

pKatushka2S-B vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	1	49
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	2	1949; 2362
AatI	AGG!CCT	0	
AatII	GACGT!C	1	4069
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	2026
AccII	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
AccIII	T!CCGGA	1	1232
Acc16I	TGC!GCA	1	3369
Acc36I	ACCTGCNNNN!	2	674; 836
Acc36I	!NNNNNNNNGCAGGT	0	
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	4	208; 268; 1702; 3095
AccB7I	CCANNNN!NTGG	1	1468
AccBSI	CCG!CTC	1	1839
AccBSI	GAG!CGG	5	36; 68; 856; 2187; 3988
AceIII	CAGCTCNNNNNNN!	3	1906; 2206; 3446
AceIII	!NNNNNNNNNNNGAGCTG	2	1251; 1833
AciI	C!CGC	25	467; 605; 707; 860; 952; 1214; 1578; 1834; 1837; 2094; 2120; 2137; 2299; 2327; 2454; 2473; 2594; 2839; 3210; 3301; 3538; 3703; 3780; 3889; 4035
AciI	G!CGG	21	36; 68; 302; 614; 656; 856; 1672; 1927; 1966; 1976; 2018; 2043; 2081; 2180; 2187; 2208; 2704; 2848; 3492; 3659; 3988
AcII	AA!CGTT	3	1323; 3373; 3746
AcIWI	GGATCNNNN!	5	129; 442; 2903; 3000; 3780
AcIWI	!NNNNNGATCC	8	122; 689; 893; 2815; 2901; 2999; 3463; 3784
AcoI	Y!GGCCR	4	812; 857; 1501; 3535
AcsI	R!AATTY	2	17; 1236
AcuI	CTGAAGNNNNNNNNNNNNNNNNNN!	2	664; 2802
AcuI	!NNNNNNNNNNNNNNNCTTCAG	1	3814
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	2	3684; 4066
AdeI	CACNNN!GTG	0	
AfaI	GT!AC	7	199; 349; 601; 1115; 1653; 2062; 3627
AfeI	AGC!GCT	0	
AfiI	CCNNNNN!NNGG	10	265; 378; 544; 753; 1468; 1905; 2276; 2294; 2460; 2739
AflII	C!TTAAG	0	
AflIII	A!CRYGT	1	2254
AgeI	A!CCGGT	1	135
AgsI	TTS!AA	7	59; 231; 2723; 3925; 3948; 3958; 4002
AhdI	GACNNN!NNGTC	1	3147
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
AjnI	!CCWGG	9	329; 377; 473; 1411; 1467; 1715; 2280; 2401; 2414
AjuI	GAANNNNNNNTTGGNNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNNNTTGG	0	
AleI	CACNN!NNGTG	1	148
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	1	610
AlfI	!NNNNNNNNNGCANNNNNNNTGC	1	576

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	555
AloI	!NNNNNNNGGANNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	523
AluI	AG!CT	24	341; 648; 851; 866; 875; 880; 984; 988; 1008; 1017; 1136; 1265; 1736; 1847; 1896; 1915; 2196; 2422; 2558; 2815; 3135; 3336; 3436; 3499
AluBI	AG!CT	24	341; 648; 851; 866; 875; 880; 984; 988; 1008; 1017; 1136; 1265; 1736; 1847; 1896; 1915; 2196; 2422; 2558; 2815; 3135; 3336; 3436; 3499
AlwI	GGATCNNNN!	5	129; 442; 2903; 3000; 3780
AlwI	!NNNNNGATCC	8	122; 689; 893; 2815; 2901; 2999; 3463; 3784
Alw21I	GWGCW!C	5	238; 2074; 2572; 3733; 3818
Alw26I	GTCTCN!	2	1460; 3984
Alw26I	!NNNNNGAGAC	4	744; 775; 1897; 3208
Alw44I	G!TGCAC	4	234; 2070; 2568; 3814
AlwNI	CAGNNN!CTG	2	821; 2670
Ama87I	C!YCGRG	1	1
Aor13HI	T!CCGGA	1	1232
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	1	2079
ApaLI	G!TGCAC	4	234; 2070; 2568; 3814
ApeKI	G!CWGC	15	353; 497; 795; 1847; 1893; 1990; 2159; 2177; 2596; 2661; 2664; 2870; 3135; 3198; 3564
ApoI	R!AATTY	2	17; 1236
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	2378
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	0	
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	0	
AquII	!NNNNNNNNNNNNNNNNNGTNCGGC	1	329
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	125
AquIII	!NNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNCTTCCYC	1	2122
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	1	1535
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNGTCCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNGACNNNNNNNTTYG	1	1503
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	3319
Asi256I	G!ATC	21	122; 128; 171; 285; 435; 519; 695; 899; 2821; 2896; 2907; 2915; 2993; 3005; 3110; 3451; 3469; 3515; 3773; 3790; 3826
AsiGI	A!CCGGT	1	135
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2001
Asp700I	GAANN!NNTTC	1	3746
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	0	
AspEI	GACNNN!NNGTC	1	3147
AspLEI	GCG!C	14	1857; 1960; 1990; 2131; 2164; 2434; 2501; 2601; 2775; 2884; 3277; 3370; 3707; 4039
AspS9I	G!GNCC	10	304; 547; 639; 744; 1778; 3189; 3268; 3285; 3507; 4123
AssI	AGT!ACT	2	1653; 3627
AsuII	TT!CGAA	0	
AsuC2I	CC!SGG	7	728; 956; 1900; 1935; 2634; 3330; 3681
AsuHPI	GGTGANNNNNNNN!	10	166; 540; 983; 1272; 1416; 1484; 1818; 1876; 3633; 3874
AsuHPI	!NNNNNNNTCACC	9	165; 429; 1278; 1472; 1526; 2990; 3217; 3839; 4128
AsuNHI	G!CTAGC	1	984
AvaI	C!YCGRG	1	1
AvaII	G!GWCC	3	744; 3285; 3507
AviII	TGC!GCA	1	3369
AvrII	C!CTAGG	0	
AxyI	CC!TNAGG	1	413
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BaeI	!NNNNNNNGRTACNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCMI	8	211; 238; 271; 848; 1707; 2074; 2572; 3818
BalI	TGG!CCA	2	814; 1503
BamHI	G!GATCC	1	127
BanI	G!GYRCC	4	208; 268; 1702; 3095
BanII	GRGCY!C	0	
BanIII	AT!CGAT	0	
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	1	1468
BauI	C!ACGAG	2	799; 4118
BauI	C!TCGTG	3	649; 2427; 3811
BbeI	GGCGC!C	0	
Bbr7I	GAAGACNNNNNN!	1	460
Bbr7I	!NNNNNNNNNNNGTCTTC	1	4120
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	455
BbsI	!NNNNNNGTCTTC	1	4125
BbuI	GCATG!C	0	
BbvI	GCAGCNNNNNNNN!	7	365; 807; 1905; 2002; 2673; 2882; 3576
BbvI	!NNNNNNNNNNNGCTGC	7	484; 1834; 2146; 2164; 2583; 3122; 3185
Bbv12I	GWGCW!C	5	238; 2074; 2572; 3733; 3818
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	546; 930; 3191; 3315; 3602
BccI	!NNNNNGATGG	3	630; 798; 1605
BceAI	ACGGCNNNNNNNNNNNN!	5	366; 510; 561; 1162; 2756
BceAI	!NNNNNNNNNNNNNGCCGT	1	1587
BcefI	ACGGCNNNNNNNNNNNN!	5	366; 510; 561; 1162; 2756
BcefI	!NNNNNNNNNNNNNGCCGT	1	1588
BcgI	CGANNNNNNNTGCNNNNNNNNNNNN!	1	3686
BcgI	!NNNNNNNNNNNGCANNNNNNNTCG	0	
BcgI	GCANNNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNNNTGC	1	3652
BciVI	GTATCCNNNNNN!	0	
BciVI	!NNNNNGGATAC	2	2457; 3984
BclI	T!GATCA	1	170
BcnI	CC!SGG	7	728; 956; 1900; 1935; 2634; 3330; 3681
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNNTCANNNNNNNNNNNN!	2	1111; 2359
BdaI	!NNNNNNNNNNNTGANNNNNNNTCA	2	1077; 2325
BfaI	C!TAG	7	833; 985; 1733; 1842; 2749; 3002; 3337
BfiI	ACTGGGNNNNN!	2	850; 1785
BfiI	!NNNNCCAGT	2	1995; 3187
BfmI	C!TRYAG	3	2519; 2710; 3388
BfoI	RGCGC!Y	2	2132; 2502
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	0	
BfuI	!NNNNNGGATAC	2	2457; 3984
BfuAI	ACCTGCNNNN!	2	674; 836
BfuAI	!NNNNNNNNNGCAGGT	0	
BfuCI	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
BglI	GCCNNNN!NGGC	3	623; 637; 3267
BglII	A!GATCT	0	
BisI	GC!NGC	28	303; 354; 498; 615; 796; 857; 860; 952; 1578; 1837; 1848; 1894; 1991; 2044; 2160; 2181; 2299; 2454; 2597; 2662; 2665; 2871; 3136; 3199; 3538; 3565; 3660; 3889
BlnI	C!CTAGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BlpI	GC!TNAGC	2	852; 876
BlsI	GCN!GC	28	304; 355; 499; 616; 797; 858; 861; 953; 1579; 1838; 1849; 1895; 1992; 2045; 2161; 2182; 2300; 2455; 2598; 2663; 2666; 2872; 3137; 3200; 3539; 3566; 3661; 3890
BmcAI	AGT!ACT	2	1653; 3627
Bme18I	G!GWCC	3	744; 3285; 3507
Bme1390I	CC!NGG	16	331; 379; 475; 728; 956; 1413; 1469; 1717; 1900; 1935; 2282; 2403; 2416; 2634; 3330; 3681
BmeRI	GACNNN!NNGTC	1	3147
BmeT110I	C!YCGRG	1	1
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	10	305; 548; 640; 745; 1779; 3190; 3269; 3286; 3508; 4124
BmiI	GGN!NCC	11	129; 210; 270; 1704; 2286; 2325; 3097; 3191; 3232; 3443; 4033
BmrI	ACTGGGNNNNN!	2	850; 1785
BmrI	!NNNNCCAGT	2	1995; 3187
BmrFI	CC!NGG	16	331; 379; 475; 728; 956; 1413; 1469; 1717; 1900; 1935; 2282; 2403; 2416; 2634; 3330; 3681
BmsI	GCATCNNNN!	8	392; 1079; 1752; 2055; 2131; 2351; 3403; 3843
BmsI	!NNNNNNNNNGATGC	7	545; 584; 713; 1564; 1920; 2091; 3594
BmtI	GCTAG!C	1	988
BmuI	ACTGGGNNNNN!	2	850; 1785
BmuI	!NNNNCCAGT	2	1995; 3187
BoxI	GACNN!NNGTC	1	787
BpiI	GAAGACNN!	1	455
BpiI	!NNNNNGTCTTC	1	4125
BpII	GAGNNNNNCTCNNNNNNNNNNNNNN!	0	
BpII	!NNNNNNNGAGNNNNNCTC	0	
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	1358
BpmI	!NNNNNNNNNNNNNNCTCCAG	2	472; 3217
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	1	1009
Bpu14I	TT!CGAA	0	
Bpu1102I	GC!TNAGC	2	852; 876
BpuAI	GAAGACNN!	1	455
BpuAI	!NNNNNGTCTTC	1	4125
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	1758; 2643
BpuEI	!NNNNNNNNNNNNNNCTCAAG	5	664; 703; 2345; 2884; 3752
BpuMI	CC!SGG	7	728; 956; 1900; 1935; 2634; 3330; 3681
BpvUI	CGAT!CG	1	3517
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	775; 3208
Bsa29I	AT!CGAT	0	
BsaAI	YAC!GTR	1	2008
BsaBI	GATNN!NNATC	1	126
BsaHI	GR!CGYC	2	3684; 4066
BsaJI	C!CNNGG	9	146; 242; 377; 473; 1467; 1468; 1537; 1716; 2414
BsaMI	GAATGCN!	2	1229; 1636
BsaMI	G!CATTC	0	
BsaWI	W!CCGGW	6	135; 746; 1232; 2460; 2607; 3438
BsaXI	ACNNNNNCTCNNNNNNNNNN!	0	
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	0	
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNGTGTG	1	1950
Bsc4I	CCNNNNN!NNGG	10	265; 378; 544; 753; 1468; 1905; 2276; 2294; 2460; 2739
BscAI	GCATCNNNN!	8	391; 1078; 1751; 2054; 2130; 2350; 3402; 3842
BscAI	!NNNNNGATGC	7	548; 587; 716; 1567; 1923; 2094; 3597
Bse1I	ACTGGN!	8	758; 845; 1043; 1780; 2034; 2662; 2675; 3623
Bse1I	C!CAGT	8	902; 1483; 2001; 2787; 3193; 3311; 3354; 3793
Bse8I	GATNN!NNATC	1	126
Bse21I	CC!TNAGG	1	413

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bse118I	R!CCGGY	2	135; 3227
BseAI	T!CCGGA	1	1232
BseBI	CC!WGG	9	331; 379; 475; 1413; 1469; 1717; 2282; 2403; 2416
BseCI	AT!CGAT	0	
BseDI	C!CNNGG	9	146; 242; 377; 473; 1467; 1468; 1537; 1716; 2414
Bse3DI	GCAATGNN!	2	1255; 3208
Bse3DI	!CATTGC	1	3382
BseGI	GGATGNN!	1	1935
BseGI	!CATCC	8	238; 326; 383; 538; 1229; 3126; 3307; 3594
BseJI	GATNN!NNATC	1	126
BseLI	CCNNNNN!NNGG	10	265; 378; 544; 753; 1468; 1905; 2276; 2294; 2460; 2739
BseMI	GCAATGNN!	2	1255; 3208
BseMI	!CATTGC	1	3382
BseMII	CTCAGNNNNNNNNNN!	6	927; 1471; 1777; 2543; 2952; 3118
BseMII	!NNNNNNNNCTGAG	7	404; 610; 843; 867; 1810; 2055; 3635
BseNI	ACTGGN!	8	758; 845; 1043; 1780; 2034; 2662; 2675; 3623
BseNI	C!CAGT	8	902; 1483; 2001; 2787; 3193; 3311; 3354; 3793
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	115
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	8	211; 238; 271; 848; 1707; 2074; 2572; 3818
BseXI	GCAGCNNNNNNNN!	7	365; 807; 1905; 2002; 2673; 2882; 3576
BseXI	!NNNNNNNNNNNGCTGC	7	484; 1834; 2146; 2164; 2583; 3122; 3185
BseX3I	C!GGCCG	1	857
BseYI	C!CCAGC	0	
BseYI	G!CTGGG	2	575; 2558
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	1	652
Bsh1236I	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
Bsh1285I	CGRY!CG	5	140; 860; 2594; 3517; 3666
BshFI	GG!CC	22	305; 548; 583; 617; 626; 640; 772; 814; 859; 1149; 1194; 1416; 1503; 1780; 2269; 2280; 2298; 2732; 3190; 3270; 3537; 4124
BshNI	G!GYRCC	4	208; 268; 1702; 3095
BshTI	A!CCGGT	1	135
BshVI	AT!CGAT	0	
BsiEI	CGRY!CG	5	140; 860; 2594; 3517; 3666
BsiHKAI	GWGCW!C	5	238; 2074; 2572; 3733; 3818
BsiHKCI	C!YCGRG	1	1
BsiSI	C!CGG	18	136; 728; 747; 955; 1191; 1233; 1361; 1900; 1934; 2461; 2608; 2634; 2824; 3228; 3262; 3329; 3439; 3681
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	10	265; 378; 544; 753; 1468; 1905; 2276; 2294; 2460; 2739
BsIFI	GGGACNNNNNNNNNN!	0	
BsIFI	!NNNNNNNNNNNNNGTCCC	0	
BsmI	GAATGCN!	2	1229; 1636
BsmI	G!CATTC	0	
BsmAI	GTCTCN!	2	1460; 3984
BsmAI	!NNNNNGAGAC	4	744; 775; 1897; 3208
BsmBI	CGTCTCN!	1	1460
BsmBI	!NNNNNGAGACG	1	1897
BsmFI	GGGACNNNNNNNNNN!	0	
BsmFI	!NNNNNNNNNNNNNGTCCC	0	
BsnI	GG!CC	22	305; 548; 583; 617; 626; 640; 772; 814; 859; 1149; 1194; 1416; 1503; 1780; 2269; 2280; 2298; 2732; 3190; 3270; 3537; 4124
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	775; 3208
BsoBI	C!YCGRG	1	1
Bsp13I	T!CCGGA	1	1232
Bsp19I	C!CATGG	2	146; 1537
Bsp24I	GACNNNNNTGGNNNNNNNNNNNN!	2	2779; 2957
Bsp24I	!NNNNNNCCANNNNNNNGTC	1	4051
Bsp24I	CCANNNNNNNGTCNNNNNNNNNNNN!	1	4083

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Bsp24I	!NNNNNNNNGACNNNNNTGG	2	2747; 2925
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	0	
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
Bsp1286I	GDGCH!C	9	211; 238; 271; 848; 1707; 2074; 2572; 3733; 3818
Bsp1407I	T!GTACA	1	197
Bsp1720I	GC!TNAGC	2	852; 876
BspACI	C!CGC	25	467; 605; 707; 860; 952; 1214; 1578; 1834; 1837; 2094; 2120; 2137; 2299; 2327; 2454; 2473; 2594; 2839; 3210; 3301; 3538; 3703; 3780; 3889; 4035
BspACI	G!CGG	21	36; 68; 302; 614; 656; 856; 1672; 1927; 1966; 1976; 2018; 2043; 2081; 2180; 2187; 2208; 2704; 2848; 3492; 3659; 3988
BspCNI	CTCAGNNNNNNNN!	6	926; 1470; 1776; 2542; 2951; 3117
BspCNI	!NNNNNNNCTGAG	7	405; 611; 844; 868; 1811; 2056; 3636
BspDI	AT!CGAT	0	
BspD6I	GA CTNNNN!	4	893; 1735; 2162; 3150
BspD6I	!NNNNNNGAGTC	1	2618
BspEI	T!CCGGA	1	1232
BspFNI	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
BspHI	T!CATGA	3	2974; 3982; 4087
BspLI	GGN!NCC	11	129; 210; 270; 1704; 2286; 2325; 3097; 3191; 3232; 3443; 4033
BspMI	ACCTGCNNNN!	2	674; 836
BspMI	!NNNNNNNNGCAGGT	0	
BspOI	GCTAG!C	1	988
BspPI	GGATCNNNN!	5	129; 442; 2903; 3000; 3780
BspPI	!NNNNNGATCC	8	122; 689; 893; 2815; 2901; 2999; 3463; 3784
BspQI	GCTCTCN!	1	2138
BspQI	!NNNNGAAGAGC	0	
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	0	
BspT107I	G!GYRCC	4	208; 268; 1702; 3095
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNNGAGACC	2	775; 3208
BsrI	ACTGGN!	8	758; 845; 1043; 1780; 2034; 2662; 2675; 3623
BsrI	C!CAGT	8	902; 1483; 2001; 2787; 3193; 3311; 3354; 3793
BsrBI	CCG!CTC	1	1839
BsrBI	GAG!CGG	5	36; 68; 856; 2187; 3988
BsrDI	GCAATGNN!	2	1255; 3208
BsrDI	!CATTGC	1	3382
BsrFI	R!CCGGY	2	135; 3227
BsrGI	T!GTACA	1	197
BsrSI	ACTGGN!	8	758; 845; 1043; 1780; 2034; 2662; 2675; 3623
BsrSI	C!CAGT	8	902; 1483; 2001; 2787; 3193; 3311; 3354; 3793
BssAI	R!CCGGY	2	135; 3227
BssECI	C!CNNGG	9	146; 242; 377; 473; 1467; 1468; 1537; 1716; 2414
BssHII	G!CGCGC	0	
BssKI	!CCNGG	16	329; 377; 473; 726; 954; 1411; 1467; 1715; 1898; 1933; 2280; 2401; 2414; 2632; 3328; 3679
BssMI	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
BssNI	GR!CGYC	2	3684; 4066
BssNAI	GTA!TAC	1	2027
BssSI	C!ACGAG	2	799; 4118
BssSI	C!TCGTG	3	649; 2427; 3811
BssT1I	C!CWWGG	2	146; 1537
Bst6I	CTCTCN!	2	2138; 3942
Bst6I	!NNNNGAAGAG	0	
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	1	2027

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstACI	GR!CGYC	2	3684; 4066
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	1	2078
BstAUI	T!GTACA	1	197
BstBI	TT!CGAA	0	
Bst2BI	C!ACGAG	2	799; 4118
Bst2BI	C!TCGTG	3	649; 2427; 3811
BstBAI	YAC!GTR	1	2008
Bst4CI	ACN!GT	16	197; 213; 1052; 1130; 1163; 1260; 1301; 1404; 1651; 1873; 1908; 2218; 2289; 2759; 3072; 3587
BstC8I	GCN!NGC	13	166; 256; 460; 585; 864; 986; 1214; 1582; 2185; 2271; 2308; 2868; 3259
BstDEI	C!TNAG	16	413; 619; 710; 852; 876; 913; 1009; 1457; 1763; 1819; 2064; 2529; 2938; 3104; 3644; 4070
BstDSI	C!CRYGG	2	146; 1537
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	1	1935
BstF5I	!CATCC	8	238; 326; 383; 538; 1229; 3126; 3307; 3594
BstFNI	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
BstH2I	RGCGC!Y	2	2132; 2502
BstHHI	GCG!C	14	1857; 1960; 1990; 2131; 2164; 2434; 2501; 2601; 2775; 2884; 3277; 3370; 3707; 4039
BstKTI	GAT!C	21	124; 130; 173; 287; 437; 521; 697; 901; 2823; 2898; 2909; 2917; 2995; 3007; 3112; 3453; 3471; 3517; 3775; 3792; 3828
BstMAI	GTCTCN!	2	1460; 3984
BstMAI	!NNNNNGAGAC	4	744; 775; 1897; 3208
BstMBI	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
BstMCI	CGRY!CG	5	140; 860; 2594; 3517; 3666
BstMWI	GCNNNNN!NNGC	13	33; 623; 637; 872; 990; 1014; 1577; 2078; 2128; 2193; 2307; 2879; 3267
BstNI	CC!WGG	9	331; 379; 475; 1413; 1469; 1717; 2282; 2403; 2416
BstNSI	RCATG!Y	3	186; 1893; 2258
BstOI	CC!WGG	9	331; 379; 475; 1413; 1469; 1717; 2282; 2403; 2416
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	787
BstSCI	!CCNGG	16	329; 377; 473; 726; 954; 1411; 1467; 1715; 1898; 1933; 2280; 2401; 2414; 2632; 3328; 3679
BstSFI	C!TRYAG	3	2519; 2710; 3388
BstSLI	GKGCM!C	8	211; 238; 271; 848; 1707; 2074; 2572; 3818
BstSNI	TAC!GTA	0	
BstUI	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
Bst2UI	CC!WGG	9	331; 379; 475; 1413; 1469; 1717; 2282; 2403; 2416
BstV1I	GCAGCNNNNNNN!	7	365; 807; 1905; 2002; 2673; 2882; 3576
BstV1I	!NNNNNNNNNNNGCTGC	7	484; 1834; 2146; 2164; 2583; 3122; 3185
BstV2I	GAAGACNN!	1	455
BstV2I	!NNNNNGTCTTC	1	4125
BstXI	CCANNNNN!NTGG	1	150
BstX2I	R!GATCY	9	127; 694; 898; 2895; 2906; 2992; 3004; 3772; 3789
BstYI	R!GATCY	9	127; 694; 898; 2895; 2906; 2992; 3004; 3772; 3789
BstZI	C!GGCCG	1	857
BstZ17I	GTA!TAC	1	2027
BsuI	GTATCCNNNNNN!	0	
BsuI	!NNNNNGGATAC	2	2457; 3984
Bsu15I	AT!CGAT	0	
Bsu36I	CC!TNAGG	1	413
BsuRI	GG!CC	22	305; 548; 583; 617; 626; 640; 772; 814; 859; 1149; 1194; 1416; 1503; 1780; 2269; 2280; 2298; 2732; 3190; 3270; 3537; 4124
BsuTUI	AT!CGAT	0	
BtgI	C!CRYGG	2	146; 1537
BtgZI	GCGATGNNNNNNNNNN!	1	1672

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BtgZI	!NNNNNNNNNNNNNNNNNNNNCATCGC	1	1315
BthCI	GCNG!C	28	305; 356; 500; 617; 798; 859; 862; 954; 1580; 1839; 1850; 1896; 1993; 2046; 2162; 2183; 2301; 2456; 2599; 2664; 2667; 2873; 3138; 3201; 3540; 3567; 3662; 3891
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	1	3547
BtsI	!CACTGC	2	669; 3567
BtsCI	GGATGNN!	1	1935
BtsCI	!CATCC	8	238; 326; 383; 538; 1229; 3126; 3307; 3594
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	674; 836
BveI	!NNNNNNNNNGCAGGT	0	
Cac8I	GCN!NGC	13	166; 256; 460; 585; 864; 986; 1214; 1582; 2185; 2271; 2308; 2868; 3259
CaiI	CAGNNN!CTG	2	821; 2670
CciI	T!CATGA	3	2974; 3982; 4087
CciNI	GC!GGCCGC	1	857
CdiI	CATC!G	3	1074; 1333; 3398
CdiI	C!GATG	2	1658; 3799
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	2043
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	1	2306
CelII	GC!TNAGC	2	852; 876
CfoI	GCG!C	14	1857; 1960; 1990; 2131; 2164; 2434; 2501; 2601; 2775; 2884; 3277; 3370; 3707; 4039
CfrI	Y!GGCCR	4	812; 857; 1501; 3535
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	2	135; 3227
Cfr13I	G!GNCC	10	304; 547; 639; 744; 1778; 3189; 3268; 3285; 3507; 4123
Cfr42I	CCGC!GG	0	
ChaI	GATC!	21	125; 131; 174; 288; 438; 522; 698; 902; 2824; 2899; 2910; 2918; 2996; 3008; 3113; 3454; 3472; 3518; 3776; 3793; 3829
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	6	171; 250; 2100; 2306; 2861; 4084
CjeI	!NNNNNNNNNACNNNNNNNTGG	5	185; 909; 2747; 2825; 2925
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	5	219; 943; 2781; 2859; 2959
CjeI	!NNNNNNNNCCANNNNNNGT	6	137; 216; 2066; 2272; 2827; 4050
CjePI	CCANNNNNNNTCNNNNNNNNNNNNNN!	2	2812; 4084
CjePI	!NNNNNNNNNGANNNNNNNTGG	4	2747; 2925; 3045; 3517
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	4	2780; 2958; 3078; 3550
CjePI	!NNNNNNNNCCANNNNNNNNTC	2	2779; 4051
ClaI	AT!CGAT	0	
CpoI	CG!GWCCG	0	
CseI	GACGCNNNNN!	2	2365; 2943
CseI	!NNNNNNNNNNNGCGTC	2	1949; 3673
CsiI	A!CCWGGT	0	
CspI	CG!GWCCG	0	
Csp6I	G!TAC	7	198; 348; 600; 1114; 1652; 2061; 3626
Csp45I	TT!CGAA	0	
CspAI	A!CCGGT	1	135
CspCI	CAANNNNNNGTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNNNNGTGG	0	
CstMI	AAGGAGNNNNNNNNNNNNNNNNNNNN!	2	791; 2133
CstMI	!NNNNNNNNNNNNNNNNNNNNCTCCTT	1	3481
CviAII	C!ATG	22	147; 183; 189; 201; 279; 345; 425; 628; 1308; 1538; 1599; 1620; 1890; 1995; 2255; 2975; 3466; 3476; 3554; 3590; 3983; 4088

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	472; 3217; 3814
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	4123
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	9	329; 377; 473; 1411; 1467; 1715; 2280; 2401; 2414
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	2	146; 1537
EcoT22I	ATGCA!T	0	
EcoT38I	GRGCY!C	0	
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	0	
EheI	GGC!GCC	0	
ErhI	C!CWWGG	2	146; 1537
EsaBC3I	TC!GA	7	3; 297; 324; 792; 1769; 2355; 3799
Esp3I	CGTCTCN!	1	1460
Esp3I	!NNNNNGAGACG	1	1897
FaeI	CATG!	22	150; 186; 192; 204; 282; 348; 428; 631; 1311; 1541; 1602; 1623; 1893; 1998; 2258; 2978; 3469; 3479; 3557; 3593; 3986; 4091
FaiI	YA!TR	56	12; 49; 115; 148; 184; 190; 202; 280; 346; 426; 444; 629; 690; 1045; 1059; 1120; 1245; 1274; 1309; 1377; 1379; 1446; 1509; 1539; 1552; 1600; 1621; 1891; 1996; 2027; 2041; 2077; 2079; 2256; 2320; 2393; 2698; 2976; 3048; 3050; 3052; 3132; 3423; 3467; 3477; 3555; 3561; 3574; 3591; 3657; 3712; 3933; 3984; 3996; 4089; 4102
FalI	AAGNNNNNCTNNNNNNNNNNNN!	1	423
FalI	!NNNNNNNNAAGNNNNNCTT	1	391
FaqI	GGGACNNNNNNNNNN!	0	
FaqI	!NNNNNNNNNNNNNGTCCC	0	
FatI	!CATG	22	146; 182; 188; 200; 278; 344; 424; 627; 1307; 1537; 1598; 1619; 1889; 1994; 2254; 2974; 3465; 3475; 3553; 3589; 3982; 4087
FauI	CCCGCNNNN!	3	612; 714; 1221
FauI	!NNNNNGCGGG	3	649; 1665; 1959
FauNDI	CA!TATG	1	2077
FbaI	T!GATCA	1	170
FblI	GT!MKAC	1	2026
FmuI	GGNC!C	10	307; 550; 642; 747; 1781; 3192; 3271; 3288; 3510; 4126
Fnu4HI	GC!NGC	28	303; 354; 498; 615; 796; 857; 860; 952; 1578; 1837; 1848; 1894; 1991; 2044; 2160; 2181; 2299; 2454; 2597; 2662; 2665; 2871; 3136; 3199; 3538; 3565; 3660; 3889
FokI	GGATGNNNNNNNN!	1	1942
FokI	!NNNNNNNNNNNNNCATCC	8	225; 313; 370; 525; 1216; 3113; 3294; 3581
FriOI	GRGCY!C	0	
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	3369
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	7	833; 985; 1733; 1842; 2749; 3002; 3337
FspEI	CCNNNNNNNNNNNN!	125	13; 144; 159; 189; 225; 255; 272; 286; 319; 333; 351; 375; 390; 420; 453; 480; 495; 514; 550; 597; 616; 631; 645; 679; 699; 719; 740; 760; 786; 828; 845; 873; 902; 925; 965; 993; 1061; 1076; 1130; 1163; 1204; 1226; 1246; 1302; 1320; 1362; 1425; 1475; 1496; 1517; 1538; 1591; 1616; 1632; 1719; 1794; 1831; 1847; 1864; 1894; 1912; 1947; 1962; 2007; 2088; 2107; 2133; 2150; 2237; 2283; 2301; 2331; 2345; 2394; 2415; 2438; 2452; 2467; 2481; 2496; 2567; 2590; 2607; 2621; 2642; 2668; 2746; 2800; 2837; 2852; 2923; 3014; 3090; 3112; 3143; 3159; 3196; 3223; 3241; 3267; 3284; 3301; 3317; 3342; 3367; 3395; 3452; 3485; 3515; 3551; 3607; 3647; 3679; 3693; 3716; 3793; 3820; 3863; 3902; 3954; 4048; 4062; 4091; 4112; 4138

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FspEI	!NNNNNNNNNNNNNNNNNGG	121	21; 53; 85; 104; 133; 187; 229; 250; 274; 316; 335; 364; 400; 437; 460; 479; 509; 530; 557; 599; 622; 641; 713; 732; 751; 790; 826; 867; 911; 930; 954; 975; 996; 1024; 1052; 1074; 1122; 1176; 1218; 1243; 1322; 1346; 1377; 1398; 1454; 1485; 1524; 1543; 1566; 1597; 1649; 1675; 1702; 1725; 1744; 1762; 1789; 1809; 1847; 1885; 1912; 1939; 1958; 2003; 2028; 2066; 2093; 2111; 2151; 2172; 2190; 2218; 2251; 2280; 2306; 2354; 2388; 2446; 2472; 2507; 2526; 2544; 2593; 2619; 2643; 2663; 2686; 2711; 2738; 2782; 2809; 2827; 2878; 2910; 2947; 2975; 3047; 3078; 3155; 3213; 3247; 3268; 3314; 3376; 3403; 3424; 3477; 3519; 3540; 3604; 3644; 3666; 3724; 3755; 3844; 3863; 3882; 3954; 3973; 4012; 4094
Fsp4HI	GC!NGC	28	303; 354; 498; 615; 796; 857; 860; 952; 1578; 1837; 1848; 1894; 1991; 2044; 2160; 2181; 2299; 2454; 2597; 2662; 2665; 2871; 3136; 3199; 3538; 3565; 3660; 3889
GdiII	C!GGCCR	1	857
GdiII	Y!GGCCG	2	857; 3535
GlaI	GC!GC	14	1856; 1959; 1989; 2130; 2163; 2433; 2500; 2600; 2774; 2883; 3276; 3369; 3706; 4038
GluI	GC!NGC	28	303; 354; 498; 615; 796; 857; 860; 952; 1578; 1837; 1848; 1894; 1991; 2044; 2160; 2181; 2299; 2454; 2597; 2662; 2665; 2871; 3136; 3199; 3538; 3565; 3660; 3889
GsaI	CCCAG!C	0	
GsaI	GCTGG!G	2	579; 2562
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	1358
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	472; 3217
HaeI	WGG!CCW	8	583; 626; 814; 1416; 1503; 2269; 2280; 2732
HaeII	RGCGC!Y	2	2132; 2502
HaeIII	GG!CC	22	305; 548; 583; 617; 626; 640; 772; 814; 859; 1149; 1194; 1416; 1503; 1780; 2269; 2280; 2298; 2732; 3190; 3270; 3537; 4124
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	1	3166
HaeIV	!NNNNNNNNNGAYNNNNNRTC	1	3132
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	1	3165
HaeIV	!NNNNNNNGAYNNNNNRTC	1	3134
HapII	C!CGG	18	136; 728; 747; 955; 1191; 1233; 1361; 1900; 1934; 2461; 2608; 2634; 2824; 3228; 3262; 3329; 3439; 3681
HgaI	GACGCNNNNN!	2	2365; 2943
HgaI	!NNNNNNNNNGCGTC	2	1949; 3673
HhaI	GCG!C	14	1857; 1960; 1990; 2131; 2164; 2434; 2501; 2601; 2775; 2884; 3277; 3370; 3707; 4039
Hin1I	GR!CGYC	2	3684; 4066
Hin1II	CATG!	22	150; 186; 192; 204; 282; 348; 428; 631; 1311; 1541; 1602; 1623; 1893; 1998; 2258; 2978; 3469; 3479; 3557; 3593; 3986; 4091
Hin4I	GAYNNNNNVTCNNNNNNNNNNNNNN!	3	1243; 3165; 3239
Hin4I	!NNNNNNNGABNNNNNRTC	1	3133
Hin4I	GABNNNNNRTCNNNNNNNNNNNNNN!	1	3165
Hin4I	!NNNNNNNGAYNNNNNVTC	3	1211; 3133; 3207
Hin6I	G!CGC	14	1855; 1958; 1988; 2129; 2162; 2432; 2499; 2599; 2773; 2882; 3275; 3368; 3705; 4037
HinP1I	G!CGC	14	1855; 1958; 1988; 2129; 2162; 2432; 2499; 2599; 2773; 2882; 3275; 3368; 3705; 4037
HincII	GTY!RAC	0	
HindII	GTY!RAC	0	
HindIII	A!AGCTT	1	864
HinfI	G!ANTC	10	55; 761; 885; 976; 1586; 1727; 2154; 2229; 2625; 3142
HpaI	GTT!AAC	0	
HpaII	C!CGG	18	136; 728; 747; 955; 1191; 1233; 1361; 1900; 1934; 2461; 2608; 2634; 2824; 3228; 3262; 3329; 3439; 3681
HphI	GGTGANNNNNNNN!	10	166; 540; 983; 1272; 1416; 1484; 1818; 1876; 3633; 3874
HphI	!NNNNNNNTCACC	9	165; 429; 1278; 1472; 1526; 2990; 3217; 3839; 4128
Hpy8I	GTN!NAC	11	216; 236; 531; 744; 1286; 1809; 2027; 2072; 2570; 3058; 3816
Hpy99I	CGWCG!	5	793; 1356; 2359; 3153; 3416

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Hpy166II	GTN!NAC	11	216; 236; 531; 744; 1286; 1809; 2027; 2072; 2570; 3058; 3816
Hpy188I	TCN!GA	13	243; 916; 938; 1885; 2051; 2368; 2446; 2799; 2933; 3068; 3514; 3525; 3645
Hpy188III	TC!NNGA	22	3; 125; 489; 516; 681; 720; 926; 1003; 1233; 1337; 1818; 1842; 2488; 2622; 2720; 2818; 2901; 2975; 3234; 3983; 4088; 4118
HpyAV	CCTTCNNNNNN!	5	324; 417; 2494; 2804; 3512
HpyAV	!NNNNNGAAGG	4	244; 2746; 3259; 3871
HpyCH4III	ACN!GT	16	197; 213; 1052; 1130; 1163; 1260; 1301; 1404; 1651; 1873; 1908; 2218; 2289; 2759; 3072; 3587
HpyCH4IV	A!CGT	9	512; 788; 1323; 1498; 2007; 2957; 3373; 3746; 4066
HpyCH4V	TG!CA	13	186; 236; 558; 669; 1893; 2072; 2570; 2866; 3201; 3291; 3484; 3572; 3816
HpyF3I	C!TNAG	16	413; 619; 710; 852; 876; 913; 1009; 1457; 1763; 1819; 2064; 2529; 2938; 3104; 3644; 4070
HpyF10VI	GCNNNNN!NNGC	13	33; 623; 637; 872; 990; 1014; 1577; 2078; 2128; 2193; 2307; 2879; 3267
Hsp92I	GR!CGYC	2	3684; 4066
Hsp92II	CATG!	22	150; 186; 192; 204; 282; 348; 428; 631; 1311; 1541; 1602; 1623; 1893; 1998; 2258; 2978; 3469; 3479; 3557; 3593; 3986; 4091
HspAI	G!CGC	14	1855; 1958; 1988; 2129; 2162; 2432; 2499; 2599; 2773; 2882; 3275; 3368; 3705; 4037
KasI	G!GCGCC	0	
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	1	1232
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	1	170
KspAI	GTT!AAC	0	
Kzo9I	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
LguI	GCTCTCN!	1	2138
LguI	!NNNNGAAGAGC	0	
LpnI	RGC!GCGY	2	2130; 2500
LpnPI	CCDGNNNNNNNNN!	52	149; 286; 343; 391; 425; 487; 502; 563; 597; 631; 646; 679; 741; 760; 828; 902; 968; 1137; 1204; 1230; 1246; 1374; 1425; 1481; 1496; 1729; 1831; 1913; 1947; 2014; 2283; 2347; 2415; 2452; 2474; 2621; 2647; 2800; 2837; 3152; 3206; 3241; 3267; 3301; 3324; 3342; 3367; 3452; 3694; 3806; 3863; 4075
LpnPI	!NNNNNNNNNNNNNCHGG	52	121; 316; 364; 460; 561; 713; 732; 826; 911; 940; 988; 1024; 1122; 1176; 1218; 1251; 1322; 1346; 1398; 1454; 1566; 1653; 1702; 1761; 1885; 1919; 1939; 2015; 2111; 2218; 2267; 2292; 2371; 2401; 2446; 2544; 2593; 2619; 2643; 2663; 2809; 2827; 3172; 3213; 3247; 3314; 3376; 3424; 3604; 3666; 3844; 3954
Lsp1109I	GCAGCNNNNNNNN!	7	365; 807; 1905; 2002; 2673; 2882; 3576
Lsp1109I	!NNNNNNNNNNNGCTGC	7	484; 1834; 2146; 2164; 2583; 3122; 3185
LweI	GCATCNNNNN!	8	392; 1079; 1752; 2055; 2131; 2351; 3403; 3843
LweI	!NNNNNNNNNGATGC	7	545; 584; 713; 1564; 1920; 2091; 3594
MabI	A!CCWGGT	0	
MaeI	C!TAG	7	833; 985; 1733; 1842; 2749; 3002; 3337
MaeII	A!CGT	9	512; 788; 1323; 1498; 2007; 2957; 3373; 3746; 4066
MaeIII	!GTNAC	12	1293; 1398; 1908; 2003; 2610; 2673; 2789; 3072; 3403; 3461; 3614; 3802
MalI	GA!TC	21	123; 129; 172; 286; 436; 520; 696; 900; 2822; 2897; 2908; 2916; 2994; 3006; 3111; 3452; 3470; 3516; 3774; 3791; 3827
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	0	
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	0	
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	1	1839
MbiI	GAG!CGG	5	36; 68; 856; 2187; 3988

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MboI	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
MboII	GAAGANNNNNNNN!	4	294; 460; 573; 2916
MboII	!NNNNNNNTCTTC	7	1511; 2125; 2987; 3742; 3820; 3929; 4125
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	59
MflI	R!GATCY	9	127; 694; 898; 2895; 2906; 2992; 3004; 3772; 3789
MhlI	GDGCH!C	9	211; 238; 271; 848; 1707; 2074; 2572; 3733; 3818
MlsI	TGG!CCA	2	814; 1503
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	814; 1503
MlyI	GAGTCNNNNN!	1	2634
MlyI	!NNNNNGACTC	4	879; 1721; 2148; 3136
Mly113I	GG!CGCC	0	
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	3	566; 2469; 2653
MmeI	!NNNNNNNNNNNNNNNNNGTYGGA	0	
MnlI	CCTCNNNNNNN!	13	10; 317; 496; 511; 688; 727; 922; 1861; 1891; 2153; 2436; 3314; 3520
MnlI	!NNNNNGAGG	19	93; 112; 150; 198; 237; 258; 291; 408; 425; 573; 616; 762; 1082; 1733; 2362; 2686; 3086; 3167; 4114
Mph1103I	ATGCA!T	0	
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	1232
MroNI	G!CCGGC	0	
MroXI	GAANN!NNTTC	1	3746
MscI	TGG!CCA	2	814; 1503
MseI	T!TAA	19	95; 109; 398; 868; 1155; 1494; 1636; 1688; 1709; 2035; 2960; 3012; 3017; 3031; 3084; 3319; 3358; 3723; 4095
MslI	CAYNN!NNRTG	6	148; 187; 592; 3399; 3558; 3917
MspI	C!CGG	18	136; 728; 747; 955; 1191; 1233; 1361; 1900; 1934; 2461; 2608; 2634; 2824; 3228; 3262; 3329; 3439; 3681
Msp20I	TGG!CCA	2	814; 1503
MspA1I	CMG!CKG	9	607; 614; 851; 1136; 1580; 1966; 2596; 2841; 3782
MspCI	C!TTAAG	0	
MspJI	CNNRRNNNNNNNN!	205	13; 49; 81; 94; 137; 159; 177; 195; 213; 243; 261; 276; 291; 309; 342; 357; 385; 400; 424; 437; 453; 471; 485; 501; 514; 528; 549; 562; 583; 596; 616; 630; 644; 661; 678; 691; 705; 718; 732; 753; 766; 785; 804; 827; 840; 853; 873; 888; 901; 914; 927; 949; 967; 992; 1006; 1021; 1051; 1075; 1120; 1136; 1149; 1175; 1191; 1215; 1229; 1245; 1278; 1303; 1320; 1349; 1362; 1386; 1408; 1424; 1437; 1469; 1495; 1511; 1539; 1556; 1569; 1584; 1602; 1632; 1647; 1680; 1720; 1745; 1759; 1775; 1788; 1830; 1854; 1868; 1896; 1911; 1928; 1946; 1961; 1979; 1996; 2012; 2031; 2046; 2062; 2076; 2107; 2133; 2156; 2177; 2196; 2209; 2237; 2255; 2275; 2293; 2312; 2331; 2346; 2360; 2374; 2388; 2414; 2427; 2441; 2457; 2473; 2500; 2518; 2541; 2566; 2583; 2601; 2615; 2634; 2655; 2670; 2683; 2699; 2725; 2745; 2761; 2793; 2810; 2830; 2844; 2879; 2893; 2911; 2938; 2960; 2987; 3013; 3053; 3073; 3089; 3111; 3143; 3159; 3183; 3199; 3223; 3236; 3266; 3283; 3300; 3323; 3341; 3366; 3381; 3403; 3418; 3451; 3466; 3486; 3525; 3551; 3564; 3585; 3602; 3631; 3646; 3678; 3692; 3705; 3721; 3744; 3766; 3779; 3805; 3819; 3832; 3862; 3880; 3894; 3925; 3942; 3981; 3995; 4035; 4048; 4061; 4074; 4100; 4125

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	!NNNNNNNNNNNNNNYNG	171	10; 49; 100; 122; 142; 163; 187; 217; 241; 259; 283; 302; 324; 364; 385; 411; 431; 460; 502; 536; 557; 577; 604; 628; 652; 685; 706; 725; 751; 773; 796; 814; 839; 858; 875; 900; 917; 941; 959; 976; 996; 1025; 1072; 1110; 1131; 1161; 1195; 1218; 1248; 1277; 1294; 1322; 1346; 1368; 1387; 1425; 1444; 1469; 1494; 1513; 1539; 1567; 1585; 1606; 1642; 1659; 1686; 1703; 1723; 1750; 1770; 1790; 1810; 1828; 1847; 1869; 1886; 1906; 1931; 1949; 1969; 1987; 2016; 2035; 2064; 2089; 2111; 2130; 2147; 2165; 2201; 2218; 2241; 2267; 2286; 2307; 2325; 2348; 2367; 2388; 2413; 2430; 2447; 2472; 2501; 2520; 2541; 2566; 2584; 2608; 2629; 2657; 2678; 2706; 2725; 2749; 2773; 2795; 2828; 2845; 2865; 2887; 2910; 2942; 2961; 2988; 3037; 3074; 3091; 3125; 3150; 3172; 3197; 3214; 3240; 3258; 3286; 3315; 3336; 3353; 3377; 3396; 3419; 3440; 3462; 3482; 3509; 3540; 3576; 3598; 3621; 3642; 3662; 3679; 3725; 3755; 3773; 3797; 3817; 3836; 3860; 3890; 3954; 3971; 3996; 4013; 4034; 4057; 4074; 4095; 4115
MspR9I	CC!NGG	16	331; 379; 475; 728; 956; 1413; 1469; 1717; 1900; 1935; 2282; 2403; 2416; 2634; 3330; 3681
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	59
MvaI	CC!WGG	9	331; 379; 475; 1413; 1469; 1717; 2282; 2403; 2416
Mva1269I	GAATGCN!	2	1229; 1636
Mva1269I	G!CATTC	0	
MvnI	CG!CG	8	1855; 1857; 1960; 2301; 2882; 3212; 3705; 4037
MvrI	CGAT!CG	1	3517
MwoI	GCNNNNN!NNGC	13	33; 623; 637; 872; 990; 1014; 1577; 2078; 2128; 2193; 2307; 2879; 3267
NaeI	GCC!GGC	0	
NarI	GG!CGCC	0	
NciI	CC!SGG	7	728; 956; 1900; 1935; 2634; 3330; 3681
NcoI	C!CATGG	2	146; 1537
NdeI	CA!TATG	1	2077
NdeII	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	0	
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	3	275; 3393; 3618
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	3	311; 3429; 3654
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	0	
NgoMIV	G!CCGGC	0	
NheI	G!CTAGC	1	984
NlaIII	CATG!	22	150; 186; 192; 204; 282; 348; 428; 631; 1311; 1541; 1602; 1623; 1893; 1998; 2258; 2978; 3469; 3479; 3557; 3593; 3986; 4091
NlaIV	GGN!NCC	11	129; 210; 270; 1704; 2286; 2325; 3097; 3191; 3232; 3443; 4033
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	1	2367
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	535; 1591; 1847
Nli3877I	CYCGR!G	1	5
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	1	3296
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	551
NmeDI	RCCGGYNNNNNNN!	2	147; 3239
NmeDI	!NNNNNNNNNNNNRCCGGY	2	122; 3214
NmuCI	!GTSAC	4	1908; 2003; 3403; 3614
NotI	GC!GGCCGC	1	857
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	3369
NsiI	ATGCA!T	0	
NspI	RCATG!Y	3	186; 1893; 2258
NspV	TT!CGAA	0	
OiiI	CACNN!NNGTG	1	148
PabI	GTA!C	7	200; 350; 602; 1116; 1654; 2063; 3628
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	4126
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	2	821; 2670
PsuI	R!GATCY	9	127; 694; 898; 2895; 2906; 2992; 3004; 3772; 3789
PsyI	GACN!NNGTC	1	2001
PteI	G!CGCGC	0	
PvuI	CGAT!CG	1	3517
PvuII	CAG!CTG	2	851; 1136
RcaI	T!CATGA	3	2974; 3982; 4087
RceI	CATCGACNNNNNNNNNNNNNNNNNNNN!	0	
RceI	!NNNNNNNNNNNNNNNNNNNGTTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNN!	0	
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	7	199; 349; 601; 1115; 1653; 2062; 3627
RsaNI	G!TAC	7	198; 348; 600; 1114; 1652; 2061; 3626
RseI	CAYNN!NNRTG	6	148; 187; 592; 3399; 3558; 3917
RsrII	CG!GWCCG	0	
Rsr2I	CG!GWCCG	0	
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTCN!	1	2138
SapI	!NNNNGAAGAGC	0	
SaqAI	T!TAA	19	95; 109; 398; 868; 1155; 1494; 1636; 1688; 1709; 2035; 2960; 3012; 3017; 3031; 3084; 3319; 3358; 3723; 4095
SatI	GC!NGC	28	303; 354; 498; 615; 796; 857; 860; 952; 1578; 1837; 1848; 1894; 1991; 2044; 2160; 2181; 2299; 2454; 2597; 2662; 2665; 2871; 3136; 3199; 3538; 3565; 3660; 3889
Sau96I	G!GNCC	10	304; 547; 639; 744; 1778; 3189; 3268; 3285; 3507; 4123
Sau3AI	!GATC	21	121; 127; 170; 284; 434; 518; 694; 898; 2820; 2895; 2906; 2914; 2992; 3004; 3109; 3450; 3468; 3514; 3772; 3789; 3825
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	2	1653; 3627
SchI	GAGTCNNNNN!	1	2634
SchI	!NNNNNGACTC	4	879; 1721; 2148; 3136
SciI	CTC!GAG	1	3
ScrFI	CC!NGG	16	331; 379; 475; 728; 956; 1413; 1469; 1717; 1900; 1935; 2282; 2403; 2416; 2634; 3330; 3681
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	4	585; 1029; 3304; 3550
SdeAI	!NNNNNNNNNNNNNNNNNNCTYCTG	3	867; 1796; 2417
SdeOSI	GACNNNNRTGANNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNTCAYNNNNNGTC	1	3394
SdeOSI	TCAYNNNNGTCNNNNNNNNNNNNNN!	1	3428
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	0	
SduI	GDGCH!C	9	211; 238; 271; 848; 1707; 2074; 2572; 3733; 3818
SeI	!CGCG	8	1853; 1855; 1958; 2299; 2880; 3210; 3703; 4035
SetI	ASST!	56	2; 293; 343; 364; 515; 650; 668; 719; 787; 791; 830; 853; 868; 877; 882; 914; 986; 990; 1010; 1019; 1119; 1138; 1267; 1326; 1414; 1501; 1570; 1594; 1738; 1849; 1883; 1898; 1917; 2010; 2198; 2373; 2424; 2470; 2526; 2545; 2560; 2697; 2796; 2817; 2960; 3003; 3101; 3137; 3338; 3376; 3438; 3501; 3749; 4064; 4069; 4101
SexAI	A!CCWGGT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	8	392; 1079; 1752; 2055; 2131; 2351; 3403; 3843
SfaNI	!NNNNNNNNNGATGC	7	545; 584; 713; 1564; 1920; 2091; 3594
SfcI	C!TRYAG	3	2519; 2710; 3388
SfiI	GGCCNNNN!NGGCC	1	623
SfoI	GGC!GCC	0	
Sfr274I	C!TCGAG	1	1
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	0	
SgeI	CNNGNNNNNNNNN!	156	13; 137; 159; 177; 195; 213; 243; 267; 285; 300; 342; 357; 390; 424; 437; 465; 486; 501; 528; 562; 583; 596; 616; 630; 645; 661; 678; 693; 711; 732; 753; 766; 804; 827; 840; 853; 875; 893; 914; 938; 956; 993; 1006; 1051; 1136; 1149; 1193; 1221; 1245; 1278; 1303; 1320; 1349; 1362; 1398; 1424; 1480; 1495; 1511; 1539; 1569; 1593; 1611; 1632; 1680; 1728; 1745; 1788; 1830; 1854; 1868; 1902; 1928; 1946; 1961; 1979; 1996; 2013; 2042; 2138; 2156; 2177; 2196; 2245; 2267; 2282; 2312; 2346; 2374; 2393; 2414; 2427; 2441; 2462; 2480; 2500; 2527; 2567; 2583; 2601; 2620; 2634; 2655; 2670; 2683; 2704; 2732; 2761; 2799; 2830; 2854; 2879; 2893; 2913; 2938; 2968; 2987; 3014; 3073; 3151; 3164; 3183; 3199; 3223; 3240; 3266; 3284; 3300; 3323; 3341; 3366; 3403; 3418; 3451; 3466; 3488; 3566; 3602; 3631; 3647; 3679; 3692; 3705; 3766; 3781; 3805; 3823; 3862; 3886; 3925; 3981; 3995; 4048; 4074; 4100; 4130
SgeI	!NNNNNNNNNNNNCNG	134	111; 133; 151; 169; 187; 217; 241; 259; 283; 316; 364; 398; 439; 460; 502; 536; 557; 577; 604; 628; 652; 685; 706; 727; 751; 778; 801; 819; 849; 867; 888; 912; 930; 967; 989; 1025; 1110; 1167; 1195; 1219; 1252; 1277; 1294; 1323; 1347; 1372; 1398; 1454; 1485; 1513; 1543; 1567; 1585; 1606; 1654; 1702; 1719; 1762; 1804; 1828; 1876; 1902; 1920; 1940; 1963; 1981; 2016; 2112; 2130; 2151; 2170; 2219; 2241; 2267; 2286; 2320; 2348; 2367; 2388; 2413; 2436; 2454; 2474; 2501; 2541; 2566; 2594; 2619; 2644; 2664; 2706; 2735; 2773; 2804; 2828; 2853; 2887; 2912; 2942; 2961; 2988; 3047; 3125; 3157; 3179; 3197; 3214; 3240; 3258; 3297; 3315; 3340; 3377; 3396; 3425; 3445; 3462; 3540; 3576; 3605; 3653; 3679; 3740; 3779; 3797; 3836; 3860; 3899; 3955; 4022; 4048; 4074; 4104; 4126
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	1	2929
SimI	!GACCC	3	1997; 2446; 3215
SinI	G!GWCC	3	744; 3285; 3507
SlaI	C!TCGAG	1	1
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	6	148; 187; 592; 3399; 3558; 3917
SmlI	C!TYRAG	8	1; 679; 718; 1737; 2360; 2622; 2899; 3767
SmoI	C!TYRAG	8	1; 679; 718; 1737; 2360; 2622; 2899; 3767
SmuI	CCCGCNNNN!	3	612; 714; 1221
SmuI	!NNNNNNGCGGG	3	649; 1665; 1959
SnaBI	TAC!GTA	0	
SpeI	A!CTAGT	0	
SphI	GCATG!C	0	
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	13	17; 44; 59; 76; 88; 106; 869; 1236; 1641; 1680; 3014; 3320; 3575
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
TstI	!NNNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2001
Tth111II	CAARCANNNNNNNNNN!	2	2844; 2883
Tth111II	!NNNNNNNNNTGYTTG	2	1788; 2851
UnbI	!GGNCC	10	303; 546; 638; 743; 1777; 3188; 3267; 3284; 3506; 4122
Van91I	CCANNNN!NTGG	1	1468
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	4	234; 2070; 2568; 3814
VpaK11AI	!GGWCC	3	743; 3284; 3506
VpaK11BI	G!GWCC	3	744; 3285; 3507
VspI	AT!TAAT	1	3319
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	2	17; 1236
XbaI	T!CTAGA	1	1841
XceI	RCATG!Y	3	186; 1893; 2258
XcmI	CCANNNNN!NNNNTGG	0	
XhoI	C!TCGAG	1	1
XhoII	R!GATCY	9	127; 694; 898; 2895; 2906; 2992; 3004; 3772; 3789
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	0	
XmiI	GT!MKAC	1	2026
XmnI	GAANN!NNTTC	1	3746
XspI	C!TAG	7	833; 985; 1733; 1842; 2749; 3002; 3337
ZraI	GAC!GTC	1	4067
ZrmI	AGT!ACT	2	1653; 3627
Zsp2I	ATGCA!T	0	