

## pTurboFP602-mito vector

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1554; 1759
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1842; 2798; 4587
AatI	AGG!CCT	1	2592
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2873
Acc36I	ACCTGCNNNN!	3	1231; 3039; 3489
Acc36I	!NNNNNNNNGCAGGT	1	2658
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	6	465; 765; 825; 1924; 2770; 2805
AccB7I	CCANNNN!NTGG	3	680; 1298; 1310
AccBSI	CCG!CTC	2	2195; 3384
AccBSI	GAG!CGG	2	2031; 3438
AceIII	CAGCTCNNNNNNN!	1	1727
AceIII	!NNNNNNNNNNGAGCTG	2	552; 711
AcI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1418; 2086; 2089; 2103; 2193; 2441; 2453; 2462; 2474; 2484; 2495; 2541; 2680; 2743; 3245; 3290; 3356; 3382; 3507; 3510; 3658; 3790; 4097; 4241; 4737
AcI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1414; 2031; 2058; 2146; 2256; 2837; 2901; 3002; 3005; 3285; 3340; 3438; 3576; 3723; 3863; 4106; 4351; 4472; 4491; 4618; 4646
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	8	694; 2639; 2950; 3196; 3588; 3947; 4045; 4131
AcIWI	!NNNNNGATCC	8	580; 665; 681; 1246; 3015; 3559; 3946; 4043
AcoI	Y!GGCCR	7	1187; 1369; 1415; 2677; 2851; 3242; 3269
AcsI	R!AATY	3	1585; 1689; 1700
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1221; 2917; 3349
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4147
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552
AdeI	CACNNN!GTG	2	1298; 1887
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 756; 906; 1158; 1377; 3077
AfeI	AGC!GCT	0	
AfiI	CCNNNN!NNGG	22	49; 680; 822; 935; 1101; 1298; 1310; 1783; 2109; 2501; 2752; 3296; 3577; 3609; 3741; 3776; 3826; 3858; 4211; 4490; 4656; 4674
AfIII	C!TTAAG	1	1653
AfIII	A!CRYGT	1	4689
AgeI	A!CCGGT	1	692
AgsI	TTS!AA	6	788; 2182; 2226; 2236; 2649; 4225
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajni	!CCWGG	14	88; 281; 886; 934; 1030; 2305; 2360; 2377; 3156; 3735; 3838; 4528; 4541; 4662
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	1	705
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	3	1167; 2345; 2417
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	3	1133; 2311; 2383
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1112; 1853
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	1080; 1821
AluI	AG!CT	16	566; 725; 898; 1205; 1408; 1550; 1717; 1974; 2269; 2557; 2877; 3335; 4132; 4389; 4435; 4525
AluBI	AG!CT	16	566; 725; 898; 1205; 1408; 1550; 1717; 1974; 2269; 2557; 2877; 3335; 4132; 4389; 4435; 4525
AlwI	GGATCNNNN!	8	694; 2639; 2950; 3196; 3588; 3947; 4045; 4131
AlwI	!NNNNNGATCC	8	580; 665; 681; 1246; 3015; 3559; 3946; 4043
Alw21I	GWGCW!C	4	795; 2884; 3074; 4379
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1332; 2195; 2613; 3632; 3760
Alw44I	G!TGCAC	2	791; 4375
AlwNI	CAGNN!CTG	2	3872; 4280
Ama87I	C!YCGRG	0	
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	2339; 2411; 3873
ApaLI	G!TGCAC	2	791; 4375
ApeKI	G!CWGC	19	614; 617; 620; 910; 1054; 1352; 1547; 2066; 2731; 2832; 2874; 2915; 3008; 3395; 3848; 4074; 4280; 4283; 4348
ApoI	R!AATTY	3	1585; 1689; 1700
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3286
ApyPI	!NNNNNNNNNNNNNNNNNNNGTTCGAT	3	3080; 3733; 4571
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3170
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	886
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2599
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3341
ArsI	GACNNNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 671; 687; 728; 842; 1076; 1252; 1429; 2609; 2613; 2632; 2943; 3021; 3102; 3111; 3189; 3565; 3581; 3940; 3952; 4030; 4038; 4049; 4124
AsiGI	A!CCGGT	1	692
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2889
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2593; 3608
AspEI	GACNN!NNGTC	0	
AspLEI	GCG!C	22	664; 666; 2037; 2045; 2071; 2093; 2102; 2115; 2146; 2765; 2773; 2837; 2874; 3140; 3400; 3576; 3662; 4065; 4174; 4348; 4448; 4515
AspS9I	G!GNCC	13	83; 276; 641; 861; 1104; 1196; 1301; 1878; 3287; 3732; 3778; 3836; 3869
AssI	AGT!ACT	1	1377
AsuII	TT!CGAA	1	3453
AsuC2I	CC!SGG	6	644; 1285; 2775; 2935; 3548; 4312
AsuHPI	GGTGANNNNNNNN!	5	376; 723; 1097; 3842; 3958
AsuHPI	!NNNNNNNTCACC	4	722; 986; 1888; 2949
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	0	
AvaII	G!GWCC	3	1301; 3287; 3732
AviII	TGC!GCA	1	2873
AvrII	C!CTAGG	2	2593; 3608

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	3	970; 2251; 3883
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCN!C	7	768; 795; 828; 1405; 2717; 2810; 4379
BalI	TGG!CCA	3	1189; 1371; 2853
BamHI	G!GATCC	1	686
BanI	G!GYRCC	6	465; 765; 825; 1924; 2770; 2805
BanII	GRGCY!C	3	1962; 3136; 3846
BanIII	AT!CGAT	1	2611
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNNN!NTGG	3	680; 1298; 1310
BauI	C!ACGAG	3	1356; 3489; 4516
BauI	C!TCGTG	2	1206; 3363
BbeI	GGCGC!C	1	2774
Bbr7I	GAAGACNNNNNN!	1	1017
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	1012
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2341; 2413; 3176
BbvI	GCAGCNNNNNNNN!	8	922; 1364; 1559; 2844; 2886; 3407; 3860; 4360
BbvI	!NNNNNNNNNNNGCTGC	8	601; 1041; 2053; 2718; 2902; 2995; 4061; 4267
Bbv12I	GWGCW!C	4	795; 2884; 3074; 4379
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1103; 1901; 2465; 2991; 3493
BccI	!NNNNNGATGG	5	1187; 1355; 1869; 2649; 3077
BceAI	ACGGCNNNNNNNNNN!	5	923; 1067; 1118; 3197; 3684
BceAI	!NNNNNNNNNNNGCCGT	3	1912; 2730; 4189
BceFI	ACGGCNNNNNNNNNN!	5	923; 1067; 1118; 3197; 3684
BceFI	!NNNNNNNNNNNGCCGT	3	1913; 2731; 4190
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2200; 2990; 4491
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	727
BcnI	CC!SGG	6	644; 1285; 2775; 2935; 3548; 4312
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNN!	1	4624
BdaI	!NNNNNNNNNTGANNNNNNTCA	1	4590
BfaI	C!TAG	9	592; 1390; 1426; 1620; 2038; 2594; 3609; 3943; 4196
BfiI	ACTGGGNNNNN!	2	1407; 2720
BfiI	!NNNCCCAGT	3	289; 648; 2472
BfmI	C!TRYAG	3	2106; 4233; 4424
BfoI	RGCGC!Y	4	2038; 2046; 2774; 4449
BfrI	C!TTAAG	1	1653
BfuI	GTATCCNNNNNN!	3	2200; 2990; 4491
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1231; 3039; 3489
BfuAI	!NNNNNNNNNGCAGGT	1	2658
BfuCI	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1180; 2546
BglII	A!GATCT	0	

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BisI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1418; 1548; 2067; 2089; 2103; 2541; 2680; 2732; 2743; 2833; 2838; 2875; 2916; 3003; 3009; 3245; 3341; 3382; 3396; 3510; 3849; 3864; 4075; 4281; 4284; 4349; 4492; 4647
BlnI	C!CTAGG	2	2593; 3608
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	39	613; 616; 619; 622; 649; 661; 861; 912; 1056; 1173; 1354; 1419; 1549; 2068; 2090; 2104; 2542; 2681; 2733; 2744; 2834; 2839; 2876; 2917; 3004; 3010; 3246; 3342; 3383; 3397; 3511; 3850; 3865; 4076; 4282; 4285; 4350; 4493; 4648
BmcAI	AGT!ACT	1	1377
Bme18I	G!GWCC	3	1301; 3287; 3732
Bme1390I	CC!NGG	20	90; 283; 644; 888; 936; 1032; 1285; 2307; 2362; 2379; 2775; 2935; 3158; 3548; 3737; 3840; 4312; 4530; 4543; 4664
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	0	
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	13	84; 277; 642; 862; 1105; 1197; 1302; 1879; 3288; 3733; 3779; 3837; 3870
BmiI	GGN!NCC	18	467; 651; 688; 767; 827; 1926; 1947; 1959; 2150; 2311; 2383; 2772; 2807; 3655; 3734; 3779; 4622; 4661
BmrI	ACTGGGNNNNN!	2	1407; 2720
BmrI	!NNNNCCCACT	3	289; 648; 2472
BmrFI	CC!NGG	20	90; 283; 644; 888; 936; 1032; 1285; 2307; 2362; 2379; 2775; 2935; 3158; 3548; 3737; 3840; 4312; 4530; 4543; 4664
BmsI	GCATCNNNNN!	7	949; 1587; 2350; 2422; 3070; 3134; 3409
BmsI	!NNNNNNNNNGATGC	9	357; 1102; 1141; 1270; 1401; 2729; 2984; 3200; 4592
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1407; 2720
BmuI	!NNNNCCCACT	3	289; 648; 2472
BoxI	GACNN!NNGTC	1	1344
BpiI	GAAGACNN!	1	1012
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2560; 3459
BpI	!NNNNNNNNGAGNNNNNCTC	2	2528; 3427
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3611
BpmI	!NNNNNNNNNNNNNNNNCTCCAG	2	1029; 3554
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3453
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	1012
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4065; 4604
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	4	1221; 1260; 3147; 4306
BpuMI	CC!SGG	6	644; 1285; 2775; 2935; 3548; 4312
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1332; 3760
Bsa29I	AT!CGAT	1	2611
BsaAI	YAC!GTR	3	340; 1887; 3075
BsaBI	GATNN!NNATC	2	1433; 2630
BsaHI	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552
BsaJI	C!CNNGG	21	360; 703; 799; 934; 935; 1030; 1184; 2305; 2377; 2500; 2535; 2544; 2593; 2934; 3203; 3608; 3735; 3736; 3838; 3839; 4529
BsaMI	GAATGCN!	1	1522
BsaMI	G!CATTC	1	1615
BsaWI	W!CCGGW	5	692; 2802; 3646; 4336; 4483
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1851
BsaXI	!NNNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1821
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	2	1772; 3679

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Bsc4I	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1298; 1310; 1783; 2109; 2501; 2752; 3296; 3577; 3609; 3741; 3776; 3826; 3858; 4211; 4490; 4656; 4674
BscAI	GCATCNNNN!	7	948; 1586; 2349; 2421; 3069; 3133; 3408
BscAI	!NNNNNNGATGC	9	360; 1105; 1144; 1273; 1404; 2732; 2987; 3203; 4595
BseI	ACTGGN!	5	1315; 1402; 2715; 2916; 4162
BseI	C!CAGT	6	295; 654; 1800; 2478; 4274; 4287
Bse8I	GATNN!NNATC	2	1433; 2630
Bse21I	CC!TNAGG	3	970; 2251; 3883
Bse118I	R!CCGGY	5	692; 1988; 3090; 3271; 3554
BseAI	T!CCGGA	0	
BseBI	CC!WGG	14	90; 283; 888; 936; 1032; 2307; 2362; 2379; 3158; 3737; 3840; 4530; 4543; 4664
BseCI	AT!CGAT	1	2611
BseDI	C!CNNGG	21	360; 703; 799; 934; 935; 1030; 1184; 2305; 2377; 2500; 2535; 2544; 2593; 2934; 3203; 3608; 3735; 3736; 3838; 3839; 4529
Bse3DI	GCAATGNN!	1	3004
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2631; 3088; 3113; 3567
BseGI	!CATCC	5	795; 883; 940; 1095; 2457
BseJ	GATNN!NNATC	2	1433; 2630
BseLI	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1298; 1310; 1783; 2109; 2501; 2752; 3296; 3577; 3609; 3741; 3776; 3826; 3858; 4211; 4490; 4656; 4674
BseMI	GCAATGNN!	1	3004
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3897
BseMII	!NNNNNNNNNCTGAG	7	961; 1167; 2242; 2544; 3425; 3997; 4406
BseNI	ACTGGN!	5	1315; 1402; 2715; 2916; 4162
BseNI	C!CAGT	6	295; 654; 1800; 2478; 4274; 4287
BsePI	G!CGCGC	1	662
BseRI	GAGGAGNNNNNNNNNN!	1	2589
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGCMI!	7	768; 795; 828; 1405; 2717; 2810; 4379
BseXI	GCAGCNNNNNNNN!	8	922; 1364; 1559; 2844; 2886; 3407; 3860; 4360
BseXI	!NNNNNNNNNNNGCTGC	8	601; 1041; 2053; 2718; 2902; 2995; 4061; 4267
BseX3I	C!GGCCG	2	1415; 2677
BseYI	C!CCAGC	3	2314; 2386; 4385
BseYI	G!CTGGG	2	1132; 3275
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNNCTGCAC	1	1209
Bsh1236I	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
Bsh1285I	CGRY!CG	4	697; 1418; 2680; 4355
BshFI	GG!CC	30	84; 277; 642; 862; 1105; 1140; 1174; 1183; 1189; 1197; 1329; 1371; 1417; 1737; 1879; 2534; 2540; 2549; 2592; 2679; 2853; 3244; 3271; 3780; 3837; 3870; 4215; 4649; 4667; 4678
BshNI	G!GYRCC	6	465; 765; 825; 1924; 2770; 2805
BshTI	A!CCGGT	1	692
BshVI	AT!CGAT	1	2611
BsiEI	CGRY!CG	4	697; 1418; 2680; 4355
BsiHKAI	GWGCW!C	4	795; 2884; 3074; 4379
BsiHKCI	C!YCGRG	0	
BsiSI	C!CGG	19	644; 693; 1285; 1989; 2676; 2753; 2775; 2803; 2934; 3024; 3091; 3272; 3547; 3555; 3647; 4121; 4311; 4337; 4484
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	22	49; 680; 822; 935; 1101; 1298; 1310; 1783; 2109; 2501; 2752; 3296; 3577; 3609; 3741; 3776; 3826; 3858; 4211; 4490; 4656; 4674
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2922; 3454; 3563
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2287; 2359; 2423; 3718
BsmI	GAATGCN!	1	1522
BsmI	G!CATTC	1	1615
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1332; 2195; 2613; 3632; 3760
BsmBI	CGTCTCN!	0	

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BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2922; 3454; 3563
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2287; 2359; 2423; 3718
BsnI	GG!CC	30	84; 277; 642; 862; 1105; 1140; 1174; 1183; 1189; 1197; 1329; 1371; 1417; 1737; 1879; 2534; 2540; 2549; 2592; 2679; 2853; 3244; 3271; 3780; 3837; 3870; 4215; 4649; 4667; 4678
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	1332; 3760
BsoBI	C!YCGRG	0	
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	5	360; 703; 1184; 2500; 3203
Bsp24I	GACNNNNNNTGGNNNNNNNNNN!	2	289; 3574
Bsp24I	!NNNNNNCCANNNNNNNGTC	2	3995; 4173
Bsp24I	CCANNNNNNGTCNNNNNNNNNNNN!	2	4027; 4205
Bsp24I	!NNNNNNNGACNNNNNNNTGG	2	257; 3542
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3453
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
Bsp1286I	GDGCH!C	12	768; 795; 828; 1405; 1962; 2717; 2810; 2884; 3074; 3136; 3846; 4379
Bsp1407I	T!GTACA	1	754
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1418; 2086; 2089; 2103; 2193; 2441; 2453; 2462; 2474; 2484; 2495; 2541; 2680; 2743; 3245; 3290; 3356; 3382; 3507; 3510; 3658; 3790; 4097; 4241; 4737
BspACI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1414; 2031; 2058; 2146; 2256; 2837; 2901; 3002; 3005; 3285; 3340; 3438; 3576; 3723; 3863; 4106; 4351; 4472; 4491; 4618; 4646
BspCNI	CTCAGNNNNNNNN!	1	3896
BspCNI	!NNNNNNNCTGAG	7	962; 1168; 2243; 2545; 3426; 3998; 4407
BspDI	AT!CGAT	1	2611
BspD6I	GACTCNNNN!	5	418; 1430; 1844; 3450; 4327
BspD6I	!NNNNNNGAGTC	2	1807; 2239
BspEI	T!CCGGA	0	
BspFNI	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
BspHI	T!CATGA	2	2197; 3969
BspLI	GGN!NCC	18	467; 651; 688; 767; 827; 1926; 1947; 1959; 2150; 2311; 2383; 2772; 2807; 3655; 3734; 3779; 4622; 4661
BspMI	ACCTGCNNNN!	3	1231; 3039; 3489
BspMI	!NNNNNNNNGCAGGT	1	2658
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	694; 2639; 2950; 3196; 3588; 3947; 4045; 4131
BspPI	!NNNNNGATCC	8	580; 665; 681; 1246; 3015; 3559; 3946; 4043
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3115; 3325
BspTI	C!TTAAG	1	1653
BspT104I	TT!CGAA	1	3453
BspT107I	G!GYRCC	6	465; 765; 825; 1924; 2770; 2805
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1332; 3760
BsrI	ACTGGN!	5	1315; 1402; 2715; 2916; 4162
BsrI	C!CAGT	6	295; 654; 1800; 2478; 4274; 4287
BsrBI	CCG!CTC	2	2195; 3384
BsrBI	GAG!CGG	2	2031; 3438
BsrDI	GCAATGNN!	1	3004
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	692; 1988; 3090; 3271; 3554
BsrGI	T!GTACA	1	754
BsrSI	ACTGGN!	5	1315; 1402; 2715; 2916; 4162
BsrSI	C!CAGT	6	295; 654; 1800; 2478; 4274; 4287
BssAI	R!CCGGY	5	692; 1988; 3090; 3271; 3554

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNNGG	21	360; 703; 799; 934; 935; 1030; 1184; 2305; 2377; 2500; 2535; 2544; 2593; 2934; 3203; 3608; 3735; 3736; 3838; 3839; 4529
BssHII	G!CGCGC	1	662
BssKI	!CCNGG	20	88; 281; 642; 886; 934; 1030; 1283; 2305; 2360; 2377; 2773; 2933; 3156; 3546; 3735; 3838; 4310; 4528; 4541; 4662
BssMI	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
BssNI	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1356; 3489; 4516
BssSI	C!TCGTG	2	1206; 3363
BssTII	C!CWVGG	7	360; 703; 1184; 2500; 2593; 3203; 3608
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2238; 3115; 3325
Bst98I	C!TTAAG	1	1653
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552
BstAFI	C!TTAAG	1	1653
BstAPI	GCANNNN!NTGC	3	2338; 2410; 3872
BstAUI	T!GTACA	1	754
BstBI	TT!CGAA	1	3453
Bst2BI	C!ACGAG	3	1356; 3489; 4516
Bst2BI	C!TCGTG	2	1206; 3363
BstBAI	YAC!GTR	3	340; 1887; 3075
Bst4CI	ACN!GT	15	76; 198; 269; 543; 581; 754; 770; 1862; 3151; 3267; 3375; 3698; 4189; 4659; 4730
BstC8I	GCN!NGC	33	86; 279; 593; 664; 723; 813; 1017; 1142; 1990; 2033; 2047; 2320; 2339; 2392; 2411; 2665; 2851; 3070; 3136; 3142; 3170; 3174; 3215; 3219; 3273; 3556; 3743; 3790; 3846; 3868; 4079; 4639; 4676
BstDEI	C!TNAG	9	970; 1176; 1267; 2251; 2553; 3434; 3883; 4006; 4415
BstDSI	C!CRYGG	5	360; 703; 1184; 2500; 3203
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2631; 3088; 3113; 3567
BstF5I	!CATCC	5	795; 883; 940; 1095; 2457
BstFNI	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
BstH2I	RGCGC!Y	4	2038; 2046; 2774; 4449
BstHHI	GCG!C	22	664; 666; 2037; 2045; 2071; 2093; 2102; 2115; 2146; 2765; 2773; 2837; 2874; 3140; 3400; 3576; 3662; 4065; 4174; 4348; 4448; 4515
BstKTI	GAT!C	24	588; 673; 689; 730; 844; 1078; 1254; 1431; 2611; 2615; 2634; 2945; 3023; 3104; 3113; 3191; 3567; 3583; 3942; 3954; 4032; 4040; 4051; 4126
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1332; 2195; 2613; 3632; 3760
BstMBI	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
BstMCI	CGRY!CG	4	697; 1418; 2680; 4355
BstMWI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 1180; 1414; 1998; 2028; 2055; 2097; 2338; 2410; 2461; 2540; 2762; 2846; 2869; 3008; 3131; 3214; 3481; 3668; 3872; 4071; 4643
BstNI	CC!WGG	14	90; 283; 888; 936; 1032; 2307; 2362; 2379; 3158; 3737; 3840; 4530; 4543; 4664
BstNSI	RCATG!Y	6	599; 743; 2341; 2413; 3176; 4693
BstOI	CC!WGG	14	90; 283; 888; 936; 1032; 2307; 2362; 2379; 3158; 3737; 3840; 4530; 4543; 4664
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1344
BstSCI	!CCNGG	20	88; 281; 642; 886; 934; 1030; 1283; 2305; 2360; 2377; 2773; 2933; 3156; 3546; 3735; 3838; 4310; 4528; 4541; 4662
BstSFI	C!TRYAG	3	2106; 4233; 4424
BstSLI	GKGC!C	7	768; 795; 828; 1405; 2717; 2810; 4379
BstSNI	TAC!GTA	1	340

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstUI	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
Bst2UI	CC!WGG	14	90; 283; 888; 936; 1032; 2307; 2362; 2379; 3158; 3737; 3840; 4530; 4543; 4664
BstV1I	GCAGCNNNNNNNN!	8	922; 1364; 1559; 2844; 2886; 3407; 3860; 4360
BstV1I	!NNNNNNNNNNNGCTGC	8	601; 1041; 2053; 2718; 2902; 2995; 4061; 4267
BstV2I	GAAGACNN!	1	1012
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	1	707
BstX2I	R!GATCY	11	585; 670; 686; 1251; 2942; 3188; 3580; 3939; 3951; 4037; 4048
BstYI	R!GATCY	11	585; 670; 686; 1251; 2942; 3188; 3580; 3939; 3951; 4037; 4048
BstZI	C!GGCCG	2	1415; 2677
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2200; 2990; 4491
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2611
Bsu36I	CC!TNAGG	3	970; 2251; 3883
BsuRI	GG!CC	30	84; 277; 642; 862; 1105; 1140; 1174; 1183; 1189; 1197; 1329; 1371; 1417; 1737; 1879; 2534; 2540; 2549; 2592; 2679; 2853; 3244; 3271; 3780; 3837; 3870; 4215; 4649; 4667; 4678
BsuTUI	AT!CGAT	1	2611
BtgI	C!CRYGG	5	360; 703; 1184; 2500; 3203
BtgZI	GCGATGNNNNNNNNNN!	2	1888; 3223
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3042; 3386
BthCI	GCNG!C	39	614; 617; 620; 623; 650; 662; 862; 913; 1057; 1174; 1355; 1420; 1550; 2069; 2091; 2105; 2543; 2682; 2734; 2745; 2835; 2840; 2877; 2918; 3005; 3011; 3247; 3343; 3384; 3398; 3512; 3851; 3866; 4077; 4283; 4286; 4351; 4494; 4649
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	1226; 1610
BtsCI	GGATGNN!	4	2631; 3088; 3113; 3567
BtsCI	!CATCC	5	795; 883; 940; 1095; 2457
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	1231; 3039; 3489
BveI	!NNNNNNNNNGCAGGT	1	2658
Cac8I	GCN!NGC	33	86; 279; 593; 664; 723; 813; 1017; 1142; 1990; 2033; 2047; 2320; 2339; 2392; 2411; 2665; 2851; 3070; 3136; 3142; 3170; 3174; 3215; 3219; 3273; 3556; 3743; 3790; 3846; 3868; 4079; 4639; 4676
CaiI	CAGNNN!CTG	2	3872; 4280
CciI	T!CATGA	2	2197; 3969
CciNI	GC!GGCCGC	1	1415
CdiI	CATC!G	5	352; 3060; 3065; 3263; 3404
CdiI	C!GATG	2	1874; 3209
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	4643
CdpI	!NNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2432; 2474
CelII	GC!TNAGC	0	
CfoI	GCG!C	22	664; 666; 2037; 2045; 2071; 2093; 2102; 2115; 2146; 2765; 2773; 2837; 2874; 3140; 3400; 3576; 3662; 4065; 4174; 4348; 4448; 4515
CfrI	Y!GGCCR	7	1187; 1369; 1415; 2677; 2851; 3242; 3269
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	5	692; 1988; 3090; 3271; 3554
Cfr13I	G!GNCC	13	83; 276; 641; 861; 1104; 1196; 1301; 1878; 3287; 3732; 3778; 3836; 3869
Cfr42I	CCGC!GG	0	
ChaI	GATC!	24	589; 674; 690; 731; 845; 1079; 1255; 1432; 2612; 2616; 2635; 2946; 3024; 3105; 3114; 3192; 3568; 3584; 3943; 3955; 4033; 4041; 4052; 4127
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	6	728; 807; 2588; 4028; 4128; 4206
CjeI	!NNNNNNNNNACNNNNNNNTGG	8	64; 257; 742; 2255; 2350; 3542; 4092; 4647
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	8	98; 291; 776; 2289; 2384; 3576; 4126; 4681
CjeI	!NNNNNNNNCCANNNNNNNGT	6	694; 773; 2554; 3994; 4094; 4172
CjePI	CCANNNNNNNTCNNNNNNNNNNNNNNNN!	2	4028; 4206
CjePI	!NNNNNNNNGANNNNNNNTGG	4	257; 1169; 3542; 4141



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	4	290; 1202; 3575; 4174
CjePI	!NNNNNNNCCANNNNNNNTC	2	3995; 4173
Clal	AT!CGAT	1	2611
CpoI	CG!GWCCG	1	3287
CseI	GACGCNNNNN!	4	526; 617; 3481; 3560
CseI	!NNNNNNNNNNNGCGTC	3	2104; 3999; 4577
CsiI	A!CCWGGT	1	2360
CspI	CG!GWCCG	1	3287
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 755; 905; 1157; 1376; 3076
Csp45I	TT!CGAA	1	3453
CspAI	A!CCGGT	1	692
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	3	1348; 2051; 3660
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	24	301; 361; 596; 704; 740; 746; 758; 836; 902; 982; 1185; 2198; 2338; 2410; 2501; 2642; 2987; 3173; 3204; 3230; 3586; 3970; 4690; 4741
CviJI	RG!CY	99	42; 84; 93; 277; 566; 628; 637; 642; 650; 725; 815; 862; 891; 898; 918; 976; 1042; 1054; 1105; 1132; 1140; 1174; 1183; 1189; 1197; 1205; 1219; 1288; 1329; 1365; 1371; 1408; 1417; 1440; 1550; 1717; 1737; 1879; 1960; 1974; 1988; 2269; 2310; 2382; 2505; 2534; 2540; 2549; 2557; 2580; 2592; 2598; 2679; 2696; 2704; 2731; 2756; 2840; 2849; 2853; 2877; 2915; 2991; 3008; 3027; 3090; 3134; 3144; 3161; 3244; 3271; 3275; 3312; 3335; 3351; 3531; 3558; 3619; 3741; 3780; 3837; 3844; 3851; 3870; 3881; 4132; 4161; 4204; 4215; 4280; 4359; 4384; 4389; 4435; 4525; 4623; 4649; 4667; 4678
CviKI-1	RG!CY	99	42; 84; 93; 277; 566; 628; 637; 642; 650; 725; 815; 862; 891; 898; 918; 976; 1042; 1054; 1105; 1132; 1140; 1174; 1183; 1189; 1197; 1205; 1219; 1288; 1329; 1365; 1371; 1408; 1417; 1440; 1550; 1717; 1737; 1879; 1960; 1974; 1988; 2269; 2310; 2382; 2505; 2534; 2540; 2549; 2557; 2580; 2592; 2598; 2679; 2696; 2704; 2731; 2756; 2840; 2849; 2853; 2877; 2915; 2991; 3008; 3027; 3090; 3134; 3144; 3161; 3244; 3271; 3275; 3312; 3335; 3351; 3531; 3558; 3619; 3741; 3780; 3837; 3844; 3851; 3870; 3881; 4132; 4161; 4204; 4215; 4280; 4359; 4384; 4389; 4435; 4525; 4623; 4649; 4667; 4678
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 755; 905; 1157; 1376; 3076
DdeI	C!TNAG	9	970; 1176; 1267; 2251; 2553; 3434; 3883; 4006; 4415
DinI	GGC!GCC	1	2772
DpnI	GA!TC	24	587; 672; 688; 729; 843; 1077; 1253; 1430; 2610; 2614; 2633; 2944; 3022; 3103; 3112; 3190; 3566; 3582; 3941; 3953; 4031; 4039; 4050; 4125
DpnII	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
DraI	TTT!AAA	3	1473; 3915; 3934
DraII	RG!GNCCY	1	3869
DraIII	CACNN!GTG	2	1298; 1887
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	3	266; 1399; 4251
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNN!NNGTC	3	1842; 2798; 4587
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1842; 2798; 4587
EaeI	Y!GGCCR	7	1187; 1369; 1415; 2677; 2851; 3242; 3269
EagI	C!GGCCG	2	1415; 2677
Eam1104I	CTCTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2238; 3115; 3325
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	3	2238; 3115; 3325
EciI	GGCGGANNNNNNNNNNNN!	4	2271; 3300; 4487; 4633
EciI	!NNNNNNNNNTCCGCC	4	496; 2442; 2463; 2484

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	1415; 2677
Eco24I	GRGCY!C	3	1962; 3136; 3846
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1332; 3760
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1301; 3287; 3732
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	2	1415; 2677
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	3	1221; 2917; 3349
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4147
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	970; 2251; 3883
Eco88I	C!YCGRG	0	
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	7	360; 703; 1184; 2500; 2593; 3203; 3608
Eco147I	AGG!CCT	1	2592
EcoHI	!CCSGG	6	642; 1283; 2773; 2933; 3546; 4310
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	4	1221; 2917; 3349; 3611
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	1029; 3554; 4147
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3869
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	14	88; 281; 886; 934; 1030; 2305; 2360; 2377; 3156; 3735; 3838; 4528; 4541; 4662
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	7	360; 703; 1184; 2500; 2593; 3203; 3608
EcoT22I	ATGCA!T	3	2343; 2415; 4746
EcoT38I	GRGCY!C	3	1962; 3136; 3846
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2772
EheI	GGC!GCC	1	2772
ErhI	C!CWWGG	7	360; 703; 1184; 2500; 2593; 3203; 3608
EsaBC3I	TC!GA	14	854; 881; 1349; 1921; 2612; 2885; 3041; 3065; 3101; 3263; 3454; 3499; 3754; 4592
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1188; 2201; 2341; 2413; 2504; 2645; 2990; 3176; 3207; 3233; 3589; 3973; 4693; 4744
Fail	YA!TR	62	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 705; 741; 747; 759; 837; 903; 983; 1001; 1186; 1247; 1433; 1443; 1509; 1554; 1759; 2187; 2199; 2330; 2339; 2402; 2411; 2435; 2502; 2526; 2643; 2707; 2988; 3013; 3174; 3205; 3231; 3303; 3519; 3587; 3665; 3717; 3878; 3895; 3897; 3899; 3971; 4249; 4438; 4554; 4627; 4691; 4742
FalI	AAGNNNNNCTNNNNNNNNNNNN!	2	980; 3111
FalI	!NNNNNNNNAAGNNNNNCTT	2	948; 3079
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2922; 3454; 3563
FaqI	!NNNNNNNNNNNNNGTCCC	4	2287; 2359; 2423; 3718
FatI	!CATG	24	300; 360; 595; 703; 739; 745; 757; 835; 901; 981; 1184; 2197; 2337; 2409; 2500; 2641; 2986; 3172; 3203; 3229; 3585; 3969; 4689; 4740
FauI	CCCGCNNNN!	10	93; 119; 286; 1169; 1271; 2093; 2448; 2469; 3665; 3797
FauI	!NNNNNGCGGG	7	616; 1206; 2024; 2894; 3431; 3569; 3716
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	727
FbII	GT!MKAC	0	
FmuI	GGNC!C	13	86; 279; 644; 864; 1107; 1199; 1304; 1881; 3290; 3735; 3781; 3839; 3872
Fnu4HI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1418; 1548; 2067; 2089; 2103; 2541; 2680; 2732; 2743; 2833; 2838; 2875; 2916; 3003; 3009; 3245; 3341; 3382; 3396; 3510; 3849; 3864; 4075; 4281; 4284; 4349; 4492; 4647

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FokI	GGATGNNNNNNNNN!	4	2638; 3095; 3120; 3574
FokI	!NNNNNNNNNNNNNCATCC	5	782; 870; 927; 1082; 2444
FriOI	GRGCY!C	3	1962; 3136; 3846
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2873
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1390; 1426; 1620; 2038; 2594; 3609; 3943; 4196
FspEI	CCNNNNNNNNNNNN!	160	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 656; 673; 687; 703; 746; 782; 812; 829; 843; 876; 890; 908; 932; 947; 977; 1010; 1037; 1052; 1071; 1107; 1154; 1173; 1188; 1203; 1236; 1256; 1276; 1297; 1317; 1343; 1385; 1401; 1431; 1454; 1493; 1507; 1648; 1743; 1767; 1790; 1813; 1831; 1853; 1874; 1893; 1912; 1941; 1962; 1976; 2002; 2090; 2116; 2165; 2206; 2224; 2263; 2279; 2317; 2374; 2389; 2446; 2466; 2480; 2497; 2511; 2548; 2563; 2606; 2689; 2756; 2787; 2807; 2822; 2867; 2881; 2947; 2961; 2980; 2996; 3037; 3057; 3104; 3154; 3170; 3190; 3215; 3235; 3258; 3285; 3303; 3329; 3369; 3395; 3419; 3475; 3489; 3517; 3560; 3581; 3616; 3660; 3748; 3772; 3794; 3814; 3830; 3851; 3865; 3884; 3968; 3988; 4016; 4031; 4065; 4107; 4134; 4149; 4194; 4218; 4232; 4254; 4280; 4300; 4324; 4350; 4398; 4417; 4436; 4462; 4497; 4542; 4572; 4586; 4637; 4651; 4676; 4692; 4713; 4742
FspEI	!NNNNNNNNNNNNNNNGG	128	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 690; 744; 786; 807; 831; 873; 892; 921; 957; 994; 1017; 1036; 1066; 1087; 1114; 1156; 1179; 1198; 1270; 1296; 1347; 1383; 1442; 1542; 1611; 1641; 1719; 1768; 1790; 1818; 1854; 1899; 1928; 1964; 1983; 2011; 2031; 2094; 2117; 2225; 2257; 2275; 2304; 2347; 2376; 2487; 2516; 2559; 2580; 2608; 2641; 2661; 2686; 2713; 2738; 2760; 2788; 2814; 2835; 2886; 2907; 2925; 2973; 3009; 3065; 3090; 3114; 3143; 3166; 3190; 3216; 3238; 3257; 3282; 3322; 3358; 3423; 3508; 3532; 3561; 3595; 3616; 3636; 3681; 3708; 3727; 3760; 3812; 3843; 3870; 3922; 4020; 4091; 4136; 4197; 4262; 4296; 4322; 4340; 4376; 4446; 4469; 4491; 4515; 4548; 4596; 4631; 4649; 4706
Fsp4HI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1418; 1548; 2067; 2089; 2103; 2541; 2680; 2732; 2743; 2833; 2838; 2875; 2916; 3003; 3009; 3245; 3341; 3382; 3396; 3510; 3849; 3864; 4075; 4281; 4284; 4349; 4492; 4647
GdiII	C!GGCCR	2	1415; 2677
GdiII	Y!GGCCG	4	1415; 2677; 3242; 3269
GlaI	GC!GC	22	663; 665; 2036; 2044; 2070; 2092; 2101; 2114; 2145; 2764; 2772; 2836; 2873; 3139; 3399; 3575; 3661; 4064; 4173; 4347; 4447; 4514
Glul	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1418; 1548; 2067; 2089; 2103; 2541; 2680; 2732; 2743; 2833; 2838; 2875; 2916; 3003; 3009; 3245; 3341; 3382; 3396; 3510; 3849; 3864; 4075; 4281; 4284; 4349; 4492; 4647
GsaI	CCCAG!C	3	2318; 2390; 4389
GsaI	GCTGG!G	2	1136; 3279
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3611
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	1029; 3554
HaeI	WGG!CCW	9	1140; 1183; 1189; 1371; 2592; 2853; 4215; 4667; 4678
HaeII	RGCGC!Y	4	2038; 2046; 2774; 4449
HaeIII	GG!CC	30	84; 277; 642; 862; 1105; 1140; 1174; 1183; 1189; 1197; 1329; 1371; 1417; 1737; 1879; 2534; 2540; 2549; 2592; 2679; 2853; 3244; 3271; 3780; 3837; 3870; 4215; 4649; 4667; 4678
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1446; 2967
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1412; 2933
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1445; 2966
HaeIV	!NNNNNNNGAYNNNNNRTC	2	1414; 2935
HapII	C!CGG	19	644; 693; 1285; 1989; 2676; 2753; 2775; 2803; 2934; 3024; 3091; 3272; 3547; 3555; 3647; 4121; 4311; 4337; 4484
HgaI	GACGCNNNNN!	4	526; 617; 3481; 3560
HgaI	!NNNNNNNNNNNGCGTC	3	2104; 3999; 4577
HhaI	GCG!C	22	664; 666; 2037; 2045; 2071; 2093; 2102; 2115; 2146; 2765; 2773; 2837; 2874; 3140; 3400; 3576; 3662; 4065; 4174; 4348; 4448; 4515
HinII	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Hin1III	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1188; 2201; 2341; 2413; 2504; 2645; 2990; 3176; 3207; 3233; 3589; 3973; 4693; 4744
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1445; 2966
Hin4I	!NNNNNNNGABNNNNNRTC	3	1413; 2934; 2964
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1445; 2966; 2996
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1413; 2934
Hin6I	G!CGC	22	662; 664; 2035; 2043; 2069; 2091; 2100; 2113; 2144; 2763; 2771; 2835; 2872; 3138; 3398; 3574; 3660; 4063; 4172; 4346; 4446; 4513
HinP1I	G!CGC	22	662; 664; 2035; 2043; 2069; 2091; 2100; 2113; 2144; 2763; 2771; 2835; 2872; 3138; 3398; 3574; 3660; 4063; 4172; 4346; 4446; 4513
HincII	GTY!RAC	1	1534
HindII	GTY!RAC	1	1534
HindIII	A!AGCTT	0	
HinfI	G!ANTC	14	410; 991; 1318; 1422; 1814; 1836; 2246; 3256; 3390; 3442; 3500; 3537; 4319; 4715
HpaI	GTT!AAC	1	1534
HpaII	C!CGG	19	644; 693; 1285; 1989; 2676; 2753; 2775; 2803; 2934; 3024; 3091; 3272; 3547; 3555; 3647; 4121; 4311; 4337; 4484
HphI	GGTGANNNNNNNN!	5	376; 723; 1097; 3842; 3958
HphI	!NNNNNNNTCACC	4	722; 986; 1888; 2949
Hpy8I	GTN!NAC	12	201; 539; 577; 773; 793; 1088; 1301; 1534; 1818; 1835; 1890; 4377
Hpy99I	CGWCG!	8	1350; 2861; 2889; 3183; 3198; 3475; 3860; 4593
Hpy166II	GTN!NAC	12	201; 539; 577; 773; 793; 1088; 1301; 1534; 1818; 1835; 1890; 4377
Hpy188I	TCN!GA	12	585; 800; 1945; 2554; 2738; 3082; 3435; 3536; 4015; 4149; 4502; 4580
Hpy188III	TC!NNGA	25	605; 1046; 1073; 1238; 1277; 1426; 2198; 2250; 2563; 2616; 2789; 3105; 3114; 3197; 3253; 3297; 3387; 3420; 3489; 3970; 4044; 4127; 4225; 4323; 4457
HpyAV	CCTCANNNNNN!	6	881; 929; 974; 3416; 3523; 4202
HpyAV	!NNNNNGAAGG	8	801; 2004; 2899; 3628; 3644; 3827; 4144; 4454
HpyCH4III	ACN!GT	15	76; 198; 269; 543; 581; 754; 770; 1862; 3151; 3267; 3375; 3698; 4189; 4659; 4730
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1069; 1345; 1831; 1843; 1886; 1996; 2887; 3074; 3855; 3988
HpyCH4V	TG!CA	20	743; 793; 1115; 1226; 1520; 1547; 1615; 2332; 2341; 2404; 2413; 2528; 2604; 2663; 2822; 2997; 3011; 4081; 4377; 4744
HpyF3I	C!TNAG	9	970; 1176; 1267; 2251; 2553; 3434; 3883; 4006; 4415
HpyF10VI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 1180; 1414; 1998; 2028; 2055; 2097; 2338; 2410; 2461; 2540; 2762; 2846; 2869; 3008; 3131; 3214; 3481; 3668; 3872; 4071; 4643
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 609; 2771; 3473; 3552
Hsp92II	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1188; 2201; 2341; 2413; 2504; 2645; 2990; 3176; 3207; 3233; 3589; 3973; 4693; 4744
HspAI	G!CGC	22	662; 664; 2035; 2043; 2069; 2091; 2100; 2113; 2144; 2763; 2771; 2835; 2872; 3138; 3398; 3574; 3660; 4063; 4172; 4346; 4446; 4513
KasI	G!GCGCC	1	2770
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	1	727
KspAI	GTT!AAC	1	1534
Kzo9I	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3115; 3325
LpnI	RGC!GCV	4	2036; 2044; 2772; 4447

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	CCDGNNNNNNNNN!	61	102; 295; 618; 657; 706; 843; 900; 948; 982; 1044; 1059; 1120; 1154; 1188; 1203; 1236; 1298; 1508; 1813; 2002; 2225; 2263; 2279; 2319; 2374; 2391; 2491; 2576; 2689; 2766; 2788; 2811; 2947; 2961; 2980; 3037; 3104; 3154; 3170; 3227; 3285; 3494; 3560; 3584; 3660; 3749; 3852; 3885; 4116; 4134; 4280; 4300; 4324; 4350; 4399; 4497; 4542; 4572; 4651; 4676; 4713
LpnPI	!NNNNNNNNNNNNNCHGG	53	75; 268; 552; 619; 678; 873; 921; 1017; 1118; 1270; 1296; 1383; 1854; 1974; 2031; 2094; 2292; 2304; 2364; 2376; 2608; 2653; 2696; 2738; 2760; 2788; 2835; 2897; 2919; 3009; 3076; 3099; 3143; 3238; 3257; 3282; 3431; 3532; 3575; 3632; 3722; 3825; 3852; 3870; 4106; 4143; 4296; 4322; 4462; 4480; 4515; 4596; 4649
Lsp1109I	GCAGCNNNNNNNN!	8	922; 1364; 1559; 2844; 2886; 3407; 3860; 4360
Lsp1109I	!NNNNNNNNNNNNNGCTGC	8	601; 1041; 2053; 2718; 2902; 2995; 4061; 4267
LweI	GCATCNNNNN!	7	949; 1587; 2350; 2422; 3070; 3134; 3409
LweI	!NNNNNNNNNGATGC	9	357; 1102; 1141; 1270; 1401; 2729; 2984; 3200; 4592
MabI	A!CCWGGT	1	2360
MaeI	C!TAG	9	592; 1390; 1426; 1620; 2038; 2594; 3609; 3943; 4196
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1069; 1345; 1831; 1843; 1886; 1996; 2887; 3074; 3855; 3988
MaeIII	!GTNAC	12	61; 148; 497; 1559; 2060; 2072; 2891; 3197; 3887; 4153; 4269; 4332
MalI	GA!TC	24	587; 672; 688; 729; 843; 1077; 1253; 1430; 2610; 2614; 2633; 2944; 3022; 3103; 3112; 3190; 3566; 3582; 3941; 3953; 4031; 4039; 4050; 4125
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2195; 3384
MbiI	GAG!CGG	2	2031; 3438
MboI	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
MboII	GAAGANNNNNNNN!	8	851; 1017; 1130; 2027; 2255; 3132; 3342; 3961
MboII	!NNNNNNNTCTTC	4	3422; 3589; 3789; 4032
McaTI	GCGC!GC	1	665
MfeI	C!AATTG	1	1521
MflI	R!GATCY	11	585; 670; 686; 1251; 2942; 3188; 3580; 3939; 3951; 4037; 4048
MhlI	GDGCH!C	12	768; 795; 828; 1405; 1962; 2717; 2810; 2884; 3074; 3136; 3846; 4379
MisI	TGG!CCA	3	1189; 1371; 2853
MluI	A!CGCGT	0	
MluNI	TGG!CCA	3	1189; 1371; 2853
MlyI	GAGTCNNNNN!	2	1823; 2255
MlyI	!NNNNNGACTC	5	404; 1416; 1830; 3436; 4313
Mly113I	GG!CGCC	1	2771
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	2	1123; 1864
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4296; 4480
MnlI	CCTCNNNNNNN!	13	874; 1053; 1068; 1245; 1284; 1395; 1490; 2554; 3372; 3578; 3892; 4262; 4586
MnlI	!NNNNNNGAGG	22	541; 707; 755; 794; 815; 848; 965; 1130; 1173; 1319; 1450; 1915; 2246; 2524; 2567; 2582; 2622; 2686; 2822; 3179; 3609; 4512
Mph1103I	ATGCA!T	3	2343; 2415; 4746
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1988; 3271; 3554
MroXI	GAANN!NN TTC	0	
MscI	TGG!CCA	3	1189; 1371; 2853
MseI	T!TAA	16	7; 955; 1472; 1533; 1654; 1675; 1686; 1698; 1709; 1726; 1824; 2095; 3914; 3928; 3933; 3985
MslI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3208
MspI	C!CGG	19	644; 693; 1285; 1989; 2676; 2753; 2775; 2803; 2934; 3024; 3091; 3272; 3547; 3555; 3647; 4121; 4311; 4337; 4484
Msp20I	TGG!CCA	3	1189; 1371; 2853
MspA1I	CMG!CKG	8	614; 1164; 1171; 1408; 2269; 2877; 4106; 4351
MspCI	C!TTAAG	1	1653

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	242	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; 617; 636; 650; 665; 679; 705; 734; 752; 770; 800; 818; 833; 848; 866; 899; 914; 942; 957; 981; 994; 1010; 1028; 1042; 1058; 1071; 1085; 1106; 1119; 1140; 1153; 1173; 1187; 1202; 1218; 1235; 1248; 1262; 1275; 1289; 1310; 1323; 1342; 1361; 1384; 1401; 1416; 1431; 1444; 1459; 1478; 1495; 1508; 1549; 1563; 1576; 1594; 1632; 1647; 1665; 1706; 1730; 1750; 1768; 1789; 1812; 1844; 1859; 1881; 1899; 1912; 1933; 1950; 1963; 1976; 1992; 2005; 2035; 2050; 2075; 2093; 2106; 2121; 2145; 2159; 2183; 2208; 2224; 2262; 2278; 2317; 2331; 2345; 2373; 2389; 2403; 2417; 2446; 2459; 2480; 2489; 2511; 2541; 2557; 2575; 2605; 2628; 2652; 2676; 2695; 2723; 2749; 2765; 2778; 2801; 2815; 2835; 2848; 2862; 2881; 2895; 2908; 2924; 2939; 2952; 2968; 2983; 2999; 3024; 3043; 3059; 3072; 3085; 3103; 3117; 3131; 3147; 3169; 3185; 3204; 3226; 3242; 3265; 3284; 3298; 3314; 3328; 3348; 3364; 3377; 3399; 3432; 3446; 3466; 3479; 3493; 3547; 3560; 3583; 3596; 3615; 3632; 3659; 3695; 3728; 3747; 3772; 3793; 3820; 3833; 3850; 3864; 3879; 3895; 3955; 3980; 3996; 4018; 4031; 4045; 4076; 4090; 4115; 4133; 4148; 4161; 4180; 4193; 4208; 4237; 4256; 4274; 4299; 4314; 4333; 4349; 4368; 4386; 4402; 4416; 4435; 4462; 4485; 4507; 4526; 4541; 4554; 4571; 4591; 4618; 4631; 4650; 4675; 4698; 4712; 4725; 4742
MspJI	!NNNNNNNNNNNNYNG	199	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 591; 608; 625; 647; 667; 690; 708; 726; 744; 774; 798; 816; 840; 859; 881; 921; 942; 968; 988; 1017; 1059; 1093; 1114; 1134; 1161; 1185; 1209; 1242; 1263; 1282; 1308; 1330; 1353; 1376; 1399; 1423; 1452; 1481; 1523; 1606; 1641; 1668; 1691; 1720; 1764; 1786; 1818; 1854; 1871; 1892; 1929; 1949; 1966; 1983; 2018; 2036; 2054; 2071; 2095; 2117; 2144; 2172; 2198; 2236; 2257; 2274; 2292; 2315; 2336; 2364; 2387; 2408; 2426; 2447; 2464; 2487; 2511; 2531; 2549; 2571; 2602; 2624; 2650; 2669; 2686; 2714; 2733; 2752; 2770; 2788; 2809; 2831; 2855; 2888; 2908; 2926; 2947; 2973; 3000; 3017; 3034; 3051; 3077; 3099; 3121; 3139; 3159; 3178; 3200; 3238; 3258; 3282; 3302; 3322; 3349; 3373; 3406; 3425; 3453; 3475; 3504; 3532; 3557; 3576; 3595; 3616; 3633; 3650; 3681; 3708; 3728; 3751; 3771; 3808; 3825; 3844; 3870; 3890; 3929; 3956; 3975; 3993; 4030; 4048; 4089; 4107; 4133; 4150; 4182; 4211; 4239; 4260; 4283; 4302; 4323; 4341; 4358; 4376; 4402; 4423; 4443; 4463; 4481; 4502; 4528; 4545; 4564; 4583; 4612; 4631; 4649; 4668; 4686; 4704; 4727
MspR9I	CC!NGG	20	90; 283; 644; 888; 936; 1032; 1285; 2307; 2362; 2379; 2775; 2935; 3158; 3548; 3737; 3840; 4312; 4530; 4543; 4664
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1521
MvaI	CC!WGG	14	90; 283; 888; 936; 1032; 2307; 2362; 2379; 3158; 3737; 3840; 4530; 4543; 4664
Mva1269I	GAATGCN!	1	1522
Mva1269I	G!CATTC	1	1615
MvnI	CG!CG	17	60; 662; 664; 1420; 1695; 2071; 2091; 2115; 2146; 2837; 3138; 3576; 3660; 3723; 3792; 4065; 4646
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 1180; 1414; 1998; 2028; 2055; 2097; 2338; 2410; 2461; 2540; 2762; 2846; 2869; 3008; 3131; 3214; 3481; 3668; 3872; 4071; 4643
NaeI	GCC!GGC	3	1990; 3273; 3556
NarI	GG!CGCC	1	2771
NciI	CC!SGG	6	644; 1285; 2775; 2935; 3548; 4312
NcoI	C!CATGG	5	360; 703; 1184; 2500; 3203
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
NgoAVIII	GACNNNNNTGANNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	832
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	868
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1988; 3271; 3554

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NheI	G!CTAGC	1	591
NlaIII	CATG!	24	304; 364; 599; 707; 743; 749; 761; 839; 905; 985; 1188; 2201; 2341; 2413; 2504; 2645; 2990; 3176; 3207; 3233; 3589; 3973; 4693; 4744
NlaIV	GGN!NCC	18	467; 651; 688; 767; 827; 1926; 1947; 1959; 2150; 2311; 2383; 2772; 2807; 3655; 3734; 3779; 4622; 4661
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1603; 1918; 3510
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1092; 4582
Nli3877I	CYCGR!G	0	
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2560; 2996
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	3	618; 1108; 2525
NmeDI	RCCGGYNNNNNNNN!	5	704; 2000; 3102; 3283; 3566
NmeDI	!NNNNNNNNNNNNRCCGGY	5	679; 1975; 3077; 3258; 3541
NmuCI	!GTSAC	3	2060; 2891; 3197
NotI	GC!GGCCGC	1	1415
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2873
NsiI	ATGCA!T	3	2343; 2415; 4746
NspI	RCATG!Y	6	599; 743; 2341; 2413; 3176; 4693
NspV	TT!CGAA	1	3453
OliI	CACNN!NNGTG	1	705
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 757; 907; 1159; 1378; 3078
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2341; 2413; 3176
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2197; 3969
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	935; 3736; 3839
PauI	G!CGCGC	1	662
PceI	AGG!CCT	1	2592
PciI	A!CATGT	1	4689
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3115; 3325
PcsI	WCGNNNN!NNNCGW	7	1354; 3065; 3142; 3385; 3459; 3852; 4370
PctI	GAATGCN!	1	1522
PctI	G!CATTC	1	1615
PdiI	GCC!GGC	3	1990; 3273; 3556
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	991; 1318; 3256; 3390; 3500; 3537; 4715
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2889
PfIMI	CCANNNN!NTGG	3	680; 1298; 1310
PfoI	T!CCNGGA	1	3546
PhoI	GG!CC	30	84; 277; 642; 862; 1105; 1140; 1174; 1183; 1189; 1197; 1329; 1371; 1417; 1737; 1879; 2534; 2540; 2549; 2592; 2679; 2853; 3244; 3271; 3780; 3837; 3870; 4215; 4649; 4667; 4678
PinAI	A!CCGGT	1	692
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3152
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	3	1389; 2717; 2972
PleI	GAGTCNNNN!	2	1822; 2254
PleI	!NNNNNGACTC	5	404; 1416; 1830; 3436; 4313
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1853
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	3983
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	4015
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1821
PpsI	GAGTCNNNN!	2	1822; 2254
PpsI	!NNNNNGACTC	5	404; 1416; 1830; 3436; 4313
Ppu10I	A!TGCAT	3	2339; 2411; 4742
Ppu21I	YAC!GTR	3	340; 1887; 3075
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4689

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PshAI	GACNN!NNGTC	1	1344
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1554; 1759
Psp03I	GGWC!C	3	1304; 3290; 3735
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	14	88; 281; 886; 934; 1030; 2305; 2360; 2377; 3156; 3735; 3838; 4528; 4541; 4662
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	14	88; 281; 886; 934; 1030; 2305; 2360; 2377; 3156; 3735; 3838; 4528; 4541; 4662
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	18	467; 651; 688; 767; 827; 1926; 1947; 1959; 2150; 2311; 2383; 2772; 2807; 3655; 3734; 3779; 4622; 4661
PspOMI	G!GGCCC	0	
PspOMII	CGCCCARNNNNNNNNNNNNNNNNNNNN!	3	125; 2501; 3500
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2903
PspPI	G!GNCC	13	83; 276; 641; 861; 1104; 1196; 1301; 1878; 3287; 3732; 3778; 3836; 3869
PspPPI	RG!GWCCY	0	
PspPRI	CCYACAGNNNNNNNNNNNNNNNN!	3	2324; 2396; 3902
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	956; 1384; 2237; 3432
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGNC!CY	1	3872
PstI	CTGCA!G	0	
PstNI	CAGNN!CTG	2	3872; 4280
PsuI	R!GATCY	11	585; 670; 686; 1251; 2942; 3188; 3580; 3939; 3951; 4037; 4048
Psyl	GACN!NNGTC	1	2889
PteI	G!CGCGC	1	662
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	3	1408; 2269; 2877
RcaI	T!CATGA	2	2197; 3969
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3286
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1500
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	1	602
RpaB5I	CGRGGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	11	219; 244; 299; 332; 383; 540; 756; 906; 1158; 1377; 3077
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 755; 905; 1157; 1376; 3076
RseI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3208
RsrII	CG!GWCCG	1	3287
Rsr2I	CG!GWCCG	1	3287
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SaI	G!TCGAC	0	
SapI	GCTCTTCN!	0	
SapI	!NNNNGAAGAGC	2	3115; 3325
SaqAI	T!TAA	16	7; 955; 1472; 1533; 1654; 1675; 1686; 1698; 1709; 1726; 1824; 2095; 3914; 3928; 3933; 3985
SatI	GC!NGC	39	612; 615; 618; 621; 648; 660; 860; 911; 1055; 1172; 1353; 1418; 1548; 2067; 2089; 2103; 2541; 2680; 2732; 2743; 2833; 2838; 2875; 2916; 3003; 3009; 3245; 3341; 3382; 3396; 3510; 3849; 3864; 4075; 4281; 4284; 4349; 4492; 4647



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau96I	G!GNCC	13	83; 276; 641; 861; 1104; 1196; 1301; 1878; 3287; 3732; 3778; 3836; 3869
Sau3AI	!GATC	24	585; 670; 686; 727; 841; 1075; 1251; 1428; 2608; 2612; 2631; 2942; 3020; 3101; 3110; 3188; 3564; 3580; 3939; 3951; 4029; 4037; 4048; 4123
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	1377
SchI	GAGTCNNNNN!	2	1823; 2255
SchI	!NNNNNGACTC	5	404; 1416; 1830; 3436; 4313
SciI	CTC!GAG	0	
ScrFI	CC!NGG	20	90; 283; 644; 888; 936; 1032; 1285; 2307; 2362; 2379; 2775; 2935; 3158; 3548; 3737; 3840; 4312; 4530; 4543; 4664
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	5	1142; 2349; 2421; 2590; 4532
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2926; 3411
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	12	768; 795; 828; 1405; 1962; 2717; 2810; 2884; 3074; 3136; 3846; 4379
SelI	!CGCG	17	58; 660; 662; 1418; 1693; 2069; 2089; 2113; 2144; 2835; 3136; 3574; 3658; 3721; 3790; 4063; 4644
SetI	ASST!	60	125; 137; 178; 261; 308; 342; 447; 552; 568; 727; 850; 900; 1072; 1207; 1225; 1276; 1344; 1348; 1387; 1410; 1461; 1482; 1491; 1503; 1552; 1719; 1834; 1846; 1889; 1926; 1976; 1999; 2123; 2271; 2366; 2559; 2672; 2800; 2879; 2890; 2962; 3033; 3077; 3337; 3483; 3527; 3858; 3889; 3948; 3991; 4134; 4155; 4254; 4391; 4406; 4425; 4437; 4481; 4527; 4578
SexAI	A!CCWGGT	1	2360
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	949; 1587; 2350; 2422; 3070; 3134; 3409
SfaNI	!NNNNNNNNNGATGC	9	357; 1102; 1141; 1270; 1401; 2729; 2984; 3200; 4592
SfcI	C!TRYAG	3	2106; 4233; 4424
SfiI	GGCCNNNN!NGGCC	2	1180; 2546
SfoI	GGC!GCC	1	2772
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3453
SgeI	CNNGNNNNNNNNN!	190	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 617; 636; 650; 666; 680; 705; 734; 752; 770; 800; 824; 842; 857; 899; 914; 947; 981; 994; 1022; 1043; 1058; 1085; 1119; 1140; 1153; 1173; 1187; 1202; 1218; 1235; 1250; 1268; 1289; 1310; 1323; 1361; 1385; 1402; 1431; 1478; 1507; 1549; 1632; 1706; 1790; 1812; 1844; 1881; 1899; 1918; 1933; 1975; 1992; 2009; 2044; 2058; 2075; 2097; 2121; 2145; 2210; 2224; 2262; 2278; 2318; 2331; 2350; 2373; 2390; 2403; 2422; 2452; 2473; 2490; 2513; 2548; 2575; 2606; 2628; 2654; 2676; 2695; 2723; 2759; 2778; 2801; 2815; 2835; 2848; 2862; 2881; 2895; 2914; 2946; 2960; 2973; 2999; 3030; 3043; 3060; 3077; 3091; 3108; 3126; 3141; 3169; 3185; 3204; 3226; 3242; 3265; 3284; 3309; 3328; 3348; 3375; 3399; 3432; 3451; 3479; 3493; 3559; 3583; 3598; 3621; 3642; 3659; 3707; 3734; 3748; 3777; 3801; 3834; 3851; 3871; 3884; 3897; 3955; 3982; 4001; 4031; 4056; 4076; 4090; 4115; 4133; 4170; 4208; 4237; 4265; 4279; 4299; 4314; 4335; 4349; 4368; 4386; 4402; 4442; 4462; 4489; 4507; 4528; 4541; 4554; 4571; 4595; 4618; 4650; 4675; 4702; 4724

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	164	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 610; 629; 647; 679; 708; 726; 744; 774; 798; 816; 840; 873; 921; 955; 996; 1017; 1059; 1093; 1114; 1134; 1161; 1185; 1209; 1242; 1263; 1284; 1308; 1335; 1359; 1376; 1405; 1452; 1481; 1523; 1606; 1680; 1764; 1786; 1818; 1855; 1873; 1892; 1949; 1966; 1983; 2018; 2036; 2056; 2076; 2095; 2119; 2184; 2236; 2292; 2324; 2347; 2364; 2396; 2426; 2447; 2464; 2487; 2522; 2549; 2580; 2602; 2628; 2650; 2669; 2697; 2733; 2752; 2775; 2796; 2814; 2831; 2855; 2888; 2920; 2947; 2973; 3004; 3034; 3051; 3077; 3100; 3121; 3143; 3163; 3183; 3200; 3239; 3258; 3283; 3302; 3322; 3349; 3373; 3406; 3425; 3453; 3475; 3533; 3557; 3576; 3595; 3616; 3633; 3681; 3708; 3728; 3751; 3775; 3808; 3825; 3845; 3871; 3929; 3956; 3975; 4005; 4030; 4050; 4089; 4107; 4144; 4182; 4211; 4239; 4260; 4288; 4309; 4342; 4360; 4416; 4436; 4463; 4481; 4502; 4528; 4545; 4569; 4592; 4624; 4649; 4676; 4698; 4727
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1918; 3705; 4498
SimI	!GACCC	4	106; 3199; 3767; 4015
SinI	G!GWCC	3	1301; 3287; 3732
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	5	365; 705; 744; 1149; 3208
SmlI	C!TYRAG	7	1236; 1275; 1653; 3162; 4044; 4321; 4583
SmoI	C!TYRAG	7	1236; 1275; 1653; 3162; 4044; 4321; 4583
SmuI	CCCGCNNNN!	10	93; 119; 286; 1169; 1271; 2093; 2448; 2469; 3665; 3797
SmuI	!NNNNNNGCGGG	7	616; 1206; 2024; 2894; 3431; 3569; 3716
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2341; 2413; 3176
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 1521; 1585; 1663; 1689; 1700; 2347; 2419; 2511; 3929
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	1	2592
SsiI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1024; 1162; 1264; 1418; 2086; 2089; 2103; 2193; 2441; 2453; 2462; 2474; 2484; 2495; 2541; 2680; 2743; 3245; 3290; 3356; 3382; 3507; 3510; 3658; 3790; 4097; 4241; 4737
SsiI	G!CGG	29	370; 403; 528; 623; 647; 859; 1171; 1213; 1414; 2031; 2058; 2146; 2256; 2837; 2901; 3002; 3005; 3285; 3340; 3438; 3576; 3723; 3863; 4106; 4351; 4472; 4491; 4618; 4646
SspI	AAT!ATT	2	1679; 2232
SspDI	G!GCGCC	1	2770
SspD5I	GGTGANNNNNNNN!	5	376; 723; 1097; 3842; 3958
SspD5I	!NNNNNNNNNTCACC	4	721; 985; 1887; 2948
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	1030
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 650; 952; 1168; 1270; 1291; 1970; 2092; 2447; 2468; 2781; 3184; 3323; 3394; 3664; 3796; 4026; 4464
Sth132I	!NNNNNNNNNCGGG	22	15; 407; 470; 615; 1001; 1073; 1205; 1971; 2023; 2124; 2851; 2893; 2926; 3430; 3539; 3568; 3715; 3819; 3850; 4303; 4347; 4555
Sth302II	CC!GG	19	645; 694; 1286; 1990; 2677; 2754; 2776; 2804; 2935; 3025; 3092; 3273; 3548; 3556; 3648; 4122; 4312; 4338; 4485
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	4	2639; 3096; 3121; 3575
StsI	!NNNNNNNNNNNNNNCATCC	5	781; 869; 926; 1081; 2443
StuI	AGG!CCT	1	2592
StyI	C!CWWGG	7	360; 703; 1184; 2500; 2593; 3203; 3608

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	20	88; 281; 642; 886; 934; 1030; 1283; 2305; 2360; 2377; 2773; 2933; 3156; 3546; 3735; 3838; 4310; 4528; 4541; 4662
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	15	76; 198; 269; 543; 581; 754; 770; 1862; 3151; 3267; 3375; 3698; 4189; 4659; 4730
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1072; 1348; 1834; 1846; 1889; 1999; 2890; 3077; 3858; 3991
TaqI	T!CGA	14	853; 880; 1348; 1920; 2611; 2884; 3040; 3064; 3100; 3262; 3453; 3498; 3753; 4591
TaqII	GACCGANNNNNNNNNNN!	3	1791; 2808; 3476
TaqII	!NNNNNNNNNTCGGTC	1	3720
TaqII	CACCCANNNNNNNNNNN!	2	843; 948
TaqII	!NNNNNNNNNTGGGTG	4	172; 699; 2675; 3267
TasI	!AATT	10	18; 1521; 1585; 1663; 1689; 1700; 2347; 2419; 2511; 3929
TatI	W!GTACW	6	217; 297; 330; 381; 754; 1375
TauI	GCSG!C	21	614; 650; 662; 862; 1174; 1420; 2091; 2105; 2543; 2682; 2745; 2840; 3005; 3008; 3247; 3343; 3384; 3512; 3866; 4494; 4649
TfiI	G!AWTC	7	991; 1318; 3256; 3390; 3500; 3537; 4715
TliI	C!TCGAG	0	
Tru1I	T!TAA	16	7; 955; 1472; 1533; 1654; 1675; 1686; 1698; 1709; 1726; 1824; 2095; 3914; 3928; 3933; 3985
Tru9I	T!TAA	16	7; 955; 1472; 1533; 1654; 1675; 1686; 1698; 1709; 1726; 1824; 2095; 3914; 3928; 3933; 3985
TscAI	CASTGNN!	7	661; 1233; 1617; 2900; 4010; 4281; 4294
TseI	G!CWGC	19	614; 617; 620; 910; 1054; 1352; 1547; 2066; 2731; 2832; 2874; 2915; 3008; 3395; 3848; 4074; 4280; 4283; 4348
TsoI	TARCCANNNNNNNNNNN!	2	1743; 2090
TsoI	!NNNNNNNNNTGGYTA	3	879; 1548; 3300
Tsp45I	!GTSAC	3	2060; 2891; 3197
Tsp509I	!AATT	10	18; 1521; 1585; 1663; 1689; 1700; 2347; 2419; 2511; 3929
TspDTI	ATGAANNNNNNNNNNN!	5	762; 852; 1529; 2830; 3534
TspDTI	!NNNNNNNNNTTCAT	6	26; 890; 911; 3248; 3704; 3911
TspEI	!AATT	10	18; 1521; 1585; 1663; 1689; 1700; 2347; 2419; 2511; 3929
TspGWI	ACGGANNNNNNNNNNN!	1	3646
TspGWI	!NNNNNNNNNTCCGT	1	590
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	7	661; 1233; 1617; 2900; 4010; 4281; 4294
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNNGTG	0	
TstI	GGANNNNNGTGNNNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2889
Tth111II	CAARCANNNNNNNNNNN!	1	4098
Tth111II	!NNNNNNNNNTGYTTG	3	3206; 4066; 4105
UnbI	!GGNCC	13	82; 275; 640; 860; 1103; 1195; 1300; 1877; 3286; 3731; 3777; 3835; 3868
Van9I	CCANNNN!NTGG	3	680; 1298; 1310
Vha464I	C!TTAAG	1	1653
VneI	G!TGCAC	2	791; 4375
VpaK11AI	!GGWCC	3	1300; 3286; 3731
VpaK11BI	G!GWCC	3	1301; 3287; 3732
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	1585; 1689; 1700
XbaI	T!CTAGA	1	1425
XceI	RCATG!Y	6	599; 743; 2341; 2413; 3176; 4693
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	11	585; 670; 686; 1251; 2942; 3188; 3580; 3939; 3951; 4037; 4048
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2593; 3608
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1390; 1426; 1620; 2038; 2594; 3609; 3943; 4196
ZraI	GAC!GTC	4	123; 176; 259; 445
ZrmI	AGT!ACT	1	1377

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Zsp21	ATGCA!T	3	2343; 2415; 4746