

## pTagCFP-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	2799; 3004
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	4	1092; 3087; 4043; 5832
AatI	AGG!CCT	2	1267; 3837
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	1902
AccII	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	4118
Acc36I	ACCTGCNNNN!	2	4284; 4734
Acc36I	!NNNNNNNNGCAGGT	1	3903
Acc65I	G!GTACC	1	1907
AccB1I	G!GYRCC	7	465; 659; 672; 1907; 3169; 4015; 4050
AccB7I	CCANNNN!NTGG	4	1130; 1514; 2360; 2636
AccBSI	CCG!CTC	3	748; 3440; 4629
AccBSI	GAG!CGG	3	1945; 3276; 4683
AceIII	CAGCTCNNNNNNN!	3	1298; 1620; 2972
AceIII	!NNNNNNNNNNGAGCTG	12	552; 1098; 1212; 1359; 1456; 1479; 1629; 1944; 1977; 2298; 2531; 2631
AciI	C!CGC	49	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2156; 2264; 2303; 2441; 2554; 2570; 2582; 2651; 2663; 3331; 3334; 3348; 3438; 3686; 3698; 3707; 3719; 3729; 3740; 3786; 3925; 3988; 4490; 4535; 4601; 4627; 4752; 4755; 4903; 5035; 5342; 5486; 5982
AciI	G!CGG	32	370; 403; 528; 693; 766; 1913; 1945; 2029; 2266; 2458; 2461; 2659; 3276; 3303; 3391; 3501; 4082; 4146; 4247; 4250; 4530; 4585; 4683; 4821; 4968; 5108; 5351; 5596; 5717; 5736; 5863; 5891
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	10	741; 1626; 1930; 3884; 4195; 4441; 4833; 5192; 5290; 5376
AclWI	!NNNNNGATCC	9	580; 1613; 1917; 2432; 2516; 4260; 4804; 5191; 5288
AcoI	Y!GGCCR	11	678; 694; 787; 1114; 2009; 2473; 2660; 3922; 4096; 4487; 4514
AcsI	R!AATTY	4	1891; 2830; 2934; 2945
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	4	1566; 2334; 4162; 4594
AcuI	!NNNNNNNNNNNNNNNCTTCAG	3	743; 2594; 5392
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
AdeI	CACNNN!GTG	2	2594; 3132
AfaI	GT!AC	14	219; 244; 299; 332; 383; 540; 1407; 1502; 1909; 2256; 2367; 2391; 2649; 4322
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	37	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 1945; 2107; 2134; 2240; 2270; 2360; 2636; 3028; 3354; 3746; 3997; 4541; 4822; 4854; 4986; 5021; 5071; 5103; 5456; 5735; 5901; 5919
AfiII	C!TTAAG	1	2898
AfiIII	A!CRYGT	2	2386; 5934
AgeI	A!CCGGT	2	637; 1928
AgsI	TTS!AA	9	989; 2192; 2330; 2435; 3427; 3471; 3481; 3894; 5470
AhdI	GACNNN!NNGTC	2	963; 1503
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	1	2003

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AjnI	!CCWGG	31	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4401; 4980; 5083; 5773; 5786; 5907
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	1	1571
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	1	1539
AleI	CACNN!NNGTG	3	1437; 2118; 2295
AlfI	GCANNNNNNTGCNNNNNNNNNN!	5	1068; 1455; 1818; 3590; 3662
AlfI	!NNNNNNNNNGCANNNNNNNTGC	5	1034; 1421; 1784; 3556; 3628
AloI	GAACNNNNNNNTCCNNNNNNNNNN!	1	3098
AloI	!NNNNNNNGGANNNNNNGTTC	1	2058
AloI	GGANNNNNNGTTCNNNNNNNNNN!	1	2090
AloI	!NNNNNNNGAACNNNNNNNTCC	1	3066
AluI	AG!CT	35	566; 604; 667; 757; 1112; 1193; 1226; 1288; 1373; 1397; 1470; 1493; 1555; 1610; 1643; 1715; 1958; 1991; 2063; 2096; 2312; 2471; 2545; 2645; 2795; 2962; 3219; 3514; 3802; 4122; 4580; 5377; 5634; 5680; 5770
AluBI	AG!CT	35	566; 604; 667; 757; 1112; 1193; 1226; 1288; 1373; 1397; 1470; 1493; 1555; 1610; 1643; 1715; 1958; 1991; 2063; 2096; 2312; 2471; 2545; 2645; 2795; 2962; 3219; 3514; 3802; 4122; 4580; 5377; 5634; 5680; 5770
AlwI	GGATCNNNN!	10	741; 1626; 1930; 3884; 4195; 4441; 4833; 5192; 5290; 5376
AlwI	!NNNNNGATCC	9	580; 1613; 1917; 2432; 2516; 4260; 4804; 5191; 5288
Alw21I	GWGCW!C	9	943; 1434; 1444; 2008; 2170; 2599; 4129; 4319; 5624
Alw26I	GTCTCN!	2	434; 1417
Alw26I	!NNNNNGAGAC	12	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 3440; 3858; 4877; 5005
Alw44I	G!TGCAC	2	2004; 5620
AlwNI	CAGNNN!CTG	4	714; 973; 5117; 5525
Ama87I	C!YCGRG	4	1654; 1918; 2163; 2205
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	2	1361; 1919
ApaBI	GCANNNNN!TGC	4	2147; 3584; 3656; 5118
ApaLI	G!TGCAC	2	2004; 5620
ApeKI	G!CWGC	24	688; 1077; 1190; 1226; 1470; 1607; 1625; 1792; 2096; 2468; 2545; 2792; 3311; 3976; 4077; 4119; 4160; 4253; 4640; 5093; 5319; 5525; 5528; 5593
ApoI	R!AATY	4	1891; 2830; 2934; 2945
ApyPI	ATCGACNNNNNNNNNNNNNNNNNN!	2	1546; 4531
ApyPI	!NNNNNNNNNNNNNNNNNGTCGAT	3	4325; 4978; 5816
AquII	GCCGNACNNNNNNNNNNNNNNNNNN!	1	4415
AquII	!NNNNNNNNNNNNNNNNNGTNCGGC	0	
AquIII	GAGGAGNNNNNNNNNNNNNNNNNN!	6	918; 1246; 1417; 1450; 1978; 3844
AquIII	!NNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNN!	1	1279
AquIV	!NNNNNNNNNNNNNNNNNCTCCYC	1	4586
ArsI	GACNNNNNTTYGNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNGTC	0	
ArsI	CRAANNNNNGTCNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	31	586; 734; 992; 1016; 1205; 1340; 1520; 1619; 1727; 1923; 1985; 2069; 2438; 2522; 2674; 3854; 3858; 3877; 4188; 4266; 4347; 4356; 4434; 4810; 4826; 5185; 5197; 5275; 5283; 5294; 5369
AsiGI	A!CCGGT	2	637; 1928
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	4134
Asp700I	GAANN!NNTTC	1	2184
Asp718I	G!GTACC	1	1907
AspA2I	C!CTAGG	2	3838; 4853
AspEI	GACNN!NNGTC	2	963; 1503

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AspLEI	GCG!C	31	662; 675; 693; 714; 1123; 1672; 2029; 2199; 2227; 2373; 2616; 3282; 3290; 3316; 3338; 3347; 3360; 3391; 4010; 4018; 4082; 4119; 4385; 4645; 4821; 4907; 5310; 5419; 5593; 5693; 5760
AspS9I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2110; 2351; 2511; 2567; 3123; 4532; 4977; 5023; 5081; 5114
AssI	AGT!ACT	1	1407
AsuII	TT!CGAA	1	4698
AsuC2I	CC!SGG	15	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 4020; 4180; 4793; 5557
AsuHPI	GGTGANNNNNNNN!	8	376; 1788; 2043; 2132; 2285; 2309; 5087; 5203
AsuHPI	!NNNNNNNTCACC	4	599; 1436; 3133; 4194
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	4	1654; 1918; 2163; 2205
AvaII	G!GWCC	8	640; 775; 957; 1001; 1328; 2567; 4532; 4977
AviII	TGC!GCA	1	4118
AvrII	C!CTAGG	2	3838; 4853
AxyI	CC!TNAGG	4	1005; 1569; 3496; 5128
BaeI	ACNNNGTAYCNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGC!C	9	1361; 1919; 1978; 2008; 2107; 2500; 3962; 4055; 5624
BalI	TGG!CCA	3	789; 1116; 4098
BamHI	G!GATCC	2	1618; 1922
BanI	G!GYRCC	7	465; 659; 672; 1907; 3169; 4015; 4050
BanII	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3207; 4381; 5091
BanIII	AT!CGAT	1	3856
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNCTTC	0	
BarI	GTANNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	4	1130; 1514; 2360; 2636
BauI	C!ACGAG	2	4734; 5761
BauI	C!TCGTG	1	4608
BbeI	GGCGC!C	3	663; 676; 4019
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	0	
BbsI	!NNNNNGTCTTC	0	
BbuI	GCATG!C	3	3586; 3658; 4421
BbvI	GCAGNNNNNNNN!	11	700; 1202; 1619; 1804; 2480; 2804; 4089; 4131; 4652; 5105; 5605
BbvI	!NNNNNNNNNNNGCTGC	12	1064; 1213; 1457; 1612; 2083; 2532; 3298; 3963; 4147; 4240; 5306; 5512
Bbv12I	GWGCW!C	9	943; 1434; 1444; 2008; 2170; 2599; 4129; 4319; 5624
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	1	1459
BccI	CCATCNNNN!	9	1818; 2238; 2382; 2535; 2565; 3146; 3710; 4236; 4738
BccI	!NNNNNGATGG	7	1595; 1749; 1836; 2502; 3114; 3894; 4322
BceAI	ACGGCNNNNNNNNNN!	9	686; 2012; 2072; 2264; 2354; 2432; 2648; 4442; 4929
BceAI	!NNNNNNNNNNNGCCGT	3	3157; 3975; 5434
Bcefl	ACGGCNNNNNNNNNN!	9	686; 2012; 2072; 2264; 2354; 2432; 2648; 4442; 4929
Bcefl	!NNNNNNNNNNNGCCGT	3	3158; 3976; 5435
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	3445; 4235; 5736
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	15	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 4020; 4180; 4793; 5557
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	2	2544; 5869

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BdaI	!NNNNNNNNNTGANNNNNTCA	2	2510; 5835
BfaI	C!TAG	9	592; 1398; 2671; 2865; 3283; 3839; 4854; 5188; 5441
BfiI	ACTGGGNNNN!	1	3965
BfiI	!NNNNCCCAGT	2	289; 3717
BfmI	C!TRYAG	7	1053; 1188; 1596; 1896; 3351; 5478; 5669
BfoI	RGCGC!Y	11	663; 676; 715; 1673; 2200; 2374; 2617; 3283; 3291; 4019; 5694
BfrI	C!TTAAG	1	2898
BfuI	GTATCCNNNN!	3	3445; 4235; 5736
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	2	4284; 4734
BfuAI	!NNNNNNNGCAGGT	1	3903
BfuCI	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
BglI	GCCNNNN!NGGC	4	90; 212; 283; 3791
BglII	A!GATCT	1	1015
BisI	GC!NGC	47	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2097; 2267; 2459; 2462; 2469; 2546; 2660; 2663; 2793; 3312; 3334; 3348; 3786; 3925; 3977; 3988; 4078; 4083; 4120; 4161; 4248; 4251; 4254; 4490; 4586; 4627; 4641; 4755; 5094; 5109; 5320; 5526; 5529; 5594; 5737; 5892
BlnI	C!CTAGG	2	3838; 4853
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	47	690; 695; 768; 1079; 1192; 1228; 1472; 1609; 1627; 1743; 1794; 2098; 2268; 2460; 2463; 2470; 2547; 2661; 2664; 2794; 3313; 3335; 3349; 3787; 3926; 3978; 3989; 4079; 4084; 4121; 4162; 4249; 4252; 4255; 4491; 4587; 4628; 4642; 4756; 5095; 5110; 5321; 5527; 5530; 5595; 5738; 5893
BmcAI	AGT!ACT	1	1407
Bme18I	G!GWCC	8	640; 775; 957; 1001; 1328; 2567; 4532; 4977
Bme1390I	CC!NGG	46	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4020; 4180; 4403; 4793; 4982; 5085; 5557; 5775; 5788; 5909
BmeRI	GACNNN!NNGTC	2	963; 1503
BmeT110I	C!YCGRG	4	1654; 1918; 2163; 2205
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	1	2003
BmgT120I	GG!NCC	23	84; 277; 641; 776; 783; 958; 1002; 1329; 1359; 1584; 1677; 1692; 1917; 2111; 2352; 2512; 2568; 3124; 4533; 4978; 5024; 5082; 5115
BmiI	GGN!NCC	30	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 2513; 3171; 3192; 3204; 3395; 3556; 3628; 4017; 4052; 4900; 4979; 5024; 5867; 5906
BmrI	ACTGGGNNNN!	1	3965
BmrI	!NNNNCCCAGT	2	289; 3717
BmrFI	CC!NGG	46	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4020; 4180; 4403; 4793; 4982; 5085; 5557; 5775; 5788; 5909
BmsI	GCATCNNNN!	11	835; 1054; 1895; 1978; 2149; 2832; 3595; 3667; 4315; 4379; 4654
BmsI	!NNNNNNNNNGATGC	7	357; 1301; 1769; 3974; 4229; 4445; 5837
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNN!	1	3965
BmuI	!NNNNCCCAGT	2	289; 3717
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNGTCTTC	0	
BpII	GAGNNNNCTCNNNNNNNNNNNN!	2	3805; 4704
BpII	!NNNNNNNNAGNNNNNNCTC	2	3773; 4672
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	8	921; 995; 1215; 1737; 2085; 2442; 2622; 4856
BpmI	!NNNNNNNNNNNNNNCTCCAG	1	4799
Bpu10I	CC!TNAGC	1	2541
Bpu10I	GC!TNAGG	1	1459

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Bpu14I	TT!CGAA	1	4698
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	3	1653; 5310; 5849
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	3	1200; 4392; 5551
BpuMI	CC!SGG	15	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 4020; 4180; 4793; 5557
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	1	1417
BsaI	!NNNNNGAGACC	4	837; 897; 1854; 5005
Bsa29I	AT!CGAT	1	3856
BsaAI	YAC!GTR	3	340; 3132; 4320
BsaBI	GATNN!NNATC	3	2526; 2678; 3875
BsaHI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
BsaJI	C!CNNGG	38	360; 643; 644; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 2106; 2116; 2134; 2206; 2264; 2293; 2348; 2500; 2501; 2630; 3550; 3622; 3745; 3780; 3789; 3838; 4179; 4448; 4853; 4980; 4981; 5083; 5084; 5774
BsaMI	GAATGCN!	1	2767
BsaMI	G!CATTC	1	2860
BsaWI	W!CCGGW	7	637; 913; 1928; 4047; 4891; 5581; 5728
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	2	1545; 3096
BsaXI	!NNNNNNNGGAGNNNNNGT	1	2058
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	1	2088
BsaXI	!NNNNNNNNNACNNNNNCTCC	2	1515; 3066
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTTG	2	3017; 4924
Bsc4I	CCNNNNN!NNGG	37	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 1945; 2107; 2134; 2240; 2270; 2360; 2636; 3028; 3354; 3746; 3997; 4541; 4822; 4854; 4986; 5021; 5071; 5103; 5456; 5735; 5901; 5919
BscAI	GCATCNNNN!	11	834; 1053; 1894; 1977; 2148; 2831; 3594; 3666; 4314; 4378; 4653
BscAI	!NNNNNNGATGC	7	360; 1304; 1772; 3977; 4232; 4448; 5840
Bse1I	ACTGGN!	5	978; 1413; 3960; 4161; 5407
Bse1I	C!CAGT	9	295; 1124; 1508; 2144; 2549; 3045; 3723; 5519; 5532
Bse8I	GATNN!NNATC	3	2526; 2678; 3875
Bse21I	CC!TNAGG	4	1005; 1569; 3496; 5128
Bse118I	R!CCGGY	8	637; 680; 1928; 2088; 3233; 4335; 4516; 4799
BseAI	T!CCGGA	0	
BseBI	CC!WGG	31	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4403; 4982; 5085; 5775; 5788; 5909
BseCI	AT!CGAT	1	3856
BseDI	C!CNNGG	38	360; 643; 644; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 2106; 2116; 2134; 2206; 2264; 2293; 2348; 2500; 2501; 2630; 3550; 3622; 3745; 3780; 3789; 3838; 4179; 4448; 4853; 4980; 4981; 5083; 5084; 5774
Bse3DI	GCAATGNN!	1	4249
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	5	1847; 3876; 4333; 4358; 4812
BseGI	!CATCC	9	826; 1141; 1351; 1810; 2140; 2215; 2230; 2344; 3702
BseJI	GATNN!NNATC	3	2526; 2678; 3875
BseLI	CCNNNNN!NNGG	37	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 1945; 2107; 2134; 2240; 2270; 2360; 2636; 3028; 3354; 3746; 3997; 4541; 4822; 4854; 4986; 5021; 5071; 5103; 5456; 5735; 5901; 5919
BseMI	GCAATGNN!	1	4249
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	4	1026; 1338; 1428; 5142
BseMII	!NNNNNNNNNCTGAG	14	996; 1450; 1465; 1485; 1560; 1714; 1849; 1872; 2532; 3487; 3789; 4670; 5242; 5651
BseNI	ACTGGN!	5	978; 1413; 3960; 4161; 5407
BseNI	C!CAGT	9	295; 1124; 1508; 2144; 2549; 3045; 3723; 5519; 5532
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	6	908; 1236; 1407; 1440; 1968; 3834

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BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI	9	1361; 1919; 1978; 2008; 2107; 2500; 3962; 4055; 5624
BseXI	GCAGCNNNNNNNN!	11	700; 1202; 1619; 1804; 2480; 2804; 4089; 4131; 4652; 5105; 5605
BseXI	!NNNNNNNNNNNGCTGC	12	1064; 1213; 1457; 1612; 2083; 2532; 3298; 3963; 4147; 4240; 5306; 5512
BseX3I	C!GGCCG	3	678; 2660; 3922
BseYI	C!CCAGC	4	663; 3559; 3631; 5630
BseYI	G!CTGGG	2	714; 4520
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	1	2487
BsgI	!NNNNNNNNNNNNNNCTGCAC	2	1611; 2066
Bsh1236I	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
Bsh1285I	CGRY!CG	6	681; 866; 1933; 2663; 3925; 5600
BshFI	GG!CC	40	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2011; 2111; 2353; 2409; 2419; 2475; 2512; 2662; 2982; 3124; 3779; 3785; 3794; 3837; 3924; 4098; 4489; 4516; 5025; 5082; 5115; 5460; 5894; 5912; 5923
BshNI	G!GYRCC	7	465; 659; 672; 1907; 3169; 4015; 4050
BshTI	A!CCGGT	2	637; 1928
BshVI	AT!CGAT	1	3856
BsiEI	CGRY!CG	6	681; 866; 1933; 2663; 3925; 5600
BsiHKAI	GWGCW!C	9	943; 1434; 1444; 2008; 2170; 2599; 4129; 4319; 5624
BsiHKCI	C!YCGRG	4	1654; 1918; 2163; 2205
BsiSI	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2089; 3234; 3921; 3998; 4020; 4048; 4179; 4269; 4336; 4517; 4792; 4800; 4892; 5366; 5556; 5582; 5729
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	37	49; 637; 669; 760; 913; 1130; 1253; 1291; 1514; 1574; 1601; 1661; 1679; 1748; 1831; 1945; 2107; 2134; 2240; 2270; 2360; 2636; 3028; 3354; 3746; 3997; 4541; 4822; 4854; 4986; 5021; 5071; 5103; 5456; 5735; 5901; 5919
BsIFI	GGGACNNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4167; 4699; 4808
BsIFI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3532; 3604; 3668; 4963
BsmI	GAATGCN!	1	2767
BsmI	G!CATTC	1	2860
BsmAI	GTCTCN!	2	434; 1417
BsmAI	!NNNNNGAGAC	12	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 3440; 3858; 4877; 5005
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	2	1470; 1490
BsmFI	GGGACNNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4167; 4699; 4808
BsmFI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3532; 3604; 3668; 4963
BsnI	GG!CC	40	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2011; 2111; 2353; 2409; 2419; 2475; 2512; 2662; 2982; 3124; 3779; 3785; 3794; 3837; 3924; 4098; 4489; 4516; 5025; 5082; 5115; 5460; 5894; 5912; 5923
Bso31I	GGTCTCN!	1	1417
Bso31I	!NNNNNGAGACC	4	837; 897; 1854; 5005
BsoBI	C!YCGRG	4	1654; 1918; 2163; 2205
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 1145; 3745; 4448
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	4	289; 1209; 1424; 4819
Bsp24I	!NNNNNNCCANNNNNGTC	2	5240; 5418
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	5272; 5450
Bsp24I	!NNNNNNNGACNNNNNTGG	4	257; 1177; 1392; 4787
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	4698
Bsp120I	G!GGCCC	2	1357; 1915
Bsp143I	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
Bsp1286I	GDGCH!C	23	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1978; 2008; 2107; 2170; 2500; 2599; 3207; 3962; 4055; 4129; 4319; 4381; 5091; 5624

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bsp1407I	T!GTACA	1	2389
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	49	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2156; 2264; 2303; 2441; 2554; 2570; 2582; 2651; 2663; 3331; 3334; 3348; 3438; 3686; 3698; 3707; 3719; 3729; 3740; 3786; 3925; 3988; 4490; 4535; 4601; 4627; 4752; 4755; 4903; 5035; 5342; 5486; 5982
BspACI	G!CGG	32	370; 403; 528; 693; 766; 1913; 1945; 2029; 2266; 2458; 2461; 2659; 3276; 3303; 3391; 3501; 4082; 4146; 4247; 4250; 4530; 4585; 4683; 4821; 4968; 5108; 5351; 5596; 5717; 5736; 5863; 5891
BspCNI	CTCAGNNNNNNNN!	4	1025; 1337; 1427; 5141
BspCNI	!NNNNNNNCTGAG	14	997; 1451; 1466; 1486; 1561; 1715; 1850; 1873; 2533; 3488; 3790; 4671; 5243; 5652
BspDI	AT!CGAT	1	3856
BspD6I	GACTCNNNN!	6	418; 1538; 2675; 3089; 4695; 5572
BspD6I	!NNNNNNGAGTC	5	1086; 1628; 2597; 3052; 3484
BspEI	T!CCGGA	0	
BspFNI	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
BspHI	T!CATGA	3	1234; 3442; 5214
BspLI	GGN!NCC	30	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 2513; 3171; 3192; 3204; 3395; 3556; 3628; 4017; 4052; 4900; 4979; 5024; 5867; 5906
BspMI	ACCTGCNNNN!	2	4284; 4734
BspMI	!NNNNNNNNGCAGGT	1	3903
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	10	741; 1626; 1930; 3884; 4195; 4441; 4833; 5192; 5290; 5376
BspPI	!NNNNNGATCC	9	580; 1613; 1917; 2432; 2516; 4260; 4804; 5191; 5288
BspQI	GCTCTCN!	1	1236
BspQI	!NNNNGAAGAGC	2	4360; 4570
BspTI	C!TTAAG	1	2898
BspT104I	TT!CGAA	1	4698
BspT107I	G!GYRCC	7	465; 659; 672; 1907; 3169; 4015; 4050
BspTNI	GGTCTCN!	1	1417
BspTNI	!NNNNNGAGACC	4	837; 897; 1854; 5005
BsrI	ACTGGN!	5	978; 1413; 3960; 4161; 5407
BsrI	C!CAGT	9	295; 1124; 1508; 2144; 2549; 3045; 3723; 5519; 5532
BsrBI	CCG!CTC	3	748; 3440; 4629
BsrBI	GAG!CGG	3	1945; 3276; 4683
BsrDI	GCAATGNN!	1	4249
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	8	637; 680; 1928; 2088; 3233; 4335; 4516; 4799
BsrGI	T!GTACA	1	2389
BsrSI	ACTGGN!	5	978; 1413; 3960; 4161; 5407
BsrSI	C!CAGT	9	295; 1124; 1508; 2144; 2549; 3045; 3723; 5519; 5532
BssAI	R!CCGGY	8	637; 680; 1928; 2088; 3233; 4335; 4516; 4799
BssECI	C!CNNGG	38	360; 643; 644; 778; 802; 961; 1145; 1300; 1513; 1654; 1678; 1783; 1911; 1918; 2106; 2116; 2134; 2206; 2264; 2293; 2348; 2500; 2501; 2630; 3550; 3622; 3745; 3780; 3789; 3838; 4179; 4448; 4853; 4980; 4981; 5083; 5084; 5774
BssHII	G!CGCGC	0	
BssKI	!CCNNGG	46	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4018; 4178; 4401; 4791; 4980; 5083; 5555; 5773; 5786; 5907
BssMI	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
BssNI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	2	4734; 5761
BssSI	C!TCGTG	1	4608
BssTII	C!CWWGG	8	360; 1145; 1513; 1783; 3745; 3838; 4448; 4853

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bst6I	CTCTCN!	1	1236
Bst6I	!NNNNGAAGAG	4	1246; 3483; 4360; 4570
Bst98I	C!TTAAG	1	2898
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
BstAFI	C!TTAAG	1	2898
BstAPI	GCANNN!NTGC	4	2146; 3583; 3655; 5117
BstAUI	T!GTACA	1	2389
BstBI	TT!CGAA	1	4698
Bst2BI	C!ACGAG	2	4734; 5761
Bst2BI	C!TCGTG	1	4608
BstBAI	YAC!GTR	3	340; 3132; 4320
Bst4CI	ACN!GT	19	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 3107; 4396; 4512; 4620; 4943; 5434; 5904; 5975
BstC8I	GCN!NGC	46	86; 279; 593; 698; 710; 1043; 1114; 1286; 1375; 1553; 1586; 1645; 1746; 1915; 1967; 2025; 2061; 2094; 2156; 2466; 2473; 2582; 3235; 3278; 3292; 3565; 3584; 3637; 3656; 3910; 4096; 4315; 4381; 4387; 4419; 4460; 4464; 4518; 4801; 4988; 5035; 5091; 5113; 5324; 5884; 5921
BstDEI	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2541; 3496; 3798; 4679; 5128; 5251; 5660
BstDSI	C!CRYGG	8	360; 1145; 1300; 1911; 2264; 2630; 3745; 4448
BstEII	G!GTNACC	1	2120
BstENI	CCTNN!NNNAGG	1	1572
BstF5I	GGATGNN!	5	1847; 3876; 4333; 4358; 4812
BstF5I	!CATCC	9	826; 1141; 1351; 1810; 2140; 2215; 2230; 2344; 3702
BstFNI	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
BstH2I	RGCGC!Y	11	663; 676; 715; 1673; 2200; 2374; 2617; 3283; 3291; 4019; 5694
BstHHI	GCG!C	31	662; 675; 693; 714; 1123; 1672; 2029; 2199; 2227; 2373; 2616; 3282; 3290; 3316; 3338; 3347; 3360; 3391; 4010; 4018; 4082; 4119; 4385; 4645; 4821; 4907; 5310; 5419; 5593; 5693; 5760
BstKTI	GAT!C	31	588; 736; 994; 1018; 1207; 1342; 1522; 1621; 1729; 1925; 1987; 2071; 2440; 2524; 2676; 3856; 3860; 3879; 4190; 4268; 4349; 4358; 4436; 4812; 4828; 5187; 5199; 5277; 5285; 5296; 5371
BstMAI	GTCTCN!	2	434; 1417
BstMAI	!NNNNNGAGAC	12	837; 897; 964; 1098; 1191; 1470; 1490; 1854; 3440; 3858; 4877; 5005
BstMBI	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
BstMCI	CGRY!CG	6	681; 866; 1933; 2663; 3925; 5600
BstMWI	GCNNNN!NNGC	43	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1988; 2089; 2102; 2146; 2377; 2569; 2620; 2659; 3243; 3273; 3300; 3342; 3583; 3655; 3706; 3785; 4007; 4091; 4114; 4253; 4376; 4459; 4726; 4913; 5117; 5316; 5888
BstNI	CC!WGG	31	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4403; 4982; 5085; 5775; 5788; 5909
BstNSI	RCATG!Y	4	3586; 3658; 4421; 5938
BstOI	CC!WGG	31	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4403; 4982; 5085; 5775; 5788; 5909
BstPI	G!GTNACC	1	2120
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	46	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4018; 4178; 4401; 4791; 4980; 5083; 5555; 5773; 5786; 5907
BstSFI	C!TRYAG	7	1053; 1188; 1596; 1896; 3351; 5478; 5669
BstSLI	GKGCM!C	9	1361; 1919; 1978; 2008; 2107; 2500; 3962; 4055; 5624
BstSNI	TAC!GTA	1	340



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstUI	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
Bst2UI	CC!WGG	31	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4403; 4982; 5085; 5775; 5788; 5909
BstV1I	GCAGCNNNNNNNN!	11	700; 1202; 1619; 1804; 2480; 2804; 4089; 4131; 4652; 5105; 5605
BstV1I	!NNNNNNNNNNNGCTGC	12	1064; 1213; 1457; 1612; 2083; 2532; 3298; 3963; 4147; 4240; 5306; 5512
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	1	1343
BstX2I	R!GATCY	13	585; 733; 1015; 1618; 1922; 2437; 4187; 4433; 4825; 5184; 5196; 5282; 5293
BstYI	R!GATCY	13	585; 733; 1015; 1618; 1922; 2437; 4187; 4433; 4825; 5184; 5196; 5282; 5293
BstZI	C!GGCCG	3	678; 2660; 3922
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	3445; 4235; 5736
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	3856
Bsu36I	CC!TNAGG	4	1005; 1569; 3496; 5128
BsuRI	GG!CC	40	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2011; 2111; 2353; 2409; 2419; 2475; 2512; 2662; 2982; 3124; 3779; 3785; 3794; 3837; 3924; 4098; 4489; 4516; 5025; 5082; 5115; 5460; 5894; 5912; 5923
BsuTUI	AT!CGAT	1	3856
BtgI	C!CRYGG	8	360; 1145; 1300; 1911; 2264; 2630; 3745; 4448
BtgZI	GCGATGNNNNNNNNNN!	3	2521; 3133; 4468
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 4287; 4631
BthCI	GCNG!C	47	691; 696; 769; 1080; 1193; 1229; 1473; 1610; 1628; 1744; 1795; 2099; 2269; 2461; 2464; 2471; 2548; 2662; 2665; 2795; 3314; 3336; 3350; 3788; 3927; 3979; 3990; 4080; 4085; 4122; 4163; 4250; 4253; 4256; 4492; 4588; 4629; 4643; 4757; 5096; 5111; 5322; 5528; 5531; 5596; 5739; 5894
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	1	2003
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	1	2855
BtsCI	GGATGNN!	5	1847; 3876; 4333; 4358; 4812
BtsCI	!CATCC	9	826; 1141; 1351; 1810; 2140; 2215; 2230; 2344; 3702
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	4284; 4734
BveI	!NNNNNNNNNGCAGGT	1	3903
Cac8I	GCN!NGC	46	86; 279; 593; 698; 710; 1043; 1114; 1286; 1375; 1553; 1586; 1645; 1746; 1915; 1967; 2025; 2061; 2094; 2156; 2466; 2473; 2582; 3235; 3278; 3292; 3565; 3584; 3637; 3656; 3910; 4096; 4315; 4381; 4387; 4419; 4460; 4464; 4518; 4801; 4988; 5035; 5091; 5113; 5324; 5884; 5921
CaiI	CAGNNN!CTG	4	714; 973; 5117; 5525
CciI	T!CATGA	3	1234; 3442; 5214
CciNI	GC!GGCCGC	1	2660
CdiI	CATC!G	10	352; 998; 1049; 1890; 1973; 2453; 4305; 4310; 4508; 4649
CdiI	C!GATG	3	2507; 3119; 4454
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	5888
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	4	486; 1133; 3677; 3719
CelII	GC!TNAGC	0	
CfoI	GCG!C	31	662; 675; 693; 714; 1123; 1672; 2029; 2199; 2227; 2373; 2616; 3282; 3290; 3316; 3338; 3347; 3360; 3391; 4010; 4018; 4082; 4119; 4385; 4645; 4821; 4907; 5310; 5419; 5593; 5693; 5760
CfrI	Y!GGCCR	11	678; 694; 787; 1114; 2009; 2473; 2660; 3922; 4096; 4487; 4514
Cfr9I	C!CCGGG	2	1654; 1918
Cfr10I	R!CCGGY	8	637; 680; 1928; 2088; 3233; 4335; 4516; 4799
Cfr13I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2110; 2351; 2511; 2567; 3123; 4532; 4977; 5023; 5081; 5114
Cfr42I	CCGC!GG	2	1914; 2267

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ChaI	GATC!	31	589; 737; 995; 1019; 1208; 1343; 1523; 1622; 1730; 1926; 1988; 2072; 2441; 2525; 2677; 3857; 3861; 3880; 4191; 4269; 4350; 4359; 4437; 4813; 4829; 5188; 5200; 5278; 5286; 5297; 5372
CjeI	CCANNNNNNGTNNNNNNNNNNNNNN!	4	3833; 5273; 5373; 5451
CjeI	!NNNNNNNNNACNNNNNTGG	9	64; 257; 1177; 1392; 3500; 3595; 4787; 5337; 5892
CjeI	ACNNNNNTTGGNNNNNNNNNNNNNN!	9	98; 291; 1211; 1426; 3534; 3629; 4821; 5371; 5926
CjeI	!NNNNNNNNCCANNNNNNGT	4	3799; 5239; 5339; 5417
CjePI	CCANNNNNNTCANNNNNNNNNNNN!	3	1559; 5273; 5451
CjePI	!NNNNNNNNGANNNNNNNTGG	6	257; 1177; 1392; 1826; 4787; 5386
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	6	290; 1210; 1425; 1859; 4820; 5419
CjePI	!NNNNNNNNCCANNNNNNTC	3	1526; 5240; 5418
Clai	AT!CGAT	1	3856
CpoI	CG!GWCCG	1	4532
CseI	GACGCNNNNN!	5	526; 1490; 2055; 4726; 4805
CseI	!NNNNNNNNNGCGTC	5	689; 2294; 3349; 5244; 5822
CsiI	A!CCWGGT	1	3605
CspI	CG!GWCCG	1	4532
Csp6I	G!TAC	14	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 2255; 2366; 2390; 2648; 4321
Csp45I	TT!CGAA	1	4698
CspAI	A!CCGGT	2	637; 1928
CspCI	CAANNNNGTGGNNNNNNNNNNNN!	2	411; 1047
CspCI	!NNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNGTGG	2	376; 1012
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	5	865; 1243; 2356; 3296; 4905
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	30	301; 361; 599; 770; 848; 1118; 1146; 1235; 1343; 1535; 1802; 1940; 2171; 2201; 2396; 2591; 2636; 3443; 3583; 3655; 3746; 3887; 4232; 4418; 4449; 4475; 4831; 5215; 5935; 5986
CviJI	RG!CY	132	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; 1958; 1991; 2011; 2063; 2096; 2111; 2212; 2312; 2326; 2353; 2409; 2419; 2471; 2475; 2512; 2545; 2580; 2645; 2662; 2685; 2795; 2962; 2982; 3124; 3205; 3219; 3233; 3514; 3555; 3627; 3750; 3779; 3785; 3794; 3802; 3825; 3837; 3843; 3924; 3941; 3949; 3976; 4001; 4085; 4094; 4098; 4122; 4160; 4236; 4253; 4272; 4335; 4379; 4389; 4406; 4489; 4516; 4520; 4557; 4580; 4596; 4776; 4803; 4864; 4986; 5025; 5082; 5089; 5096; 5115; 5126; 5377; 5406; 5449; 5460; 5525; 5604; 5629; 5634; 5680; 5770; 5868; 5894; 5912; 5923
CviKI-1	RG!CY	132	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; 1958; 1991; 2011; 2063; 2096; 2111; 2212; 2312; 2326; 2353; 2409; 2419; 2471; 2475; 2512; 2545; 2580; 2645; 2662; 2685; 2795; 2962; 2982; 3124; 3205; 3219; 3233; 3514; 3555; 3627; 3750; 3779; 3785; 3794; 3802; 3825; 3837; 3843; 3924; 3941; 3949; 3976; 4001; 4085; 4094; 4098; 4122; 4160; 4236; 4253; 4272; 4335; 4379; 4389; 4406; 4489; 4516; 4520; 4557; 4580; 4596; 4776; 4803; 4864; 4986; 5025; 5082; 5089; 5096; 5115; 5126; 5377; 5406; 5449; 5460; 5525; 5604; 5629; 5634; 5680; 5770; 5868; 5894; 5912; 5923
CviQI	G!TAC	14	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 2255; 2366; 2390; 2648; 4321
DdeI	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2541; 3496; 3798; 4679; 5128; 5251; 5660
DinI	GGC!GCC	3	661; 674; 4017
DpnI	GA!TC	31	587; 735; 993; 1017; 1206; 1341; 1521; 1620; 1728; 1924; 1986; 2070; 2439; 2523; 2675; 3855; 3859; 3878; 4189; 4267; 4348; 4357; 4435; 4811; 4827; 5186; 5198; 5276; 5284; 5295; 5370

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
DpnII	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
DraI	TTT!AAA	3	2718; 5160; 5179
DraII	RG!GNCCY	6	782; 957; 1001; 1328; 1691; 5114
DraIII	CACNNN!GTG	2	2594; 3132
DraRI	CAAGNACNNNNNNNNNNNNNNNNNNNN!	5	266; 1429; 2278; 2590; 5496
DraRI	!NNNNNNNNNNNNNNNNNNNGTCTTG	1	1492
DrdI	GACNNN!NNGTC	4	1092; 3087; 4043; 5832
DrdIV	TACGACNNNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	2	963; 1503
DseDI	GACNNN!NNGTC	4	1092; 3087; 4043; 5832
EaeI	Y!GGCCR	11	678; 694; 787; 1114; 2009; 2473; 2660; 3922; 4096; 4487; 4514
EagI	C!GGCCG	3	678; 2660; 3922
Eam1104I	CTCTTCN!	1	1236
Eam1104I	!NNNNGAAGAG	4	1246; 3483; 4360; 4570
Eam1105I	GACNNN!NNGTC	2	963; 1503
EarI	CTCTTCN!	1	1236
EarI	!NNNNGAAGAG	4	1246; 3483; 4360; 4570
EciI	GGCGGANNNNNNNNNNNN!	4	3516; 4545; 5732; 5878
EciI	!NNNNNNNNNTCCGCC	6	496; 2430; 2543; 3687; 3708; 3729
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	3	678; 2660; 3922
Eco24I	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3207; 4381; 5091
Eco31I	GGTCTCN!	1	1417
Eco31I	!NNNNNGAGACC	4	837; 897; 1854; 5005
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	8	640; 775; 957; 1001; 1328; 2567; 4532; 4977
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	3	678; 2660; 3922
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	4	1566; 2334; 4162; 4594
Eco57I	!NNNNNNNNNNNNNNNCTTCAG	3	743; 2594; 5392
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	4	1005; 1569; 3496; 5128
Eco88I	C!YCGRG	4	1654; 1918; 2163; 2205
Eco91I	G!GTNACC	1	2120
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	8	360; 1145; 1513; 1783; 3745; 3838; 4448; 4853
Eco147I	AGG!CCT	2	1267; 3837
EcoHI	!CCSGG	15	675; 729; 777; 792; 801; 934; 1354; 1653; 1654; 1917; 1918; 4018; 4178; 4791; 5555
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	12	921; 995; 1215; 1566; 1737; 2085; 2334; 2442; 2622; 4162; 4594; 4856
Eco57MI	!NNNNNNNNNNNNNNNCTYCAG	4	743; 2594; 4799; 5392
EcoNI	CCTNN!NNNAGG	1	1572
Eco065I	G!GTNACC	1	2120
Eco0109I	RG!GNCCY	6	782; 957; 1001; 1328; 1691; 5114
EcoRI	G!AATTC	1	1891
EcoRII	!CCWGG	31	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4401; 4980; 5083; 5773; 5786; 5907
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	8	360; 1145; 1513; 1783; 3745; 3838; 4448; 4853
EcoT22I	ATGCA!T	3	3588; 3660; 5991
EcoT38I	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3207; 4381; 5091
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	3	661; 674; 4017
EheI	GGC!GCC	3	661; 674; 4017
ErhI	C!CWWGG	8	360; 1145; 1513; 1783; 3745; 3838; 4448; 4853
EsaBC3I	TC!GA	20	998; 1208; 1523; 1890; 1903; 1988; 2282; 2309; 2453; 3166; 3857; 4130; 4286; 4310; 4346; 4508; 4699; 4744; 4999; 5837
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	2	1470; 1490

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FaeI	CATG!	30	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 2174; 2204; 2399; 2594; 2639; 3446; 3586; 3658; 3749; 3890; 4235; 4421; 4452; 4478; 4834; 5218; 5938; 5989
FaiI	YA!TR	70	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; 2172; 2202; 2397; 2592; 2637; 2678; 2688; 2754; 2799; 3004; 3432; 3444; 3575; 3584; 3647; 3656; 3680; 3747; 3771; 3888; 3952; 4233; 4258; 4419; 4450; 4476; 4548; 4764; 4832; 4910; 4962; 5123; 5140; 5142; 5144; 5216; 5494; 5683; 5799; 5872; 5936; 5987
FalI	AAGNNNNNCTTNNNNNNNNNNNN!	2	1571; 4356
FalI	!NNNNNNNNAAGNNNNNCTT	2	1539; 4324
FaqI	GGGACNNNNNNNNNN!	8	175; 326; 494; 970; 1678; 4167; 4699; 4808
FaqI	!NNNNNNNNNNNNNGTCCC	6	626; 728; 3532; 3604; 3668; 4963
FatI	!CATG	30	300; 360; 598; 769; 847; 1117; 1145; 1234; 1342; 1534; 1801; 1939; 2170; 2200; 2395; 2590; 2635; 3442; 3582; 3654; 3745; 3886; 4231; 4417; 4448; 4474; 4830; 5214; 5934; 5985
FauI	CCCGCNNNN!	15	93; 119; 286; 753; 1050; 1593; 1836; 2163; 2271; 2589; 3338; 3693; 3714; 4910; 5042
FauI	!NNNNNNNGCGGG	7	1906; 1938; 3269; 4139; 4676; 4814; 4961
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	1902
FmuI	GGNC!C	23	86; 279; 643; 778; 785; 960; 1004; 1331; 1361; 1586; 1679; 1694; 1919; 2113; 2354; 2514; 2570; 3126; 4535; 4980; 5026; 5084; 5117
Fnu4HI	GC!NGC	47	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2097; 2267; 2459; 2462; 2469; 2546; 2660; 2663; 2793; 3312; 3334; 3348; 3786; 3925; 3977; 3988; 4078; 4083; 4120; 4161; 4248; 4251; 4254; 4490; 4586; 4627; 4641; 4755; 5094; 5109; 5320; 5526; 5529; 5594; 5737; 5892
FokI	GGATGNNNNNNNNNN!	5	1854; 3883; 4340; 4365; 4819
FokI	!NNNNNNNNNNNNNCATCC	8	813; 1128; 1338; 1797; 2127; 2202; 2331; 3689
FriOI	GRGCY!C	9	651; 723; 1013; 1153; 1361; 1919; 3207; 4381; 5091
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	4118
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1398; 2671; 2865; 3283; 3839; 4854; 5188; 5441
FspEI	CCNNNNNNNNNNNN!	204	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; 1990; 2025; 2063; 2099; 2113; 2129; 2147; 2168; 2213; 2232; 2247; 2276; 2306; 2361; 2387; 2413; 2433; 2454; 2489; 2504; 2526; 2540; 2562; 2583; 2601; 2621; 2637; 2664; 2699; 2738; 2752; 2893; 2988; 3012; 3035; 3058; 3076; 3098; 3119; 3138; 3157; 3186; 3207; 3221; 3247; 3335; 3361; 3410; 3451; 3469; 3508; 3524; 3562; 3619; 3634; 3691; 3711; 3725; 3742; 3756; 3793; 3808; 3851; 3934; 4001; 4032; 4052; 4067; 4112; 4126; 4192; 4206; 4225; 4241; 4282; 4302; 4349; 4399; 4415; 4435; 4460; 4480; 4503; 4530; 4548; 4574; 4614; 4640; 4664; 4720; 4734; 4762; 4805; 4826; 4861; 4905; 4993; 5017; 5039; 5059; 5075; 5096; 5110; 5129; 5213; 5233; 5261; 5276; 5310; 5352; 5379; 5394; 5439; 5463; 5477; 5499; 5525; 5545; 5569; 5595; 5643; 5662; 5681; 5707; 5742; 5787; 5817; 5831; 5882; 5896; 5921; 5937; 5958; 5987

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FspEI	!NNNNNNNNNNNNNNNNNGG	173	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; 1932; 1951; 1977; 2014; 2041; 2074; 2093; 2120; 2193; 2226; 2251; 2269; 2301; 2319; 2346; 2391; 2409; 2439; 2457; 2487; 2550; 2577; 2617; 2644; 2687; 2787; 2856; 2886; 2964; 3013; 3035; 3063; 3099; 3144; 3173; 3209; 3228; 3256; 3276; 3339; 3362; 3470; 3502; 3520; 3549; 3592; 3621; 3732; 3761; 3804; 3825; 3853; 3886; 3906; 3931; 3958; 3983; 4005; 4033; 4059; 4080; 4131; 4152; 4170; 4218; 4254; 4310; 4335; 4359; 4388; 4411; 4435; 4461; 4483; 4502; 4527; 4567; 4603; 4668; 4753; 4777; 4806; 4840; 4861; 4881; 4926; 4953; 4972; 5005; 5057; 5088; 5115; 5167; 5265; 5336; 5381; 5442; 5507; 5541; 5567; 5585; 5621; 5691; 5714; 5736; 5760; 5793; 5841; 5876; 5894; 5951
Fsp4HI	GC!NGC	47	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2097; 2267; 2459; 2462; 2469; 2546; 2660; 2663; 2793; 3312; 3334; 3348; 3786; 3925; 3977; 3988; 4078; 4083; 4120; 4161; 4248; 4251; 4254; 4490; 4586; 4627; 4641; 4755; 5094; 5109; 5320; 5526; 5529; 5594; 5737; 5892
GdiII	C!GGCCR	5	678; 694; 2009; 2660; 3922
GdiII	Y!GGCCG	6	678; 2473; 2660; 3922; 4487; 4514
GlaI	GC!GC	31	661; 674; 692; 713; 1122; 1671; 2028; 2198; 2226; 2372; 2615; 3281; 3289; 3315; 3337; 3346; 3359; 3390; 4009; 4017; 4081; 4118; 4384; 4644; 4820; 4906; 5309; 5418; 5592; 5692; 5759
Glul	GC!NGC	47	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2097; 2267; 2459; 2462; 2469; 2546; 2660; 2663; 2793; 3312; 3334; 3348; 3786; 3925; 3977; 3988; 4078; 4083; 4120; 4161; 4248; 4251; 4254; 4490; 4586; 4627; 4641; 4755; 5094; 5109; 5320; 5526; 5529; 5594; 5737; 5892
GsaI	CCCAG!C	4	667; 3563; 3635; 5634
GsaI	GCTGG!G	2	718; 4524
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	8	921; 995; 1215; 1737; 2085; 2442; 2622; 4856
GsuI	!NNNNNNNNNNNNNNNNCTCCAG	1	4799
HaeI	WGG!CCW	11	789; 873; 1116; 1267; 1551; 2409; 3837; 4098; 5460; 5912; 5923
HaeII	RGCGC!Y	11	663; 676; 715; 1673; 2200; 2374; 2617; 3283; 3291; 4019; 5694
HaeIII	GG!CC	40	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2011; 2111; 2353; 2409; 2419; 2475; 2512; 2662; 2982; 3124; 3779; 3785; 3794; 3837; 3924; 4098; 4489; 4516; 5025; 5082; 5115; 5460; 5894; 5912; 5923
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	4	982; 1522; 2691; 4212
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	4	948; 1488; 2657; 4178
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	4	981; 1521; 2690; 4211
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	4	950; 1490; 2659; 4180
HapII	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2089; 3234; 3921; 3998; 4020; 4048; 4179; 4269; 4336; 4517; 4792; 4800; 4892; 5366; 5556; 5582; 5729
HgaI	GACGCNNNNN!	5	526; 1490; 2055; 4726; 4805
HgaI	!NNNNNNNNNNNGCGTC	5	689; 2294; 3349; 5244; 5822
HhaI	GCG!C	31	662; 675; 693; 714; 1123; 1672; 2029; 2199; 2227; 2373; 2616; 3282; 3290; 3316; 3338; 3347; 3360; 3391; 4010; 4018; 4082; 4119; 4385; 4645; 4821; 4907; 5310; 5419; 5593; 5693; 5760
HinI	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
Hin1III	CATG!	30	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 2174; 2204; 2399; 2594; 2639; 3446; 3586; 3658; 3749; 3890; 4235; 4421; 4452; 4478; 4834; 5218; 5938; 5989
Hin4I	GAYNNNNNVTCNNNNNNNNNNNNNN!	6	981; 1228; 1521; 1547; 2690; 4211
Hin4I	!NNNNNNNNNGABNNNNNNRTC	5	949; 1489; 2658; 4179; 4209
Hin4I	GABNNNNNRTCNNNNNNNNNNNNNN!	5	981; 1521; 2690; 4211; 4241
Hin4I	!NNNNNNNNNGAYNNNNNVTC	6	949; 1196; 1489; 1515; 2658; 4179
Hin6I	G!CGC	31	660; 673; 691; 712; 1121; 1670; 2027; 2197; 2225; 2371; 2614; 3280; 3288; 3314; 3336; 3345; 3358; 3389; 4008; 4016; 4080; 4117; 4383; 4643; 4819; 4905; 5308; 5417; 5591; 5691; 5758
HinP1I	G!CGC	31	660; 673; 691; 712; 1121; 1670; 2027; 2197; 2225; 2371; 2614; 3280; 3288; 3314; 3336; 3345; 3358; 3389; 4008; 4016; 4080; 4117; 4383; 4643; 4819; 4905; 5308; 5417; 5591; 5691; 5758
HincII	GTY!RAC	3	1297; 1903; 2779

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HindII	GTY!RAC	3	1297; 1903; 2779
HindIII	A!AGCTT	0	
HinfI	G!ANTC	16	410; 1093; 1530; 1635; 2604; 2667; 3059; 3081; 3491; 4501; 4635; 4687; 4745; 4782; 5564; 5960
HpaI	GTT!AAC	1	2779
HpaII	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2089; 3234; 3921; 3998; 4020; 4048; 4179; 4269; 4336; 4517; 4792; 4800; 4892; 5366; 5556; 5582; 5729
HphI	GGTGANNNNNNN!	8	376; 1788; 2043; 2132; 2285; 2309; 5087; 5203
HphI	!NNNNNNNTCACC	4	599; 1436; 3133; 4194
Hpy8I	GTN!NAC	14	201; 539; 577; 1034; 1297; 1903; 2006; 2300; 2390; 2779; 3063; 3080; 3135; 5622
Hpy99I	CGWCG!	13	1484; 1907; 2004; 2049; 2250; 2310; 4106; 4134; 4428; 4443; 4720; 5105; 5838
Hpy166II	GTN!NAC	14	201; 539; 577; 1034; 1297; 1903; 2006; 2300; 2390; 2779; 3063; 3080; 3135; 5622
Hpy188I	TCN!GA	18	585; 969; 1015; 1381; 1546; 1640; 1859; 1882; 3190; 3799; 3983; 4327; 4680; 4781; 5260; 5394; 5747; 5825
Hpy188III	TC!NNGA	26	830; 989; 1235; 1326; 2192; 2435; 2671; 3443; 3495; 3808; 3861; 4034; 4350; 4359; 4442; 4498; 4542; 4632; 4665; 4734; 5215; 5289; 5372; 5470; 5568; 5702
HpyAV	CCTTCNNNNNN!	5	632; 2618; 4661; 4768; 5447
HpyAV	!NNNNNGAAGG	11	833; 947; 1541; 2309; 3249; 4144; 4873; 4889; 5072; 5389; 5699
HpyCH4III	ACN!GT	19	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 3107; 4396; 4512; 4620; 4943; 5434; 5904; 5975
HpyCH4IV	A!CGT	18	122; 134; 175; 258; 339; 444; 1499; 2002; 2386; 2494; 3076; 3088; 3131; 3241; 4132; 4319; 5100; 5233
HpyCH4V	TG!CA	26	708; 851; 1055; 1190; 1628; 1805; 1898; 2006; 2083; 2468; 2765; 2792; 2860; 3577; 3586; 3649; 3658; 3773; 3849; 3908; 4067; 4242; 4256; 5326; 5622; 5989
HpyF3I	C!TNAG	18	1005; 1012; 1324; 1414; 1459; 1474; 1494; 1569; 1723; 1858; 1881; 2541; 3496; 3798; 4679; 5128; 5251; 5660
HpyF10VI	GCNNNNN!NNGC	43	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1988; 2089; 2102; 2146; 2377; 2569; 2620; 2659; 3243; 3273; 3300; 3342; 3583; 3655; 3706; 3785; 4007; 4091; 4114; 4253; 4376; 4459; 4726; 4913; 5117; 5316; 5888
Hsp92I	GR!CGYC	10	122; 175; 258; 444; 660; 673; 2047; 4016; 4718; 4797
Hsp92II	CATG!	30	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 2174; 2204; 2399; 2594; 2639; 3446; 3586; 3658; 3749; 3890; 4235; 4421; 4452; 4478; 4834; 5218; 5938; 5989
HspAI	G!CGC	31	660; 673; 691; 712; 1121; 1670; 2027; 2197; 2225; 2371; 2614; 3280; 3288; 3314; 3336; 3345; 3358; 3389; 4008; 4016; 4080; 4117; 4383; 4643; 4819; 4905; 5308; 5417; 5591; 5691; 5758
KasI	G!GCGCC	3	659; 672; 4015
KfII	GG!GWCCC	1	957
KpnI	GGTAC!C	1	1911
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	2	1914; 2267
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	2779
Kzo9I	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
LguI	GCTCTCN!	1	1236
LguI	!NNNNGAAGAGC	2	4360; 4570
LpnI	RGC!GCV	11	661; 674; 713; 1671; 2198; 2372; 2615; 3281; 3289; 4017; 5692
LpnPI	CCDGNNNNNNNNN!	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; 2102; 2120; 2147; 2232; 2253; 2307; 2361; 2433; 2499; 2514; 2553; 2613; 2753; 3058; 3247; 3470; 3508; 3524; 3564; 3619; 3636; 3736; 3821; 3934; 4011; 4033; 4056; 4192; 4206; 4225; 4282; 4349; 4399; 4415; 4472; 4530; 4739; 4805; 4829; 4905; 4994; 5097; 5130; 5361; 5379; 5525; 5545; 5569; 5595; 5644; 5742; 5787; 5817; 5896; 5921; 5958

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	!NNNNNNNNNNNNNNCHGG	84	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; 1951; 1977; 2049; 2074; 2093; 2120; 2205; 2226; 2280; 2334; 2406; 2457; 2487; 2586; 3099; 3219; 3276; 3339; 3537; 3549; 3609; 3621; 3853; 3898; 3941; 3983; 4005; 4033; 4080; 4142; 4164; 4254; 4321; 4344; 4388; 4483; 4502; 4527; 4676; 4777; 4820; 4877; 4967; 5070; 5097; 5115; 5351; 5388; 5541; 5567; 5707; 5725; 5760; 5841; 5894
Lsp1109I	GCAGCNNNNNNN!	11	700; 1202; 1619; 1804; 2480; 2804; 4089; 4131; 4652; 5105; 5605
Lsp1109I	!NNNNNNNNNNNGCTGC	12	1064; 1213; 1457; 1612; 2083; 2532; 3298; 3963; 4147; 4240; 5306; 5512
LweI	GCATCNNNNN!	11	835; 1054; 1895; 1978; 2149; 2832; 3595; 3667; 4315; 4379; 4654
LweI	!NNNNNNNNNGATGC	7	357; 1301; 1769; 3974; 4229; 4445; 5837
MabI	A!CCWGGT	1	3605
MaeI	C!TAG	9	592; 1398; 2671; 2865; 3283; 3839; 4854; 5188; 5441
MaeII	A!CGT	18	122; 134; 175; 258; 339; 444; 1499; 2002; 2386; 2494; 3076; 3088; 3131; 3241; 4132; 4319; 5100; 5233
MaeIII	!GTNAC	13	61; 148; 497; 2120; 2804; 3305; 3317; 4136; 4442; 5132; 5398; 5514; 5577
MalI	GA!TC	31	587; 735; 993; 1017; 1206; 1341; 1521; 1620; 1728; 1924; 1986; 2070; 2439; 2523; 2675; 3855; 3859; 3878; 4189; 4267; 4348; 4357; 4435; 4811; 4827; 5186; 5198; 5276; 5284; 5295; 5370
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	3	748; 3440; 4629
MbiI	GAG!CGG	3	1945; 3276; 4683
MboI	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
MboII	GAAGANNNNNNNN!	11	962; 1250; 1263; 1394; 1764; 2186; 3272; 3500; 4377; 4587; 5206
MboII	!NNNNNNNTCTTC	7	1010; 1223; 2180; 4667; 4834; 5034; 5277
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	2766
MfII	R!GATCY	13	585; 733; 1015; 1618; 1922; 2437; 4187; 4433; 4825; 5184; 5196; 5282; 5293
MhII	GDGCH!C	23	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1978; 2008; 2107; 2170; 2500; 2599; 3207; 3962; 4055; 4129; 4319; 4381; 5091; 5624
MIsI	TGG!CCA	3	789; 1116; 4098
MluI	A!CGCGT	0	
MluNI	TGG!CCA	3	789; 1116; 4098
MlyI	GAGTCNNNNN!	5	1102; 1644; 2613; 3068; 3500
MlyI	!NNNNNGACTC	6	404; 1524; 2661; 3075; 4681; 5558
Mly113I	GG!CGCC	3	660; 673; 4016
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	3109
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	4	1445; 2341; 5541; 5725
MnII	CCTCNNNNNNN!	10	884; 1341; 2139; 2735; 3799; 4617; 4823; 5137; 5507; 5831
MnII	!NNNNNGAGG	40	541; 816; 886; 910; 992; 1202; 1214; 1247; 1298; 1385; 1418; 1454; 1564; 1574; 1655; 1682; 1712; 1754; 1876; 1946; 2027; 2201; 2264; 2276; 2315; 2327; 2417; 2447; 2695; 3160; 3491; 3769; 3812; 3827; 3867; 3931; 4067; 4424; 4854; 5757
Mph1103I	ATGCA!T	3	3588; 3660; 5991
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	3233; 4516; 4799
MroXI	GAANN!NN TTC	1	2184
MscI	TGG!CCA	3	789; 1116; 4098
MseI	T!TAA	16	7; 1768; 2717; 2778; 2899; 2920; 2931; 2943; 2954; 2971; 3069; 3340; 5159; 5173; 5178; 5230
MslI	CAYNN!NNRTG	6	365; 1437; 2118; 2175; 2295; 4453

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspI	C!CGG	31	638; 677; 681; 731; 778; 793; 802; 914; 935; 1355; 1655; 1832; 1919; 1929; 2089; 3234; 3921; 3998; 4020; 4048; 4179; 4269; 4336; 4517; 4792; 4800; 4892; 5366; 5556; 5582; 5729
Msp20I	TGG!CCA	3	789; 1116; 4098
MspA1I	CMG!CKG	8	1193; 1913; 2266; 2471; 3514; 4122; 5351; 5596
MspCI	C!TTAAG	1	2898
MspJI	CNNRNNNNNNNNNN!	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; 1958; 1978; 1991; 2004; 2019; 2036; 2062; 2076; 2101; 2114; 2129; 2142; 2156; 2175; 2204; 2217; 2231; 2252; 2270; 2294; 2307; 2321; 2342; 2360; 2399; 2412; 2432; 2447; 2465; 2484; 2498; 2513; 2526; 2552; 2576; 2593; 2612; 2629; 2643; 2666; 2683; 2699; 2723; 2740; 2753; 2794; 2808; 2821; 2839; 2877; 2892; 2910; 2951; 2975; 2995; 3013; 3034; 3057; 3089; 3104; 3126; 3144; 3157; 3178; 3195; 3208; 3221; 3237; 3250; 3280; 3295; 3320; 3338; 3351; 3366; 3390; 3404; 3428; 3453; 3469; 3507; 3523; 3562; 3576; 3590; 3618; 3634; 3648; 3662; 3691; 3704; 3725; 3734; 3756; 3786; 3802; 3820; 3850; 3873; 3897; 3921; 3940; 3968; 3994; 4010; 4023; 4046; 4060; 4080; 4093; 4107; 4126; 4140; 4153; 4169; 4184; 4197; 4213; 4228; 4244; 4269; 4288; 4304; 4317; 4330; 4348; 4362; 4376; 4392; 4414; 4430; 4449; 4471; 4487; 4510; 4529; 4543; 4559; 4573; 4593; 4609; 4622; 4644; 4677; 4691; 4711; 4724; 4738; 4792; 4805; 4828; 4841; 4860; 4877; 4904; 4940; 4973; 4992; 5017; 5038; 5065; 5078; 5095; 5109; 5124; 5140; 5200; 5225; 5241; 5263; 5276; 5290; 5321; 5335; 5360; 5378; 5393; 5406; 5425; 5438; 5453; 5482; 5501; 5519; 5544; 5559; 5578; 5594; 5613; 5631; 5647; 5661; 5680; 5707; 5730; 5752; 5771; 5786; 5799; 5816; 5836; 5863; 5876; 5895; 5920; 5943; 5957; 5970; 5987
MspJI	!NNNNNNNNNNNNNYNG	256	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; 1932; 1952; 1974; 1993; 2010; 2041; 2058; 2075; 2093; 2116; 2137; 2157; 2178; 2205; 2226; 2244; 2266; 2290; 2307; 2334; 2363; 2382; 2406; 2426; 2451; 2472; 2489; 2526; 2546; 2567; 2586; 2617; 2650; 2668; 2697; 2726; 2768; 2851; 2886; 2913; 2936; 2965; 3009; 3031; 3063; 3099; 3116; 3137; 3174; 3194; 3211; 3228; 3263; 3281; 3299; 3316; 3340; 3362; 3389; 3417; 3443; 3481; 3502; 3519; 3537; 3560; 3581; 3609; 3632; 3653; 3671; 3692; 3709; 3732; 3756; 3776; 3794; 3816; 3847; 3869; 3895; 3914; 3931; 3959; 3978; 3997; 4015; 4033; 4054; 4076; 4100; 4133; 4153; 4171; 4192; 4218; 4245; 4262; 4279; 4296; 4322; 4344; 4366; 4384; 4404; 4423; 4445; 4483; 4503; 4527; 4547; 4567; 4594; 4618; 4651; 4670; 4698; 4720; 4749; 4777; 4802; 4821; 4840; 4861; 4878; 4895; 4926; 4953; 4973; 4996; 5016; 5053; 5070; 5089; 5115; 5135; 5174; 5201; 5220; 5238; 5275; 5293; 5334; 5352; 5378; 5395; 5427; 5456; 5484; 5505; 5528; 5547; 5568; 5586; 5603; 5621; 5647; 5668; 5688; 5708; 5726; 5747; 5773; 5790; 5809; 5828; 5857; 5876; 5894; 5913; 5931; 5949; 5972
MspR9I	CC!NGG	46	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4020; 4180; 4403; 4793; 4982; 5085; 5557; 5775; 5788; 5909
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	2766
MvaI	CC!WGG	31	90; 283; 645; 657; 786; 870; 882; 900; 963; 1527; 1674; 1680; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4403; 4982; 5085; 5775; 5788; 5909



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Mva1269I	GAATGCN!	1	2767
Mva1269I	G!CATTC	1	2860
MvnI	CG!CG	21	60; 693; 1913; 2029; 2266; 2305; 2584; 2665; 2940; 3316; 3336; 3360; 3391; 4082; 4383; 4821; 4905; 4968; 5037; 5310; 5891
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	43	90; 212; 244; 283; 376; 400; 601; 697; 718; 754; 1074; 1118; 1281; 1490; 1590; 1728; 1988; 2089; 2102; 2146; 2377; 2569; 2620; 2659; 3243; 3273; 3300; 3342; 3583; 3655; 3706; 3785; 4007; 4091; 4114; 4253; 4376; 4459; 4726; 4913; 5117; 5316; 5888
NaeI	GCC!GGC	3	3235; 4518; 4801
NarI	GG!CGCC	3	660; 673; 4016
NciI	CC!SGG	15	677; 731; 779; 794; 803; 936; 1356; 1655; 1656; 1919; 1920; 4020; 4180; 4793; 5557
NcoI	C!CATGG	4	360; 1145; 3745; 4448
NdeI	CA!TATG	1	234
NdeII	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
NgoAVIII	GACNNNNNTGANNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	3233; 4516; 4799
NheI	G!CTAGC	1	591
NlaIII	CATG!	30	304; 364; 602; 773; 851; 1121; 1149; 1238; 1346; 1538; 1805; 1943; 2174; 2204; 2399; 2594; 2639; 3446; 3586; 3658; 3749; 3890; 4235; 4421; 4452; 4478; 4834; 5218; 5938; 5989
NlaIV	GGN!NCC	30	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 2513; 3171; 3192; 3204; 3395; 3556; 3628; 4017; 4052; 4900; 4979; 5024; 5867; 5906
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	2848; 3163; 4755
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1759; 5827
Nli3877I	CYCGR!G	4	1658; 1922; 2167; 2209
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	3805; 4241
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	3770
NmeDI	RCCGGYNNNNNNN!	8	649; 692; 1940; 2100; 3245; 4347; 4528; 4811
NmeDI	!NNNNNNNNNNNNRCCGGY	8	624; 667; 1915; 2075; 3220; 4322; 4503; 4786
NmuCI	!GTSAC	4	2120; 3305; 4136; 4442
NotI	GC!GGCCGC	1	2660
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	4118
NsiI	ATGCA!T	3	3588; 3660; 5991
NspI	RCATG!Y	4	3586; 3658; 4421; 5938
NspV	TT!CGAA	1	4698
OliI	CACNN!NNGTG	3	1437; 2118; 2295
PabI	GTA!C	14	220; 245; 300; 333; 384; 541; 1408; 1503; 1910; 2257; 2368; 2392; 2650; 4323
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	3586; 3658; 4421
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	3	1234; 3442; 5214
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	4	644; 2501; 4981; 5084
PauI	G!CGCGC	0	
PceI	AGG!CCT	2	1267; 3837
PciI	A!CATGT	1	5934
PciSI	GCTCTTCN!	1	1236
PciSI	!NNNNGAAGAGC	2	4360; 4570
Pcsi	WCGNNNN!NNNCGW	10	1385; 1969; 2581; 2638; 4310; 4387; 4630; 4704; 5097; 5615
PctI	GAATGCN!	1	2767
PctI	G!CATTC	1	2860
PdiI	GCC!GGC	3	3235; 4518; 4801
PdmI	GAANN!NNTTC	1	2184
PfeI	G!AWTC	5	4501; 4635; 4745; 4782; 5960

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	4134
PfIMI	CCANNNN!NTGG	4	1130; 1514; 2360; 2636
PfoI	T!CCNGGA	6	729; 934; 2218; 2239; 2599; 4791
PhoI	GG!CC	40	84; 277; 680; 696; 784; 789; 873; 1116; 1267; 1359; 1551; 1584; 1677; 1692; 1917; 2011; 2111; 2353; 2409; 2419; 2475; 2512; 2662; 2982; 3124; 3779; 3785; 3794; 3837; 3924; 4098; 4489; 4516; 5025; 5082; 5115; 5460; 5894; 5912; 5923
PinAI	A!CCGGT	2	637; 1928
PlaDI	CATCAGNNNNNNNNNNNNNNNNNNNN!	3	2401; 2584; 4397
PlaDI	!NNNNNNNNNNNNNNNNNNNNCTGATG	3	1061; 3962; 4217
PleI	GAGTCNNNN!	5	1101; 1643; 2612; 3067; 3499
PleI	!NNNNNGACTC	6	404; 1524; 2661; 3075; 4681; 5558
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmII	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	3098
PpiI	!NNNNNNNNGAGNNNNNGTTC	4	1944; 2058; 2262; 5228
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	4	1976; 2090; 2294; 5260
PpiI	!NNNNNNNGAACNNNNNNCTC	1	3066
Ppsi	GAGTCNNNN!	5	1101; 1643; 2612; 3067; 3499
Ppsi	!NNNNNGACTC	6	404; 1524; 2661; 3075; 4681; 5558
Ppu10I	A!TGCAT	3	3584; 3656; 5987
Ppu21I	YAC!GTR	3	340; 3132; 4320
PpuMI	RG!GWCCY	3	957; 1001; 1328
PscI	A!CATGT	1	5934
PshAI	GACN!NNGTC	0	
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	2799; 3004
Psp03I	GGWC!C	8	643; 778; 960; 1004; 1331; 2570; 4535; 4980
Psp5II	RG!GWCCY	3	957; 1001; 1328
Psp6I	!CCWGG	31	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4401; 4980; 5083; 5773; 5786; 5907
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	1	2120
PspGI	!CCWGG	31	88; 281; 643; 655; 784; 868; 880; 898; 961; 1525; 1672; 1678; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4401; 4980; 5083; 5773; 5786; 5907
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	30	467; 642; 661; 674; 728; 776; 783; 897; 958; 978; 1152; 1359; 1620; 1909; 1917; 1924; 2513; 3171; 3192; 3204; 3395; 3556; 3628; 4017; 4052; 4900; 4979; 5024; 5867; 5906
PspOMI	G!GGCCC	2	1357; 1915
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	4	125; 687; 3746; 4745
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	2	2483; 4148
PspPI	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2110; 2351; 2511; 2567; 3123; 4532; 4977; 5023; 5081; 5114
PspPPI	RG!GWCCY	3	957; 1001; 1328
PspPRI	CCYAGNNNNNNNNNNNNNNNN!	4	980; 3569; 3641; 5147
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	8	701; 991; 1445; 1555; 1867; 2121; 3482; 4677
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	6	785; 960; 1004; 1331; 1694; 5117
PstI	CTGCA!G	3	1057; 1192; 1900
PstNI	CAGNNN!CTG	4	714; 973; 5117; 5525
PsuI	R!GATCY	13	585; 733; 1015; 1618; 1922; 2437; 4187; 4433; 4825; 5184; 5196; 5282; 5293
PsyI	GACN!NNGTC	1	4134

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PteI	G!CGGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	4	1193; 2471; 3514; 4122
RcaI	T!CATGA	3	1234; 3442; 5214
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	1	4531
RceI	!NNNNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	1	2745
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNNNN!	2	1024; 1786
RpaB5I	!NNNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	14	219; 244; 299; 332; 383; 540; 1407; 1502; 1909; 2256; 2367; 2391; 2649; 4322
RsaNI	G!TAC	14	218; 243; 298; 331; 382; 539; 1406; 1501; 1908; 2255; 2366; 2390; 2648; 4321
RseI	CAYNN!NNRTG	6	365; 1437; 2118; 2175; 2295; 4453
RsrII	CG!GWCCG	1	4532
Rsr2I	CG!GWCCG	1	4532
SacI	GAGCT!C	0	
SacII	CCGC!GG	2	1914; 2267
SalI	G!TCGAC	1	1901
SapI	GCTCTCN!	1	1236
SapI	!NNNNGAAGAGC	2	4360; 4570
SaqAI	T!TAA	16	7; 1768; 2717; 2778; 2899; 2920; 2931; 2943; 2954; 2971; 3069; 3340; 5159; 5173; 5178; 5230
SatI	GC!NGC	47	689; 694; 767; 1078; 1191; 1227; 1471; 1608; 1626; 1742; 1793; 2097; 2267; 2459; 2462; 2469; 2546; 2660; 2663; 2793; 3312; 3334; 3348; 3786; 3925; 3977; 3988; 4078; 4083; 4120; 4161; 4248; 4251; 4254; 4490; 4586; 4627; 4641; 4755; 5094; 5109; 5320; 5526; 5529; 5594; 5737; 5892
Sau96I	G!GNCC	23	83; 276; 640; 775; 782; 957; 1001; 1328; 1358; 1583; 1676; 1691; 1916; 2110; 2351; 2511; 2567; 3123; 4532; 4977; 5023; 5081; 5114
Sau3AI	!GATC	31	585; 733; 991; 1015; 1204; 1339; 1519; 1618; 1726; 1922; 1984; 2068; 2437; 2521; 2673; 3853; 3857; 3876; 4187; 4265; 4346; 4355; 4433; 4809; 4825; 5184; 5196; 5274; 5282; 5293; 5368
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	1407
SchI	GAGTCNNNNN!	5	1102; 1644; 2613; 3068; 3500
SchI	!NNNNNGACTC	6	404; 1524; 2661; 3075; 4681; 5558
SciI	CTC!GAG	0	
ScrFI	CC!NGG	46	90; 283; 645; 657; 677; 731; 779; 786; 794; 803; 870; 882; 900; 936; 963; 1356; 1527; 1655; 1656; 1674; 1680; 1919; 1920; 2108; 2118; 2135; 2220; 2241; 2295; 2349; 2421; 2502; 2601; 3552; 3607; 3624; 4020; 4180; 4403; 4793; 4982; 5085; 5557; 5775; 5788; 5909
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	6	1706; 2246; 3594; 3666; 3835; 5777
SdeAI	!NNNNNNNNNNNNNNNNNNCTYCTG	3	2578; 4171; 4656
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	23	651; 723; 943; 1013; 1153; 1361; 1434; 1444; 1919; 1978; 2008; 2107; 2170; 2500; 2599; 3207; 3962; 4055; 4129; 4319; 4381; 5091; 5624
SelI	!CGCG	21	58; 691; 1911; 2027; 2264; 2303; 2582; 2663; 2938; 3314; 3334; 3358; 3389; 4080; 4381; 4819; 4903; 4966; 5035; 5308; 5889

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SetI	ASST!	91	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; 1960; 1993; 2005; 2065; 2098; 2275; 2314; 2389; 2473; 2497; 2542; 2547; 2647; 2706; 2727; 2736; 2748; 2797; 2964; 3079; 3091; 3134; 3171; 3221; 3244; 3368; 3516; 3611; 3804; 3917; 4045; 4124; 4135; 4207; 4278; 4322; 4582; 4728; 4772; 5103; 5134; 5193; 5236; 5379; 5400; 5499; 5636; 5651; 5670; 5682; 5726; 5772; 5823
SexAI	A!CCWGGT	1	3605
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	11	835; 1054; 1895; 1978; 2149; 2832; 3595; 3667; 4315; 4379; 4654
SfaNI	!NNNNNNNNNGATGC	7	357; 1301; 1769; 3974; 4229; 4445; 5837
SfcI	C!TRYAG	7	1053; 1188; 1596; 1896; 3351; 5478; 5669
SfiI	GGCCNNNN!NGGCC	1	3791
SfoI	GGC!GCC	3	661; 674; 4017
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	2	1914; 2267
SfuI	TT!CGAA	1	4698
SgeI	CNNGNNNNNNNN!	247	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; 1958; 1978; 1991; 2004; 2019; 2036; 2072; 2101; 2114; 2129; 2142; 2156; 2175; 2204; 2217; 2231; 2252; 2270; 2294; 2307; 2321; 2342; 2360; 2399; 2412; 2432; 2447; 2465; 2484; 2498; 2513; 2526; 2552; 2576; 2593; 2612; 2643; 2676; 2723; 2752; 2794; 2877; 2951; 3035; 3057; 3089; 3126; 3144; 3163; 3178; 3220; 3237; 3254; 3289; 3303; 3320; 3342; 3366; 3390; 3455; 3469; 3507; 3523; 3563; 3576; 3595; 3618; 3635; 3648; 3667; 3697; 3718; 3735; 3758; 3793; 3820; 3851; 3873; 3899; 3921; 3940; 3968; 4004; 4023; 4046; 4060; 4080; 4093; 4107; 4126; 4140; 4159; 4191; 4205; 4218; 4244; 4275; 4288; 4305; 4322; 4336; 4353; 4371; 4386; 4414; 4430; 4449; 4471; 4487; 4510; 4529; 4554; 4573; 4593; 4620; 4644; 4677; 4696; 4724; 4738; 4804; 4828; 4843; 4866; 4887; 4904; 4952; 4979; 4993; 5022; 5046; 5079; 5096; 5116; 5129; 5142; 5200; 5227; 5246; 5276; 5301; 5321; 5335; 5360; 5378; 5415; 5453; 5482; 5510; 5524; 5544; 5559; 5580; 5594; 5613; 5631; 5647; 5687; 5707; 5734; 5752; 5773; 5786; 5799; 5816; 5840; 5863; 5895; 5920; 5947; 5969
SgeI	!NNNNNNNNNNNNCNG	212	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; 1932; 1952; 1974; 1993; 2010; 2046; 2075; 2093; 2116; 2141; 2178; 2205; 2226; 2244; 2268; 2290; 2307; 2334; 2373; 2391; 2421; 2439; 2458; 2481; 2500; 2526; 2550; 2567; 2586; 2617; 2650; 2697; 2726; 2768; 2851; 2925; 3009; 3031; 3063; 3100; 3118; 3137; 3194; 3211; 3228; 3263; 3281; 3301; 3321; 3340; 3364; 3429; 3481; 3537; 3569; 3592; 3609; 3641; 3671; 3692; 3709; 3732; 3767; 3794; 3825; 3847; 3873; 3895; 3914; 3942; 3978; 3997; 4020; 4041; 4059; 4076; 4100; 4133; 4165; 4192; 4218; 4249; 4279; 4296; 4322; 4345; 4366; 4388; 4408; 4428; 4445; 4484; 4503; 4528; 4547; 4567; 4594; 4618; 4651; 4670; 4698; 4720; 4778; 4802; 4821; 4840; 4861; 4878; 4926; 4953; 4973; 4996; 5020; 5053; 5070; 5090; 5116; 5174; 5201; 5220; 5250; 5275; 5295; 5334; 5352; 5389; 5427; 5456; 5484; 5505; 5533; 5554; 5587; 5605; 5661; 5681; 5708; 5726; 5747; 5773; 5790; 5814; 5837; 5869; 5894; 5921; 5943; 5972
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	2	1914; 2267
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	6	27; 775; 807; 3163; 4950; 5743

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SimI	!GACCC	7	106; 957; 1651; 2260; 4444; 5012; 5260
SinI	G!GWCC	8	640; 775; 957; 1001; 1328; 2567; 4532; 4977
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	2	1656; 1920
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	6	365; 1437; 2118; 2175; 2295; 4453
SmlI	C!TYRAG	7	1215; 1632; 2898; 4407; 5289; 5566; 5828
SmoI	C!TYRAG	7	1215; 1632; 2898; 4407; 5289; 5566; 5828
SmuI	CCCGCNNNN!	15	93; 119; 286; 753; 1050; 1593; 1836; 2163; 2271; 2589; 3338; 3693; 3714; 4910; 5042
SmuI	!NNNNNNGCGGG	7	1906; 1938; 3269; 4139; 4676; 4814; 4961
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	3586; 3658; 4421
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 1891; 2766; 2830; 2908; 2934; 2945; 3592; 3664; 3756; 5174
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	2	1001; 1328
SseBI	AGG!CCT	2	1267; 3837
SsiI	C!CGC	49	58; 86; 98; 112; 279; 507; 589; 746; 866; 1043; 1154; 1586; 1739; 1742; 1829; 1911; 2156; 2264; 2303; 2441; 2554; 2570; 2582; 2651; 2663; 3331; 3334; 3348; 3438; 3686; 3698; 3707; 3719; 3729; 3740; 3786; 3925; 3988; 4490; 4535; 4601; 4627; 4752; 4755; 4903; 5035; 5342; 5486; 5982
SsiI	G!CGG	32	370; 403; 528; 693; 766; 1913; 1945; 2029; 2266; 2458; 2461; 2659; 3276; 3303; 3391; 3501; 4082; 4146; 4247; 4250; 4530; 4585; 4683; 4821; 4968; 5108; 5351; 5596; 5717; 5736; 5863; 5891
SspI	AAT!ATT	2	2924; 3477
SspDI	G!GCGCC	3	659; 672; 4015
SspD5I	GGTGANNNNNNNN!	8	376; 1788; 2043; 2132; 2285; 2309; 5087; 5203
SspD5I	!NNNNNNNNNTCACC	4	598; 1435; 3132; 4193
SstI	GAGC!C	0	
SstII	CCGC!GG	2	1914; 2267
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	33	92; 118; 285; 683; 737; 752; 1049; 1076; 1592; 1661; 1835; 1925; 1984; 2107; 2162; 2170; 2212; 2270; 2407; 2521; 2588; 3215; 3337; 3692; 3713; 4026; 4429; 4568; 4639; 4909; 5041; 5271; 5709
Sth132I	!NNNNNNNNCGGG	26	15; 407; 470; 770; 785; 927; 1347; 1607; 1647; 1905; 1937; 3216; 3268; 3369; 4096; 4138; 4171; 4675; 4784; 4813; 4960; 5064; 5095; 5548; 5592; 5800
Sth302II	CC!GG	31	639; 678; 682; 732; 779; 794; 803; 915; 936; 1356; 1656; 1833; 1920; 1930; 2090; 3235; 3922; 3999; 4021; 4049; 4180; 4270; 4337; 4518; 4793; 4801; 4893; 5367; 5557; 5583; 5730
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	5	1855; 3884; 4341; 4366; 4820
StsI	!NNNNNNNNNNNNNNCATCC	8	812; 1127; 1337; 1796; 2126; 2201; 2330; 3688
StuI	AGG!CCT	2	1267; 3837
StyI	C!CWWGG	8	360; 1145; 1513; 1783; 3745; 3838; 4448; 4853
StyD4I	!CCNGG	46	88; 281; 643; 655; 675; 729; 777; 784; 792; 801; 868; 880; 898; 934; 961; 1354; 1525; 1653; 1654; 1672; 1678; 1917; 1918; 2106; 2116; 2133; 2218; 2239; 2293; 2347; 2419; 2500; 2599; 3550; 3605; 3622; 4018; 4178; 4401; 4791; 4980; 5083; 5555; 5773; 5786; 5907
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	19	76; 198; 269; 543; 581; 1031; 1301; 1439; 1453; 1505; 1907; 3107; 4396; 4512; 4620; 4943; 5434; 5904; 5975
TaiI	ACGT!	18	125; 137; 178; 261; 342; 447; 1502; 2005; 2389; 2497; 3079; 3091; 3134; 3244; 4135; 4322; 5103; 5236
TaqI	T!CGA	20	997; 1207; 1522; 1889; 1902; 1987; 2281; 2308; 2452; 3165; 3856; 4129; 4285; 4309; 4345; 4507; 4698; 4743; 4998; 5836
TaqII	GACCGANNNNNNNNNN!	4	921; 3036; 4053; 4721
TaqII	!NNNNNNNNNTCGGTC	1	4965
TaqII	CACCCANNNNNNNNNN!	1	2643
TaqII	!NNNNNNNNNTGGGTG	3	172; 3920; 4512

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
TasI	!AATT	11	18; 1891; 2766; 2830; 2908; 2934; 2945; 3592; 3664; 3756; 5174
TatI	W!GTACW	8	217; 297; 330; 381; 1405; 2254; 2365; 2389
TauI	GCSG!C	23	696; 769; 1744; 2269; 2461; 2464; 2662; 2665; 3336; 3350; 3788; 3927; 3990; 4085; 4250; 4253; 4492; 4588; 4629; 4757; 5111; 5739; 5894
TfiI	G!AWTC	5	4501; 4635; 4745; 4782; 5960
ThiI	C!TCGAG	0	
TruII	T!TAA	16	7; 1768; 2717; 2778; 2899; 2920; 2931; 2943; 2954; 2971; 3069; 3340; 5159; 5173; 5178; 5230
Tru9I	T!TAA	16	7; 1768; 2717; 2778; 2899; 2920; 2931; 2943; 2954; 2971; 3069; 3340; 5159; 5173; 5178; 5230
TscAI	CASTGNN!	7	1444; 2151; 2862; 4145; 5255; 5526; 5539
TseI	G!CWGC	24	688; 1077; 1190; 1226; 1470; 1607; 1625; 1792; 2096; 2468; 2545; 2792; 3311; 3976; 4077; 4119; 4160; 4253; 4640; 5093; 5319; 5525; 5528; 5593
TsoI	TARCCANNNNNNNNNN!	2	2988; 3335
TsoI	!NNNNNNNNNTGGYTA	2	2793; 4545
Tsp45I	!GTSAC	4	2120; 3305; 4136; 4442
Tsp509I	!AATT	11	18; 1891; 2766; 2830; 2908; 2934; 2945; 3592; 3664; 3756; 5174
TspDTI	ATGAANNNNNNNNNN!	5	1251; 2187; 2774; 4075; 4779
TspDTI	!NNNNNNNNNTTCAT	6	26; 1223; 2066; 4493; 4949; 5156
TspEI	!AATT	11	18; 1891; 2766; 2830; 2908; 2934; 2945; 3592; 3664; 3756; 5174
TspGWI	ACGGANNNNNNNNNN!	1	4891
TspGWI	!NNNNNNNNNTCCGT	1	728
TspMI	C!CCGGG	2	1654; 1918
TspRI	CASTGNN!	7	1444; 2151; 2862; 4145; 5255; 5526; 5539
TstI	CACNNNNNNNTCCNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	4134
Tth111II	CAARCANNNNNNNNNN!	1	5343
Tth111II	!NNNNNNNNNTGYTTG	3	4451; 5311; 5350
UnbI	!GGNCC	23	82; 275; 639; 774; 781; 956; 1000; 1327; 1357; 1582; 1675; 1690; 1915; 2109; 2350; 2510; 2566; 3122; 4531; 4976; 5022; 5080; 5113
Van9II	CCANNNN!NTGG	4	1130; 1514; 2360; 2636
Vha464I	C!TTAAG	1	2898
VneI	G!TGCAC	2	2004; 5620
VpaK11AI	!GGWCC	8	639; 774; 956; 1000; 1327; 2566; 4531; 4976
VpaK11BI	G!GWCC	8	640; 775; 957; 1001; 1328; 2567; 4532; 4977
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	1	1572
XapI	R!AATTY	4	1891; 2830; 2934; 2945
XbaI	T!CTAGA	1	2670
XceI	RCATG!Y	4	3586; 3658; 4421; 5938
XcmI	CCANNNNN!NNNTGG	2	2417; 2498
XhoI	C!TCGAG	0	
XhoII	R!GATCY	13	585; 733; 1015; 1618; 1922; 2437; 4187; 4433; 4825; 5184; 5196; 5282; 5293
XmaI	C!CCGGG	2	1654; 1918
XmaJI	C!CTAGG	2	3838; 4853
XmiI	GT!MKAC	1	1902
XmnI	GAANN!NNTTC	1	2184
XspI	C!TAG	9	592; 1398; 2671; 2865; 3283; 3839; 4854; 5188; 5441
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	1	1407
Zsp2I	ATGCA!T	3	3588; 3660; 5991