

## pmKate2-keratin vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	2780; 2985
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	4	1092; 3068; 4024; 5813
AatI	AGG!CCT	3	1267; 2367; 3818
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	2	1902; 2518
AccII	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	4099
Acc36I	ACCTGCNNNN!	2	4265; 4715
Acc36I	!NNNNNNNNNGCAGGT	1	3884
Acc65I	G!GTACC	1	1907
AccB1I	G!GYRCC	9	465; 659; 672; 1907; 1992; 2052; 3150; 3996; 4031
AccB7I	CCANNNN!NTGG	2	1130; 1514
AccBSI	CCG!CTC	3	748; 3421; 4610
AccBSI	GAG!CGG	3	2640; 3257; 4664
AceIII	CAGCTCNNNNNNN!	3	1298; 1620; 2953
AceIII	!NNNNNNNNNNNGAGCTG	8	552; 1098; 1212; 1359; 1456; 1479; 1629; 1938
AciI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2251; 2389; 2491; 2644; 3312; 3315; 3329; 3419; 3667; 3679; 3688; 3700; 3710; 3721; 3767; 3906; 3969; 4471; 4516; 4582; 4608; 4733; 4736; 4884; 5016; 5323; 5467; 5963
AciI	G!CGG	31	370; 403; 528; 693; 766; 1913; 2076; 2086; 2398; 2440; 2640; 3257; 3284; 3372; 3482; 4063; 4127; 4228; 4231; 4511; 4566; 4664; 4802; 4949; 5089; 5332; 5577; 5698; 5717; 5844; 5872
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	10	741; 1626; 1930; 3865; 4176; 4422; 4814; 5173; 5271; 5357
AclWI	!NNNNNGATCC	8	580; 1613; 1917; 2473; 4241; 4785; 5172; 5269
AcoI	Y!GGCCR	10	678; 694; 787; 1114; 2596; 2641; 3903; 4077; 4468; 4495
AcsI	R!AATY	4	1891; 2811; 2915; 2926
AcuI	CTGAAGNNNNNNNNNNNNNNN!	4	1566; 2448; 4143; 4575
AcuI	!NNNNNNNNNNNNNNCTTCAG	2	743; 5373
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
AdeI	CACNNN!GTG	2	2588; 3113
AfaI	GT!AC	13	219; 244; 299; 332; 383; 540; 1407; 1502; 1909; 1983; 2133; 2385; 4303
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	34	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 2049; 2162; 2328; 2394; 3009; 3335; 3727; 3978; 4522; 4803; 4835; 4967; 5002; 5052; 5084; 5437; 5716; 5882; 5900
AfiII	C!TTAAG	1	2879
AfiIII	A!CRYGT	1	5915
AgeI	A!CCGGT	2	637; 1928
AgsI	TTS!AA	8	989; 2015; 2465; 3408; 3452; 3462; 3875; 5451
AhdI	GACNNN!NNGTC	2	963; 1503
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	26	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2113; 2161; 2257; 2272; 2401; 3531; 3586; 3603; 4382; 4961; 5064; 5754; 5767; 5888

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AjuI	GAANNNNNNNTTGGNNNNNNNNNNNN!	1	1571
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	1	1539
AleI	CACNN!NNGTG	2	1437; 1941
AlfI	GCANNNNNTGCGNNNNNNNNNNNN!	5	1068; 1455; 1818; 3571; 3643
AlfI	!NNNNNNNNNGCANNNNNNNTGC	5	1034; 1421; 1784; 3537; 3609
AloI	GAACNNNNNTCCNNNNNNNNNNNN!	2	2339; 3079
AloI	!NNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	2307; 3047
AluI	AG!CT	31	566; 604; 667; 757; 1112; 1193; 1226; 1288; 1373; 1397; 1470; 1493; 1555; 1610; 1643; 1715; 1952; 1979; 2125; 2432; 2776; 2943; 3200; 3495; 3783; 4103; 4561; 5358; 5615; 5661; 5751
AluBI	AG!CT	31	566; 604; 667; 757; 1112; 1193; 1226; 1288; 1373; 1397; 1470; 1493; 1555; 1610; 1643; 1715; 1952; 1979; 2125; 2432; 2776; 2943; 3200; 3495; 3783; 4103; 4561; 5358; 5615; 5661; 5751
AlwI	GGATCNNNN!	10	741; 1626; 1930; 3865; 4176; 4422; 4814; 5173; 5271; 5357
AlwI	!NNNNNGATCC	8	580; 1613; 1917; 2473; 4241; 4785; 5172; 5269
Alw21I	GWGCW!C	7	943; 1434; 1444; 2022; 4110; 4300; 5605
Alw26I	GTCTCN!	2	434; 1417
Alw26I	!NNNNNGAGAC	14	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 2370; 2559; 3421; 3839; 4858; 4986
Alw44I	G!TGCAC	2	2018; 5601
AlwNI	CAGNNN!CTG	5	714; 973; 2605; 5098; 5506
Ama87I	C!YCGRG	3	1654; 1918; 2196
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	2	1361; 1919
ApaBI	GCANNNNN!TGC	3	3565; 3637; 5099
ApaLI	G!TGCAC	2	2018; 5601
ApeKI	G!CWGC	24	688; 1077; 1190; 1226; 1470; 1607; 1625; 1792; 2137; 2281; 2579; 2773; 3292; 3957; 4058; 4100; 4141; 4234; 4621; 5074; 5300; 5506; 5509; 5574
ApoI	R!AATTY	4	1891; 2811; 2915; 2926
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	2	1546; 4512
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	4306; 4959; 5797
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	4396
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	2113
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	5	918; 1246; 1417; 1450; 3825
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	1	1279
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	2	2174; 4567
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	30	586; 734; 992; 1016; 1205; 1340; 1520; 1619; 1727; 1923; 2303; 2453; 2479; 2655; 3835; 3839; 3858; 4169; 4247; 4328; 4337; 4415; 4791; 4807; 5166; 5178; 5256; 5264; 5275; 5350
AsiGI	A!CCGGT	2	637; 1928
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	4115
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	1907
AspA2I	C!CTAGG	2	3819; 4834
AspEI	GACNNN!NNGTC	2	963; 1503
AspLEI	GCG!C	26	662; 675; 693; 714; 1123; 1672; 3263; 3271; 3297; 3319; 3328; 3341; 3372; 3991; 3999; 4063; 4100; 4366; 4626; 4802; 4888; 5291; 5400; 5574; 5674; 5741
AspS9I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2088; 2331; 2423; 2444; 3104; 4513; 4958; 5004; 5062; 5095
AssI	AGT!ACT	1	1407

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AsuII	TT!CGAA	1	4679
AsuC2I	CC!SGG	16	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 2512; 4001; 4161; 4774; 5538
AsuHPI	GGTANNNNNNNN!	6	376; 1788; 1955; 2324; 5068; 5184
AsuHPI	!NNNNNNNTCACC	5	599; 1436; 2213; 3114; 4175
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	3	1654; 1918; 2196
AvaII	G!GWCC	7	640; 775; 957; 1001; 1328; 4513; 4958
AviII	TGC!GCA	1	4099
AvrII	C!CTAGG	2	3819; 4834
AxyI	CC!TNAGG	4	1005; 1569; 3477; 5109
BaeI	ACNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGC!C	9	1361; 1919; 1995; 2022; 2055; 2632; 3943; 4036; 5605
BalI	TGG!CCA	4	789; 1116; 2598; 4079
BamHI	G!GATCC	2	1618; 1922
BanI	G!GYRCC	9	465; 659; 672; 1907; 1992; 2052; 3150; 3996; 4031
BanII	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3188; 4362; 5072
BanIII	AT!CGAT	1	3837
BarI	GAAGNNNNNTACNNNNNNNNNN!	1	2489
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	1	2457
BasI	CCANNN!NTGG	2	1130; 1514
BauI	C!ACGAG	3	2583; 4715; 5742
BauI	C!TCGTG	2	2433; 4589
BbeI	GGCG!C	3	663; 676; 4000
Bbr7I	GAAGACNNNNNN!	3	2244; 2477; 2545
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	3	2239; 2472; 2540
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	3567; 3639; 4402
BbvI	GCAGCNNNNNNNN!	12	700; 1202; 1619; 1804; 2149; 2591; 2785; 4070; 4112; 4633; 5086; 5586
BbvI	!NNNNNNNNNNNGCTGC	11	1064; 1213; 1457; 1612; 2268; 3279; 3944; 4128; 4221; 5287; 5493
Bbv12I	GWGCW!C	7	943; 1434; 1444; 2022; 4110; 4300; 5605
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	1	1459
BccI	CCATCNNNN!	6	1818; 2330; 3127; 3691; 4217; 4719
BccI	!NNNNNGATGG	6	1595; 1749; 1836; 3095; 3875; 4303
BceAI	ACGGCNNNNNNNNNN!	7	686; 2150; 2294; 2345; 2411; 4423; 4910
BceAI	!NNNNNNNNNNNNNGCCGT	3	3138; 3956; 5415
Bcefi	ACGGCNNNNNNNNNN!	7	686; 2150; 2294; 2345; 2411; 4423; 4910
Bcefi	!NNNNNNNNNNNNNGCCGT	3	3139; 3957; 5416
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GATCCNNNNNN!	3	3426; 4216; 5717
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	16	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 2512; 4001; 4161; 4774; 5538
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNN!	1	5850
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	5816
BfaI	C!TAG	10	592; 1398; 2617; 2652; 2846; 3264; 3820; 4835; 5169; 5422
BfiI	ACTGGGNNNNN!	2	2634; 3946
BfiI	!NNNNCCCAGT	2	289; 3698
BfmI	C!TRYAG	7	1053; 1188; 1596; 1896; 3332; 5459; 5650
BfoI	RGCGC!Y	8	663; 676; 715; 1673; 3264; 3272; 4000; 5675

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BfrI	C!TTAAG	1	2879
BfuI	GTATCCNNNNNN!	3	3426; 4216; 5717
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	4265; 4715
BfuAI	!NNNNNNNNNGCAGGT	1	3884
BfuCI	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
BglI	GCCNNNN!NGGC	6	90; 212; 283; 2407; 2421; 3772
BglII	A!GATCT	1	1015
BisI	GC!NGC	46	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2087; 2138; 2282; 2399; 2580; 2641; 2644; 2774; 3293; 3315; 3329; 3767; 3906; 3958; 3969; 4059; 4064; 4101; 4142; 4229; 4232; 4235; 4471; 4567; 4608; 4622; 4736; 5075; 5090; 5301; 5507; 5510; 5575; 5718; 5873
BlnI	C!CTAGG	2	3819; 4834
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	46	690; 695; 768; 1079; 1192; 1228; 1472; 1609; 1627; 1743; 1794; 2088; 2139; 2283; 2400; 2581; 2642; 2645; 2775; 3294; 3316; 3330; 3768; 3907; 3959; 3970; 4060; 4065; 4102; 4143; 4230; 4233; 4236; 4472; 4568; 4609; 4623; 4737; 5076; 5091; 5302; 5508; 5511; 5576; 5719; 5874
BmcAI	AGT!ACT	1	1407
Bme18I	G!GWCC	7	640; 775; 957; 1001; 1328; 4513; 4958
Bme1390I	CC!NGG	42	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2115; 2163; 2259; 2274; 2403; 2512; 3533; 3588; 3605; 4001; 4161; 4384; 4774; 4963; 5066; 5538; 5756; 5769; 5890
BmeRI	GACNNN!NNGTC	2	963; 1503
BmeT110I	C!YCGRG	3	1654; 1918; 2196
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	23	84; 277; 641; 776; 783; 958; 1002; 1329; 1359; 1584; 1677; 1692; 1917; 2089; 2332; 2424; 2445; 3105; 4514; 4959; 5005; 5063; 5096
BmiI	GGN!NCC	32	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 1994; 2054; 2445; 3152; 3173; 3185; 3376; 3537; 3609; 3998; 4033; 4881; 4960; 5005; 5848; 5887
BmrI	ACTGGGNNNNN!	2	2634; 3946
BmrI	!NNNNCCCAGT	2	289; 3698
BmrFI	CC!NGG	42	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2115; 2163; 2259; 2274; 2403; 2512; 3533; 3588; 3605; 4001; 4161; 4384; 4774; 4963; 5066; 5538; 5756; 5769; 5890
BmsI	GCATCNNNNN!	10	835; 1054; 1895; 2176; 2813; 3576; 3648; 4296; 4360; 4635
BmsI	!NNNNNNNNNGATGC	9	357; 1301; 1769; 2329; 2497; 3955; 4210; 4426; 5818
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	2634; 3946
BmuI	!NNNNCCCAGT	2	289; 3698
BoxI	GACNN!NNGTC	1	2571
BpiI	GAAGACNN!	3	2239; 2472; 2540
BpiI	!NNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	3786; 4685
BpI	!NNNNNNNNNGAGNNNNNCTC	2	3754; 4653
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	5	921; 995; 1215; 1737; 4837
BpmI	!NNNNNNNNNNNNNNNCTCCAG	2	2256; 4780
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	1	1459
Bpu14I	TT!CGAA	1	4679
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	3	2239; 2472; 2540
BpuAI	!NNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	3	1653; 5291; 5830
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	4	1200; 2487; 4373; 5532
BpuMI	CC!SGG	16	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 2512; 4001; 4161; 4774; 5538
BpvUI	CGAT!CG	0	

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BsaI	GGTCTCN!	1	1417
BsaI	!NNNNNGAGACC	6	837; 897; 1854; 2370; 2559; 4986
Bsa29I	AT!CGAT	1	3837
BsaAI	YAC!GTR	3	340; 3113; 4301
BsaBI	GATNN!NNATC	2	2659; 3856
BsaHI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
BsaJI	C!CNNGG	33	360; 643; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 1939; 2026; 2161; 2162; 2197; 2257; 3531; 3603; 3726; 3761; 3770; 3819; 4160; 4429; 4834; 4961; 4962; 5064; 5065; 5755
BsaMI	GAATGCN!	1	2748
BsaMI	G!CATTC	1	2841
BsaWI	W!CCGGW	7	637; 913; 1928; 4028; 4872; 5562; 5709
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	2	1545; 3077
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	2	1515; 3047
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	2998; 4905
Bsc4I	CCNNNNN!NNGG	34	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 2049; 2162; 2328; 2394; 3009; 3335; 3727; 3978; 4522; 4803; 4835; 4967; 5002; 5052; 5084; 5437; 5716; 5882; 5900
BscAI	GCATCNNNN!	10	834; 1053; 1894; 2175; 2812; 3575; 3647; 4295; 4359; 4634
BscAI	!NNNNNNGATGC	9	360; 1304; 1772; 2332; 2500; 3958; 4213; 4429; 5821
BseI	ACTGGN!	7	978; 1413; 2542; 2629; 3941; 4142; 5388
BseI	C!CAGT	7	295; 1124; 1508; 3026; 3704; 5500; 5513
Bse8I	GATNN!NNATC	2	2659; 3856
Bse2II	CC!TNAGG	4	1005; 1569; 3477; 5109
Bse118I	R!CCGGY	7	637; 680; 1928; 3214; 4316; 4497; 4780
BseAI	T!CCGGA	0	
BseBI	CC!WGG	26	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2115; 2163; 2259; 2274; 2403; 3533; 3588; 3605; 4384; 4963; 5066; 5756; 5769; 5890
BseCI	AT!CGAT	1	3837
BseDI	C!CNNGG	33	360; 643; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 1939; 2026; 2161; 2162; 2197; 2257; 3531; 3603; 3726; 3761; 3770; 3819; 4160; 4429; 4834; 4961; 4962; 5064; 5065; 5755
Bse3DI	GCAATGNN!	1	4230
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	5	1847; 3857; 4314; 4339; 4793
BseGI	!CATCC	9	826; 1141; 1351; 1810; 2022; 2110; 2167; 2322; 3683
BseJI	GATNN!NNATC	2	2659; 3856
BseLI	CCNNNNN!NNGG	34	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 2049; 2162; 2328; 2394; 3009; 3335; 3727; 3978; 4522; 4803; 4835; 4967; 5002; 5052; 5084; 5437; 5716; 5882; 5900
BseMI	GCAATGNN!	1	4230
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	4	1026; 1338; 1428; 5123
BseMII	!NNNNNNNCTGAG	13	996; 1450; 1465; 1485; 1560; 1714; 1849; 1872; 3468; 3770; 4651; 5223; 5632
BseNI	ACTGGN!	7	978; 1413; 2542; 2629; 3941; 4142; 5388
BseNI	C!CAGT	7	295; 1124; 1508; 3026; 3704; 5500; 5513
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	5	908; 1236; 1407; 1440; 3815
BseRI	!NNNNNNNCTCCTC	0	
BseSI	GKGC!C	9	1361; 1919; 1995; 2022; 2055; 2632; 3943; 4036; 5605
BseXI	GCAGCNNNNNNNN!	12	700; 1202; 1619; 1804; 2149; 2591; 2785; 4070; 4112; 4633; 5086; 5586
BseXI	!NNNNNNNNNNNGCTGC	11	1064; 1213; 1457; 1612; 2268; 3279; 3944; 4128; 4221; 5287; 5493
BseX3I	C!GGCCG	3	678; 2641; 3903
BseYI	C!CCAGC	4	663; 3540; 3612; 5611
BseYI	G!CTGGG	3	714; 2359; 4501
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsgI	!NNNNNNNNNNNNNNCTGCAC	1	1611
Bsh1236I	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
Bsh1285I	CGRY!CG	7	681; 866; 1933; 2080; 2644; 3906; 5581
BshFI	GG!CC	41	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2089; 2332; 2367; 2401; 2424; 2446; 2556; 2598; 2643; 2963; 3105; 3760; 3766; 3775; 3818; 3905; 4079; 4470; 4497; 5006; 5063; 5096; 5441; 5875; 5893; 5904
BshNI	G!GYRCC	9	465; 659; 672; 1907; 1992; 2052; 3150; 3996; 4031
BshTI	A!CCGGT	2	637; 1928
BshVI	AT!CGAT	1	3837
BsiEI	CGRY!CG	7	681; 866; 1933; 2080; 2644; 3906; 5581
BsiHKAI	GWGCW!C	7	943; 1434; 1444; 2022; 4110; 4300; 5605
BsiHKCI	C!YCGRG	3	1654; 1918; 2196
BsiSI	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2512; 3215; 3902; 3979; 4001; 4029; 4160; 4250; 4317; 4498; 4773; 4781; 4873; 5347; 5537; 5563; 5710
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	34	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 2049; 2162; 2328; 2394; 3009; 3335; 3727; 3978; 4522; 4803; 4835; 4967; 5002; 5052; 5084; 5437; 5716; 5882; 5900
BsIFI	GGGACNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4148; 4680; 4789
BsIFI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3513; 3585; 3649; 4944
BsmI	GAATGCN!	1	2748
BsmI	G!CATTC	1	2841
BsmAI	GTCTCN!	2	434; 1417
BsmAI	!NNNNNGAGAC	14	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 2370; 2559; 3421; 3839; 4858; 4986
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	2	1470; 1490
BsmFI	GGGACNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4148; 4680; 4789
BsmFI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3513; 3585; 3649; 4944
BsnI	GG!CC	41	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2089; 2332; 2367; 2401; 2424; 2446; 2556; 2598; 2643; 2963; 3105; 3760; 3766; 3775; 3818; 3905; 4079; 4470; 4497; 5006; 5063; 5096; 5441; 5875; 5893; 5904
Bso31I	GGTCTCN!	1	1417
Bso31I	!NNNNNGAGACC	6	837; 897; 1854; 2370; 2559; 4986
BsoBI	C!YCGRG	3	1654; 1918; 2196
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	5	360; 1145; 1939; 3726; 4429
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	4	289; 1209; 1424; 4800
Bsp24I	!NNNNNNCCANNNNNGTC	2	5221; 5399
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	5253; 5431
Bsp24I	!NNNNNNNGACNNNNNTGG	4	257; 1177; 1392; 4768
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	4679
Bsp120I	G!GGCCC	2	1357; 1915
Bsp143I	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
Bsp1286I	GDGCH!C	21	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1995; 2022; 2055; 2632; 3188; 3943; 4036; 4110; 4300; 4362; 5072; 5605
Bsp1407I	T!GTACA	1	1981
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2251; 2389; 2491; 2644; 3312; 3315; 3329; 3419; 3667; 3679; 3688; 3700; 3710; 3721; 3767; 3906; 3969; 4471; 4516; 4582; 4608; 4733; 4736; 4884; 5016; 5323; 5467; 5963
BspACI	G!CGG	31	370; 403; 528; 693; 766; 1913; 2076; 2086; 2398; 2440; 2640; 3257; 3284; 3372; 3482; 4063; 4127; 4228; 4231; 4511; 4566; 4664; 4802; 4949; 5089; 5332; 5577; 5698; 5717; 5844; 5872
BspCNI	CTCAGNNNNNNNN!	4	1025; 1337; 1427; 5122
BspCNI	!NNNNNNCTGAG	13	997; 1451; 1466; 1486; 1561; 1715; 1850; 1873; 3469; 3771; 4652; 5224; 5633

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BspDI	AT!CGAT	1	3837
BspD6I	GACTCNNNN!	6	418; 1538; 2656; 3070; 4676; 5553
BspD6I	!NNNNNNGAGTC	5	1086; 1628; 2211; 3033; 3465
BspEI	T!CCGGA	0	
BspFNI	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
BspHI	T!CATGA	3	1234; 3423; 5195
BspLI	GGN!NCC	32	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 1994; 2054; 2445; 3152; 3173; 3185; 3376; 3537; 3609; 3998; 4033; 4881; 4960; 5005; 5848; 5887
BspMI	ACCTGCNNNN!	2	4265; 4715
BspMI	!NNNNNNNNGCAGGT	1	3884
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	10	741; 1626; 1930; 3865; 4176; 4422; 4814; 5173; 5271; 5357
BspPI	!NNNNNGATCC	8	580; 1613; 1917; 2473; 4241; 4785; 5172; 5269
BspQI	GCTCTCN!	1	1236
BspQI	!NNNNGAAGAGC	2	4341; 4551
BspTI	C!TTAAG	1	2879
BspT104I	TT!CGAA	1	4679
BspT107I	G!GYRCC	9	465; 659; 672; 1907; 1992; 2052; 3150; 3996; 4031
BspTNI	GGTCTCN!	1	1417
BspTNI	!NNNNNGAGACC	6	837; 897; 1854; 2370; 2559; 4986
BsrI	ACTGGN!	7	978; 1413; 2542; 2629; 3941; 4142; 5388
BsrI	C!CAGT	7	295; 1124; 1508; 3026; 3704; 5500; 5513
BsrBI	CCG!CTC	3	748; 3421; 4610
BsrBI	GAG!CGG	3	2640; 3257; 4664
BsrDI	GCAATGNN!	1	4230
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	7	637; 680; 1928; 3214; 4316; 4497; 4780
BsrGI	T!GTACA	1	1981
BsrSI	ACTGGN!	7	978; 1413; 2542; 2629; 3941; 4142; 5388
BsrSI	C!CAGT	7	295; 1124; 1508; 3026; 3704; 5500; 5513
BssAI	R!CCGGY	7	637; 680; 1928; 3214; 4316; 4497; 4780
BssECI	C!CNNGG	33	360; 643; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 1939; 2026; 2161; 2162; 2197; 2257; 3531; 3603; 3726; 3761; 3770; 3819; 4160; 4429; 4834; 4961; 4962; 5064; 5065; 5755
BssHII	G!CGCGC	0	
BssKI	!CCNNGG	42	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2113; 2161; 2257; 2272; 2401; 2510; 3531; 3586; 3603; 3999; 4159; 4382; 4772; 4961; 5064; 5536; 5754; 5767; 5888
BssMI	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
BssNI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	2583; 4715; 5742
BssSI	C!TCGTG	2	2433; 4589
BssT1I	C!CWWGG	9	360; 1145; 1513; 1783; 1939; 3726; 3819; 4429; 4834
Bst6I	CTCTCN!	1	1236
Bst6I	!NNNNGAAGAG	4	1246; 3464; 4341; 4551
Bst98I	C!TTAAG	1	2879
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
BstAFI	C!TTAAG	1	2879
BstAPI	GCANNNN!NTGC	3	3564; 3636; 5098
BstAUI	T!GTACA	1	1981
BstBI	TT!CGAA	1	4679
Bst2BI	C!ACGAG	3	2583; 4715; 5742
Bst2BI	C!TCGTG	2	2433; 4589
BstBAI	YAC!GTR	3	340; 3113; 4301
Bst4CI	ACN!GT	20	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 1997; 3088; 4377; 4493; 4601; 4924; 5415; 5885; 5956

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstC8I	GCN!NGC	42	86; 279; 593; 698; 710; 1043; 1114; 1286; 1375; 1553; 1586; 1645; 1746; 1915; 1950; 2040; 2244; 3216; 3259; 3273; 3546; 3565; 3618; 3637; 3891; 4077; 4296; 4362; 4368; 4396; 4400; 4441; 4445; 4499; 4782; 4969; 5016; 5072; 5094; 5305; 5865; 5902
BstDEI	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2494; 3477; 3779; 4660; 5109; 5232; 5641
BstDSI	C!CRYGG	7	360; 1145; 1300; 1911; 1939; 3726; 4429
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	1	1572
BstF5I	GGATGNN!	5	1847; 3857; 4314; 4339; 4793
BstF5I	!CATCC	9	826; 1141; 1351; 1810; 2022; 2110; 2167; 2322; 3683
BstFNI	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
BstH2I	RGCGC!Y	8	663; 676; 715; 1673; 3264; 3272; 4000; 5675
BstHHI	GCG!C	26	662; 675; 693; 714; 1123; 1672; 3263; 3271; 3297; 3319; 3328; 3341; 3372; 3991; 3999; 4063; 4100; 4366; 4626; 4802; 4888; 5291; 5400; 5574; 5674; 5741
BstKTI	GAT!C	30	588; 736; 994; 1018; 1207; 1342; 1522; 1621; 1729; 1925; 2305; 2455; 2481; 2657; 3837; 3841; 3860; 4171; 4249; 4330; 4339; 4417; 4793; 4809; 5168; 5180; 5258; 5266; 5277; 5352
BstMAI	GTCTCN!	2	434; 1417
BstMAI	!NNNNNGAGAC	14	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 2370; 2559; 3421; 3839; 4858; 4986
BstMBI	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
BstMCI	CGRY!CG	7	681; 866; 1933; 2080; 2644; 3906; 5581
BstMWI	GCNNNNN!NNGC	38	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1976; 2407; 2421; 3224; 3254; 3281; 3323; 3564; 3636; 3687; 3766; 3988; 4072; 4095; 4234; 4357; 4440; 4707; 4894; 5098; 5297; 5869
BstNI	CC!WGG	26	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2115; 2163; 2259; 2274; 2403; 3533; 3588; 3605; 4384; 4963; 5066; 5756; 5769; 5890
BstNSI	RCATG!Y	5	1970; 3567; 3639; 4402; 5919
BstOI	CC!WGG	26	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2115; 2163; 2259; 2274; 2403; 3533; 3588; 3605; 4384; 4963; 5066; 5756; 5769; 5890
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	2571
BstSCI	!CCNGG	42	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2113; 2161; 2257; 2272; 2401; 2510; 3531; 3586; 3603; 3999; 4159; 4382; 4772; 4961; 5064; 5536; 5754; 5767; 5888
BstSFI	C!TRYAG	7	1053; 1188; 1596; 1896; 3332; 5459; 5650
BstSLI	GKGC!C	9	1361; 1919; 1995; 2022; 2055; 2632; 3943; 4036; 5605
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
Bst2UI	CC!WGG	26	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2115; 2163; 2259; 2274; 2403; 3533; 3588; 3605; 4384; 4963; 5066; 5756; 5769; 5890
BstV1I	GCAGC!NNNNNNN!	12	700; 1202; 1619; 1804; 2149; 2591; 2785; 4070; 4112; 4633; 5086; 5586
BstV1I	!NNNNNNNNNNNGCTGC	11	1064; 1213; 1457; 1612; 2268; 3279; 3944; 4128; 4221; 5287; 5493
BstV2I	GAAGACNN!	3	2239; 2472; 2540
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	1	1343
BstX2I	R!GATCY	13	585; 733; 1015; 1618; 1922; 2478; 4168; 4414; 4806; 5165; 5177; 5263; 5274
BstYI	R!GATCY	13	585; 733; 1015; 1618; 1922; 2478; 4168; 4414; 4806; 5165; 5177; 5263; 5274
BstZI	C!GGCCG	3	678; 2641; 3903
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	3426; 4216; 5717
BsuI	!NNNNNGGATAC	0	



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bsu15I	AT!CGAT	1	3837
Bsu36I	CC!TNAGG	4	1005; 1569; 3477; 5109
BsuRI	GG!CC	41	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2089; 2332; 2367; 2401; 2424; 2446; 2556; 2598; 2643; 2963; 3105; 3760; 3766; 3775; 3818; 3905; 4079; 4470; 4497; 5006; 5063; 5096; 5441; 5875; 5893; 5904
BsuTUI	AT!CGAT	1	3837
BtgI	C!CRYGG	7	360; 1145; 1300; 1911; 1939; 3726; 4429
BtgZI	GCGATGNNNNNNNNNN!	2	3114; 4449
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 4268; 4612
BthCI	GCNG!C	46	691; 696; 769; 1080; 1193; 1229; 1473; 1610; 1628; 1744; 1795; 2089; 2140; 2284; 2401; 2582; 2643; 2646; 2776; 3295; 3317; 3331; 3769; 3908; 3960; 3971; 4061; 4066; 4103; 4144; 4231; 4234; 4237; 4473; 4569; 4610; 4624; 4738; 5077; 5092; 5303; 5509; 5512; 5577; 5720; 5875
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCA GTGNN!	0	
BtsI	!CACTGC	1	2836
BtsCI	GGATGNN!	5	1847; 3857; 4314; 4339; 4793
BtsCI	!CATCC	9	826; 1141; 1351; 1810; 2022; 2110; 2167; 2322; 3683
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	4265; 4715
BveI	!NNNNNNNNNGCAGGT	1	3884
Cac8I	GCN!NGC	42	86; 279; 593; 698; 710; 1043; 1114; 1286; 1375; 1553; 1586; 1645; 1746; 1915; 1950; 2040; 2244; 3216; 3259; 3273; 3546; 3565; 3618; 3637; 3891; 4077; 4296; 4362; 4368; 4396; 4400; 4441; 4445; 4499; 4782; 4969; 5016; 5072; 5094; 5305; 5865; 5902
CaiI	CAGNNN!CTG	5	714; 973; 2605; 5098; 5506
CciI	T!CATGA	3	1234; 3423; 5195
CciNI	GC!GGCCGC	1	2641
CdiI	CATC!G	8	352; 998; 1049; 1890; 4286; 4291; 4489; 4630
CdiI	C!GATG	2	3100; 4435
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	5869
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	4	486; 1133; 3658; 3700
CelII	GC!TNAGC	0	
CfoI	GCG!C	26	662; 675; 693; 714; 1123; 1672; 3263; 3271; 3297; 3319; 3328; 3341; 3372; 3991; 3999; 4063; 4100; 4366; 4626; 4802; 4888; 5291; 5400; 5574; 5674; 5741
CfrI	Y!GGCCR	10	678; 694; 787; 1114; 2596; 2641; 3903; 4077; 4468; 4495
Cfr9I	C!CCGGG	2	1654; 1918
Cfr10I	R!CCGGY	7	637; 680; 1928; 3214; 4316; 4497; 4780
Cfr13I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2088; 2331; 2423; 2444; 3104; 4513; 4958; 5004; 5062; 5095
Cfr42I	CCGC!GG	1	1914
ChaI	GATC!	30	589; 737; 995; 1019; 1208; 1343; 1523; 1622; 1730; 1926; 2306; 2456; 2482; 2658; 3838; 3842; 3861; 4172; 4250; 4331; 4340; 4418; 4794; 4810; 5169; 5181; 5259; 5267; 5278; 5353
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	2034; 3814; 5254; 5354; 5432
CjeI	!NNNNNNNNNACNNNNNNNTGG	9	64; 257; 1177; 1392; 3481; 3576; 4768; 5318; 5873
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	9	98; 291; 1211; 1426; 3515; 3610; 4802; 5352; 5907
CjeI	!NNNNNNNNCCANNNNNNGT	5	2000; 3780; 5220; 5320; 5398
CjePI	CCANNNNNNTCNNNNNNNNNNNNNN!	3	1559; 5254; 5432
CjePI	!NNNNNNNNGANNNNNNNTGG	7	257; 1177; 1392; 1826; 2404; 4768; 5367
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	7	290; 1210; 1425; 1859; 2437; 4801; 5400
CjePI	!NNNNNNNNCCANNNNNNNNTC	3	1526; 5221; 5399
Clal	AT!CGAT	1	3837
CpoI	CG!GWCCG	1	4513
CseI	GACGCNNNNN!	4	526; 1490; 4707; 4786
CseI	!NNNNNNNNNNNGCGTC	5	689; 2504; 3330; 5225; 5803
CsiI	A!CCWGGT	1	3586
CspI	CG!GWCCG	1	4513
Csp6I	G!TAC	13	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 1982; 2132; 2384; 4302
Csp45I	TT!CGAA	1	4679

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CspAI	A!CCGGT	2	637; 1928
CspCI	CAANNNGTGGNNNNNNNNNNNN!	2	411; 1047
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNGTGG	2	376; 1012
CstMI	AAGGAGNNNNNNNNNNNNNNNNNNNN!	6	865; 1243; 1984; 2575; 3277; 4886
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	32	301; 361; 599; 770; 848; 1118; 1146; 1235; 1343; 1535; 1802; 1940; 1967; 1973; 1985; 2063; 2129; 2209; 2420; 3424; 3564; 3636; 3727; 3868; 4213; 4399; 4430; 4456; 4812; 5196; 5916; 5967
CviJI	RG!CY	134	42; 84; 93; 277; 566; 604; 649; 667; 680; 696; 721; 757; 784; 789; 801; 856; 873; 898; 920; 979; 1011; 1112; 1116; 1151; 1193; 1212; 1226; 1267; 1275; 1288; 1359; 1373; 1377; 1397; 1470; 1493; 1551; 1555; 1567; 1584; 1610; 1643; 1677; 1692; 1715; 1722; 1917; 1952; 1979; 2042; 2089; 2118; 2125; 2203; 2269; 2281; 2332; 2359; 2367; 2401; 2415; 2424; 2432; 2446; 2556; 2592; 2598; 2643; 2666; 2776; 2943; 2963; 3105; 3186; 3200; 3214; 3495; 3536; 3608; 3731; 3760; 3766; 3775; 3783; 3806; 3818; 3824; 3905; 3922; 3930; 3957; 3982; 4066; 4075; 4079; 4103; 4141; 4217; 4234; 4253; 4316; 4360; 4370; 4387; 4470; 4497; 4501; 4538; 4561; 4577; 4757; 4784; 4845; 4967; 5006; 5063; 5070; 5077; 5096; 5107; 5358; 5387; 5430; 5441; 5506; 5585; 5610; 5615; 5661; 5751; 5849; 5875; 5893; 5904
CviKI-1	RG!CY	134	42; 84; 93; 277; 566; 604; 649; 667; 680; 696; 721; 757; 784; 789; 801; 856; 873; 898; 920; 979; 1011; 1112; 1116; 1151; 1193; 1212; 1226; 1267; 1275; 1288; 1359; 1373; 1377; 1397; 1470; 1493; 1551; 1555; 1567; 1584; 1610; 1643; 1677; 1692; 1715; 1722; 1917; 1952; 1979; 2042; 2089; 2118; 2125; 2203; 2269; 2281; 2332; 2359; 2367; 2401; 2415; 2424; 2432; 2446; 2556; 2592; 2598; 2643; 2666; 2776; 2943; 2963; 3105; 3186; 3200; 3214; 3495; 3536; 3608; 3731; 3760; 3766; 3775; 3783; 3806; 3818; 3824; 3905; 3922; 3930; 3957; 3982; 4066; 4075; 4079; 4103; 4141; 4217; 4234; 4253; 4316; 4360; 4370; 4387; 4470; 4497; 4501; 4538; 4561; 4577; 4757; 4784; 4845; 4967; 5006; 5063; 5070; 5077; 5096; 5107; 5358; 5387; 5430; 5441; 5506; 5585; 5610; 5615; 5661; 5751; 5849; 5875; 5893; 5904
CviQI	G!TAC	13	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 1982; 2132; 2384; 4302
DdeI	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2494; 3477; 3779; 4660; 5109; 5232; 5641
DinI	GGC!GCC	3	661; 674; 3998
DpnI	GA!TC	30	587; 735; 993; 1017; 1206; 1341; 1521; 1620; 1728; 1924; 2304; 2454; 2480; 2656; 3836; 3840; 3859; 4170; 4248; 4329; 4338; 4416; 4792; 4808; 5167; 5179; 5257; 5265; 5276; 5351
DpnII	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
DraI	TTT!AAA	3	2699; 5141; 5160
DraII	RG!GNCCY	6	782; 957; 1001; 1328; 1691; 5095
DraIII	CACNN!GTG	2	2588; 3113
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNN!	3	266; 1429; 5477
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	1	1492
DrdI	GACNNN!NNGTC	4	1092; 3068; 4024; 5813
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	2	963; 1503
DseDI	GACNNN!NNGTC	4	1092; 3068; 4024; 5813
EaeI	Y!GGCCR	10	678; 694; 787; 1114; 2596; 2641; 3903; 4077; 4468; 4495
EagI	C!GGCCG	3	678; 2641; 3903
Eam1104I	CTCTCN!	1	1236
Eam1104I	!NNNNGAAGAG	4	1246; 3464; 4341; 4551
Eam1105I	GACNNN!NNGTC	2	963; 1503
EarI	CTCTCN!	1	1236
EarI	!NNNNGAAGAG	4	1246; 3464; 4341; 4551
EciI	GGCGGANNNNNNNNNNNN!	4	3497; 4526; 5713; 5859
EciI	!NNNNNNNNNTCCGCC	4	496; 3668; 3689; 3710
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	3	678; 2641; 3903

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eco24I	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3188; 4362; 5072
Eco31I	GGTCTCN!	1	1417
Eco31I	!NNNNNGAGACC	6	837; 897; 1854; 2370; 2559; 4986
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	7	640; 775; 957; 1001; 1328; 4513; 4958
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	3	678; 2641; 3903
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	4	1566; 2448; 4143; 4575
Eco57I	!NNNNNNNNNNNNNNCTTCAG	2	743; 5373
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	4	1005; 1569; 3477; 5109
Eco88I	C!YCGRG	3	1654; 1918; 2196
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	9	360; 1145; 1513; 1783; 1939; 3726; 3819; 4429; 4834
Eco147I	AGG!CCT	3	1267; 2367; 3818
EcoHI	!CCSGG	16	675; 729; 777; 792; 801; 934; 1354; 1653; 1654; 1917; 1918; 2510; 3999; 4159; 4772; 5536
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	9	921; 995; 1215; 1566; 1737; 2448; 4143; 4575; 4837
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	4	743; 2256; 4780; 5373
EcoNI	CCTNN!NNNAGG	1	1572
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	6	782; 957; 1001; 1328; 1691; 5095
EcoRI	G!AATTC	1	1891
EcoRII	!CCWGG	26	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2113; 2161; 2257; 2272; 2401; 3531; 3586; 3603; 4382; 4961; 5064; 5754; 5767; 5888
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	9	360; 1145; 1513; 1783; 1939; 3726; 3819; 4429; 4834
EcoT22I	ATGCA!T	3	3569; 3641; 5972
EcoT38I	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3188; 4362; 5072
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	3	661; 674; 3998
EheI	GGC!GCC	3	661; 674; 3998
ErhI	C!CWWGG	9	360; 1145; 1513; 1783; 1939; 3726; 3819; 4429; 4834
EsaBC3I	TC!GA	19	998; 1208; 1523; 1890; 1903; 2081; 2108; 2576; 3147; 3838; 4111; 4267; 4291; 4327; 4489; 4680; 4725; 4980; 5818
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	2	1470; 1490
FaeI	CATG!	32	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 1970; 1976; 1988; 2066; 2132; 2212; 2423; 3427; 3567; 3639; 3730; 3871; 4216; 4402; 4433; 4459; 4815; 5199; 5919; 5970
Fail	YA!TR	75	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 600; 706; 771; 849; 1102; 1119; 1147; 1236; 1344; 1366; 1536; 1687; 1803; 1941; 1968; 1974; 1986; 2064; 2130; 2210; 2228; 2421; 2474; 2524; 2659; 2669; 2735; 2780; 2985; 3413; 3425; 3556; 3565; 3628; 3637; 3661; 3728; 3752; 3869; 3933; 4214; 4239; 4400; 4431; 4457; 4529; 4745; 4813; 4891; 4943; 5104; 5121; 5123; 5125; 5197; 5475; 5664; 5780; 5853; 5917; 5968
FalI	AAGNNNNCTTNNNNNNNNNNNN!	3	1571; 2207; 4337
FalI	!NNNNNNNAAGNNNNCTT	3	1539; 2175; 4305
FaqI	GGGACNNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4148; 4680; 4789
FaqI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3513; 3585; 3649; 4944
FatI	!CATG	32	300; 360; 598; 769; 847; 1117; 1145; 1234; 1342; 1534; 1801; 1939; 1966; 1972; 1984; 2062; 2128; 2208; 2419; 3423; 3563; 3635; 3726; 3867; 4212; 4398; 4429; 4455; 4811; 5195; 5915; 5966
FauI	CCCGCNNNN!	14	93; 119; 286; 753; 1050; 1593; 1836; 2396; 2498; 3319; 3674; 3695; 4891; 5023
FauI	!NNNNNGCGGG	7	1906; 2433; 3250; 4120; 4657; 4795; 4942
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	2	1902; 2518

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FmuI	GGNC!C	23	86; 279; 643; 778; 785; 960; 1004; 1331; 1361; 1586; 1679; 1694; 1919; 2091; 2334; 2426; 2447; 3107; 4516; 4961; 5007; 5065; 5098
Fnu4HI	GC!NGC	46	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2087; 2138; 2282; 2399; 2580; 2641; 2644; 2774; 3293; 3315; 3329; 3767; 3906; 3958; 3969; 4059; 4064; 4101; 4142; 4229; 4232; 4235; 4471; 4567; 4608; 4622; 4736; 5075; 5090; 5301; 5507; 5510; 5575; 5718; 5873
FokI	GGATGNNNNNNNNN!	5	1854; 3864; 4321; 4346; 4800
FokI	!NNNNNNNNNNNNNNCATCC	9	813; 1128; 1338; 1797; 2009; 2097; 2154; 2309; 3670
FriOI	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3188; 4362; 5072
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	4099
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	10	592; 1398; 2617; 2652; 2846; 3264; 3820; 4835; 5169; 5422
FspEI	CCNNNNNNNNNNNN!	203	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 611; 632; 651; 669; 689; 710; 743; 758; 791; 806; 843; 860; 879; 894; 912; 927; 948; 973; 993; 1017; 1055; 1082; 1130; 1158; 1187; 1260; 1281; 1298; 1313; 1328; 1344; 1368; 1401; 1448; 1521; 1539; 1565; 1581; 1598; 1635; 1667; 1686; 1706; 1745; 1796; 1814; 1835; 1877; 1924; 1939; 2009; 2039; 2056; 2070; 2103; 2117; 2135; 2159; 2174; 2204; 2237; 2264; 2279; 2298; 2334; 2381; 2400; 2415; 2429; 2460; 2483; 2503; 2524; 2570; 2612; 2628; 2657; 2680; 2719; 2733; 2874; 2969; 2993; 3016; 3039; 3057; 3079; 3100; 3119; 3138; 3167; 3188; 3202; 3228; 3316; 3342; 3391; 3432; 3450; 3489; 3505; 3543; 3600; 3615; 3672; 3692; 3706; 3723; 3737; 3774; 3789; 3832; 3915; 3982; 4013; 4033; 4048; 4093; 4107; 4173; 4187; 4206; 4222; 4263; 4283; 4330; 4380; 4396; 4416; 4441; 4461; 4484; 4511; 4529; 4555; 4595; 4621; 4645; 4701; 4715; 4743; 4786; 4807; 4842; 4886; 4974; 4998; 5020; 5040; 5056; 5077; 5091; 5110; 5194; 5214; 5242; 5257; 5291; 5333; 5360; 5375; 5420; 5444; 5458; 5480; 5506; 5526; 5550; 5576; 5624; 5643; 5662; 5688; 5723; 5768; 5798; 5812; 5863; 5877; 5902; 5918; 5939; 5968
FspEI	!NNNNNNNNNNNNNNNGG	171	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 623; 642; 662; 694; 716; 746; 764; 787; 805; 825; 855; 878; 899; 920; 939; 959; 984; 1017; 1098; 1116; 1143; 1179; 1203; 1239; 1276; 1311; 1329; 1359; 1377; 1410; 1446; 1500; 1533; 1556; 1587; 1629; 1647; 1665; 1692; 1734; 1759; 1817; 1836; 1868; 1890; 1914; 1944; 1971; 2013; 2034; 2058; 2100; 2119; 2148; 2184; 2221; 2244; 2263; 2293; 2314; 2341; 2380; 2406; 2425; 2497; 2523; 2571; 2610; 2668; 2768; 2837; 2867; 2945; 2994; 3016; 3044; 3080; 3125; 3154; 3190; 3209; 3237; 3257; 3320; 3343; 3451; 3483; 3501; 3530; 3573; 3602; 3713; 3742; 3785; 3806; 3834; 3867; 3887; 3912; 3939; 3964; 3986; 4014; 4040; 4061; 4112; 4133; 4151; 4199; 4235; 4291; 4316; 4340; 4369; 4392; 4416; 4442; 4464; 4483; 4508; 4548; 4584; 4649; 4734; 4758; 4787; 4821; 4842; 4862; 4907; 4934; 4953; 4986; 5038; 5069; 5096; 5148; 5246; 5317; 5362; 5423; 5488; 5522; 5548; 5566; 5602; 5672; 5695; 5717; 5741; 5774; 5822; 5857; 5875; 5932
Fsp4HI	GC!NGC	46	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2087; 2138; 2282; 2399; 2580; 2641; 2644; 2774; 3293; 3315; 3329; 3767; 3906; 3958; 3969; 4059; 4064; 4101; 4142; 4229; 4232; 4235; 4471; 4567; 4608; 4622; 4736; 5075; 5090; 5301; 5507; 5510; 5575; 5718; 5873
GdiII	C!GGCCR	4	678; 694; 2641; 3903
GdiII	Y!GGCCG	5	678; 2641; 3903; 4468; 4495
GlaI	GC!GC	26	661; 674; 692; 713; 1122; 1671; 3262; 3270; 3296; 3318; 3327; 3340; 3371; 3990; 3998; 4062; 4099; 4365; 4625; 4801; 4887; 5290; 5399; 5573; 5673; 5740
GluI	GC!NGC	46	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2087; 2138; 2282; 2399; 2580; 2641; 2644; 2774; 3293; 3315; 3329; 3767; 3906; 3958; 3969; 4059; 4064; 4101; 4142; 4229; 4232; 4235; 4471; 4567; 4608; 4622; 4736; 5075; 5090; 5301; 5507; 5510; 5575; 5718; 5873
GsaI	CCCAG!C	4	667; 3544; 3616; 5615
GsaI	GCTGG!G	3	718; 2363; 4505
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	5	921; 995; 1215; 1737; 4837
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	2256; 4780

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HaeI	WGG!CCW	12	789; 873; 1116; 1267; 1551; 2367; 2598; 3818; 4079; 5441; 5893; 5904
HaeII	RGCGC!Y	8	663; 676; 715; 1673; 3264; 3272; 4000; 5675
HaeIII	GG!CC	41	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2089; 2332; 2367; 2401; 2424; 2446; 2556; 2598; 2643; 2963; 3105; 3760; 3766; 3775; 3818; 3905; 4079; 4470; 4497; 5006; 5063; 5096; 5441; 5875; 5893; 5904
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNN!	4	982; 1522; 2672; 4193
HaeIV	!NNNNNNNNNGAYNNNNNRTC	4	948; 1488; 2638; 4159
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNN!	4	981; 1521; 2671; 4192
HaeIV	!NNNNNNNNNGAYNNNNNRTC	4	950; 1490; 2640; 4161
HapII	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2512; 3215; 3902; 3979; 4001; 4029; 4160; 4250; 4317; 4498; 4773; 4781; 4873; 5347; 5537; 5563; 5710
HgaI	GACGCNNNNN!	4	526; 1490; 4707; 4786
HgaI	!NNNNNNNNNNNGCGTC	5	689; 2504; 3330; 5225; 5803
HhaI	GCG!C	26	662; 675; 693; 714; 1123; 1672; 3263; 3271; 3297; 3319; 3328; 3341; 3372; 3991; 3999; 4063; 4100; 4366; 4626; 4802; 4888; 5291; 5400; 5574; 5674; 5741
HinI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
HinIII	CATG!	32	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 1970; 1976; 1988; 2066; 2132; 2212; 2423; 3427; 3567; 3639; 3730; 3871; 4216; 4402; 4433; 4459; 4815; 5199; 5919; 5970
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	6	981; 1228; 1521; 1547; 2671; 4192
Hin4I	!NNNNNNNNNGABNNNNNRTC	5	949; 1489; 2639; 4160; 4190
Hin4I	GABNNNNNRTCNNNNNNNNNNNNN!	5	981; 1521; 2671; 4192; 4222
Hin4I	!NNNNNNNNNGAYNNNNNVTC	6	949; 1196; 1489; 1515; 2639; 4160
Hin6I	G!CGC	26	660; 673; 691; 712; 1121; 1670; 3261; 3269; 3295; 3317; 3326; 3339; 3370; 3989; 3997; 4061; 4098; 4364; 4624; 4800; 4886; 5289; 5398; 5572; 5672; 5739
HinP1I	G!CGC	26	660; 673; 691; 712; 1121; 1670; 3261; 3269; 3295; 3317; 3326; 3339; 3370; 3989; 3997; 4061; 4098; 4364; 4624; 4800; 4886; 5289; 5398; 5572; 5672; 5739
HincII	GTY!RAC	3	1297; 1903; 2760
HindII	GTY!RAC	3	1297; 1903; 2760
HindIII	A!AGCTT	0	
HinFI	G!ANTC	18	410; 1093; 1530; 1635; 2068; 2218; 2545; 2648; 3040; 3062; 3472; 4482; 4616; 4668; 4726; 4763; 5545; 5941
HpaI	GTT!AAC	1	2760
HpaII	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2512; 3215; 3902; 3979; 4001; 4029; 4160; 4250; 4317; 4498; 4773; 4781; 4873; 5347; 5537; 5563; 5710
HphI	GGTGANNNNNNNN!	6	376; 1788; 1955; 2324; 5068; 5184
HphI	!NNNNNNNTCACC	5	599; 1436; 2213; 3114; 4175
Hpy8I	GTN!NAC	16	201; 539; 577; 1034; 1297; 1903; 2000; 2020; 2315; 2519; 2528; 2760; 3044; 3061; 3116; 5603
Hpy99I	CGWCG!	10	1484; 1907; 2577; 4087; 4115; 4409; 4424; 4701; 5086; 5819
Hpy166II	GTN!NAC	16	201; 539; 577; 1034; 1297; 1903; 2000; 2020; 2315; 2519; 2528; 2760; 3044; 3061; 3116; 5603
Hpy188I	TCN!GA	20	585; 969; 1015; 1381; 1546; 1640; 1859; 1882; 2027; 2307; 3171; 3780; 3964; 4308; 4661; 4762; 5241; 5375; 5728; 5806
Hpy188III	TC!NNGA	26	830; 989; 1235; 1326; 2300; 2504; 2652; 3424; 3476; 3789; 3842; 4015; 4331; 4340; 4423; 4479; 4523; 4613; 4646; 4715; 5196; 5270; 5353; 5451; 5549; 5683
HpyAV	CCTTCNNNNNN!	7	632; 2108; 2156; 2201; 4642; 4749; 5428
HpyAV	!NNNNNNGAAGG	12	833; 947; 1541; 2028; 2400; 3230; 4125; 4854; 4870; 5053; 5370; 5680
HpyCH4III	ACN!GT	20	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 1997; 3088; 4377; 4493; 4601; 4924; 5415; 5885; 5956
HpyCH4IV	A!CGT	17	122; 134; 175; 258; 339; 444; 1499; 2296; 2572; 3057; 3069; 3112; 3222; 4113; 4300; 5081; 5214
HpyCH4V	TG!CA	27	708; 851; 1055; 1190; 1628; 1805; 1898; 1970; 2020; 2342; 2458; 2746; 2773; 2841; 3558; 3567; 3630; 3639; 3754; 3830; 3889; 4048; 4223; 4237; 5307; 5603; 5970
HpyF3I	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2494; 3477; 3779; 4660; 5109; 5232; 5641

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HpyF10VI	GCNNNNN!NNGC	38	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1976; 2407; 2421; 3224; 3254; 3281; 3323; 3564; 3636; 3687; 3766; 3988; 4072; 4095; 4234; 4357; 4440; 4707; 4894; 5098; 5297; 5869
Hsp92I	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2515; 3997; 4699; 4778
Hsp92II	CATG!	32	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 1970; 1976; 1988; 2066; 2132; 2212; 2423; 3427; 3567; 3639; 3730; 3871; 4216; 4402; 4433; 4459; 4815; 5199; 5919; 5970
HspAI	G!CGC	26	660; 673; 691; 712; 1121; 1670; 3261; 3269; 3295; 3317; 3326; 3339; 3370; 3989; 3997; 4061; 4098; 4364; 4624; 4800; 4886; 5289; 5398; 5572; 5672; 5739
KasI	G!GCGCC	3	659; 672; 3996
KfII	GG!GWCCC	1	957
KpnI	GGTAC!C	1	1911
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	1914
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	2760
Kzo9I	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
LguI	GCTCTTCN!	1	1236
LguI	!NNNNGAAGAGC	2	4341; 4551
LpnI	RGCI!GCY	8	661; 674; 713; 1671; 3262; 3270; 3998; 5673
LpnPI	CCDGNNNNNNNNNN!	88	102; 295; 651; 669; 690; 710; 744; 767; 791; 806; 843; 870; 894; 912; 927; 948; 975; 1017; 1137; 1290; 1368; 1521; 1539; 1565; 1581; 1635; 1668; 1686; 1707; 1758; 1845; 1932; 2070; 2127; 2175; 2271; 2286; 2347; 2394; 2415; 2439; 2463; 2525; 2612; 2734; 3039; 3228; 3451; 3489; 3505; 3545; 3600; 3617; 3717; 3802; 3915; 3992; 4014; 4037; 4173; 4187; 4206; 4263; 4330; 4380; 4396; 4453; 4511; 4720; 4786; 4810; 4886; 4975; 5078; 5111; 5342; 5360; 5506; 5526; 5550; 5576; 5625; 5723; 5768; 5798; 5877; 5902; 5939
LpnPI	!NNNNNNNNNNNNNCHGG	78	75; 268; 552; 623; 642; 662; 694; 716; 746; 771; 795; 855; 885; 906; 948; 1098; 1179; 1276; 1311; 1340; 1359; 1394; 1512; 1629; 1659; 1701; 1734; 1817; 1904; 2100; 2148; 2244; 2345; 2388; 2497; 2523; 2610; 3080; 3200; 3257; 3320; 3518; 3530; 3590; 3602; 3834; 3879; 3922; 3964; 3986; 4014; 4061; 4123; 4145; 4235; 4302; 4325; 4369; 4464; 4483; 4508; 4657; 4758; 4801; 4858; 4948; 5051; 5078; 5096; 5332; 5369; 5522; 5548; 5688; 5706; 5741; 5822; 5875
Lsp1109I	GCAGCNNNNNNN!	12	700; 1202; 1619; 1804; 2149; 2591; 2785; 4070; 4112; 4633; 5086; 5586
Lsp1109I	!NNNNNNNNNNNGCTGC	11	1064; 1213; 1457; 1612; 2268; 3279; 3944; 4128; 4221; 5287; 5493
LweI	GCATCNNNNN!	10	835; 1054; 1895; 2176; 2813; 3576; 3648; 4296; 4360; 4635
LweI	!NNNNNNNNNNGATGC	9	357; 1301; 1769; 2329; 2497; 3955; 4210; 4426; 5818
MabI	A!CCWGGT	1	3586
MaeI	C!TAG	10	592; 1398; 2617; 2652; 2846; 3264; 3820; 4835; 5169; 5422
MaeII	A!CGT	17	122; 134; 175; 258; 339; 444; 1499; 2296; 2572; 3057; 3069; 3112; 3222; 4113; 4300; 5081; 5214
MaeIII	!GTNAC	13	61; 148; 497; 2219; 2785; 3286; 3298; 4117; 4423; 5113; 5379; 5495; 5558
MalI	GA!TC	30	587; 735; 993; 1017; 1206; 1341; 1521; 1620; 1728; 1924; 2304; 2454; 2480; 2656; 3836; 3840; 3859; 4170; 4248; 4329; 4338; 4416; 4792; 4808; 5167; 5179; 5257; 5265; 5276; 5351
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	3	748; 3421; 4610
MbiI	GAG!CGG	3	2640; 3257; 4664
MboI	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
MboII	GAAGANNNNNNNN!	14	962; 1250; 1263; 1394; 1764; 2244; 2357; 2477; 2545; 3253; 3481; 4358; 4568; 5187
MboII	!NNNNNNNTCTTC	6	1010; 1223; 4648; 4815; 5015; 5258
McaTI	GCGC!GC	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MfeI	C!AATTG	1	2747
MfII	R!GATCY	13	585; 733; 1015; 1618; 1922; 2478; 4168; 4414; 4806; 5165; 5177; 5263; 5274
MhII	GDGCH!C	21	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1995; 2022; 2055; 2632; 3188; 3943; 4036; 4110; 4300; 4362; 5072; 5605
MIsI	TGG!CCA	4	789; 1116; 2598; 4079
MluI	A!CGCGT	0	
MluNI	TGG!CCA	4	789; 1116; 2598; 4079
MlyI	GAGTCNNNNN!	5	1102; 1644; 2227; 3049; 3481
MlyI	!NNNNNGACTC	6	404; 1524; 2642; 3056; 4662; 5539
Mly113I	GG!CGCC	3	660; 673; 3997
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	2	2350; 3090
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	3	1445; 5522; 5706
MnII	CCTCNNNNNNN!	15	884; 1341; 2101; 2280; 2295; 2378; 2511; 2622; 2716; 3780; 4598; 4804; 5118; 5488; 5812
MnII	!NNNNNNGAGG	40	541; 816; 886; 910; 992; 1202; 1214; 1247; 1298; 1385; 1418; 1454; 1564; 1574; 1655; 1682; 1712; 1754; 1876; 1982; 2021; 2042; 2075; 2192; 2301; 2357; 2546; 2579; 2676; 3141; 3472; 3750; 3793; 3808; 3848; 3912; 4048; 4405; 4835; 5738
Mph1103I	ATGCA!T	3	3569; 3641; 5972
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	3214; 4497; 4780
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	4	789; 1116; 2598; 4079
MseI	T!TAA	18	7; 1768; 1957; 2182; 2698; 2759; 2880; 2901; 2912; 2924; 2935; 2952; 3050; 3321; 5140; 5154; 5159; 5211
MslI	CAYNN!NNRTG	5	365; 1437; 1941; 1971; 4434
MspI	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2512; 3215; 3902; 3979; 4001; 4029; 4160; 4250; 4317; 4498; 4773; 4781; 4873; 5347; 5537; 5563; 5710
Msp20I	TGG!CCA	4	789; 1116; 2598; 4079
MspAII	CMG!CKG	7	1193; 1913; 2391; 3495; 4103; 5332; 5577
MspCI	C!TTAAG	1	2879
MspJI	CNNRRNNNNNNNNN!	312	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; 611; 625; 643; 656; 669; 688; 704; 721; 736; 752; 766; 782; 797; 814; 842; 860; 881; 894; 911; 926; 941; 956; 973; 986; 1001; 1016; 1034; 1054; 1068; 1081; 1109; 1125; 1158; 1186; 1206; 1220; 1247; 1260; 1280; 1297; 1313; 1329; 1344; 1360; 1373; 1386; 1400; 1415; 1431; 1448; 1462; 1486; 1499; 1512; 1526; 1539; 1557; 1580; 1597; 1611; 1628; 1644; 1660; 1685; 1706; 1724; 1747; 1761; 1785; 1814; 1827; 1840; 1859; 1876; 1893; 1924; 1941; 1961; 1979; 1997; 2027; 2045; 2060; 2075; 2093; 2126; 2141; 2169; 2184; 2208; 2221; 2237; 2255; 2269; 2285; 2298; 2312; 2333; 2346; 2367; 2386; 2400; 2414; 2428; 2445; 2462; 2483; 2502; 2516; 2543; 2561; 2581; 2595; 2611; 2628; 2643; 2657; 2670; 2685; 2704; 2721; 2734; 2775; 2789; 2802; 2820; 2858; 2873; 2891; 2932; 2956; 2976; 2994; 3015; 3038; 3070; 3085; 3107; 3125; 3138; 3159; 3176; 3189; 3202; 3218; 3231; 3261; 3276; 3301; 3319; 3332; 3347; 3371; 3385; 3409; 3434; 3450; 3488; 3504; 3543; 3557; 3571; 3599; 3615; 3629; 3643; 3672; 3685; 3706; 3715; 3737; 3767; 3783; 3801; 3831; 3854; 3878; 3902; 3921; 3949; 3975; 3991; 4004; 4027; 4041; 4061; 4074; 4088; 4107; 4121; 4134; 4150; 4165; 4178; 4194; 4209; 4225; 4250; 4269; 4285; 4298; 4311; 4329; 4343; 4357; 4373; 4395; 4411; 4430; 4452; 4468; 4491; 4510; 4524; 4540; 4554; 4574; 4590; 4603; 4625; 4658; 4672; 4692; 4705; 4719; 4773; 4786; 4809; 4822; 4841; 4858; 4885; 4921; 4954; 4973; 4998; 5019; 5046; 5059; 5076; 5090; 5105; 5121; 5181; 5206; 5222; 5244; 5257; 5271; 5302; 5316; 5341; 5359; 5374; 5387; 5406; 5419; 5434; 5463; 5482; 5500; 5525; 5540; 5559; 5575; 5594; 5612; 5628; 5642; 5661; 5688; 5711; 5733; 5752; 5767; 5780; 5797; 5817; 5844; 5857; 5876; 5901; 5924; 5938; 5951; 5968



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	!NNNNNNNNNNNNNNYNGG	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; 599; 624; 642; 662; 683; 701; 724; 746; 763; 780; 800; 822; 843; 867; 885; 907; 930; 948; 975; 992; 1017; 1038; 1055; 1076; 1099; 1116; 1134; 1169; 1194; 1221; 1258; 1276; 1311; 1329; 1351; 1375; 1395; 1441; 1461; 1481; 1500; 1521; 1538; 1556; 1576; 1602; 1620; 1640; 1659; 1680; 1698; 1731; 1759; 1788; 1814; 1843; 1866; 1898; 1915; 1935; 1953; 1971; 2001; 2025; 2043; 2067; 2086; 2108; 2148; 2169; 2195; 2215; 2244; 2286; 2320; 2341; 2361; 2388; 2406; 2423; 2441; 2469; 2490; 2509; 2535; 2557; 2580; 2603; 2623; 2649; 2678; 2707; 2749; 2832; 2867; 2894; 2917; 2946; 2990; 3012; 3044; 3080; 3097; 3118; 3155; 3175; 3192; 3209; 3244; 3262; 3280; 3297; 3321; 3343; 3370; 3398; 3424; 3462; 3483; 3500; 3518; 3541; 3562; 3590; 3613; 3634; 3652; 3673; 3690; 3713; 3737; 3757; 3775; 3797; 3828; 3850; 3876; 3895; 3912; 3940; 3959; 3978; 3996; 4014; 4035; 4057; 4081; 4114; 4134; 4152; 4173; 4199; 4226; 4243; 4260; 4277; 4303; 4325; 4347; 4365; 4385; 4404; 4426; 4464; 4484; 4508; 4528; 4548; 4575; 4599; 4632; 4651; 4679; 4701; 4730; 4758; 4783; 4802; 4821; 4842; 4859; 4876; 4907; 4934; 4954; 4977; 4997; 5034; 5051; 5070; 5096; 5116; 5155; 5182; 5201; 5219; 5256; 5274; 5315; 5333; 5359; 5376; 5408; 5437; 5465; 5486; 5509; 5528; 5549; 5567; 5584; 5602; 5628; 5649; 5669; 5689; 5707; 5728; 5754; 5771; 5790; 5809; 5838; 5857; 5875; 5894; 5912; 5930; 5953
MspR9I	CC!NGG	42	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2115; 2163; 2259; 2274; 2403; 2512; 3533; 3588; 3605; 4001; 4161; 4384; 4774; 4963; 5066; 5538; 5756; 5769; 5890
MssI	GTTT!AAC	0	
MunI	CA!AATTG	1	2747
MvaI	CC!WGG	26	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2115; 2163; 2259; 2274; 2403; 3533; 3588; 3605; 4384; 4963; 5066; 5756; 5769; 5890
Mva1269I	GAATGCN!	1	2748
Mva1269I	G!CATTC	1	2841
MvnI	CG!CG	17	60; 693; 1913; 2646; 2921; 3297; 3317; 3341; 3372; 4063; 4364; 4802; 4886; 4949; 5018; 5291; 5872
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	38	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1976; 2407; 2421; 3224; 3254; 3281; 3323; 3564; 3636; 3687; 3766; 3988; 4072; 4095; 4234; 4357; 4440; 4707; 4894; 5098; 5297; 5869
NaeI	GCC!GGC	3	3216; 4499; 4782
NarI	GG!CGCC	3	660; 673; 3997
NciI	CC!SGG	16	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 2512; 4001; 4161; 4774; 5538
NcoI	C!CATGG	5	360; 1145; 1939; 3726; 4429
NdeI	CA!TATG	1	234
NdeII	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	2059
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	2095
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	3214; 4497; 4780
NheI	G!CTAGC	1	591
NlaIII	CATG!	32	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 1970; 1976; 1988; 2066; 2132; 2212; 2423; 3427; 3567; 3639; 3730; 3871; 4216; 4402; 4433; 4459; 4815; 5199; 5919; 5970
NlaIV	GGN!NCC	32	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 1994; 2054; 2445; 3152; 3173; 3185; 3376; 3537; 3609; 3998; 4033; 4881; 4960; 5005; 5848; 5887
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	2829; 3144; 4736
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	4	347; 1759; 2319; 5808
Nli3877I	CYCGR!G	3	1658; 1922; 2200
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	3786; 4222
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	2335; 3751



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NmeDI	RCCGGYNNNNNNN!	7	649; 692; 1940; 3226; 4328; 4509; 4792
NmeDI	!NNNNNNNNNNRCCGGY	7	624; 667; 1915; 3201; 4303; 4484; 4767
NmuCI	!GTSAC	4	2219; 3286; 4117; 4423
NotI	GC!GGCCGC	1	2641
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	4099
NsiI	ATGCA!T	3	3569; 3641; 5972
NspI	RCATG!Y	5	1970; 3567; 3639; 4402; 5919
NspV	TT!CGAA	1	4679
OliI	CACNN!NNGTG	2	1437; 1941
PabI	GTA!C	13	220; 245; 300; 333; 384; 541; 1408; 1503; 1910; 1984; 2134; 2386; 4304
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	3567; 3639; 4402
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	3	1234; 3423; 5195
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	4	644; 2162; 4962; 5065
PauI	G!CGCGC	0	
PceI	AGG!CCT	3	1267; 2367; 3818
PciI	A!CATGT	1	5915
PciSI	GCTCTCN!	1	1236
PciSI	!NNNNGAAGAGC	2	4341; 4551
PcsI	WCGNNNN!NNNCGW	8	1385; 2581; 4291; 4368; 4611; 4685; 5078; 5596
PctI	GAATGCN!	1	2748
PctI	G!CATTC	1	2841
PdiI	GCC!GGC	3	3216; 4499; 4782
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	2068; 2545; 4482; 4616; 4726; 4763; 5941
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	4115
PfIMI	CCANNNN!NTGG	2	1130; 1514
PfoI	T!CCNGGA	4	729; 934; 2272; 4772
PhoI	GG!CC	41	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2089; 2332; 2367; 2401; 2424; 2446; 2556; 2598; 2643; 2963; 3105; 3760; 3766; 3775; 3818; 3905; 4079; 4470; 4497; 5006; 5063; 5096; 5441; 5875; 5893; 5904
PinAI	A!CCGGT	2	637; 1928
PlaDI	CATCAGNNNNNNNNNNNNNNNNNNNN!	1	4378
PlaDI	!NNNNNNNNNNNNNNNNNNNNCTGATG	3	1061; 3943; 4198
PleI	GAGTCNNNN!	5	1101; 1643; 2226; 3048; 3480
PleI	!NNNNNGACTC	6	404; 1524; 2642; 3056; 4662; 5539
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	3079
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	5209
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	5241
PpiI	!NNNNNNNGAACNNNNNNCTC	1	3047
PpsI	GAGTCNNNN!	5	1101; 1643; 2226; 3048; 3480
PpsI	!NNNNNGACTC	6	404; 1524; 2642; 3056; 4662; 5539
Ppu10I	A!TGCAT	3	3565; 3637; 5968
Ppu21I	YAC!GTR	3	340; 3113; 4301
PpuMI	RG!GWCCY	3	957; 1001; 1328
PscI	A!CATGT	1	5915
PshAI	GACNN!NNGTC	1	2571
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	2780; 2985
Psp03I	GGWC!C	7	643; 778; 960; 1004; 1331; 4516; 4961
Psp5II	RG!GWCCY	3	957; 1001; 1328
Psp6I	!CCWGG	26	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2113; 2161; 2257; 2272; 2401; 3531; 3586; 3603; 4382; 4961; 5064; 5754; 5767; 5888
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	0	
PspGI	!CCWGG	26	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2113; 2161; 2257; 2272; 2401; 3531; 3586; 3603; 4382; 4961; 5064; 5754; 5767; 5888
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	32	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 1994; 2054; 2445; 3152; 3173; 3185; 3376; 3537; 3609; 3998; 4033; 4881; 4960; 5005; 5848; 5887
PspOMI	G!GGCCC	2	1357; 1915
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNNNN!	4	125; 687; 3727; 4726
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	4129
PspPI	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2088; 2331; 2423; 2444; 3104; 4513; 4958; 5004; 5062; 5095
PspPPI	RG!GWCCY	3	957; 1001; 1328
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	4	980; 3550; 3622; 5128
PspPRI	!NNNNNNNNNNNNNCTGRGG	8	701; 991; 1445; 1555; 1867; 2611; 3463; 4658
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	6	785; 960; 1004; 1331; 1694; 5098
PstI	CTGCA!G	3	1057; 1192; 1900
PstNI	CAGNNN!CTG	5	714; 973; 2605; 5098; 5506
PsuI	R!GATCY	13	585; 733; 1015; 1618; 1922; 2478; 4168; 4414; 4806; 5165; 5177; 5263; 5274
PsyI	GACN!NNGTC	1	4115
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	3	1193; 3495; 4103
RcaI	T!CATGA	3	1234; 3423; 5195
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	1	4512
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNN!	1	2726
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNNNN!	2	1024; 1786
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	13	219; 244; 299; 332; 383; 540; 1407; 1502; 1909; 1983; 2133; 2385; 4303
RsaNI	G!TAC	13	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 1982; 2132; 2384; 4302
RseI	CAYNN!NNRTG	5	365; 1437; 1941; 1971; 4434
RsrII	CG!GWCCG	1	4513
Rsr2I	CG!GWCCG	1	4513
SacI	GAGCT!C	0	
SacII	CCGC!GG	1	1914
SalI	G!TCGAC	1	1901
SapI	GCTCTCN!	1	1236
SapI	!NNNNGAAGAGC	2	4341; 4551
SaqAI	T!TAA	18	7; 1768; 1957; 2182; 2698; 2759; 2880; 2901; 2912; 2924; 2935; 2952; 3050; 3321; 5140; 5154; 5159; 5211
SatI	GC!NGC	46	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2087; 2138; 2282; 2399; 2580; 2641; 2644; 2774; 3293; 3315; 3329; 3767; 3906; 3958; 3969; 4059; 4064; 4101; 4142; 4229; 4232; 4235; 4471; 4567; 4608; 4622; 4736; 5075; 5090; 5301; 5507; 5510; 5575; 5718; 5873
Sau96I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2088; 2331; 2423; 2444; 3104; 4513; 4958; 5004; 5062; 5095

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau3AI	!GATC	30	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 2302; 2452; 2478; 2654; 3834; 3838; 3857; 4168; 4246; 4327; 4336; 4414; 4790; 4806; 5165; 5177; 5255; 5263; 5274; 5349
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	1407
SchI	GAGTCNNNNN!	5	1102; 1644; 2227; 3049; 3481
SchI	!NNNNNGACTC	6	404; 1524; 2642; 3056; 4662; 5539
SciI	CTC!GAG	0	
ScrFI	CC!NGG	42	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2115; 2163; 2259; 2274; 2403; 2512; 3533; 3588; 3605; 4001; 4161; 4384; 4774; 4963; 5066; 5538; 5756; 5769; 5890
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	7	1706; 2369; 2557; 3575; 3647; 3816; 5758
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	4152; 4637
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	21	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1995; 2022; 2055; 2632; 3188; 3943; 4036; 4110; 4300; 4362; 5072; 5605
SelI	!CGCG	17	58; 691; 1911; 2644; 2919; 3295; 3315; 3339; 3370; 4061; 4362; 4800; 4884; 4947; 5016; 5289; 5870
SetI	ASST!	90	125; 137; 178; 261; 308; 342; 447; 552; 568; 606; 624; 669; 759; 883; 967; 1006; 1114; 1162; 1195; 1228; 1290; 1309; 1333; 1375; 1399; 1465; 1472; 1495; 1502; 1528; 1557; 1579; 1612; 1633; 1645; 1711; 1717; 1737; 1954; 1981; 2127; 2148; 2299; 2434; 2452; 2503; 2571; 2575; 2590; 2614; 2687; 2708; 2717; 2729; 2778; 2945; 3060; 3072; 3115; 3152; 3202; 3225; 3349; 3497; 3592; 3785; 3898; 4026; 4105; 4116; 4188; 4259; 4303; 4563; 4709; 4753; 5084; 5115; 5174; 5217; 5360; 5381; 5480; 5617; 5632; 5651; 5663; 5707; 5753; 5804
SexAI	A!CCWGGT	1	3586
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	10	835; 1054; 1895; 2176; 2813; 3576; 3648; 4296; 4360; 4635
SfaNI	!NNNNNNNNNGATGC	9	357; 1301; 1769; 2329; 2497; 3955; 4210; 4426; 5818
Sfci	C!TRYAG	7	1053; 1188; 1596; 1896; 3332; 5459; 5650
SfiI	GGCCNNNN!NGGCC	1	3772
SfoI	GGC!GCC	3	661; 674; 3998
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	1	1914
Sful	TT!CGAA	1	4679
SgeI	CNNGNNNNNNNN!	240	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 650; 668; 688; 704; 721; 736; 752; 766; 782; 797; 814; 842; 860; 881; 894; 911; 926; 947; 974; 1001; 1016; 1054; 1081; 1109; 1125; 1158; 1195; 1220; 1247; 1260; 1284; 1297; 1313; 1338; 1355; 1368; 1382; 1401; 1415; 1520; 1538; 1564; 1580; 1597; 1628; 1644; 1666; 1685; 1706; 1724; 1757; 1772; 1785; 1814; 1840; 1924; 1941; 1961; 1979; 1997; 2027; 2051; 2069; 2084; 2126; 2141; 2174; 2208; 2221; 2249; 2270; 2285; 2312; 2346; 2367; 2387; 2400; 2414; 2432; 2445; 2462; 2495; 2516; 2550; 2588; 2611; 2629; 2657; 2704; 2733; 2775; 2858; 2932; 3016; 3038; 3070; 3107; 3125; 3144; 3159; 3201; 3218; 3235; 3270; 3284; 3301; 3323; 3347; 3371; 3436; 3450; 3488; 3504; 3544; 3557; 3576; 3599; 3616; 3629; 3648; 3678; 3699; 3716; 3739; 3774; 3801; 3832; 3854; 3880; 3902; 3921; 3949; 3985; 4004; 4027; 4041; 4061; 4074; 4088; 4107; 4121; 4140; 4172; 4186; 4199; 4225; 4256; 4269; 4286; 4303; 4317; 4334; 4352; 4367; 4395; 4411; 4430; 4452; 4468; 4491; 4510; 4535; 4554; 4574; 4601; 4625; 4658; 4677; 4705; 4719; 4785; 4809; 4824; 4847; 4868; 4885; 4933; 4960; 4974; 5003; 5027; 5060; 5077; 5097; 5110; 5123; 5181; 5208; 5227; 5257; 5282; 5302; 5316; 5341; 5359; 5396; 5434; 5463; 5491; 5505; 5525; 5540; 5561; 5575; 5594; 5612; 5628; 5668; 5688; 5715; 5733; 5754; 5767; 5780; 5797; 5821; 5844; 5876; 5901; 5928; 5950

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	208	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 599; 624; 642; 662; 683; 701; 726; 747; 764; 788; 816; 834; 855; 885; 907; 930; 948; 975; 1028; 1055; 1083; 1104; 1132; 1169; 1194; 1221; 1258; 1277; 1312; 1329; 1356; 1375; 1395; 1494; 1512; 1538; 1571; 1602; 1630; 1659; 1680; 1698; 1731; 1759; 1788; 1814; 1898; 1915; 1935; 1953; 1971; 2001; 2025; 2043; 2067; 2100; 2148; 2182; 2223; 2244; 2286; 2320; 2341; 2361; 2388; 2406; 2427; 2448; 2469; 2490; 2524; 2562; 2585; 2603; 2631; 2678; 2707; 2749; 2832; 2906; 2990; 3012; 3044; 3081; 3099; 3118; 3175; 3192; 3209; 3244; 3262; 3282; 3302; 3321; 3345; 3410; 3462; 3518; 3550; 3573; 3590; 3622; 3652; 3673; 3690; 3713; 3748; 3775; 3806; 3828; 3854; 3876; 3895; 3923; 3959; 3978; 4001; 4022; 4040; 4057; 4081; 4114; 4146; 4173; 4199; 4230; 4260; 4277; 4303; 4326; 4347; 4369; 4389; 4409; 4426; 4465; 4484; 4509; 4528; 4548; 4575; 4599; 4632; 4651; 4679; 4701; 4759; 4783; 4802; 4821; 4842; 4859; 4907; 4934; 4954; 4977; 5001; 5034; 5051; 5071; 5097; 5155; 5182; 5201; 5231; 5256; 5276; 5315; 5333; 5370; 5408; 5437; 5465; 5486; 5514; 5535; 5568; 5586; 5642; 5662; 5689; 5707; 5728; 5754; 5771; 5795; 5818; 5850; 5875; 5902; 5924; 5953
Sgfl	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	1914
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	6	27; 775; 807; 3144; 4931; 5724
SimI	!GACCC	7	106; 957; 1651; 2377; 4425; 4993; 5241
SinI	G!GWCC	7	640; 775; 957; 1001; 1328; 4513; 4958
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	2	1656; 1920
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 1437; 1941; 1971; 4434
SmlI	C!TYRAG	8	1215; 1632; 2502; 2879; 4388; 5270; 5547; 5809
SmoI	C!TYRAG	8	1215; 1632; 2502; 2879; 4388; 5270; 5547; 5809
SmuI	CCCGCNNNN!	14	93; 119; 286; 753; 1050; 1593; 1836; 2396; 2498; 3319; 3674; 3695; 4891; 5023
SmuI	!NNNNNNGCGGG	7	1906; 2433; 3250; 4120; 4657; 4795; 4942
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	3567; 3639; 4402
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1891; 2747; 2811; 2889; 2915; 2926; 3573; 3645; 3737; 5155
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCCT	2	1001; 1328
SseBI	AGG!CCT	3	1267; 2367; 3818
SsiI	C!CGC	44	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2251; 2389; 2491; 2644; 3312; 3315; 3329; 3419; 3667; 3679; 3688; 3700; 3710; 3721; 3767; 3906; 3969; 4471; 4516; 4582; 4608; 4733; 4736; 4884; 5016; 5323; 5467; 5963
SsiI	G!CGG	31	370; 403; 528; 693; 766; 1913; 2076; 2086; 2398; 2440; 2640; 3257; 3284; 3372; 3482; 4063; 4127; 4228; 4231; 4511; 4566; 4664; 4802; 4949; 5089; 5332; 5577; 5698; 5717; 5844; 5872
SspI	AAT!ATT	2	2905; 3458
SspDI	G!GCGCC	3	659; 672; 3996
SspD5I	GGTGANNNNNNN!	6	376; 1788; 1955; 2324; 5068; 5184
SspD5I	!NNNNNNNNTCACC	5	598; 1435; 2212; 3113; 4174
SstI	GAGCT!C	0	
SstII	CCGC!GG	1	1914
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNN!	1	2257
SstE37I	!NNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	29	92; 118; 285; 683; 737; 752; 1049; 1076; 1592; 1661; 1835; 1925; 2179; 2203; 2395; 2497; 2518; 3196; 3318; 3673; 3694; 4007; 4410; 4549; 4620; 4890; 5022; 5252; 5690
Sth132I	!NNNNNNNNCGGG	27	15; 407; 470; 770; 785; 927; 1347; 1607; 1647; 1905; 2228; 2432; 3197; 3249; 3350; 4077; 4119; 4152; 4656; 4765; 4794; 4941; 5045; 5076; 5529; 5573; 5781

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sth302II	CC!GG	31	639; 678; 682; 732; 779; 794; 803; 915; 936; 1356; 1656; 1833; 1920; 1930; 2513; 3216; 3903; 3980; 4002; 4030; 4161; 4251; 4318; 4499; 4774; 4782; 4874; 5348; 5538; 5564; 5711
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	5	1855; 3865; 4322; 4347; 4801
StsI	!NNNNNNNNNNNNNNCATCC	9	812; 1127; 1337; 1796; 2008; 2096; 2153; 2308; 3669
StuI	AGG!CCT	3	1267; 2367; 3818
StyI	C!CWWGG	9	360; 1145; 1513; 1783; 1939; 3726; 3819; 4429; 4834
StyD4I	!CCNGG	42	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2113; 2161; 2257; 2272; 2401; 2510; 3531; 3586; 3603; 3999; 4159; 4382; 4772; 4961; 5064; 5536; 5754; 5767; 5888
SwaI	ATTT!AAT	0	
TaaI	ACN!GT	20	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 1997; 3088; 4377; 4493; 4601; 4924; 5415; 5885; 5956
TaiI	ACGT!	17	125; 137; 178; 261; 342; 447; 1502; 2299; 2575; 3060; 3072; 3115; 3225; 4116; 4303; 5084; 5217
TaqI	T!CGA	19	997; 1207; 1522; 1889; 1902; 2080; 2107; 2575; 3146; 3837; 4110; 4266; 4290; 4326; 4488; 4679; 4724; 4979; 5817
TaqII	GACCGANNNNNNNNNN!	4	921; 3017; 4034; 4702
TaqII	!NNNNNNNNNTCGGTC	1	4946
TaqII	CACCCANNNNNNNNNN!	2	2070; 2175
TaqII	!NNNNNNNNNTGGGTG	3	172; 3901; 4493
TasI	!AATT	11	18; 1891; 2747; 2811; 2889; 2915; 2926; 3573; 3645; 3737; 5155
TatI	W!GTACW	6	217; 297; 330; 381; 1405; 1981
TauI	GCSG!C	22	696; 769; 1744; 2089; 2401; 2643; 2646; 3317; 3331; 3769; 3908; 3971; 4066; 4231; 4234; 4473; 4569; 4610; 4738; 5092; 5720; 5875
TfiI	G!AWTC	7	2068; 2545; 4482; 4616; 4726; 4763; 5941
TliI	C!TCGAG	0	
TruII	T!TAA	18	7; 1768; 1957; 2182; 2698; 2759; 2880; 2901; 2912; 2924; 2935; 2952; 3050; 3321; 5140; 5154; 5159; 5211
Tru9I	T!TAA	18	7; 1768; 1957; 2182; 2698; 2759; 2880; 2901; 2912; 2924; 2935; 2952; 3050; 3321; 5140; 5154; 5159; 5211
TscAI	CASTGNN!	6	1444; 2843; 4126; 5236; 5507; 5520
TseI	G!CWGC	24	688; 1077; 1190; 1226; 1470; 1607; 1625; 1792; 2137; 2281; 2579; 2773; 3292; 3957; 4058; 4100; 4141; 4234; 4621; 5074; 5300; 5506; 5509; 5574
TsoI	TARCCANNNNNNNNNN!	2	2969; 3316
TsoI	!NNNNNNNNNTGGYTA	3	2106; 2774; 4526
Tsp45I	!GTSAC	4	2219; 3286; 4117; 4423
Tsp509I	!AATT	11	18; 1891; 2747; 2811; 2889; 2915; 2926; 3573; 3645; 3737; 5155
TspDTI	ATGAANNNNNNNNNN!	5	1251; 1989; 2755; 4056; 4760
TspDTI	!NNNNNNNNNTTCAT	7	26; 1223; 2117; 2138; 4474; 4930; 5137
TspEI	!AATT	11	18; 1891; 2747; 2811; 2889; 2915; 2926; 3573; 3645; 3737; 5155
TspGWI	ACGGANNNNNNNNNN!	1	4872
TspGWI	!NNNNNNNNNTCCGT	1	728
TspMI	C!CCGGG	2	1654; 1918
TspRI	CASTGNN!	6	1444; 2843; 4126; 5236; 5507; 5520
TstI	CACNNNNNTCCNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	4115
Tth111II	CAARCANNNNNNNNN!	1	5324
Tth111III	!NNNNNNNNNTGYTTG	3	4432; 5292; 5331
UnbI	!GGNCC	23	82; 275; 639; 774; 781; 956; 1000; 1327; 1357; 1582; 1675; 1690; 1915; 2087; 2330; 2422; 2443; 3103; 4512; 4957; 5003; 5061; 5094
Van91I	CCANNNN!NTGG	2	1130; 1514
Vha464I	C!TTAAG	1	2879
VneI	G!TGCAC	2	2018; 5601
VpaK11AI	!GWCC	7	639; 774; 956; 1000; 1327; 4512; 4957
VpaK11BI	G!GWCC	7	640; 775; 957; 1001; 1328; 4513; 4958

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	1	1572
XapI	R!AATTY	4	1891; 2811; 2915; 2926
XbaI	T!CTAGA	1	2651
XceI	RCATG!Y	5	1970; 3567; 3639; 4402; 5919
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	13	585; 733; 1015; 1618; 1922; 2478; 4168; 4414; 4806; 5165; 5177; 5263; 5274
XmaI	C!CCGGG	2	1654; 1918
XmaJI	C!CTAGG	2	3819; 4834
XmiI	GT!MKAC	2	1902; 2518
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	10	592; 1398; 2617; 2652; 2846; 3264; 3820; 4835; 5169; 5422
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	1	1407
Zsp2I	ATGCA!T	3	3569; 3641; 5972