; 2066; 2110; 2245; 2368; 2613; 3132; 3154; 3168; 3606; 3745; 3797; 3808; 3898; 3903; 3940; 3981; 4068; 4071; 4074; 4310; 4406; 4447; 4461; 4575; 4914; 4929; 5140; 5346; 5349; 5414; 5557; 5712
BmcAI	AGT!ACT	1	2350
Bme18I	G!GWCC	6	1233; 1319; 1875; 1890; 4351; 4796
Bme1390I	CC!NGG	38	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1422; 1423; 1455; 1462; 1750; 1879; 1888; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 3839; 3999; 4222; 4612; 4801; 4904; 5376; 5594; 5607; 5728
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	5	829; 871; 1334; 1421; 1633
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	2	669; 2199
BmgT120I	GG!NCC	20	84; 277; 777; 1018; 1178; 1234; 1246; 1320; 1425; 1513; 1663; 1876; 1891; 2438; 2943; 4352; 4797; 4843; 4901; 4934
BmiI	GGN!NCC	28	467; 1179; 1380; 1450; 1459; 1600; 1631; 1664; 1891; 2104; 2247; 2303; 2370; 2439; 2472; 2990; 3011; 3023; 3214; 3375; 3447; 3836; 3871; 4719; 4798; 4843; 5686; 5725
BmrI	ACTGGGNNNNN!	2	1584; 3784
BmrI	!NNNNCCCAGT	2	289; 3536
BmrFI	CC!NGG	38	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1422; 1423; 1455; 1462; 1750; 1879; 1888; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 3839; 3999; 4222; 4612; 4801; 4904; 5376; 5594; 5607; 5728
BmsI	GCATCNNNNN!	13	644; 815; 980; 1538; 1571; 1799; 2168; 2651; 3414; 3486; 4134; 4198; 4473
BmsI	!NNNNNNNNGATGC	7	357; 1404; 2267; 3793; 4048; 4264; 5656
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1584; 3784
BmuI	!NNNNCCCAGT	2	289; 3536
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	1	1422
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	3	1549; 3624; 4523
BpI	!NNNNNNNNGAGNNNNNCTC	3	1517; 3592; 4491
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	6	751; 1048; 1108; 1288; 2068; 4675
BpmI	!NNNNNNNNNNNNNNNCTCCAG	1	4618
Bpu10I	CC!TNAGC	2	1207; 2339
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	4517
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BpuAI	!NNNNNNGTCTTC	1	1422
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	5129; 5668
BpuEI	!NNNNNNNNNNNNNNCTCAAG	2	4211; 5370
BpuMI	CC!SGG	7	1422; 1423; 1888; 3839; 3999; 4612; 5376
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1708; 4824
Bsa29I	AT!CGAT	1	3675
BsaAI	YAC!GTR	3	340; 2951; 4139
BsaBI	GATNN!NNATC	5	1192; 2323; 2407; 2497; 3694
BsaHI	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616
BsaJI	C!CNNGG	37	360; 772; 782; 872; 930; 959; 1014; 1166; 1167; 1296; 1420; 1453; 1461; 1634; 1658; 1676; 1946; 2000; 2024; 2045; 2139; 2259; 2297; 3369; 3441; 3564; 3599; 3608; 3657; 3998; 4267; 4672; 4799; 4800; 4902; 4903; 5593
BsaMI	GAATGCN!	1	2586
BsaMI	G!CATTC	1	2679
BsaWI	W!CCGGW	7	1321; 1804; 2476; 3866; 4710; 5400; 5547
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	2	1393; 2915
BsaXI	!NNNNNNNGGAGNNNNNGT	2	724; 1972
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	2	754; 2002
BsaXI	!NNNNNNNNNACNNNNNCTCC	2	1363; 2885
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	2	1748; 2252
BsbI	!NNNNNNNNNNNNNNNNNGTGTG	2	2836; 4743
Bsc4I	CCNNNNN!NNGG	28	49; 611; 773; 906; 936; 1026; 1071; 1242; 1302; 1445; 1811; 1872; 2145; 2847; 3173; 3565; 3816; 4360; 4641; 4673; 4805; 4840; 4890; 4922; 5275; 5554; 5720; 5738
BscAI	GCATCNNNN!	13	643; 814; 979; 1537; 1570; 1798; 2167; 2650; 3413; 3485; 4133; 4197; 4472
BscAI	!NNNNNNGATGC	7	360; 1407; 2270; 3796; 4051; 4267; 5659
Bse1I	ACTGGN!	5	1579; 1791; 3779; 3980; 5226
Bse1I	C!CAGT	7	295; 810; 900; 2864; 3542; 5338; 5351
Bse8I	GATNN!NNATC	5	1192; 2323; 2407; 2497; 3694
Bse21I	CC!TNAGG	3	2114; 3315; 4947
Bse118I	R!CCGGY	7	631; 754; 1396; 3052; 4154; 4335; 4618
BseAI	T!CCGGA	1	1321
BseBI	CC!WGG	31	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1455; 1462; 1750; 1879; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 4222; 4801; 4904; 5594; 5607; 5728
BseCI	AT!CGAT	1	3675
BseDI	C!CNNGG	37	360; 772; 782; 872; 930; 959; 1014; 1166; 1167; 1296; 1420; 1453; 1461; 1634; 1658; 1676; 1946; 2000; 2024; 2045; 2139; 2259; 2297; 3369; 3441; 3564; 3599; 3608; 3657; 3998; 4267; 4672; 4799; 4800; 4902; 4903; 5593
Bse3DI	GCAATGNN!	2	2100; 4068
Bse3DI	!CATTGC	2	2264; 2327
BseGI	GGATGNN!	6	1350; 2282; 3695; 4152; 4177; 4631
BseGI	!CATCC	11	806; 881; 896; 1010; 1058; 1529; 1862; 2159; 2204; 2372; 3521
BseJI	GATNN!NNATC	5	1192; 2323; 2407; 2497; 3694
BseLI	CCNNNNN!NNGG	28	49; 611; 773; 906; 936; 1026; 1071; 1242; 1302; 1445; 1811; 1872; 2145; 2847; 3173; 3565; 3816; 4360; 4641; 4673; 4805; 4840; 4890; 4922; 5275; 5554; 5720; 5738
BseMI	GCAATGNN!	2	2100; 4068
BseMI	!CATTGC	2	2264; 2327
BseMII	CTCAGNNNNNNNNNN!	3	1228; 1341; 4961
BseMII	!NNNNNNNNCTGAG	8	1198; 2105; 2330; 3306; 3608; 4489; 5061; 5470
BseNI	ACTGGN!	5	1579; 1791; 3779; 3980; 5226
BseNI	C!CAGT	7	295; 810; 900; 2864; 3542; 5338; 5351
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	3	634; 1651; 3653
BseRI	!NNNNNNNNCTCCTC	2	2031; 2324
BseSI	GKGC!C	8	644; 674; 773; 1166; 1832; 3781; 3874; 5443
BseXI	GCAGCNNNNNNNN!	7	1146; 2623; 3908; 3950; 4471; 4924; 5424
BseXI	!NNNNNNNNNNNGCTGC	13	749; 1273; 1607; 1637; 2016; 2051; 2095; 3117; 3782; 3966; 4059; 5125; 5331
BseX3I	C!GGCCG	2	1949; 3741

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BseYI	C!CCAGC	5	1728; 2305; 3378; 3450; 5449
BseYI	G!CTGGG	1	4339
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	1	1153
BsgI	!NNNNNNNNNNNNNNNNCTGCAC	1	732
Bsh1236I	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
Bsh1285I	CGRY!CG	4	599; 1952; 3744; 5419
BshFI	GG!CC	39	84; 277; 677; 777; 1019; 1075; 1085; 1141; 1178; 1246; 1396; 1426; 1513; 1663; 1681; 1778; 1886; 1951; 2023; 2075; 2380; 2438; 2801; 2943; 3598; 3604; 3613; 3656; 3743; 3917; 4308; 4335; 4844; 4901; 4934; 5279; 5713; 5731; 5742
BshNI	G!GYRCC	9	465; 1448; 1457; 1598; 2245; 2301; 2988; 3834; 3869
BshTI	A!CCGGT	0	
BshVI	AT!CGAT	1	3675
BsiEI	CGRY!CG	4	599; 1952; 3744; 5419
BsiHKAI	GWGCW!C	9	674; 836; 1213; 1265; 1559; 1643; 3948; 4138; 5443
BsiHKCI	C!YCGRG	5	829; 871; 1334; 1421; 1633
BsiSI	C!CGG	26	632; 755; 1322; 1382; 1397; 1422; 1805; 1887; 2435; 2477; 3053; 3740; 3817; 3839; 3867; 3998; 4088; 4155; 4336; 4611; 4619; 4711; 5185; 5375; 5401; 5548
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	28	49; 611; 773; 906; 936; 1026; 1071; 1242; 1302; 1445; 1811; 1872; 2145; 2847; 3173; 3565; 3816; 4360; 4641; 4673; 4805; 4840; 4890; 4922; 5275; 5554; 5720; 5738
BsIFI	GGGACNNNNNNNNNN!	8	175; 326; 494; 1591; 1903; 3986; 4518; 4627
BsIFI	!NNNNNNNNNNNNNNNGTCCC	4	3351; 3423; 3487; 4782
BsmI	GAATGCN!	1	2586
BsmI	G!CATTC	1	2679
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1708; 3259; 3677; 4696; 4824
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	8	175; 326; 494; 1591; 1903; 3986; 4518; 4627
BsmFI	!NNNNNNNNNNNNNNNGTCCC	4	3351; 3423; 3487; 4782
BsnI	GG!CC	39	84; 277; 677; 777; 1019; 1075; 1085; 1141; 1178; 1246; 1396; 1426; 1513; 1663; 1681; 1778; 1886; 1951; 2023; 2075; 2380; 2438; 2801; 2943; 3598; 3604; 3613; 3656; 3743; 3917; 4308; 4335; 4844; 4901; 4934; 5279; 5713; 5731; 5742
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	1708; 4824
BsoBI	C!YCGRG	5	829; 871; 1334; 1421; 1633
Bsp13I	T!CCGGA	1	1321
Bsp19I	C!CATGG	3	360; 3564; 4267
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 4638
Bsp24I	!NNNNNNCCANNNNNGTC	3	1854; 5059; 5237
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	3	1886; 5091; 5269
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 4606
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	4517
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
Bsp1286I	GDGCH!C	18	644; 674; 773; 836; 1166; 1213; 1265; 1559; 1643; 1832; 3026; 3781; 3874; 3948; 4138; 4200; 4910; 5443
Bsp1407I	T!GTACA	2	1055; 1313
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	43	58; 86; 98; 112; 279; 507; 589; 822; 930; 969; 1062; 1107; 1236; 1248; 1358; 1686; 2106; 2208; 2454; 3150; 3153; 3167; 3257; 3505; 3517; 3526; 3538; 3548; 3559; 3605; 3744; 3807; 4309; 4354; 4420; 4446; 4571; 4574; 4722; 4854; 5161; 5305; 5801
BspACI	G!CGG	35	370; 403; 528; 595; 611; 695; 932; 1124; 1127; 1405; 1928; 1956; 2100; 2243; 2366; 3095; 3122; 3210; 3320; 3901; 3965; 4066; 4069; 4349; 4404; 4502; 4640; 4787; 4927; 5170; 5415; 5536; 5555; 5682; 5710

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BspCNI	CTCAGNNNNNNNNN!	3	1227; 1340; 4960
BspCNI	!NNNNNNNCTGAG	8	1199; 2106; 2331; 3307; 3609; 4490; 5062; 5471
BspDI	AT!CGAT	1	3675
BspD6I	GACTCNNNN!	6	418; 1333; 1809; 2908; 4514; 5391
BspD6I	!NNNNNNGAGTC	5	1263; 2142; 2424; 2871; 3303
BspEI	T!CCGGA	1	1321
BspFNI	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
BspHI	T!CATGA	4	1907; 2186; 3261; 5033
BspLI	GGN!NCC	28	467; 1179; 1380; 1450; 1459; 1600; 1631; 1664; 1891; 2104; 2247; 2303; 2370; 2439; 2472; 2990; 3011; 3023; 3214; 3375; 3447; 3836; 3871; 4719; 4798; 4843; 5686; 5725
BspMI	ACCTGCNNNN!	2	4103; 4553
BspMI	!NNNNNNNNGCAGGT	1	3722
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	11	2368; 2416; 2478; 2487; 3703; 4014; 4260; 4652; 5011; 5109; 5195
BspPI	!NNNNNGATCC	8	580; 1182; 1908; 2465; 4079; 4623; 5010; 5107
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	3	2047; 4179; 4389
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	1	4517
BspT107I	G!GYRCC	9	465; 1448; 1457; 1598; 2245; 2301; 2988; 3834; 3869
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1708; 4824
BsrI	ACTGGN!	5	1579; 1791; 3779; 3980; 5226
BsrI	C!CAGT	7	295; 810; 900; 2864; 3542; 5338; 5351
BsrBI	CCG!CTC	2	3259; 4448
BsrBI	GAG!CGG	5	611; 1956; 2100; 3095; 4502
BsrDI	GCAATGNN!	2	2100; 4068
BsrDI	!CATTGC	2	2264; 2327
BsrFI	R!CCGGY	7	631; 754; 1396; 3052; 4154; 4335; 4618
BsrGI	T!GTACA	2	1055; 1313
BsrSI	ACTGGN!	5	1579; 1791; 3779; 3980; 5226
BsrSI	C!CAGT	7	295; 810; 900; 2864; 3542; 5338; 5351
BssAI	R!CCGGY	7	631; 754; 1396; 3052; 4154; 4335; 4618
BssECI	C!CNNGG	37	360; 772; 782; 872; 930; 959; 1014; 1166; 1167; 1296; 1420; 1453; 1461; 1634; 1658; 1676; 1946; 2000; 2024; 2045; 2139; 2259; 2297; 3369; 3441; 3564; 3599; 3608; 3657; 3998; 4267; 4672; 4799; 4800; 4902; 4903; 5593
BssHII	G!CGCGC	0	
BssKI	!CCNGG	38	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1420; 1421; 1453; 1460; 1748; 1877; 1886; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 3837; 3997; 4220; 4610; 4799; 4902; 5374; 5592; 5605; 5726
BssMI	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
BssNI	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	4553; 5580
BssSI	C!TCGTG	1	4427
BssTII	C!CWWGG	6	360; 1676; 3564; 3657; 4267; 4672
Bst6I	CTCTCN!	1	2128
Bst6I	!NNNNGAAGAG	4	2047; 3302; 4179; 4389
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	5	812; 1647; 3402; 3474; 4936
BstAUI	T!GTACA	2	1055; 1313
BstBI	TT!CGAA	1	4517
Bst2BI	C!ACGAG	2	4553; 5580
Bst2BI	C!TCGTG	1	4427

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstBAI	YAC!GTR	3	340; 2951; 4139
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 1827; 2232; 2926; 4215; 4331; 4439; 4762; 5253; 5723; 5794
BstC8I	GCN!NGC	40	86; 279; 593; 633; 691; 727; 760; 822; 1132; 1139; 1248; 1284; 1398; 1407; 1884; 2416; 3054; 3097; 3111; 3384; 3403; 3456; 3475; 3729; 3915; 4134; 4200; 4206; 4238; 4279; 4283; 4337; 4620; 4807; 4854; 4910; 4932; 5143; 5703; 5740
BstDEI	C!TNAG	11	1207; 1214; 1327; 2114; 2339; 3315; 3617; 4498; 4947; 5070; 5479
BstDSI	C!CRYGG	7	360; 930; 1296; 1946; 2024; 3564; 4267
BstEII	G!GTNACC	2	786; 1815
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	6	1350; 2282; 3695; 4152; 4177; 4631
BstF5I	!CATCC	11	806; 881; 896; 1010; 1058; 1529; 1862; 2159; 2204; 2372; 3521
BstFNI	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
BstH2I	RGCGC!Y	7	866; 1283; 1452; 3102; 3110; 3838; 5513
BstHHI	GCG!C	28	695; 865; 893; 1282; 1362; 1451; 1928; 2345; 3101; 3109; 3135; 3157; 3166; 3179; 3210; 3829; 3837; 3901; 3938; 4204; 4464; 4640; 4726; 5129; 5238; 5412; 5512; 5579
BstKTI	GAT!C	32	588; 653; 737; 1190; 1226; 1333; 1706; 1916; 2291; 2321; 2327; 2363; 2411; 2473; 2482; 2495; 3675; 3679; 3698; 4009; 4087; 4168; 4177; 4255; 4631; 4647; 5006; 5018; 5096; 5104; 5115; 5190
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNNGAGAC	5	1708; 3259; 3677; 4696; 4824
BstMBI	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
BstMCI	CGRY!CG	4	599; 1952; 3744; 5419
BstMWI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 654; 695; 755; 768; 812; 1043; 1235; 1286; 1397; 1423; 1455; 1526; 1647; 1750; 1934; 2029; 3062; 3092; 3119; 3161; 3402; 3474; 3525; 3604; 3826; 3910; 3933; 4072; 4195; 4278; 4545; 4732; 4936; 5135; 5707
BstNI	CC!WGG	31	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1455; 1462; 1750; 1879; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 4222; 4801; 4904; 5594; 5607; 5728
BstNSI	RCATG!Y	5	1389; 3405; 3477; 4240; 5757
BstOI	CC!WGG	31	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1455; 1462; 1750; 1879; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 4222; 4801; 4904; 5594; 5607; 5728
BstPI	G!GTNACC	2	786; 1815
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	38	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1420; 1421; 1453; 1460; 1748; 1877; 1886; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 3837; 3997; 4220; 4610; 4799; 4902; 5374; 5592; 5605; 5726
BstSFI	C!TRYAG	4	1932; 3170; 5297; 5488
BstSLI	GKGCM!C	8	644; 674; 773; 1166; 1832; 3781; 3874; 5443
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
Bst2UI	CC!WGG	31	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1455; 1462; 1750; 1879; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 4222; 4801; 4904; 5594; 5607; 5728
BstVII	GCAGCNNNNNNN!	7	1146; 2623; 3908; 3950; 4471; 4924; 5424
BstVII	!NNNNNNNNNNNGCTGC	13	749; 1273; 1607; 1637; 2016; 2051; 2095; 3117; 3782; 3966; 4059; 5125; 5331
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	1	1422
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	12	585; 1330; 1913; 2470; 2479; 4006; 4252; 4644; 5003; 5015; 5101; 5112
BstYI	R!GATCY	12	585; 1330; 1913; 2470; 2479; 4006; 4252; 4644; 5003; 5015; 5101; 5112
BstZI	C!GGCCG	2	1949; 3741



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	3264; 4054; 5555
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	3675
Bsu36I	CC!TNAGG	3	2114; 3315; 4947
BsuRI	GG!CC	39	84; 277; 677; 777; 1019; 1075; 1085; 1141; 1178; 1246; 1396; 1426; 1513; 1663; 1681; 1778; 1886; 1951; 2023; 2075; 2380; 2438; 2801; 2943; 3598; 3604; 3613; 3656; 3743; 3917; 4308; 4335; 4844; 4901; 4934; 5279; 5713; 5731; 5742
BsuTUI	AT!CGAT	1	3675
BtgI	C!CRYGG	7	360; 930; 1296; 1946; 2024; 3564; 4267
BtgZI	GCGATGNNNNNNNNNN!	2	2952; 4287
BtgZI	!NNNNNNNNNNNNNNNNCATCGC	3	334; 4106; 4450
BthCI	GCNG!C	44	698; 765; 935; 1127; 1130; 1137; 1289; 1360; 1623; 1653; 1931; 2032; 2067; 2111; 2246; 2369; 2614; 3133; 3155; 3169; 3607; 3746; 3798; 3809; 3899; 3904; 3941; 3982; 4069; 4072; 4075; 4311; 4407; 4448; 4462; 4576; 4915; 4930; 5141; 5347; 5350; 5415; 5558; 5713
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	2	669; 2199
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	2291; 2674
BtsCI	GGATGNN!	6	1350; 2282; 3695; 4152; 4177; 4631
BtsCI	!CATCC	11	806; 881; 896; 1010; 1058; 1529; 1862; 2159; 2204; 2372; 3521
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	4103; 4553
BveI	!NNNNNNNNNGCAGGT	1	3722
Cac8I	GCN!NGC	40	86; 279; 593; 633; 691; 727; 760; 822; 1132; 1139; 1248; 1284; 1398; 1407; 1884; 2416; 3054; 3097; 3111; 3384; 3403; 3456; 3475; 3729; 3915; 4134; 4200; 4206; 4238; 4279; 4283; 4337; 4620; 4807; 4854; 4910; 4932; 5143; 5703; 5740
CaiI	CAGNNN!CTG	3	1283; 4936; 5344
CciI	T!CATGA	4	1907; 2186; 3261; 5033
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	13	352; 639; 975; 1119; 1443; 1554; 1566; 1794; 2448; 4124; 4129; 4327; 4468
CdiI	C!GATG	3	1413; 2938; 4273
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	5707
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 3496; 3538
CelII	GC!TNAGC	0	
CfoI	GCG!C	28	695; 865; 893; 1282; 1362; 1451; 1928; 2345; 3101; 3109; 3135; 3157; 3166; 3179; 3210; 3829; 3837; 3901; 3938; 4204; 4464; 4640; 4726; 5129; 5238; 5412; 5512; 5579
CfrI	Y!GGCCR	11	675; 1139; 1776; 1884; 1949; 2021; 2073; 3741; 3915; 4306; 4333
Cfr9I	C!CCGGG	1	1421
Cfr10I	R!CCGGY	7	631; 754; 1396; 3052; 4154; 4335; 4618
Cfr13I	G!GNCC	20	83; 276; 776; 1017; 1177; 1233; 1245; 1319; 1424; 1512; 1662; 1875; 1890; 2437; 2942; 4351; 4796; 4842; 4900; 4933
Cfr42I	CCGC!GG	1	933
ChaI	GATC!	32	589; 654; 738; 1191; 1227; 1334; 1707; 1917; 2292; 2322; 2328; 2364; 2412; 2474; 2483; 2496; 3676; 3680; 3699; 4010; 4088; 4169; 4178; 4256; 4632; 4648; 5007; 5019; 5097; 5105; 5116; 5191
CjeI	CCANNNNNGTNNNNNNNNNNNNNNNN!	8	1072; 1726; 1887; 2422; 3652; 5092; 5192; 5270
CjeI	!NNNNNNNNNACNNNNNNNTGG	8	64; 257; 2341; 3319; 3414; 4606; 5156; 5711
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	8	98; 291; 2375; 3353; 3448; 4640; 5190; 5745
CjeI	!NNNNNNNNCCANNNNNNNGT	8	1038; 1692; 1853; 2388; 3618; 5058; 5158; 5236
CjePI	CCANNNNNNNTCNNNNNNNNNNNNNN!	3	1887; 5092; 5270
CjePI	!NNNNNNNNGANNNNNNNTGG	4	257; 1579; 4606; 5205
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	4	290; 1612; 4639; 5238
CjePI	!NNNNNNNNCCANNNNNNNTC	3	1854; 5059; 5237
Clai	AT!CGAT	1	3675
CpoI	CG!GWCCG	1	4351
CseI	GACGCNNNN!	4	526; 721; 4545; 4624
CseI	!NNNNNNNNNNNGCGTC	4	1858; 3168; 5063; 5641
CsiI	A!CCWGGT	1	3424

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CspI	CG!GWCCG	1	4351
Csp6I	G!TAC	18	218; 243; 298; 331; 382; 539; 921; 1032; 1056; 1314; 1545; 1737; 1767; 1781; 2220; 2256; 2349; 4140
Csp45I	TT!CGAA	1	4517
CspAI	A!CCGGT	0	
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	5	1022; 2003; 2309; 3115; 4724
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	30	301; 361; 606; 837; 867; 1257; 1302; 1386; 1479; 1584; 1707; 1734; 1858; 1908; 2145; 2187; 2253; 3262; 3402; 3474; 3565; 3706; 4051; 4237; 4268; 4294; 4650; 5034; 5754; 5805
CviJI	RG!CY	120	42; 84; 93; 277; 566; 624; 657; 677; 729; 762; 777; 878; 978; 1019; 1026; 1037; 1046; 1075; 1085; 1093; 1137; 1141; 1178; 1246; 1311; 1339; 1379; 1396; 1400; 1426; 1513; 1620; 1630; 1663; 1681; 1732; 1753; 1778; 1882; 1886; 1931; 1937; 1951; 1986; 2023; 2029; 2039; 2057; 2064; 2075; 2130; 2369; 2380; 2438; 2504; 2614; 2781; 2801; 2943; 3024; 3038; 3052; 3333; 3374; 3446; 3569; 3598; 3604; 3613; 3621; 3644; 3656; 3662; 3743; 3760; 3768; 3795; 3820; 3904; 3913; 3917; 3941; 3979; 4055; 4072; 4091; 4154; 4198; 4208; 4225; 4308; 4335; 4339; 4376; 4399; 4415; 4595; 4622; 4683; 4805; 4844; 4901; 4908; 4915; 4934; 4945; 5196; 5225; 5268; 5279; 5344; 5423; 5448; 5453; 5499; 5589; 5687; 5713; 5731; 5742
CviKI-1	RG!CY	120	42; 84; 93; 277; 566; 624; 657; 677; 729; 762; 777; 878; 978; 1019; 1026; 1037; 1046; 1075; 1085; 1093; 1137; 1141; 1178; 1246; 1311; 1339; 1379; 1396; 1400; 1426; 1513; 1620; 1630; 1663; 1681; 1732; 1753; 1778; 1882; 1886; 1931; 1937; 1951; 1986; 2023; 2029; 2039; 2057; 2064; 2075; 2130; 2369; 2380; 2438; 2504; 2614; 2781; 2801; 2943; 3024; 3038; 3052; 3333; 3374; 3446; 3569; 3598; 3604; 3613; 3621; 3644; 3656; 3662; 3743; 3760; 3768; 3795; 3820; 3904; 3913; 3917; 3941; 3979; 4055; 4072; 4091; 4154; 4198; 4208; 4225; 4308; 4335; 4339; 4376; 4399; 4415; 4595; 4622; 4683; 4805; 4844; 4901; 4908; 4915; 4934; 4945; 5196; 5225; 5268; 5279; 5344; 5423; 5448; 5453; 5499; 5589; 5687; 5713; 5731; 5742
CviQI	G!TAC	18	218; 243; 298; 331; 382; 539; 921; 1032; 1056; 1314; 1545; 1737; 1767; 1781; 2220; 2256; 2349; 4140
DdeI	C!TNAG	11	1207; 1214; 1327; 2114; 2339; 3315; 3617; 4498; 4947; 5070; 5479
DinI	GGC!GCC	2	1450; 3836
DpnI	GA!TC	32	587; 652; 736; 1189; 1225; 1332; 1705; 1915; 2290; 2320; 2326; 2362; 2410; 2472; 2481; 2494; 3674; 3678; 3697; 4008; 4086; 4167; 4176; 4254; 4630; 4646; 5005; 5017; 5095; 5103; 5114; 5189
DpnII	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
DraI	TTT!AAA	3	2537; 4979; 4998
DraII	RG!GNCCY	3	1662; 1890; 4933
DraIII	CACNNN!GTG	5	1053; 1260; 1647; 1827; 2951
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	6	266; 944; 1013; 1256; 2372; 5315
DraRI	!NNNNNNNNNNNNNNNNNNNGTNCTTG	0	
DrdI	GACNNN!NNGTC	4	2077; 2906; 3862; 5651
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	4	2077; 2906; 3862; 5651
EaeI	Y!GGCCR	11	675; 1139; 1776; 1884; 1949; 2021; 2073; 3741; 3915; 4306; 4333
EagI	C!GGCCG	2	1949; 3741
Eam1104I	CTCTCN!	1	2128
Eam1104I	!NNNNGAAGAG	4	2047; 3302; 4179; 4389
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	1	2128
EarI	!NNNNGAAGAG	4	2047; 3302; 4179; 4389

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
EciI	GGCGGANNNNNNNNNNN!	4	3335; 4364; 5551; 5697
EciI	!NNNNNNNNNTCCGCC	5	496; 1051; 3506; 3527; 3548
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	1949; 3741
Eco24I	GRGCY!C	3	3026; 4200; 4910
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1708; 4824
Eco32I	GAT!ATC	1	1353
Eco47I	G!GWCC	6	1233; 1319; 1875; 1890; 4351; 4796
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	2	1949; 3741
Eco57I	CTGAAGNNNNNNNNNNNNNNN!	4	1000; 1561; 3981; 4413
Eco57I	!NNNNNNNNNNNNNNCTTCAG	2	1260; 5211
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	2114; 3315; 4947
Eco88I	C!YCGRG	5	829; 871; 1334; 1421; 1633
Eco91I	G!GTNACC	2	786; 1815
Eco105I	TAC!GTA	1	340
Eco130I	C!CWGG	6	360; 1676; 3564; 3657; 4267; 4672
Eco147I	AGG!CCT	1	3656
EcoHI	!CCSGG	7	1420; 1421; 1886; 3837; 3997; 4610; 5374
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNN!	10	751; 1000; 1048; 1108; 1288; 1561; 2068; 3981; 4413; 4675
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	1260; 4618; 5211
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	2	786; 1815
Eco0109I	RG!GNCCY	3	1662; 1890; 4933
EcoRI	G!AATC	0	
EcoRII	!CCWGG	31	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1453; 1460; 1748; 1877; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 4220; 4799; 4902; 5592; 5605; 5726
EcoRV	GAT!ATC	1	1353
EcoT14I	C!CWGG	6	360; 1676; 3564; 3657; 4267; 4672
EcoT22I	ATGCA!T	3	3407; 3479; 5810
EcoT38I	GRGCY!C	3	3026; 4200; 4910
Eco53kl	GAG!CTC	0	
EgeI	GGC!GCC	2	1450; 3836
EheI	GGC!GCC	2	1450; 3836
ErhI	C!CWGG	6	360; 1676; 3564; 3657; 4267; 4672
EsaBC3I	TC!GA	19	654; 948; 975; 1119; 1336; 1371; 1554; 2010; 2985; 3676; 3949; 4105; 4129; 4165; 4327; 4518; 4563; 4818; 5656
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	30	304; 364; 609; 840; 870; 1260; 1305; 1389; 1482; 1587; 1710; 1737; 1861; 1911; 2148; 2190; 2256; 3265; 3405; 3477; 3568; 3709; 4054; 4240; 4271; 4297; 4653; 5037; 5757; 5808
Fail	YA!TR	70	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 607; 838; 868; 1258; 1303; 1342; 1387; 1480; 1499; 1585; 1708; 1735; 1847; 1859; 1909; 2146; 2188; 2254; 2426; 2497; 2507; 2573; 2618; 2823; 3251; 3263; 3394; 3403; 3466; 3475; 3499; 3566; 3590; 3707; 3771; 4052; 4077; 4238; 4269; 4295; 4367; 4583; 4651; 4729; 4781; 4942; 4959; 4961; 4963; 5035; 5313; 5502; 5618; 5691; 5755; 5806
FalI	AAGNNNNNCTTNNNNNNNNNNNN!	2	1416; 4175
FalI	!NNNNNNNNAAGNNNNNCTT	2	1384; 4143
FaqI	GGGACNNNNNNNNNN!	8	175; 326; 494; 1591; 1903; 3986; 4518; 4627
FaqI	!NNNNNNNNNNNNNGTCCC	4	3351; 3423; 3487; 4782
FatI	!CATG	30	300; 360; 605; 836; 866; 1256; 1301; 1385; 1478; 1583; 1706; 1733; 1857; 1907; 2144; 2186; 2252; 3261; 3401; 3473; 3564; 3705; 4050; 4236; 4267; 4293; 4649; 5033; 5753; 5804
FauI	CCCGCNNNN!	12	93; 119; 286; 829; 937; 1114; 1255; 3157; 3512; 3533; 4729; 4861
FauI	!NNNNNGCGGG	8	604; 1398; 1949; 3088; 3958; 4495; 4633; 4780
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	2492
FblI	GT!MKAC	1	1370

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FmuI	GGNC!C	20	86; 279; 779; 1020; 1180; 1236; 1248; 1322; 1427; 1515; 1665; 1878; 1893; 2440; 2945; 4354; 4799; 4845; 4903; 4936
Fnu4HI	GC!NGC	44	696; 763; 933; 1125; 1128; 1135; 1287; 1358; 1621; 1651; 1929; 2030; 2065; 2109; 2244; 2367; 2612; 3131; 3153; 3167; 3605; 3744; 3796; 3807; 3897; 3902; 3939; 3980; 4067; 4070; 4073; 4309; 4405; 4446; 4460; 4574; 4913; 4928; 5139; 5345; 5348; 5413; 5556; 5711
FokI	GGATGNNNNNNNNN!	6	1357; 2289; 3702; 4159; 4184; 4638
FokI	!NNNNNNNNNNNNNCATCC	10	793; 868; 997; 1045; 1516; 1849; 2146; 2191; 2359; 3508
FriOI	GRGCY!C	3	3026; 4200; 4910
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	3937
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 2466; 2483; 2684; 3102; 3658; 4673; 5007; 5260
FspEI	CCNNNNNNNNNNNN!	205	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 615; 645; 691; 729; 765; 779; 795; 823; 841; 879; 898; 913; 942; 972; 1027; 1060; 1075; 1089; 1119; 1155; 1170; 1192; 1206; 1233; 1249; 1267; 1287; 1303; 1335; 1371; 1395; 1410; 1431; 1447; 1465; 1509; 1527; 1546; 1561; 1584; 1615; 1646; 1671; 1687; 1713; 1731; 1746; 1762; 1776; 1792; 1818; 1833; 1863; 1879; 1900; 1918; 1935; 1956; 2013; 2037; 2055; 2081; 2100; 2119; 2140; 2166; 2187; 2221; 2238; 2262; 2283; 2310; 2348; 2367; 2385; 2403; 2448; 2464; 2487; 2518; 2557; 2571; 2712; 2807; 2831; 2854; 2877; 2895; 2917; 2938; 2957; 2976; 3005; 3026; 3040; 3066; 3154; 3180; 3229; 3270; 3288; 3327; 3343; 3381; 3438; 3453; 3510; 3530; 3544; 3561; 3575; 3612; 3627; 3670; 3753; 3820; 3851; 3871; 3886; 3931; 3945; 4011; 4025; 4044; 4060; 4101; 4121; 4168; 4218; 4234; 4254; 4279; 4299; 4322; 4349; 4367; 4393; 4433; 4459; 4483; 4539; 4553; 4581; 4624; 4645; 4680; 4724; 4812; 4836; 4858; 4878; 4894; 4915; 4929; 4948; 5032; 5052; 5080; 5095; 5129; 5171; 5198; 5213; 5258; 5282; 5296; 5318; 5344; 5364; 5388; 5414; 5462; 5481; 5500; 5526; 5561; 5606; 5636; 5650; 5701; 5715; 5740; 5756; 5777; 5806
FspEI	!NNNNNNNNNNNNNNNGG	165	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 580; 598; 617; 643; 680; 707; 740; 759; 788; 859; 892; 917; 935; 967; 985; 1012; 1057; 1075; 1105; 1123; 1153; 1216; 1243; 1283; 1302; 1327; 1361; 1382; 1407; 1429; 1447; 1465; 1486; 1511; 1544; 1570; 1612; 1645; 1663; 1735; 1760; 1783; 1825; 1858; 1913; 1933; 1963; 1987; 2005; 2032; 2057; 2075; 2101; 2125; 2185; 2225; 2246; 2269; 2343; 2362; 2391; 2420; 2452; 2506; 2606; 2675; 2783; 2832; 2854; 2882; 2918; 2963; 2992; 3028; 3047; 3075; 3095; 3158; 3181; 3289; 3321; 3339; 3368; 3411; 3440; 3551; 3580; 3623; 3644; 3672; 3705; 3725; 3750; 3777; 3802; 3824; 3852; 3878; 3899; 3950; 3971; 3989; 4037; 4073; 4129; 4154; 4178; 4207; 4230; 4254; 4280; 4302; 4321; 4346; 4386; 4422; 4487; 4572; 4596; 4625; 4659; 4680; 4700; 4745; 4772; 4791; 4824; 4876; 4907; 4934; 4986; 5084; 5155; 5200; 5261; 5326; 5360; 5386; 5404; 5440; 5510; 5533; 5555; 5579; 5612; 5660; 5695; 5713; 5770
Fsp4HI	GC!NGC	44	696; 763; 933; 1125; 1128; 1135; 1287; 1358; 1621; 1651; 1929; 2030; 2065; 2109; 2244; 2367; 2612; 3131; 3153; 3167; 3605; 3744; 3796; 3807; 3897; 3902; 3939; 3980; 4067; 4070; 4073; 4309; 4405; 4446; 4460; 4574; 4913; 4928; 5139; 5345; 5348; 5413; 5556; 5711
GdiI	C!GGCCR	4	675; 1949; 2073; 3741
GdiI	Y!GGCCG	7	1139; 1776; 1884; 1949; 3741; 4306; 4333
GlaI	GC!GC	28	694; 864; 892; 1281; 1361; 1450; 1927; 2344; 3100; 3108; 3134; 3156; 3165; 3178; 3209; 3828; 3836; 3900; 3937; 4203; 4463; 4639; 4725; 5128; 5237; 5411; 5511; 5578
GluI	GC!NGC	44	696; 763; 933; 1125; 1128; 1135; 1287; 1358; 1621; 1651; 1929; 2030; 2065; 2109; 2244; 2367; 2612; 3131; 3153; 3167; 3605; 3744; 3796; 3807; 3897; 3902; 3939; 3980; 4067; 4070; 4073; 4309; 4405; 4446; 4460; 4574; 4913; 4928; 5139; 5345; 5348; 5413; 5556; 5711
GsaI	CCCAG!C	5	1732; 2309; 3382; 3454; 5453
GsaI	GCTGG!G	1	4343
GsuI	CTGGAGNNNNNNNNNNNNNNN!	6	751; 1048; 1108; 1288; 2068; 4675
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	4618
HaeI	WGG!CCW	9	1075; 1681; 2023; 2380; 3656; 3917; 5279; 5731; 5742
HaeII	RGCGC!Y	7	866; 1283; 1452; 3102; 3110; 3838; 5513

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HaeIII	GG!CC	39	84; 277; 677; 777; 1019; 1075; 1085; 1141; 1178; 1246; 1396; 1426; 1513; 1663; 1681; 1778; 1886; 1951; 2023; 2075; 2380; 2438; 2801; 2943; 3598; 3604; 3613; 3656; 3743; 3917; 4308; 4335; 4844; 4901; 4934; 5279; 5713; 5731; 5742
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNN!	2	2510; 4031
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	2476; 3997
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNN!	2	2509; 4030
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	2478; 3999
HapII	C!CGG	26	632; 755; 1322; 1382; 1397; 1422; 1805; 1887; 2435; 2477; 3053; 3740; 3817; 3839; 3867; 3998; 4088; 4155; 4336; 4611; 4619; 4711; 5185; 5375; 5401; 5548
HgaI	GACGCNNNNN!	4	526; 721; 4545; 4624
HgaI	!NNNNNNNNNNNGCGTC	4	1858; 3168; 5063; 5641
HhaI	GCG!C	28	695; 865; 893; 1282; 1362; 1451; 1928; 2345; 3101; 3109; 3135; 3157; 3166; 3179; 3210; 3829; 3837; 3901; 3938; 4204; 4464; 4640; 4726; 5129; 5238; 5412; 5512; 5579
HinI	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616
Hin1II	CATG!	30	304; 364; 609; 840; 870; 1260; 1305; 1389; 1482; 1587; 1710; 1737; 1861; 1911; 2148; 2190; 2256; 3265; 3405; 3477; 3568; 3709; 4054; 4240; 4271; 4297; 4653; 5037; 5757; 5808
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	4	1395; 2348; 2509; 4030
Hin4I	!NNNNNNNNGABNNNNNRTC	3	2477; 3998; 4028
Hin4I	GABNNNNNRTCNNNNNNNNNNN!	3	2509; 4030; 4060
Hin4I	!NNNNNNNNGAYNNNNNVTC	4	1363; 2316; 2477; 3998
Hin6I	G!CGC	28	693; 863; 891; 1280; 1360; 1449; 1926; 2343; 3099; 3107; 3133; 3155; 3164; 3177; 3208; 3827; 3835; 3899; 3936; 4202; 4462; 4638; 4724; 5127; 5236; 5410; 5510; 5577
HinP1I	G!CGC	28	693; 863; 891; 1280; 1360; 1449; 1926; 2343; 3099; 3107; 3133; 3155; 3164; 3177; 3208; 3827; 3835; 3899; 3936; 4202; 4462; 4638; 4724; 5127; 5236; 5410; 5510; 5577
HincII	GTY!RAC	2	1371; 2598
HindII	GTY!RAC	2	1371; 2598
HindIII	A!AGCTT	0	
HinfI	G!ANTC	17	410; 1270; 1325; 1492; 1801; 2149; 2431; 2878; 2900; 3310; 4320; 4454; 4506; 4564; 4601; 5383; 5779
HpaI	GTT!AAC	1	2598
HpaII	C!CGG	26	632; 755; 1322; 1382; 1397; 1422; 1805; 1887; 2435; 2477; 3053; 3740; 3817; 3839; 3867; 3998; 4088; 4155; 4336; 4611; 4619; 4711; 5185; 5375; 5401; 5548
HphI	GGTGANNNNNNNN!	7	376; 798; 951; 975; 1819; 4906; 5022
HphI	!NNNNNNNTCACC	8	1527; 1560; 1809; 1911; 1932; 2076; 2952; 4013
Hpy8I	GTN!NAC	15	201; 539; 577; 672; 966; 1056; 1371; 2202; 2390; 2451; 2598; 2882; 2899; 2954; 5441
Hpy99I	CGWCG!	16	670; 715; 916; 1177; 1369; 1372; 1414; 1510; 1999; 3925; 3953; 4247; 4262; 4539; 4924; 5657
Hpy166II	GTN!NAC	15	201; 539; 577; 672; 966; 1056; 1371; 2202; 2390; 2451; 2598; 2882; 2899; 2954; 5441
Hpy188I	TCN!GA	14	585; 1217; 1330; 1487; 3009; 3618; 3802; 4146; 4499; 4600; 5079; 5213; 5566; 5644
Hpy188III	TC!NNGA	31	858; 1101; 1322; 1334; 1633; 1794; 1873; 1908; 2187; 2322; 2338; 2483; 3262; 3314; 3627; 3680; 3853; 4169; 4178; 4261; 4317; 4361; 4451; 4484; 4553; 5034; 5108; 5191; 5289; 5387; 5521
HpyAV	CCTTCNNNNNN!	9	1284; 1617; 1728; 2141; 2184; 2403; 4480; 4587; 5266
HpyAV	!NNNNNNGAAGG	10	975; 1482; 2277; 3068; 3963; 4692; 4708; 4891; 5208; 5518
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 1827; 2232; 2926; 4215; 4331; 4439; 4762; 5253; 5723; 5794
HpyCH4IV	A!CGT	20	122; 134; 175; 258; 339; 444; 668; 1052; 1160; 1739; 1994; 2198; 2895; 2907; 2950; 3060; 3951; 4138; 4919; 5052
HpyCH4V	TG!CA	21	672; 749; 1134; 1391; 2280; 2584; 2611; 2679; 3396; 3405; 3468; 3477; 3592; 3668; 3727; 3886; 4061; 4075; 5145; 5441; 5808
HpyF3I	C!TNAG	11	1207; 1214; 1327; 2114; 2339; 3315; 3617; 4498; 4947; 5070; 5479
HpyF10VI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 654; 695; 755; 768; 812; 1043; 1235; 1286; 1397; 1423; 1455; 1526; 1647; 1750; 1934; 2029; 3062; 3092; 3119; 3161; 3402; 3474; 3525; 3604; 3826; 3910; 3933; 4072; 4195; 4278; 4545; 4732; 4936; 5135; 5707
Hsp92I	GR!CGYC	9	122; 175; 258; 444; 713; 1449; 3835; 4537; 4616

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Hsp92II	CATG!	30	304; 364; 609; 840; 870; 1260; 1305; 1389; 1482; 1587; 1710; 1737; 1861; 1911; 2148; 2190; 2256; 3265; 3405; 3477; 3568; 3709; 4054; 4240; 4271; 4297; 4653; 5037; 5757; 5808
HspAI	G!CGC	28	693; 863; 891; 1280; 1360; 1449; 1926; 2343; 3099; 3107; 3133; 3155; 3164; 3177; 3208; 3827; 3835; 3899; 3936; 4202; 4462; 4638; 4724; 5127; 5236; 5410; 5510; 5577
KasI	G!GCGCC	2	1448; 3834
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	1	1321
KspI	CCGC!GG	1	933
Ksp22I	T!GATCA	1	2492
KspAI	GTT!AAC	1	2598
Kzo9I	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	3	2047; 4179; 4389
LpnI	RGC!GCV	7	864; 1281; 1450; 3100; 3108; 3836; 5511
LpnPI	CCDGNNNNNNNNN!	89	102; 295; 645; 768; 786; 823; 898; 913; 973; 1027; 1099; 1165; 1180; 1219; 1279; 1296; 1335; 1395; 1410; 1435; 1467; 1528; 1552; 1681; 1714; 1742; 1762; 1777; 1818; 1879; 1900; 2014; 2049; 2081; 2126; 2140; 2166; 2230; 2273; 2311; 2351; 2389; 2410; 2448; 2490; 2572; 2877; 3066; 3289; 3327; 3343; 3383; 3438; 3455; 3555; 3640; 3753; 3830; 3852; 3875; 4011; 4025; 4044; 4101; 4168; 4218; 4234; 4291; 4349; 4558; 4624; 4648; 4724; 4813; 4916; 4949; 5180; 5198; 5344; 5364; 5388; 5414; 5463; 5561; 5606; 5636; 5715; 5740; 5777
LpnPI	!NNNNNNNNNNNNNCHGG	77	75; 268; 552; 617; 643; 715; 740; 759; 871; 892; 946; 1000; 1072; 1123; 1153; 1252; 1302; 1367; 1407; 1440; 1560; 1581; 1735; 1760; 1790; 1858; 1987; 2032; 2062; 2125; 2225; 2246; 2284; 2362; 2404; 2462; 2918; 3038; 3095; 3158; 3356; 3368; 3428; 3440; 3672; 3717; 3760; 3802; 3824; 3852; 3899; 3961; 3983; 4073; 4140; 4163; 4207; 4302; 4321; 4346; 4495; 4596; 4639; 4696; 4786; 4889; 4916; 4934; 5170; 5207; 5360; 5386; 5526; 5544; 5579; 5660; 5713
Lsp1109I	GCAGCNNNNNNNN!	7	1146; 2623; 3908; 3950; 4471; 4924; 5424
Lsp1109I	!NNNNNNNNNNNGCTGC	13	749; 1273; 1607; 1637; 2016; 2051; 2095; 3117; 3782; 3966; 4059; 5125; 5331
LweI	GCATCNNNNN!	13	644; 815; 980; 1538; 1571; 1799; 2168; 2651; 3414; 3486; 4134; 4198; 4473
LweI	!NNNNNNNNNGATGC	7	357; 1404; 2267; 3793; 4048; 4264; 5656
MabI	A!CCWGGT	1	3424
MaeI	C!TAG	9	592; 2466; 2483; 2684; 3102; 3658; 4673; 5007; 5260
MaeII	A!CGT	20	122; 134; 175; 258; 339; 444; 668; 1052; 1160; 1739; 1994; 2198; 2895; 2907; 2950; 3060; 3951; 4138; 4919; 5052
MaeIII	!GTNAC	18	61; 148; 497; 786; 1566; 1807; 1815; 1969; 2194; 2623; 3124; 3136; 3955; 4261; 4951; 5217; 5333; 5396
MalI	GA!TC	32	587; 652; 736; 1189; 1225; 1332; 1705; 1915; 2290; 2320; 2326; 2362; 2410; 2472; 2481; 2494; 3674; 3678; 3697; 4008; 4086; 4167; 4176; 4254; 4630; 4646; 5005; 5017; 5095; 5103; 5114; 5189
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	3259; 4448
MbiI	GAG!CGG	5	611; 1956; 2100; 3095; 4502
MboI	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
MboII	GAAGANNNNNNNN!	10	852; 1704; 1923; 2064; 2328; 3091; 3319; 4196; 4406; 5025
MboII	!NNNNNNNTCTTC	7	846; 1422; 2115; 4486; 4653; 4853; 5096
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	2585
MflI	R!GATCY	12	585; 1330; 1913; 2470; 2479; 4006; 4252; 4644; 5003; 5015; 5101; 5112

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MhII	GDGCH!C	18	644; 674; 773; 836; 1166; 1213; 1265; 1559; 1643; 1832; 3026; 3781; 3874; 3948; 4138; 4200; 4910; 5443
MIsI	TGG!CCA	2	2023; 3917
MluI	A!CGCGT	1	2721
MluNI	TGG!CCA	2	2023; 3917
MlyI	GAGTCNNNNN!	5	1279; 2158; 2440; 2887; 3319
MlyI	!NNNNNGACTC	6	404; 1319; 1795; 2894; 4500; 5377
Mly113I	GG!CGCC	2	1449; 3835
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	2928
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	5360; 5544
MnII	CCTCNNNNNNN!	18	805; 1446; 1543; 1782; 1861; 1915; 1927; 2052; 2345; 2391; 2451; 2554; 3618; 4436; 4642; 4956; 5326; 5650
MnII	!NNNNNNGAGG	28	541; 612; 693; 867; 930; 942; 993; 1083; 1113; 1236; 1503; 1519; 1629; 1653; 1833; 2109; 2514; 2979; 3310; 3588; 3631; 3646; 3686; 3750; 3886; 4243; 4673; 5576
Mph1103I	ATGCA!T	3	3407; 3479; 5810
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1321
MroNI	G!CCGGC	5	631; 1396; 3052; 4335; 4618
MroXI	GAANN!NNTTC	1	850
MscI	TGG!CCA	2	2023; 3917
MseI	T!TAA	16	7; 1976; 2536; 2597; 2718; 2739; 2750; 2762; 2773; 2790; 2888; 3159; 4978; 4992; 4997; 5049
MslI	CAYNN!NNRTG	7	365; 784; 841; 961; 1795; 2251; 4272
MspI	C!CGG	26	632; 755; 1322; 1382; 1397; 1422; 1805; 1887; 2435; 2477; 3053; 3740; 3817; 3839; 3867; 3998; 4088; 4155; 4336; 4611; 4619; 4711; 5185; 5375; 5401; 5548
Msp20I	TGG!CCA	2	2023; 3917
MspA1I	CMG!CKG	7	932; 1137; 2108; 3333; 3941; 5170; 5415
MspCI	C!TTAAG	0	
MspJI	CNNRRNNNNNNNNN!	297	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; 618; 644; 657; 670; 685; 702; 717; 738; 767; 780; 795; 822; 841; 870; 883; 897; 912; 930; 943; 960; 973; 987; 1008; 1026; 1039; 1060; 1078; 1098; 1113; 1131; 1150; 1164; 1179; 1192; 1218; 1232; 1249; 1267; 1295; 1309; 1329; 1346; 1371; 1394; 1409; 1433; 1455; 1473; 1491; 1508; 1521; 1546; 1561; 1583; 1596; 1615; 1636; 1657; 1670; 1687; 1701; 1714; 1740; 1761; 1776; 1792; 1806; 1824; 1843; 1868; 1885; 1899; 1918; 1934; 1959; 1977; 2013; 2026; 2048; 2073; 2088; 2125; 2139; 2152; 2165; 2178; 2199; 2221; 2237; 2252; 2265; 2282; 2310; 2334; 2350; 2367; 2388; 2409; 2427; 2442; 2467; 2489; 2503; 2518; 2542; 2559; 2572; 2613; 2627; 2640; 2658; 2696; 2711; 2729; 2770; 2794; 2814; 2832; 2853; 2876; 2908; 2923; 2945; 2963; 2976; 2997; 3014; 3027; 3040; 3056; 3069; 3099; 3114; 3139; 3157; 3170; 3185; 3209; 3223; 3247; 3272; 3288; 3326; 3342; 3381; 3395; 3409; 3437; 3453; 3467; 3481; 3510; 3523; 3544; 3553; 3575; 3605; 3621; 3639; 3669; 3692; 3716; 3740; 3759; 3787; 3813; 3829; 3842; 3865; 3879; 3899; 3912; 3926; 3945; 3959; 3972; 3988; 4003; 4016; 4032; 4047; 4063; 4088; 4107; 4123; 4136; 4149; 4167; 4181; 4195; 4211; 4233; 4249; 4268; 4290; 4306; 4329; 4348; 4362; 4378; 4392; 4412; 4428; 4441; 4463; 4496; 4510; 4530; 4543; 4557; 4611; 4624; 4647; 4660; 4679; 4696; 4723; 4759; 4792; 4811; 4836; 4857; 4884; 4897; 4914; 4928; 4943; 4959; 5019; 5044; 5060; 5082; 5095; 5109; 5140; 5154; 5179; 5197; 5212; 5225; 5244; 5257; 5272; 5301; 5320; 5338; 5363; 5378; 5397; 5413; 5432; 5450; 5466; 5480; 5499; 5526; 5549; 5571; 5590; 5605; 5618; 5635; 5655; 5682; 5695; 5714; 5739; 5762; 5776; 5789; 5806

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	!NNNNNNNNNNNNNNYNG	253	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 592; 614; 631; 655; 672; 691; 712; 732; 752; 769; 788; 807; 844; 871; 892; 910; 932; 961; 982; 1000; 1039; 1057; 1087; 1105; 1124; 1147; 1166; 1192; 1212; 1233; 1252; 1269; 1288; 1307; 1327; 1345; 1367; 1388; 1407; 1429; 1447; 1465; 1484; 1501; 1525; 1544; 1561; 1581; 1603; 1621; 1645; 1663; 1687; 1715; 1735; 1754; 1773; 1790; 1813; 1832; 1852; 1869; 1894; 1913; 1933; 1951; 1974; 1994; 2011; 2032; 2054; 2076; 2099; 2125; 2150; 2173; 2193; 2225; 2246; 2284; 2308; 2326; 2343; 2362; 2383; 2401; 2420; 2452; 2469; 2487; 2516; 2545; 2587; 2670; 2708; 2732; 2755; 2784; 2828; 2850; 2882; 2918; 2935; 2956; 2993; 3013; 3030; 3047; 3082; 3100; 3118; 3135; 3159; 3181; 3208; 3236; 3262; 3300; 3321; 3338; 3356; 3379; 3400; 3428; 3451; 3472; 3490; 3511; 3528; 3551; 3575; 3595; 3613; 3635; 3666; 3688; 3714; 3733; 3750; 3778; 3797; 3816; 3834; 3852; 3873; 3895; 3919; 3952; 3972; 3990; 4011; 4037; 4064; 4081; 4098; 4115; 4141; 4163; 4185; 4203; 4223; 4242; 4264; 4302; 4322; 4346; 4366; 4386; 4413; 4437; 4470; 4489; 4517; 4539; 4568; 4596; 4621; 4640; 4659; 4680; 4697; 4714; 4745; 4772; 4792; 4815; 4835; 4872; 4889; 4908; 4934; 4954; 4993; 5020; 5039; 5057; 5094; 5112; 5153; 5171; 5197; 5214; 5246; 5275; 5303; 5324; 5347; 5366; 5387; 5405; 5422; 5440; 5466; 5487; 5507; 5527; 5545; 5566; 5592; 5609; 5628; 5647; 5676; 5695; 5713; 5732; 5750; 5768; 5791
MspR9I	CC!NGG	38	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1422; 1423; 1455; 1462; 1750; 1879; 1888; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 3839; 3999; 4222; 4612; 4801; 4904; 5376; 5594; 5607; 5728
MssI	GTTT!AAC	0	
MunI	C!AATTG	1	2585
MvaI	CC!WGG	31	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1455; 1462; 1750; 1879; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 4222; 4801; 4904; 5594; 5607; 5728
Mva1269I	GAATGCN!	1	2586
Mva1269I	G!CATTC	1	2679
MvnI	CG!CG	22	60; 695; 932; 1250; 1360; 1405; 1688; 1928; 2723; 2759; 3135; 3155; 3179; 3210; 3901; 4202; 4640; 4724; 4787; 4856; 5129; 5710
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	41	90; 212; 244; 283; 376; 400; 654; 695; 755; 768; 812; 1043; 1235; 1286; 1397; 1423; 1455; 1526; 1647; 1750; 1934; 2029; 3062; 3092; 3119; 3161; 3402; 3474; 3525; 3604; 3826; 3910; 3933; 4072; 4195; 4278; 4545; 4732; 4936; 5135; 5707
NaeI	GCC!GGC	5	633; 1398; 3054; 4337; 4620
NarI	GG!CGCC	2	1449; 3835
NciI	CC!SGG	7	1422; 1423; 1888; 3839; 3999; 4612; 5376
NcoI	C!CATGG	3	360; 3564; 4267
NdeI	CA!TATG	1	234
NdeII	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	3	280; 1824; 1914
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	3	244; 1788; 1878
NgoMIV	G!CCGGC	5	631; 1396; 3052; 4335; 4618
NheI	G!CTAGC	1	591
NlaIII	CATG!	30	304; 364; 609; 840; 870; 1260; 1305; 1389; 1482; 1587; 1710; 1737; 1861; 1911; 2148; 2190; 2256; 3265; 3405; 3477; 3568; 3709; 4054; 4240; 4271; 4297; 4653; 5037; 5757; 5808
NlaIV	GGN!NCC	28	467; 1179; 1380; 1450; 1459; 1600; 1631; 1664; 1891; 2104; 2247; 2303; 2370; 2439; 2472; 2990; 3011; 3023; 3214; 3375; 3447; 3836; 3871; 4719; 4798; 4843; 5686; 5725
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	4	2106; 2667; 2982; 4574
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	4	347; 1450; 1777; 5646
Nli3877I	CYCGR!G	5	833; 875; 1338; 1425; 1637
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	3	1977; 3624; 4060
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	3589



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NmeDI	RCCGGYNNNNNNN!	7	643; 766; 1408; 3064; 4166; 4347; 4630
NmeDI	!NNNNNNNNNNNNRCCGGY	7	618; 741; 1383; 3039; 4141; 4322; 4605
NmuCI	!GTSAC	9	786; 1566; 1807; 1815; 1969; 2194; 3124; 3955; 4261
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	3937
NsiI	ATGCA!T	3	3407; 3479; 5810
NspI	RCATG!Y	5	1389; 3405; 3477; 4240; 5757
NspV	TT!CGAA	1	4517
OliI	CACNN!NNGTG	2	784; 961
PabI	GTA!C	18	220; 245; 300; 333; 384; 541; 923; 1034; 1058; 1316; 1547; 1739; 1769; 1783; 2222; 2258; 2351; 4142
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	3405; 3477; 4240
PaeR7I	C!TCGAG	1	1334
PagI	T!CATGA	4	1907; 2186; 3261; 5033
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	1167; 4800; 4903
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	3656
PciI	A!CATGT	1	5753
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	3	2047; 4179; 4389
PcsI	WCGNNNN!NNNCGW	11	635; 1247; 1304; 1361; 1409; 4129; 4206; 4449; 4523; 4916; 5434
PctI	GAATGCN!	1	2586
PctI	G!CATTC	1	2679
PdiI	GCC!GGC	5	633; 1398; 3054; 4337; 4620
PdmI	GAANN!NNTTC	1	850
PfeI	G!AWTC	6	1492; 4320; 4454; 4564; 4601; 5779
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	2	1813; 3953
PfIMI	CCANNNN!NTGG	2	1026; 1302
PfoI	T!CCNGGA	4	884; 905; 1265; 4610
PhoI	GG!CC	39	84; 277; 677; 777; 1019; 1075; 1085; 1141; 1178; 1246; 1396; 1426; 1513; 1663; 1681; 1778; 1886; 1951; 2023; 2075; 2380; 2438; 2801; 2943; 3598; 3604; 3613; 3656; 3743; 3917; 4308; 4335; 4844; 4901; 4934; 5279; 5713; 5731; 5742
PinAI	A!CCGGT	0	
PlaDI	CATCAGNNNNNNNNNNNNNNNNNNNN!	1	4216
PlaDI	!NNNNNNNNNNNNNNNNNNNNCTGATG	2	3781; 4036
PleI	GAGTCNNNN!	5	1278; 2157; 2439; 2886; 3318
PleI	!NNNNNGACTC	6	404; 1319; 1795; 2894; 4500; 5377
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	2917
PpiI	!NNNNNNNGAGNNNNNGTTC	4	610; 724; 928; 5047
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	4	642; 756; 960; 5079
PpiI	!NNNNNNNGAACNNNNNCTC	1	2885
PpsI	GAGTCNNNN!	5	1278; 2157; 2439; 2886; 3318
PpsI	!NNNNNGACTC	6	404; 1319; 1795; 2894; 4500; 5377
Ppu10I	A!TGCAT	3	3403; 3475; 5806
Ppu21I	YAC!GTR	3	340; 2951; 4139
PpuMI	RG!GWCCY	1	1890
PscI	A!CATGT	1	5753
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	2618; 2823
Psp03I	GGWC!C	6	1236; 1322; 1878; 1893; 4354; 4799
Psp5II	RG!GWCCY	1	1890
Psp6I	!CCWGG	31	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1453; 1460; 1748; 1877; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 4220; 4799; 4902; 5592; 5605; 5726
Psp1406I	AA!CGTT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	2	786; 1815
PspGI	!CCWGG	31	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1453; 1460; 1748; 1877; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 4220; 4799; 4902; 5592; 5605; 5726
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	28	467; 1179; 1380; 1450; 1459; 1600; 1631; 1664; 1891; 2104; 2247; 2303; 2370; 2439; 2472; 2990; 3011; 3023; 3214; 3375; 3447; 3836; 3871; 4719; 4798; 4843; 5686; 5725
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	3	125; 3565; 4564
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	2	1149; 3967
PspPI	G!GNCC	20	83; 276; 776; 1017; 1177; 1233; 1245; 1319; 1424; 1512; 1662; 1875; 1890; 2437; 2942; 4351; 4796; 4842; 4900; 4933
PspPPI	RG!GWCCY	1	1890
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	5	1472; 1747; 3388; 3460; 4966
PspPRI	!NNNNNNNNNNNNNNCTGRGG	3	2100; 3301; 4496
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	3	1665; 1893; 4936
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	3	1283; 4936; 5344
PsuI	R!GATCY	12	585; 1330; 1913; 2470; 2479; 4006; 4252; 4644; 5003; 5015; 5101; 5112
PsyI	GACN!NNGTC	2	1813; 3953
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	3	1137; 3333; 3941
RcaI	T!CATGA	4	1907; 2186; 3261; 5033
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	4350
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	2	1837; 2564
RleAI	!NNNNNNNNNTGTGGG	1	1490
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	18	219; 244; 299; 332; 383; 540; 922; 1033; 1057; 1315; 1546; 1738; 1768; 1782; 2221; 2257; 2350; 4141
RsaNI	G!TAC	18	218; 243; 298; 331; 382; 539; 921; 1032; 1056; 1314; 1545; 1737; 1767; 1781; 2220; 2256; 2349; 4140
RseI	CAYNN!NNRTG	7	365; 784; 841; 961; 1795; 2251; 4272
RsrII	CG!GWCCG	1	4351
Rsr2I	CG!GWCCG	1	4351
SacI	GAGCT!C	0	
SacII	CCGC!GG	1	933
SalI	G!TCGAC	1	1369
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	3	2047; 4179; 4389
SaqAI	T!TAA	16	7; 1976; 2536; 2597; 2718; 2739; 2750; 2762; 2773; 2790; 2888; 3159; 4978; 4992; 4997; 5049
SatI	GC!NGC	44	696; 763; 933; 1125; 1128; 1135; 1287; 1358; 1621; 1651; 1929; 2030; 2065; 2109; 2244; 2367; 2612; 3131; 3153; 3167; 3605; 3744; 3796; 3807; 3897; 3902; 3939; 3980; 4067; 4070; 4073; 4309; 4405; 4446; 4460; 4574; 4913; 4928; 5139; 5345; 5348; 5413; 5556; 5711
Sau96I	G!GNCC	20	83; 276; 776; 1017; 1177; 1233; 1245; 1319; 1424; 1512; 1662; 1875; 1890; 2437; 2942; 4351; 4796; 4842; 4900; 4933

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau3AI	!GATC	32	585; 650; 734; 1187; 1223; 1330; 1703; 1913; 2288; 2318; 2324; 2360; 2408; 2470; 2479; 2492; 3672; 3676; 3695; 4006; 4084; 4165; 4174; 4252; 4628; 4644; 5003; 5015; 5093; 5101; 5112; 5187
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	2350
SchI	GAGTCNNNNN!	5	1279; 2158; 2440; 2887; 3319
SchI	!NNNNNGACTC	6	404; 1319; 1795; 2894; 4500; 5377
SciI	CTC!GAG	1	1336
ScrFI	CC!NGG	38	90; 283; 774; 784; 886; 907; 961; 1015; 1087; 1168; 1267; 1422; 1423; 1455; 1462; 1750; 1879; 1888; 2002; 2047; 2077; 2140; 2261; 2299; 2377; 3371; 3426; 3443; 3839; 3999; 4222; 4612; 4801; 4904; 5376; 5594; 5607; 5728
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	8	912; 1512; 2307; 2445; 3413; 3485; 3654; 5596
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	4	1244; 2316; 3990; 4475
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	2	279; 1823
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	2	245; 1789
SduI	GDGCH!C	18	644; 674; 773; 836; 1166; 1213; 1265; 1559; 1643; 1832; 3026; 3781; 3874; 3948; 4138; 4200; 4910; 5443
SelI	!CGCG	22	58; 693; 930; 1248; 1358; 1403; 1686; 1926; 2721; 2757; 3133; 3153; 3177; 3208; 3899; 4200; 4638; 4722; 4785; 4854; 5127; 5708
SetI	ASST!	83	125; 137; 178; 261; 308; 342; 447; 552; 568; 626; 659; 671; 731; 764; 941; 980; 1028; 1039; 1055; 1139; 1163; 1208; 1313; 1321; 1341; 1609; 1622; 1720; 1742; 1880; 1895; 1907; 1939; 1988; 1997; 2041; 2059; 2066; 2081; 2176; 2201; 2219; 2395; 2525; 2546; 2555; 2567; 2616; 2783; 2898; 2910; 2953; 2990; 3040; 3063; 3187; 3335; 3430; 3623; 3736; 3864; 3943; 3954; 4026; 4097; 4141; 4401; 4547; 4591; 4922; 4953; 5012; 5055; 5198; 5219; 5318; 5455; 5470; 5489; 5501; 5545; 5591; 5642
SexAI	A!CCWGGT	1	3424
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	13	644; 815; 980; 1538; 1571; 1799; 2168; 2651; 3414; 3486; 4134; 4198; 4473
SfaNI	!NNNNNNNNNGATGC	7	357; 1404; 2267; 3793; 4048; 4264; 5656
SfcI	C!TRYAG	4	1932; 3170; 5297; 5488
SfiI	GGCCNNNN!NGGCC	1	3610
SfoI	GGC!GCC	2	1450; 3836
Sfr274I	C!TCGAG	1	1334
Sfr303I	CCGC!GG	1	933
SfuI	TT!CGAA	1	4517
SgeI	CNNGNNNNNNNNN!	248	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 618; 644; 657; 670; 685; 702; 717; 738; 767; 780; 795; 822; 841; 870; 883; 897; 912; 930; 943; 960; 973; 987; 1008; 1026; 1039; 1065; 1078; 1098; 1113; 1131; 1150; 1164; 1179; 1192; 1218; 1233; 1254; 1269; 1295; 1309; 1329; 1346; 1371; 1394; 1409; 1433; 1455; 1473; 1491; 1521; 1551; 1566; 1587; 1608; 1636; 1657; 1671; 1689; 1713; 1741; 1761; 1776; 1799; 1817; 1851; 1870; 1885; 1899; 1920; 1935; 1959; 1977; 2013; 2026; 2048; 2073; 2088; 2125; 2139; 2152; 2165; 2199; 2229; 2252; 2265; 2286; 2310; 2334; 2350; 2367; 2388; 2409; 2427; 2442; 2478; 2495; 2542; 2571; 2613; 2696; 2734; 2770; 2854; 2876; 2908; 2945; 2963; 2982; 2997; 3039; 3056; 3073; 3108; 3122; 3139; 3161; 3185; 3209; 3274; 3288; 3326; 3342; 3382; 3395; 3414; 3437; 3454; 3467; 3486; 3516; 3537; 3554; 3577; 3612; 3639; 3670; 3692; 3718; 3740; 3759; 3787; 3823; 3842; 3865; 3879; 3899; 3912; 3926; 3945; 3959; 3978; 4010; 4024; 4037; 4063; 4094; 4107; 4124; 4141; 4155; 4172; 4190; 4205; 4233; 4249; 4268; 4290; 4306; 4329; 4348; 4373; 4392; 4412; 4439; 4463; 4496; 4515; 4543; 4557; 4623; 4647; 4662; 4685; 4706; 4723; 4771; 4798; 4812; 4841; 4865; 4898; 4915; 4935; 4948; 4961; 5019; 5046; 5065; 5095; 5120; 5140; 5154; 5179; 5197; 5234; 5272; 5301; 5329; 5343; 5363; 5378; 5399; 5413; 5432; 5450; 5466; 5506; 5526; 5553; 5571; 5592; 5605; 5618; 5635; 5659; 5682; 5714; 5739; 5766; 5788

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	215	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 598; 618; 640; 659; 676; 712; 741; 759; 796; 815; 844; 871; 892; 910; 934; 961; 982; 1000; 1039; 1057; 1087; 1105; 1124; 1147; 1166; 1192; 1216; 1233; 1252; 1269; 1288; 1308; 1345; 1368; 1390; 1407; 1429; 1447; 1465; 1495; 1525; 1544; 1561; 1582; 1610; 1631; 1654; 1673; 1693; 1715; 1735; 1761; 1780; 1798; 1825; 1844; 1864; 1894; 1913; 1933; 1951; 1987; 2011; 2032; 2054; 2099; 2125; 2150; 2173; 2203; 2226; 2246; 2284; 2308; 2332; 2362; 2383; 2401; 2421; 2452; 2469; 2516; 2545; 2587; 2670; 2708; 2744; 2828; 2850; 2882; 2919; 2937; 2956; 3013; 3030; 3047; 3082; 3100; 3120; 3140; 3159; 3183; 3248; 3300; 3356; 3388; 3411; 3428; 3460; 3490; 3511; 3528; 3551; 3586; 3613; 3644; 3666; 3692; 3714; 3733; 3761; 3797; 3816; 3839; 3860; 3878; 3895; 3919; 3952; 3984; 4011; 4037; 4068; 4098; 4115; 4141; 4164; 4185; 4207; 4227; 4247; 4264; 4303; 4322; 4347; 4366; 4386; 4413; 4437; 4470; 4489; 4517; 4539; 4597; 4621; 4640; 4659; 4680; 4697; 4745; 4772; 4792; 4815; 4839; 4872; 4889; 4909; 4935; 4993; 5020; 5039; 5069; 5094; 5114; 5153; 5171; 5208; 5246; 5275; 5303; 5324; 5352; 5373; 5406; 5424; 5480; 5500; 5527; 5545; 5566; 5592; 5609; 5633; 5656; 5688; 5713; 5740; 5762; 5791
Sgfl	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	933
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	6	27; 1483; 1815; 2982; 4769; 5562
SimI	!GACCC	7	106; 926; 1103; 1697; 4263; 4831; 5079
SinI	G!GWCC	6	1233; 1319; 1875; 1890; 4351; 4796
SlaI	C!TCGAG	1	1334
SmaI	CCC!GGG	1	1423
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	7	365; 784; 841; 961; 1795; 2251; 4272
SmlI	C!TYRAG	5	1334; 4226; 5108; 5385; 5647
SmoI	C!TYRAG	5	1334; 4226; 5108; 5385; 5647
SmuI	CCCGCNNNN!	12	93; 119; 286; 829; 937; 1114; 1255; 3157; 3512; 3533; 4729; 4861
SmuI	!NNNNNNGCGGG	8	604; 1398; 1949; 3088; 3958; 4495; 4633; 4780
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	3405; 3477; 4240
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 2585; 2649; 2727; 2753; 2764; 3411; 3483; 3575; 4993
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	0	
SseBI	AGG!CCT	1	3656
SsiI	C!CGC	43	58; 86; 98; 112; 279; 507; 589; 822; 930; 969; 1062; 1107; 1236; 1248; 1358; 1686; 2106; 2208; 2454; 3150; 3153; 3167; 3257; 3505; 3517; 3526; 3538; 3548; 3559; 3605; 3744; 3807; 4309; 4354; 4420; 4446; 4571; 4574; 4722; 4854; 5161; 5305; 5801
SsiI	G!CGG	35	370; 403; 528; 595; 611; 695; 932; 1124; 1127; 1405; 1928; 1956; 2100; 2243; 2366; 3095; 3122; 3210; 3320; 3901; 3965; 4066; 4069; 4349; 4404; 4502; 4640; 4787; 4927; 5170; 5415; 5536; 5555; 5682; 5710
SspI	AAT!ATT	2	2743; 3296
SspDI	G!GCGCC	2	1448; 3834
SspD5I	GGTGANNNNNNNN!	7	376; 798; 951; 975; 1819; 4906; 5022
SspD5I	!NNNNNNNNNTCACC	8	1526; 1559; 1808; 1910; 1931; 2075; 2951; 4012
SstI	GAGCT!C	0	
SstII	CCGC!GG	1	933
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	28	92; 118; 285; 650; 773; 828; 836; 878; 936; 1073; 1113; 1187; 1254; 1428; 1640; 1652; 3034; 3156; 3511; 3532; 3845; 4248; 4387; 4458; 4728; 4860; 5090; 5528
Sth132I	!NNNNNNNNNCGGG	24	15; 407; 470; 603; 1397; 1414; 1803; 1879; 1948; 3035; 3087; 3188; 3915; 3957; 3990; 4494; 4603; 4632; 4779; 4883; 4914; 5367; 5411; 5619

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sth302II	CC!GG	26	633; 756; 1323; 1383; 1398; 1423; 1806; 1888; 2436; 2478; 3054; 3741; 3818; 3840; 3868; 3999; 4089; 4156; 4337; 4612; 4620; 4712; 5186; 5376; 5402; 5549
StrI	C!TCGAG	1	1334
StsI	GGATGNNNNNNNNNN!	6	1358; 2290; 3703; 4160; 4185; 4639
StsI	!NNNNNNNNNNNNNNCATCC	10	792; 867; 996; 1044; 1515; 1848; 2145; 2190; 2358; 3507
StuI	AGG!CCT	1	3656
StyI	C!CWWGG	6	360; 1676; 3564; 3657; 4267; 4672
StyD4I	!CCNGG	38	88; 281; 772; 782; 884; 905; 959; 1013; 1085; 1166; 1265; 1420; 1421; 1453; 1460; 1748; 1877; 1886; 2000; 2045; 2075; 2138; 2259; 2297; 2375; 3369; 3424; 3441; 3837; 3997; 4220; 4610; 4799; 4902; 5374; 5592; 5605; 5726
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 1827; 2232; 2926; 4215; 4331; 4439; 4762; 5253; 5723; 5794
TaiI	ACGT!	20	125; 137; 178; 261; 342; 447; 671; 1055; 1163; 1742; 1997; 2201; 2898; 2910; 2953; 3063; 3954; 4141; 4922; 5055
TaqI	T!CGA	19	653; 947; 974; 1118; 1335; 1370; 1553; 2009; 2984; 3675; 3948; 4104; 4128; 4164; 4326; 4517; 4562; 4817; 5655
TaqII	GACCGANNNNNNNNNNN!	4	1672; 2855; 3872; 4540
TaqII	!NNNNNNNNNTCGGTC	1	4784
TaqII	CACCCANNNNNNNNNNN!	3	1309; 1834; 2319
TaqII	!NNNNNNNNNTGGGTG	3	172; 3739; 4331
TasI	!AATT	10	18; 2585; 2649; 2727; 2753; 2764; 3411; 3483; 3575; 4993
TatI	W!GTACW	9	217; 297; 330; 381; 920; 1031; 1055; 1313; 2348
TauI	GCSG!C	23	698; 935; 1127; 1130; 1360; 1931; 2246; 2369; 3155; 3169; 3607; 3746; 3809; 3904; 4069; 4072; 4311; 4407; 4448; 4576; 4930; 5558; 5713
TfiI	G!AWTC	6	1492; 4320; 4454; 4564; 4601; 5779
TliI	C!TCGAG	1	1334
TruII	T!TAA	16	7; 1976; 2536; 2597; 2718; 2739; 2750; 2762; 2773; 2790; 2888; 3159; 4978; 4992; 4997; 5049
Tru9I	T!TAA	16	7; 1976; 2536; 2597; 2718; 2739; 2750; 2762; 2773; 2790; 2888; 3159; 4978; 4992; 4997; 5049
TscAI	CASTGNN!	10	817; 1791; 1830; 2237; 2298; 2681; 3964; 5074; 5345; 5358
TseI	G!CWGC	21	762; 1134; 1286; 1620; 1650; 2029; 2064; 2108; 2611; 3130; 3795; 3896; 3938; 3979; 4072; 4459; 4912; 5138; 5344; 5347; 5412
TsoI	TARCCANNNNNNNNNNN!	2	2807; 3154
TsoI	!NNNNNNNNNTGGYTA	2	2612; 4364
Tsp45I	!GTSAC	9	786; 1566; 1807; 1815; 1969; 2194; 3124; 3955; 4261
Tsp509I	!AATT	10	18; 2585; 2649; 2727; 2753; 2764; 3411; 3483; 3575; 4993
TspDTI	ATGAANNNNNNNNNNN!	7	853; 1924; 2203; 2329; 2593; 3894; 4598
TspDTI	!NNNNNNNNNTTCAT	5	26; 732; 4312; 4768; 4975
TspEI	!AATT	10	18; 2585; 2649; 2727; 2753; 2764; 3411; 3483; 3575; 4993
TspGWI	ACGGANNNNNNNNNNN!	1	4710
TspGWI	!NNNNNNNNNTCCGT	1	2343
TspMI	C!CCGGG	1	1421
TspRI	CASTGNN!	10	817; 1791; 1830; 2237; 2298; 2681; 3964; 5074; 5345; 5358
TstI	CACNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	1	1972
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	1	2004
TstI	!NNNNNNNCCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	2	1813; 3953
Tth111II	CAARCANNNNNNNNNNN!	2	2431; 5162
Tth111III	!NNNNNNNNNTGYTTG	4	1699; 4270; 5130; 5169
UnbI	!GGNCC	20	82; 275; 775; 1016; 1176; 1232; 1244; 1318; 1423; 1511; 1661; 1874; 1889; 2436; 2941; 4350; 4795; 4841; 4899; 4932
Van9II	CCANNNN!NTGG	2	1026; 1302
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	2	670; 5439
VpaK11AI	!GGWCC	6	1232; 1318; 1874; 1889; 4350; 4795
VpaK11BI	G!GWCC	6	1233; 1319; 1875; 1890; 4351; 4796
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	2649; 2753; 2764
XbaI	T!CTAGA	1	2482

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XceI	RCATG!Y	5	1389; 3405; 3477; 4240; 5757
XcmI	CCANNNNN!NNNTGG	4	1083; 1164; 1869; 2043
XhoI	C!TCGAG	1	1334
XhoII	R!GATCY	12	585; 1330; 1913; 2470; 2479; 4006; 4252; 4644; 5003; 5015; 5101; 5112
XmaI	C!CCGGG	1	1421
XmaJI	C!CTAGG	2	3657; 4672
XmiI	GT!MKAC	1	1370
XmnI	GAANN!NNTTC	1	850
XspI	C!TAG	9	592; 2466; 2483; 2684; 3102; 3658; 4673; 5007; 5260
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	1	2350
Zsp2I	ATGCA!T	3	3407; 3479; 5810