

## pTurboRFP-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	1542; 1747
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1830; 2786; 4575
AatI	AGG!CCT	1	2580
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	0	
AccII	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2861
Acc36I	ACCTGCNNNN!	3	1219; 3027; 3477
Acc36I	!NNNNNNNNGCAGGT	1	2646
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	6	465; 753; 813; 1912; 2758; 2793
AccB7I	CCANNNN!NTGG	3	680; 1286; 1298
AccBSI	CCG!CTC	2	2183; 3372
AccBSI	GAG!CGG	2	2019; 3426
AceIII	CAGCTCNNNNNNN!	1	1715
AceIII	!NNNNNNNNNNGAGCTG	2	552; 699
AcI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1012; 1150; 1252; 1406; 2074; 2077; 2091; 2181; 2429; 2441; 2450; 2462; 2472; 2483; 2529; 2668; 2731; 3233; 3278; 3344; 3370; 3495; 3498; 3646; 3778; 4085; 4229; 4725
AcI	G!CGG	30	370; 403; 528; 623; 647; 847; 1117; 1159; 1201; 1402; 2019; 2046; 2134; 2244; 2825; 2889; 2990; 2993; 3273; 3328; 3426; 3564; 3711; 3851; 4094; 4339; 4460; 4479; 4606; 4634
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	8	694; 2627; 2938; 3184; 3576; 3935; 4033; 4119
AcIWI	!NNNNNGATCC	8	580; 665; 681; 1234; 3003; 3547; 3934; 4031
AcoI	Y!GGCCR	6	1357; 1403; 2665; 2839; 3230; 3257
AcsI	R!AATTY	3	1573; 1677; 1688
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1209; 2905; 3337
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4135
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540
AdeI	CACNNN!GTG	2	1286; 1875
AfaI	GT!AC	11	219; 244; 299; 332; 383; 540; 744; 894; 1146; 1365; 3065
AfeI	AGC!GCT	0	
AfiI	CCNNNN!NNGG	23	49; 680; 810; 923; 1089; 1155; 1286; 1298; 1771; 2097; 2489; 2740; 3284; 3565; 3597; 3729; 3764; 3814; 3846; 4199; 4478; 4644; 4662
AfIII	C!TTAAG	1	1641
AfIII	A!CRYGT	1	4677
AgeI	A!CCGGT	1	692
AgsI	TTS!AA	7	776; 1226; 2170; 2214; 2224; 2637; 4213
AhdI	GACNNN!NNGTC	0	
AhI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajni	!CCWGG	14	88; 281; 874; 922; 1018; 2293; 2348; 2365; 3144; 3723; 3826; 4516; 4529; 4650
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	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	2	2333; 2405
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	2	2299; 2371
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1100; 1841
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	1068; 1809
AluI	AG!CT	17	566; 713; 740; 886; 1030; 1193; 1538; 1705; 1962; 2257; 2545; 2865; 3323; 4120; 4377; 4423; 4513
AluBI	AG!CT	17	566; 713; 740; 886; 1030; 1193; 1538; 1705; 1962; 2257; 2545; 2865; 3323; 4120; 4377; 4423; 4513
AlwI	GGATCNNNN!	8	694; 2627; 2938; 3184; 3576; 3935; 4033; 4119
AlwI	!NNNNNGATCC	8	580; 665; 681; 1234; 3003; 3547; 3934; 4031
Alw21I	GWGCW!C	4	783; 2872; 3062; 4367
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1320; 2183; 2601; 3620; 3748
Alw44I	G!TGCAC	2	779; 4363
AlwNI	CAGNN!CTG	2	3860; 4268
Ama87I	C!YCGRG	0	
Aor13HI	T!CCGGA	0	
Aor51HI	AGC!GCT	0	
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	2327; 2399; 3861
ApaLI	G!TGCAC	2	779; 4363
ApeKI	G!CWGC	19	614; 617; 620; 898; 1042; 1340; 1535; 2054; 2719; 2820; 2862; 2903; 2996; 3383; 3836; 4062; 4268; 4271; 4336
ApoI	R!AATTY	3	1573; 1677; 1688
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3274
ApyPI	!NNNNNNNNNNNNNNNNNNGTTCGAT	3	3068; 3721; 4559
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3158
AquII	!NNNNNNNNNNNNNNNNNNGTNCGGC	1	874
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2587
AquIII	!NNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3329
ArsI	GACNNNNNNNTTYGNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	24	586; 671; 687; 716; 830; 1064; 1240; 1417; 2597; 2601; 2620; 2931; 3009; 3090; 3099; 3177; 3553; 3569; 3928; 3940; 4018; 4026; 4037; 4112
AsiGI	A!CCGGT	1	692
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2877
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2581; 3596
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	22	664; 666; 2025; 2033; 2059; 2081; 2090; 2103; 2134; 2753; 2761; 2825; 2862; 3128; 3388; 3564; 3650; 4053; 4162; 4336; 4436; 4503
AspS9I	G!GNCC	13	83; 276; 641; 849; 1092; 1184; 1289; 1866; 3275; 3720; 3766; 3824; 3857
AssI	AGT!ACT	1	1365
AsuII	TT!CGAA	1	3441
AsuC2I	CC!SGG	6	644; 1273; 2763; 2923; 3536; 4300
AsuHPI	GGTGANNNNNNNN!	4	376; 1085; 3830; 3946
AsuHPI	!NNNNNNNTCACC	3	974; 1876; 2937
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	0	
AvaII	G!GWCC	3	1289; 3275; 3720
AviII	TGC!GCA	1	2861
AvrII	C!CTAGG	2	2581; 3596

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AxyI	CC!TNAGG	3	958; 2239; 3871
BaeI	ACNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGC!C	7	756; 783; 816; 1393; 2705; 2798; 4367
BalI	TGG!CCA	2	1359; 2841
BamHI	G!GATCC	1	686
BanI	G!GYRCC	6	465; 753; 813; 1912; 2758; 2793
BanII	GRGCY!C	3	1950; 3124; 3834
BanIII	AT!CGAT	1	2599
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNN!NTGG	3	680; 1286; 1298
BauI	C!ACGAG	3	1344; 3477; 4504
BauI	C!TCGTG	2	1194; 3351
BbeI	GGCGC!C	1	2762
Bbr7I	GAAGACNNNNNN!	1	1005
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	1000
BbsI	!NNNNNGTCTTC	0	
BbuI	GCATG!C	3	2329; 2401; 3164
BbvI	GCAGCNNNNNN!	8	910; 1352; 1547; 2832; 2874; 3395; 3848; 4348
BbvI	!NNNNNNNNNNNGCTGC	8	601; 1029; 2041; 2706; 2890; 2983; 4049; 4255
Bbv12I	GWGCW!C	4	783; 2872; 3062; 4367
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1091; 1889; 2453; 2979; 3481
BccI	!NNNNNGATGG	5	1175; 1343; 1857; 2637; 3065
BceAI	ACGGCNNNNNNNNNN!	6	911; 1055; 1106; 1172; 3185; 3672
BceAI	!NNNNNNNNNNNGCCGT	3	1900; 2718; 4177
Bcefl	ACGGCNNNNNNNNNN!	6	911; 1055; 1106; 1172; 3185; 3672
Bcefl	!NNNNNNNNNNNGCCGT	3	1901; 2719; 4178
BcgI	CGANNNNNNTGCNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNCGANNNNNTGC	0	
BciVI	GTATCCNNNN!	3	2188; 2978; 4479
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	1	715
BcnI	CC!SGG	6	644; 1273; 2763; 2923; 3536; 4300
BcuI	A!CTAGT	0	
BdaI	TGANNNNNTCANNNNNNNNNN!	1	4612
BdaI	!NNNNNNNNNTGANNNNNTCA	1	4578
BfaI	C!TAG	9	592; 1378; 1414; 1608; 2026; 2582; 3597; 3931; 4184
BfiI	ACTGGGNNNN!	2	1395; 2708
BfiI	!NNNCCCAGT	3	289; 648; 2460
BfmI	C!TRYAG	3	2094; 4221; 4412
BfoI	RGCG!Y	4	2026; 2034; 2762; 4437
BfrI	C!TTAAG	1	1641
BfuI	GTATCCNNNN!	3	2188; 2978; 4479
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	3	1219; 3027; 3477
BfuAI	!NNNNNNNGCAGGT	1	2646
BfuCI	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
BglI	GCCNNN!NGGC	5	90; 212; 283; 1168; 2534
BglII	A!GATCT	0	

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BisI	GC!NGC	40	612; 615; 618; 621; 648; 660; 848; 899; 1043; 1118; 1160; 1341; 1406; 1536; 2055; 2077; 2091; 2529; 2668; 2720; 2731; 2821; 2826; 2863; 2904; 2991; 2997; 3233; 3329; 3370; 3384; 3498; 3837; 3852; 4063; 4269; 4272; 4337; 4480; 4635
BlnI	C!CTAGG	2	2581; 3596
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	40	613; 616; 619; 622; 649; 661; 849; 900; 1044; 1119; 1161; 1342; 1407; 1537; 2056; 2078; 2092; 2530; 2669; 2721; 2732; 2822; 2827; 2864; 2905; 2992; 2998; 3234; 3330; 3371; 3385; 3499; 3838; 3853; 4064; 4270; 4273; 4338; 4481; 4636
BmcAI	AGT!ACT	1	1365
Bme18I	G!GWCC	3	1289; 3275; 3720
Bme1390I	CC!NGG	20	90; 283; 644; 876; 924; 1020; 1273; 2295; 2350; 2367; 2763; 2923; 3146; 3536; 3725; 3828; 4300; 4518; 4531; 4652
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	0	
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	13	84; 277; 642; 850; 1093; 1185; 1290; 1867; 3276; 3721; 3767; 3825; 3858
BmiI	GGN!NCC	18	467; 651; 688; 755; 815; 1914; 1935; 1947; 2138; 2299; 2371; 2760; 2795; 3643; 3722; 3767; 4610; 4649
BmrI	ACTGGGNNNNN!	2	1395; 2708
BmrI	!NNNNCCCCAGT	3	289; 648; 2460
BmrFI	CC!NGG	20	90; 283; 644; 876; 924; 1020; 1273; 2295; 2350; 2367; 2763; 2923; 3146; 3536; 3725; 3828; 4300; 4518; 4531; 4652
BmsI	GCATCNNNNN!	8	937; 1054; 1575; 2338; 2410; 3058; 3122; 3397
BmsI	!NNNNNNNNNGATGC	9	357; 1090; 1129; 1258; 1389; 2717; 2972; 3188; 4580
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1395; 2708
BmuI	!NNNNCCCCAGT	3	289; 648; 2460
BoxI	GACNN!NNGTC	1	1332
BpiI	GAAGACNN!	1	1000
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	2	2548; 3447
BpI	!NNNNNNNNGAGNNNNNCTC	2	2516; 3415
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3599
BpmI	!NNNNNNNNNNNNNNNCTCCAG	1	3542
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	1	3441
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	1	1000
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4053; 4592
BpuEI	!NNNNNNNNNNNNNNNCTCAAG	3	1248; 3135; 4294
BpuMI	CC!SGG	6	644; 1273; 2763; 2923; 3536; 4300
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1320; 3748
Bsa29I	AT!CGAT	1	2599
BsaAI	YAC!GTR	3	340; 1875; 3063
BsaBI	GATNN!NNATC	2	1421; 2618
BsaHI	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540
BsaJI	C!CNNGG	19	360; 787; 922; 923; 1018; 2293; 2365; 2488; 2523; 2532; 2581; 2922; 3191; 3596; 3723; 3724; 3826; 3827; 4517
BsaMI	GAATGCN!	1	1510
BsaMI	G!CATTC	1	1603
BsaWI	W!CCGGW	5	692; 2790; 3634; 4324; 4471
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1839
BsaXI	!NNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1809
BsbI	CAACACNNNNNNNNNNNNNNNNNN!	1	1156
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	2	1760; 3667

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Bsc4I	CCNNNNN!NNGG	23	49; 680; 810; 923; 1089; 1155; 1286; 1298; 1771; 2097; 2489; 2740; 3284; 3565; 3597; 3729; 3764; 3814; 3846; 4199; 4478; 4644; 4662
BscAI	GCATCNNNN!	8	936; 1053; 1574; 2337; 2409; 3057; 3121; 3396
BscAI	!NNNNNNGATGC	9	360; 1093; 1132; 1261; 1392; 2720; 2975; 3191; 4583
BseI	ACTGGN!	5	1303; 1390; 2703; 2904; 4150
BseI	C!CAGT	6	295; 654; 1788; 2466; 4262; 4275
Bse8I	GATNN!NNATC	2	1421; 2618
Bse21I	CC!TNAGG	3	958; 2239; 3871
Bse118I	R!CCGGY	5	692; 1976; 3078; 3259; 3542
BseAI	T!CCGGA	0	
BseBI	CC!WGG	14	90; 283; 876; 924; 1020; 2295; 2350; 2367; 3146; 3725; 3828; 4518; 4531; 4652
BseCI	AT!CGAT	1	2599
BseDI	C!CNNGG	19	360; 787; 922; 923; 1018; 2293; 2365; 2488; 2523; 2532; 2581; 2922; 3191; 3596; 3723; 3724; 3826; 3827; 4517
Bse3DI	GCAATGNN!	1	2992
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2619; 3076; 3101; 3555
BseGI	!CATCC	5	783; 871; 928; 1083; 2445
BseJ	GATNN!NNATC	2	1421; 2618
BseLI	CCNNNNN!NNGG	23	49; 680; 810; 923; 1089; 1155; 1286; 1298; 1771; 2097; 2489; 2740; 3284; 3565; 3597; 3729; 3764; 3814; 3846; 4199; 4478; 4644; 4662
BseMI	GCAATGNN!	1	2992
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	1	3885
BseMII	!NNNNNNNNNCTGAG	7	949; 1155; 2230; 2532; 3413; 3985; 4394
BseNI	ACTGGN!	5	1303; 1390; 2703; 2904; 4150
BseNI	C!CAGT	6	295; 654; 1788; 2466; 4262; 4275
BsePI	G!CGCGC	1	662
BseRI	GAGGAGNNNNNNNNNN!	1	2577
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGCMI	7	756; 783; 816; 1393; 2705; 2798; 4367
BseXI	GCAGCNNNNNNNN!	8	910; 1352; 1547; 2832; 2874; 3395; 3848; 4348
BseXI	!NNNNNNNNNNNGCTGC	8	601; 1029; 2041; 2706; 2890; 2983; 4049; 4255
BseX3I	C!GGCCG	2	1403; 2665
BseYI	C!CCAGC	3	2302; 2374; 4373
BseYI	G!CTGGG	2	1120; 3263
BsgI	GTGCAGNNNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNNCTGCAC	1	1197
Bsh1236I	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
Bsh1285I	CGRY!CG	4	697; 1406; 2668; 4343
BshFI	GG!CC	29	84; 277; 642; 850; 1093; 1128; 1162; 1171; 1185; 1317; 1359; 1405; 1725; 1867; 2522; 2528; 2537; 2580; 2667; 2841; 3232; 3259; 3768; 3825; 3858; 4203; 4637; 4655; 4666
BshNI	G!GYRCC	6	465; 753; 813; 1912; 2758; 2793
BshTI	A!CCGGT	1	692
BshVI	AT!CGAT	1	2599
BsiEI	CGRY!CG	4	697; 1406; 2668; 4343
BsiHKAI	GWGCW!C	4	783; 2872; 3062; 4367
BsiHKCI	C!YCGRG	0	
BsiSI	C!CGG	19	644; 693; 1273; 1977; 2664; 2741; 2763; 2791; 2922; 3012; 3079; 3260; 3535; 3543; 3635; 4109; 4299; 4325; 4472
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	23	49; 680; 810; 923; 1089; 1155; 1286; 1298; 1771; 2097; 2489; 2740; 3284; 3565; 3597; 3729; 3764; 3814; 3846; 4199; 4478; 4644; 4662
BsIFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2910; 3442; 3551
BsIFI	!NNNNNNNNNNNNNGTCCC	4	2275; 2347; 2411; 3706
BsmI	GAATGCN!	1	1510
BsmI	G!CATTC	1	1603
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1320; 2183; 2601; 3620; 3748
BsmBI	CGTCTCN!	0	

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BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2910; 3442; 3551
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2275; 2347; 2411; 3706
BsnI	GG!CC	29	84; 277; 642; 850; 1093; 1128; 1162; 1171; 1185; 1317; 1359; 1405; 1725; 1867; 2522; 2528; 2537; 2580; 2667; 2841; 3232; 3259; 3768; 3825; 3858; 4203; 4637; 4655; 4666
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	1320; 3748
BsoBI	C!YCGRG	0	
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	3	360; 2488; 3191
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3562
Bsp24I	!NNNNNNCCANNNNNGTC	2	3983; 4161
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4015; 4193
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3530
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	1	3441
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
Bsp1286I	GDGCH!C	12	756; 783; 816; 1393; 1950; 2705; 2798; 2872; 3062; 3124; 3834; 4367
Bsp1407I	T!GTACA	1	742
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1012; 1150; 1252; 1406; 2074; 2077; 2091; 2181; 2429; 2441; 2450; 2462; 2472; 2483; 2529; 2668; 2731; 3233; 3278; 3344; 3370; 3495; 3498; 3646; 3778; 4085; 4229; 4725
BspACI	G!CGG	30	370; 403; 528; 623; 647; 847; 1117; 1159; 1201; 1402; 2019; 2046; 2134; 2244; 2825; 2889; 2990; 2993; 3273; 3328; 3426; 3564; 3711; 3851; 4094; 4339; 4460; 4479; 4606; 4634
BspCNI	CTCAGNNNNNNNN!	1	3884
BspCNI	!NNNNNNNCTGAG	7	950; 1156; 2231; 2533; 3414; 3986; 4395
BspDI	AT!CGAT	1	2599
BspD6I	GACTCNNNN!	5	418; 1418; 1832; 3438; 4315
BspD6I	!NNNNNGAGTC	2	1795; 2227
BspEI	T!CCGGA	0	
BspFNI	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
BspHI	T!CATGA	2	2185; 3957
BspLI	GGN!NCC	18	467; 651; 688; 755; 815; 1914; 1935; 1947; 2138; 2299; 2371; 2760; 2795; 3643; 3722; 3767; 4610; 4649
BspMI	ACCTGCNNNN!	3	1219; 3027; 3477
BspMI	!NNNNNNNGCAGGT	1	2646
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	8	694; 2627; 2938; 3184; 3576; 3935; 4033; 4119
BspPI	!NNNNNGATCC	8	580; 665; 681; 1234; 3003; 3547; 3934; 4031
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3103; 3313
BspTI	C!TTAAG	1	1641
BspT104I	TT!CGAA	1	3441
BspT107I	G!GYRCC	6	465; 753; 813; 1912; 2758; 2793
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1320; 3748
BsrI	ACTGGN!	5	1303; 1390; 2703; 2904; 4150
BsrI	C!CAGT	6	295; 654; 1788; 2466; 4262; 4275
BsrBI	CCG!CTC	2	2183; 3372
BsrBI	GAG!CGG	2	2019; 3426
BsrDI	GCAATGNN!	1	2992
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	692; 1976; 3078; 3259; 3542
BsrGI	T!GTACA	1	742
BsrSI	ACTGGN!	5	1303; 1390; 2703; 2904; 4150
BsrSI	C!CAGT	6	295; 654; 1788; 2466; 4262; 4275
BssAI	R!CCGGY	5	692; 1976; 3078; 3259; 3542

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNGGG	19	360; 787; 922; 923; 1018; 2293; 2365; 2488; 2523; 2532; 2581; 2922; 3191; 3596; 3723; 3724; 3826; 3827; 4517
BssHII	G!CGCGC	1	662
BssKI	!CCNGG	20	88; 281; 642; 874; 922; 1018; 1271; 2293; 2348; 2365; 2761; 2921; 3144; 3534; 3723; 3826; 4298; 4516; 4529; 4650
BssMI	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
BssNI	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1344; 3477; 4504
BssSI	C!TCGTG	2	1194; 3351
BssTII	C!CWVGG	5	360; 2488; 2581; 3191; 3596
Bst6I	CTCTCN!	0	
Bst6I	!NNNNGAAGAG	3	2226; 3103; 3313
Bst98I	C!TTAAG	1	1641
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540
BstAFI	C!TTAAG	1	1641
BstAPI	GCANNNN!NTGC	3	2326; 2398; 3860
BstAUI	T!GTACA	1	742
BstBI	TT!CGAA	1	3441
Bst2BI	C!ACGAG	3	1344; 3477; 4504
Bst2BI	C!TCGTG	2	1194; 3351
BstBAI	YAC!GTR	3	340; 1875; 3063
Bst4CI	ACN!GT	14	76; 198; 269; 543; 581; 758; 1850; 3139; 3255; 3363; 3686; 4177; 4647; 4718
BstC8I	GCN!NGC	32	86; 279; 593; 664; 711; 801; 1005; 1978; 2021; 2035; 2308; 2327; 2380; 2399; 2653; 2839; 3058; 3124; 3130; 3158; 3162; 3203; 3207; 3261; 3544; 3731; 3778; 3834; 3856; 4067; 4627; 4664
BstDEI	C!TNAG	9	958; 1164; 1255; 2239; 2541; 3422; 3871; 3994; 4403
BstDSI	C!CRYGG	3	360; 2488; 3191
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2619; 3076; 3101; 3555
BstF5I	!CATCC	5	783; 871; 928; 1083; 2445
BstFNI	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
BstH2I	RGCGC!Y	4	2026; 2034; 2762; 4437
BstHHI	GCG!C	22	664; 666; 2025; 2033; 2059; 2081; 2090; 2103; 2134; 2753; 2761; 2825; 2862; 3128; 3388; 3564; 3650; 4053; 4162; 4336; 4436; 4503
BstKTI	GAT!C	24	588; 673; 689; 718; 832; 1066; 1242; 1419; 2599; 2603; 2622; 2933; 3011; 3092; 3101; 3179; 3555; 3571; 3930; 3942; 4020; 4028; 4039; 4114
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1320; 2183; 2601; 3620; 3748
BstMBI	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
BstMCI	CGRY!CG	4	697; 1406; 2668; 4343
BstMWI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 737; 1168; 1986; 2016; 2043; 2085; 2326; 2398; 2449; 2528; 2750; 2834; 2857; 2996; 3119; 3202; 3469; 3656; 3860; 4059; 4631
BstNI	CC!WGG	14	90; 283; 876; 924; 1020; 2295; 2350; 2367; 3146; 3725; 3828; 4518; 4531; 4652
BstNSI	RCATG!Y	6	599; 731; 2329; 2401; 3164; 4681
BstOI	CC!WGG	14	90; 283; 876; 924; 1020; 2295; 2350; 2367; 3146; 3725; 3828; 4518; 4531; 4652
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1332
BstSCI	!CCNGG	20	88; 281; 642; 874; 922; 1018; 1271; 2293; 2348; 2365; 2761; 2921; 3144; 3534; 3723; 3826; 4298; 4516; 4529; 4650
BstSFI	C!TRYAG	3	2094; 4221; 4412
BstSLI	GKGC!C	7	756; 783; 816; 1393; 2705; 2798; 4367
BstSNI	TAC!GTA	1	340

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstUI	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
Bst2UI	CC!WGG	14	90; 283; 876; 924; 1020; 2295; 2350; 2367; 3146; 3725; 3828; 4518; 4531; 4652
BstV1I	GCAGCNNNNNNNN!	8	910; 1352; 1547; 2832; 2874; 3395; 3848; 4348
BstV1I	!NNNNNNNNNNNGCTGC	8	601; 1029; 2041; 2706; 2890; 2983; 4049; 4255
BstV2I	GAAGACNN!	1	1000
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 670; 686; 1239; 2930; 3176; 3568; 3927; 3939; 4025; 4036
BstYI	R!GATCY	11	585; 670; 686; 1239; 2930; 3176; 3568; 3927; 3939; 4025; 4036
BstZI	C!GGCCG	2	1403; 2665
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2188; 2978; 4479
BsuI	!NNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2599
Bsu36I	CC!TNAGG	3	958; 2239; 3871
BsuRI	GG!CC	29	84; 277; 642; 850; 1093; 1128; 1162; 1171; 1185; 1317; 1359; 1405; 1725; 1867; 2522; 2528; 2537; 2580; 2667; 2841; 3232; 3259; 3768; 3825; 3858; 4203; 4637; 4655; 4666
BsuTUI	AT!CGAT	1	2599
BtgI	C!CRYGG	3	360; 2488; 3191
BtgZI	GCGATGNNNNNNNNNN!	2	1876; 3211
BtgZI	!NNNNNNNNNNNNNNCATCGC	3	334; 3030; 3374
BthCI	GCNG!C	40	614; 617; 620; 623; 650; 662; 850; 901; 1045; 1120; 1162; 1343; 1408; 1538; 2057; 2079; 2093; 2531; 2670; 2722; 2733; 2823; 2828; 2865; 2906; 2993; 2999; 3235; 3331; 3372; 3386; 3500; 3839; 3854; 4065; 4271; 4274; 4339; 4482; 4637
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	1214; 1598
BtsCI	GGATGNN!	4	2619; 3076; 3101; 3555
BtsCI	!CATCC	5	783; 871; 928; 1083; 2445
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	3	1219; 3027; 3477
BveI	!NNNNNNNNNGCAGGT	1	2646
Cac8I	GCN!NGC	32	86; 279; 593; 664; 711; 801; 1005; 1978; 2021; 2035; 2308; 2327; 2380; 2399; 2653; 2839; 3058; 3124; 3130; 3158; 3162; 3203; 3207; 3261; 3544; 3731; 3778; 3834; 3856; 4067; 4627; 4664
CaiI	CAGNNN!CTG	2	3860; 4268
CciI	T!CATGA	2	2185; 3957
CciNI	GC!GGCCGC	1	1403
CdiI	CATC!G	5	352; 3048; 3053; 3251; 3392
CdiI	C!GATG	2	1862; 3197
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	4631
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2420; 2462
CelII	GC!TNAGC	0	
CfoI	GCG!C	22	664; 666; 2025; 2033; 2059; 2081; 2090; 2103; 2134; 2753; 2761; 2825; 2862; 3128; 3388; 3564; 3650; 4053; 4162; 4336; 4436; 4503
CfrI	Y!GGCCR	6	1357; 1403; 2665; 2839; 3230; 3257
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	5	692; 1976; 3078; 3259; 3542
Cfr13I	G!GNCC	13	83; 276; 641; 849; 1092; 1184; 1289; 1866; 3275; 3720; 3766; 3824; 3857
Cfr42I	CCGC!GG	0	
ChaI	GATC!	24	589; 674; 690; 719; 833; 1067; 1243; 1420; 2600; 2604; 2623; 2934; 3012; 3093; 3102; 3180; 3556; 3572; 3931; 3943; 4021; 4029; 4040; 4115
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	795; 2576; 4016; 4116; 4194
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	64; 257; 2243; 2338; 3530; 4080; 4635
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNNNN!	7	98; 291; 2277; 2372; 3564; 4114; 4669
CjeI	!NNNNNNNNCCANNNNNNNGT	5	761; 2542; 3982; 4082; 4160
CjePI	CCANNNNNNNTCNNNNNNNNNNNNNNNN!	2	4016; 4194
CjePI	!NNNNNNNNGANNNNNNNNNTGG	3	257; 3530; 4129



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNN!	3	290; 3563; 4162
CjePI	!NNNNNNNCCANNNNNNNTC	2	3983; 4161
Clai	AT!CGAT	1	2599
CpoI	CG!GWCCG	1	3275
CseI	GACGCNNNNN!	4	526; 617; 3469; 3548
CseI	!NNNNNNNNNNNGCGTC	3	2092; 3987; 4565
CsiI	A!CCWGGT	1	2348
CspI	CG!GWCCG	1	3275
Csp6I	G!TAC	11	218; 243; 298; 331; 382; 539; 743; 893; 1145; 1364; 3064
Csp45I	TT!CGAA	1	3441
CspAI	A!CCGGT	1	692
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	4	745; 1336; 2039; 3648
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	1	1201
CviAII	C!ATG	23	301; 361; 596; 704; 728; 734; 746; 824; 890; 970; 2186; 2326; 2398; 2489; 2630; 2975; 3161; 3192; 3218; 3574; 3958; 4678; 4729
CviJI	RG!CY	99	42; 84; 93; 277; 566; 628; 637; 642; 650; 713; 740; 803; 850; 879; 886; 906; 964; 1030; 1042; 1093; 1120; 1128; 1162; 1171; 1177; 1185; 1193; 1207; 1276; 1317; 1353; 1359; 1405; 1428; 1538; 1705; 1725; 1867; 1948; 1962; 1976; 2257; 2298; 2370; 2493; 2522; 2528; 2537; 2545; 2568; 2580; 2586; 2667; 2684; 2692; 2719; 2744; 2828; 2837; 2841; 2865; 2903; 2979; 2996; 3015; 3078; 3122; 3132; 3149; 3232; 3259; 3263; 3300; 3323; 3339; 3519; 3546; 3607; 3729; 3768; 3825; 3832; 3839; 3858; 3869; 4120; 4149; 4192; 4203; 4268; 4347; 4372; 4377; 4423; 4513; 4611; 4637; 4655; 4666
CviKI-1	RG!CY	99	42; 84; 93; 277; 566; 628; 637; 642; 650; 713; 740; 803; 850; 879; 886; 906; 964; 1030; 1042; 1093; 1120; 1128; 1162; 1171; 1177; 1185; 1193; 1207; 1276; 1317; 1353; 1359; 1405; 1428; 1538; 1705; 1725; 1867; 1948; 1962; 1976; 2257; 2298; 2370; 2493; 2522; 2528; 2537; 2545; 2568; 2580; 2586; 2667; 2684; 2692; 2719; 2744; 2828; 2837; 2841; 2865; 2903; 2979; 2996; 3015; 3078; 3122; 3132; 3149; 3232; 3259; 3263; 3300; 3323; 3339; 3519; 3546; 3607; 3729; 3768; 3825; 3832; 3839; 3858; 3869; 4120; 4149; 4192; 4203; 4268; 4347; 4372; 4377; 4423; 4513; 4611; 4637; 4655; 4666
CviQI	G!TAC	11	218; 243; 298; 331; 382; 539; 743; 893; 1145; 1364; 3064
DdeI	C!TNAG	9	958; 1164; 1255; 2239; 2541; 3422; 3871; 3994; 4403
DinI	GGC!GCC	1	2760
DpnI	GA!TC	24	587; 672; 688; 717; 831; 1065; 1241; 1418; 2598; 2602; 2621; 2932; 3010; 3091; 3100; 3178; 3554; 3570; 3929; 3941; 4019; 4027; 4038; 4113
DpnII	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
DraI	TTT!AAA	3	1461; 3903; 3922
DraII	RG!GNCCY	1	3857
DraIII	CACNNN!GTG	2	1286; 1875
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	3	266; 1387; 4239
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTTG	0	
DrdI	GACNNN!NNGTC	3	1830; 2786; 4575
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1830; 2786; 4575
EaeI	Y!GGCCR	6	1357; 1403; 2665; 2839; 3230; 3257
EagI	C!GGCCG	2	1403; 2665
Eam1104I	CTCTCN!	0	
Eam1104I	!NNNNGAAGAG	3	2226; 3103; 3313
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	3	2226; 3103; 3313
EciI	GGCGGANNNNNNNNNNNN!	4	2259; 3288; 4475; 4621
EciI	!NNNNNNNNNTCCGCC	4	496; 2430; 2451; 2472

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	2	1403; 2665
Eco24I	GRGCY!C	3	1950; 3124; 3834
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1320; 3748
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	3	1289; 3275; 3720
Eco47III	AGC!GCT	0	
Eco52I	C!GGCCG	2	1403; 2665
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	3	1209; 2905; 3337
Eco57I	!NNNNNNNNNNNNNNCTTCAG	1	4135
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	958; 2239; 3871
Eco88I	C!YCGRG	0	
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	5	360; 2488; 2581; 3191; 3596
Eco147I	AGG!CCT	1	2580
EcoHI	!CCSGG	6	642; 1271; 2761; 2921; 3534; 4298
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	4	1209; 2905; 3337; 3599
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	2	3542; 4135
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3857
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	14	88; 281; 874; 922; 1018; 2293; 2348; 2365; 3144; 3723; 3826; 4516; 4529; 4650
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	5	360; 2488; 2581; 3191; 3596
EcoT22I	ATGCA!T	3	2331; 2403; 4734
EcoT38I	GRGCY!C	3	1950; 3124; 3834
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	2760
EheI	GGC!GCC	1	2760
ErhI	C!CWWGG	5	360; 2488; 2581; 3191; 3596
EsaBC3I	TC!GA	14	842; 869; 1337; 1909; 2600; 2873; 3029; 3053; 3089; 3251; 3442; 3487; 3742; 4580
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	23	304; 364; 599; 707; 731; 737; 749; 827; 893; 973; 2189; 2329; 2401; 2492; 2633; 2978; 3164; 3195; 3221; 3577; 3961; 4681; 4732
Fail	YA!TR	61	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 597; 705; 729; 735; 747; 825; 891; 971; 989; 1235; 1421; 1431; 1497; 1542; 1747; 2175; 2187; 2318; 2327; 2390; 2399; 2423; 2490; 2514; 2631; 2695; 2976; 3001; 3162; 3193; 3219; 3291; 3507; 3575; 3653; 3705; 3866; 3883; 3885; 3887; 3959; 4237; 4426; 4542; 4615; 4679; 4730
FaII	AAGNNNNNCTNNNNNNNNNNNN!	2	968; 3099
FaII	!NNNNNNNNAAGNNNNNCTT	2	936; 3067
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2910; 3442; 3551
FaqI	!NNNNNNNNNNNNNGTCCC	4	2275; 2347; 2411; 3706
FatI	!CATG	23	300; 360; 595; 703; 727; 733; 745; 823; 889; 969; 2185; 2325; 2397; 2488; 2629; 2974; 3160; 3191; 3217; 3573; 3957; 4677; 4728
FauI	CCCGCNNNN!	10	93; 119; 286; 1157; 1259; 2081; 2436; 2457; 3653; 3785
FauI	!NNNNNGCGGG	7	616; 1194; 2012; 2882; 3419; 3557; 3704
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	1	715
FbII	GT!MKAC	0	
FmuI	GGNC!C	13	86; 279; 644; 852; 1095; 1187; 1292; 1869; 3278; 3723; 3769; 3827; 3860
Fnu4HI	GC!NGC	40	612; 615; 618; 621; 648; 660; 848; 899; 1043; 1118; 1160; 1341; 1406; 1536; 2055; 2077; 2091; 2529; 2668; 2720; 2731; 2821; 2826; 2863; 2904; 2991; 2997; 3233; 3329; 3370; 3384; 3498; 3837; 3852; 4063; 4269; 4272; 4337; 4480; 4635

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FokI	GGATGNNNNNNNNNN!	4	2626; 3083; 3108; 3562
FokI	!NNNNNNNNNNNNNCATCC	5	770; 858; 915; 1070; 2432
FriOI	GRGCY!C	3	1950; 3124; 3834
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2861
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1378; 1414; 1608; 2026; 2582; 3597; 3931; 4184
FspEI	CCNNNNNNNNNNNN!	158	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; 770; 800; 817; 831; 864; 878; 896; 920; 935; 965; 998; 1025; 1040; 1095; 1142; 1161; 1176; 1191; 1224; 1244; 1264; 1285; 1305; 1331; 1373; 1389; 1419; 1442; 1481; 1495; 1636; 1731; 1755; 1778; 1801; 1819; 1841; 1862; 1881; 1900; 1929; 1950; 1964; 1990; 2078; 2104; 2153; 2194; 2212; 2251; 2267; 2305; 2362; 2377; 2434; 2454; 2468; 2485; 2499; 2536; 2551; 2594; 2677; 2744; 2775; 2795; 2810; 2855; 2869; 2935; 2949; 2968; 2984; 3025; 3045; 3092; 3142; 3158; 3178; 3203; 3223; 3246; 3273; 3291; 3317; 3357; 3383; 3407; 3463; 3477; 3505; 3548; 3569; 3604; 3648; 3736; 3760; 3782; 3802; 3818; 3839; 3853; 3872; 3956; 3976; 4004; 4019; 4053; 4095; 4122; 4137; 4182; 4206; 4220; 4242; 4268; 4288; 4312; 4338; 4386; 4405; 4424; 4450; 4485; 4530; 4560; 4574; 4625; 4639; 4664; 4680; 4701; 4730
FspEI	!NNNNNNNNNNNNNNNGG	128	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 608; 629; 666; 705; 732; 774; 795; 819; 861; 880; 909; 945; 982; 1005; 1024; 1054; 1075; 1102; 1141; 1167; 1186; 1258; 1284; 1335; 1371; 1430; 1530; 1599; 1629; 1707; 1756; 1778; 1806; 1842; 1887; 1916; 1952; 1971; 1999; 2019; 2082; 2105; 2213; 2245; 2263; 2292; 2335; 2364; 2475; 2504; 2547; 2568; 2596; 2629; 2649; 2674; 2701; 2726; 2748; 2776; 2802; 2823; 2874; 2895; 2913; 2961; 2997; 3053; 3078; 3102; 3131; 3154; 3178; 3204; 3226; 3245; 3270; 3310; 3346; 3411; 3496; 3520; 3549; 3583; 3604; 3624; 3669; 3696; 3715; 3748; 3800; 3831; 3858; 3910; 4008; 4079; 4124; 4185; 4250; 4284; 4310; 4328; 4364; 4434; 4457; 4479; 4503; 4536; 4584; 4619; 4637; 4694
Fsp4HI	GC!NGC	40	612; 615; 618; 621; 648; 660; 848; 899; 1043; 1118; 1160; 1341; 1406; 1536; 2055; 2077; 2091; 2529; 2668; 2720; 2731; 2821; 2826; 2863; 2904; 2991; 2997; 3233; 3329; 3370; 3384; 3498; 3837; 3852; 4063; 4269; 4272; 4337; 4480; 4635
GdiII	C!GGCCR	2	1403; 2665
GdiII	Y!GGCCG	4	1403; 2665; 3230; 3257
GlaI	GC!GC	22	663; 665; 2024; 2032; 2058; 2080; 2089; 2102; 2133; 2752; 2760; 2824; 2861; 3127; 3387; 3563; 3649; 4052; 4161; 4335; 4435; 4502
GluI	GC!NGC	40	612; 615; 618; 621; 648; 660; 848; 899; 1043; 1118; 1160; 1341; 1406; 1536; 2055; 2077; 2091; 2529; 2668; 2720; 2731; 2821; 2826; 2863; 2904; 2991; 2997; 3233; 3329; 3370; 3384; 3498; 3837; 3852; 4063; 4269; 4272; 4337; 4480; 4635
GsaI	CCCAG!C	3	2306; 2378; 4377
GsaI	GCTGG!G	2	1124; 3267
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3599
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3542
HaeI	WGG!CCW	8	1128; 1171; 1359; 2580; 2841; 4203; 4655; 4666
HaeII	RGCG!Y	4	2026; 2034; 2762; 4437
HaeIII	GG!CC	29	84; 277; 642; 850; 1093; 1128; 1162; 1171; 1185; 1317; 1359; 1405; 1725; 1867; 2522; 2528; 2537; 2580; 2667; 2841; 3232; 3259; 3768; 3825; 3858; 4203; 4637; 4655; 4666
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1434; 2955
HaeIV	!NNNNNNNNNGAYNNNNNRTC	2	1400; 2921
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1433; 2954
HaeIV	!NNNNNNNGAYNNNNNRTC	2	1402; 2923
HapII	C!CGG	19	644; 693; 1273; 1977; 2664; 2741; 2763; 2791; 2922; 3012; 3079; 3260; 3535; 3543; 3635; 4109; 4299; 4325; 4472
HgaI	GACGCNNNNN!	4	526; 617; 3469; 3548
HgaI	!NNNNNNNNNNNGCGTC	3	2092; 3987; 4565
HhaI	GCG!C	22	664; 666; 2025; 2033; 2059; 2081; 2090; 2103; 2134; 2753; 2761; 2825; 2862; 3128; 3388; 3564; 3650; 4053; 4162; 4336; 4436; 4503
HinII	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Hin1II	CATG!	23	304; 364; 599; 707; 731; 737; 749; 827; 893; 973; 2189; 2329; 2401; 2492; 2633; 2978; 3164; 3195; 3221; 3577; 3961; 4681; 4732
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1433; 2954
Hin4I	!NNNNNNNGABNNNNNRTC	3	1401; 2922; 2952
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1433; 2954; 2984
Hin4I	!NNNNNNNGAYNNNNNVTC	2	1401; 2922
Hin6I	G!CGC	22	662; 664; 2023; 2031; 2057; 2079; 2088; 2101; 2132; 2751; 2759; 2823; 2860; 3126; 3386; 3562; 3648; 4051; 4160; 4334; 4434; 4501
HinP1I	G!CGC	22	662; 664; 2023; 2031; 2057; 2079; 2088; 2101; 2132; 2751; 2759; 2823; 2860; 3126; 3386; 3562; 3648; 4051; 4160; 4334; 4434; 4501
HincII	GTY!RAC	1	1522
HindII	GTY!RAC	1	1522
HindIII	A!AGCTT	0	
HinfI	G!ANTC	14	410; 979; 1306; 1410; 1802; 1824; 2234; 3244; 3378; 3430; 3488; 3525; 4307; 4703
HpaI	GTT!AAC	1	1522
HpaII	C!CGG	19	644; 693; 1273; 1977; 2664; 2741; 2763; 2791; 2922; 3012; 3079; 3260; 3535; 3543; 3635; 4109; 4299; 4325; 4472
HphI	GGTGANNNNNNNN!	4	376; 1085; 3830; 3946
HphI	!NNNNNNNTCACC	3	974; 1876; 2937
Hpy8I	GTN!NAC	12	201; 539; 577; 761; 781; 1076; 1289; 1522; 1806; 1823; 1878; 4365
Hpy99I	CGWCG!	8	1338; 2849; 2877; 3171; 3186; 3463; 3848; 4581
Hpy166II	GTN!NAC	12	201; 539; 577; 761; 781; 1076; 1289; 1522; 1806; 1823; 1878; 4365
Hpy188I	TCN!GA	12	585; 788; 1933; 2542; 2726; 3070; 3423; 3524; 4003; 4137; 4490; 4568
Hpy188III	TC!NNGA	25	605; 1034; 1061; 1226; 1265; 1414; 2186; 2238; 2551; 2604; 2777; 3093; 3102; 3185; 3241; 3285; 3375; 3408; 3477; 3958; 4032; 4115; 4213; 4311; 4445
HpyAV	CCTCANNNNNN!	7	869; 917; 962; 1232; 3404; 3511; 4190
HpyAV	!NNNNNGAAGG	8	789; 1992; 2887; 3616; 3632; 3815; 4132; 4442
HpyCH4III	ACN!GT	14	76; 198; 269; 543; 581; 758; 1850; 3139; 3255; 3363; 3686; 4177; 4647; 4718
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1057; 1333; 1819; 1831; 1874; 1984; 2875; 3062; 3843; 3976
HpyCH4V	TG!CA	21	731; 781; 1045; 1103; 1214; 1508; 1535; 1603; 2320; 2329; 2392; 2401; 2516; 2592; 2651; 2810; 2985; 2999; 4069; 4365; 4732
HpyF3I	C!TNAG	9	958; 1164; 1255; 2239; 2541; 3422; 3871; 3994; 4403
HpyF10VI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 737; 1168; 1986; 2016; 2043; 2085; 2326; 2398; 2449; 2528; 2750; 2834; 2857; 2996; 3119; 3202; 3469; 3656; 3860; 4059; 4631
Hsp92I	GR!CGYC	8	122; 175; 258; 444; 609; 2759; 3461; 3540
Hsp92II	CATG!	23	304; 364; 599; 707; 731; 737; 749; 827; 893; 973; 2189; 2329; 2401; 2492; 2633; 2978; 3164; 3195; 3221; 3577; 3961; 4681; 4732
HspAI	G!CGC	22	662; 664; 2023; 2031; 2057; 2079; 2088; 2101; 2132; 2751; 2759; 2823; 2860; 3126; 3386; 3562; 3648; 4051; 4160; 4334; 4434; 4501
KasI	G!GCGCC	1	2758
KfII	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	1	715
KspAI	GTT!AAC	1	1522
Kzo9I	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3103; 3313
LpnI	RGC!GCY	4	2024; 2032; 2760; 4435

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnPI	CCDGNNNNNNNNNN!	60	102; 295; 618; 657; 706; 831; 888; 936; 970; 1032; 1047; 1108; 1176; 1191; 1224; 1286; 1496; 1801; 1990; 2213; 2251; 2267; 2307; 2362; 2379; 2479; 2564; 2677; 2754; 2776; 2799; 2935; 2949; 2968; 3025; 3092; 3142; 3158; 3215; 3273; 3482; 3548; 3572; 3648; 3737; 3840; 3873; 4104; 4122; 4268; 4288; 4312; 4338; 4387; 4485; 4530; 4560; 4639; 4664; 4701
LpnPI	!NNNNNNNNNNNNNCHGG	53	75; 268; 552; 619; 678; 861; 909; 1005; 1106; 1258; 1284; 1371; 1842; 1962; 2019; 2082; 2280; 2292; 2352; 2364; 2596; 2641; 2684; 2726; 2748; 2776; 2823; 2885; 2907; 2997; 3064; 3087; 3131; 3226; 3245; 3270; 3419; 3520; 3563; 3620; 3710; 3813; 3840; 3858; 4094; 4131; 4284; 4310; 4450; 4468; 4503; 4584; 4637
Lsp1109I	GCAGCNNNNNNNN!	8	910; 1352; 1547; 2832; 2874; 3395; 3848; 4348
Lsp1109I	!NNNNNNNNNNNNNGCTGC	8	601; 1029; 2041; 2706; 2890; 2983; 4049; 4255
LweI	GCATCNNNNN!	8	937; 1054; 1575; 2338; 2410; 3058; 3122; 3397
LweI	!NNNNNNNNNGATGC	9	357; 1090; 1129; 1258; 1389; 2717; 2972; 3188; 4580
MabI	A!CCWGGT	1	2348
MaeI	C!TAG	9	592; 1378; 1414; 1608; 2026; 2582; 3597; 3931; 4184
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1057; 1333; 1819; 1831; 1874; 1984; 2875; 3062; 3843; 3976
MaeIII	!GTNAC	12	61; 148; 497; 1547; 2048; 2060; 2879; 3185; 3875; 4141; 4257; 4320
MalI	GA!TC	24	587; 672; 688; 717; 831; 1065; 1241; 1418; 2598; 2602; 2621; 2932; 3010; 3091; 3100; 3178; 3554; 3570; 3929; 3941; 4019; 4027; 4038; 4113
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2183; 3372
MbiI	GAG!CGG	2	2019; 3426
MboI	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
MboII	GAAGANNNNNNNN!	8	839; 1005; 1118; 2015; 2243; 3120; 3330; 3949
MboII	!NNNNNNNTCTTC	4	3410; 3577; 3777; 4020
McaTI	GCGC!GC	1	665
MfeI	C!AATTG	1	1509
MflI	R!GATCY	11	585; 670; 686; 1239; 2930; 3176; 3568; 3927; 3939; 4025; 4036
MhII	GDGCH!C	12	756; 783; 816; 1393; 1950; 2705; 2798; 2872; 3062; 3124; 3834; 4367
MisI	TGG!CCA	2	1359; 2841
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	1359; 2841
MlyI	GAGTCNNNNN!	2	1811; 2243
MlyI	!NNNNNGACTC	5	404; 1404; 1818; 3424; 4301
Mly113I	GG!CGCC	1	2759
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	2	1111; 1852
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4284; 4468
MnII	CCTCNNNNNNN!	10	862; 1272; 1383; 1478; 2542; 3360; 3566; 3880; 4250; 4574
MnII	!NNNNNGAGG	21	541; 743; 782; 803; 836; 953; 1118; 1161; 1307; 1438; 1903; 2234; 2512; 2555; 2570; 2610; 2674; 2810; 3167; 3597; 4500
Mph1103I	ATGCA!T	3	2331; 2403; 4734
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1976; 3259; 3542
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1359; 2841
MseI	T!TAA	16	7; 943; 1460; 1521; 1642; 1663; 1674; 1686; 1697; 1714; 1812; 2083; 3902; 3916; 3921; 3973
MslI	CAYNN!NNRTG	4	365; 732; 1137; 3196
MspI	C!CGG	19	644; 693; 1273; 1977; 2664; 2741; 2763; 2791; 2922; 3012; 3079; 3260; 3535; 3543; 3635; 4109; 4299; 4325; 4472
Msp20I	TGG!CCA	2	1359; 2841
MspA1I	CMG!CKG	6	614; 1152; 2257; 2865; 4094; 4339
MspCI	C!TTAAG	1	1641

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	240	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; 722; 740; 758; 788; 806; 821; 836; 854; 887; 902; 930; 945; 969; 982; 998; 1016; 1030; 1046; 1073; 1094; 1107; 1126; 1141; 1161; 1175; 1190; 1206; 1223; 1238; 1255; 1275; 1298; 1311; 1330; 1349; 1372; 1389; 1404; 1419; 1432; 1447; 1466; 1483; 1496; 1537; 1551; 1564; 1582; 1620; 1635; 1653; 1694; 1718; 1738; 1756; 1777; 1800; 1832; 1847; 1869; 1887; 1900; 1921; 1938; 1951; 1964; 1980; 1993; 2023; 2038; 2063; 2081; 2094; 2109; 2133; 2147; 2171; 2196; 2212; 2250; 2266; 2305; 2319; 2333; 2361; 2377; 2391; 2405; 2434; 2447; 2468; 2477; 2499; 2529; 2545; 2563; 2593; 2616; 2640; 2664; 2683; 2711; 2737; 2753; 2766; 2789; 2803; 2823; 2836; 2850; 2869; 2883; 2896; 2912; 2927; 2940; 2956; 2971; 2987; 3012; 3031; 3047; 3060; 3073; 3091; 3105; 3119; 3135; 3157; 3173; 3192; 3214; 3230; 3253; 3272; 3286; 3302; 3316; 3336; 3352; 3365; 3387; 3420; 3434; 3454; 3467; 3481; 3535; 3548; 3571; 3584; 3603; 3620; 3647; 3683; 3716; 3735; 3760; 3781; 3808; 3821; 3838; 3852; 3867; 3883; 3943; 3968; 3984; 4006; 4019; 4033; 4064; 4078; 4103; 4121; 4136; 4149; 4168; 4181; 4196; 4225; 4244; 4262; 4287; 4302; 4321; 4337; 4356; 4374; 4390; 4404; 4423; 4450; 4473; 4495; 4514; 4529; 4542; 4559; 4579; 4606; 4619; 4638; 4663; 4686; 4700; 4713; 4730
MspJI	!NNNNNNNNNNNNYNG	198	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; 714; 732; 762; 786; 804; 828; 847; 869; 909; 930; 956; 976; 1005; 1047; 1081; 1100; 1122; 1149; 1173; 1197; 1230; 1251; 1270; 1296; 1318; 1341; 1364; 1387; 1411; 1440; 1469; 1511; 1594; 1629; 1656; 1679; 1708; 1752; 1774; 1806; 1842; 1859; 1880; 1917; 1937; 1954; 1971; 2006; 2024; 2042; 2059; 2083; 2105; 2132; 2160; 2186; 2224; 2245; 2262; 2280; 2303; 2324; 2352; 2375; 2396; 2414; 2435; 2452; 2475; 2499; 2519; 2537; 2559; 2590; 2612; 2638; 2657; 2674; 2702; 2721; 2740; 2758; 2776; 2797; 2819; 2843; 2876; 2896; 2914; 2935; 2961; 2988; 3005; 3022; 3039; 3065; 3087; 3109; 3127; 3147; 3166; 3188; 3226; 3246; 3270; 3290; 3310; 3337; 3361; 3394; 3413; 3441; 3463; 3492; 3520; 3545; 3564; 3583; 3604; 3621; 3638; 3669; 3696; 3716; 3739; 3759; 3796; 3813; 3832; 3858; 3878; 3917; 3944; 3963; 3981; 4018; 4036; 4077; 4095; 4121; 4138; 4170; 4199; 4227; 4248; 4271; 4290; 4311; 4329; 4346; 4364; 4390; 4411; 4431; 4451; 4469; 4490; 4516; 4533; 4552; 4571; 4600; 4619; 4637; 4656; 4674; 4692; 4715
MspR9I	CC!NGG	20	90; 283; 644; 876; 924; 1020; 1273; 2295; 2350; 2367; 2763; 2923; 3146; 3536; 3725; 3828; 4300; 4518; 4531; 4652
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1509
MvaI	CC!WGG	14	90; 283; 876; 924; 1020; 2295; 2350; 2367; 3146; 3725; 3828; 4518; 4531; 4652
Mva1269I	GAATGCN!	1	1510
Mva1269I	G!CATTC	1	1603
MvnI	CG!CG	18	60; 662; 664; 1117; 1408; 1683; 2059; 2079; 2103; 2134; 2825; 3126; 3564; 3648; 3711; 3780; 4053; 4634
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	30	90; 212; 244; 283; 376; 400; 617; 634; 656; 737; 1168; 1986; 2016; 2043; 2085; 2326; 2398; 2449; 2528; 2750; 2834; 2857; 2996; 3119; 3202; 3469; 3656; 3860; 4059; 4631
NaeI	GCC!GGC	3	1978; 3261; 3544
NarI	GG!CGCC	1	2759
NciI	CC!SGG	6	644; 1273; 2763; 2923; 3536; 4300
NcoI	C!CATGG	3	360; 2488; 3191
NdeI	CA!TATG	1	234
NdeII	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	820
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	856
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244
NgoMIV	G!CCGGC	3	1976; 3259; 3542
NheI	G!CTAGC	1	591

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NlaIII	CATG!	23	304; 364; 599; 707; 731; 737; 749; 827; 893; 973; 2189; 2329; 2401; 2492; 2633; 2978; 3164; 3195; 3221; 3577; 3961; 4681; 4732
NlaIV	GGN!NCC	18	467; 651; 688; 755; 815; 1914; 1935; 1947; 2138; 2299; 2371; 2760; 2795; 3643; 3722; 3767; 4610; 4649
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1591; 1906; 3498
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1080; 4570
Nli3877I	CYCGR!G	0	
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2548; 2984
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	618; 2513
NmeDI	RCCGGYNNNNNNNN!	5	704; 1988; 3090; 3271; 3554
NmeDI	!NNNNNNNNNNNNRCCGGY	5	679; 1963; 3065; 3246; 3529
NmuCI	!GTSAC	3	2048; 2879; 3185
NotI	GC!GGCCGC	1	1403
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2861
NsiI	ATGCA!T	3	2331; 2403; 4734
NspI	RCATG!Y	6	599; 731; 2329; 2401; 3164; 4681
NspV	TT!CGAA	1	3441
OliI	CACNN!NNGTG	0	
PabI	GTA!C	11	220; 245; 300; 333; 384; 541; 745; 895; 1147; 1366; 3066
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2329; 2401; 3164
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2185; 3957
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	923; 3724; 3827
PauI	G!CGCGC	1	662
PceI	AGG!CCT	1	2580
PciI	A!CATGT	1	4677
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3103; 3313
PcsI	WCGNNNN!NNNCGW	7	1342; 3053; 3130; 3373; 3447; 3840; 4358
PctI	GAATGCN!	1	1510
PctI	G!CATTC	1	1603
PdiI	GCC!GGC	3	1978; 3261; 3544
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	7	979; 1306; 3244; 3378; 3488; 3525; 4703
Pfl23II	C!GTACG	0	
PfIFI	GACN!NNGTC	1	2877
PfIMI	CCANNNN!NTGG	3	680; 1286; 1298
PfoI	T!CCNGGA	1	3534
PhoI	GG!CC	29	84; 277; 642; 850; 1093; 1128; 1162; 1171; 1185; 1317; 1359; 1405; 1725; 1867; 2522; 2528; 2537; 2580; 2667; 2841; 3232; 3259; 3768; 3825; 3858; 4203; 4637; 4655; 4666
PinAI	A!CCGGT	1	692
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3140
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2705; 2960
PleI	GAGTCNNNN!	2	1810; 2242
PleI	!NNNNNGACTC	5	404; 1404; 1818; 3424; 4301
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNCTCNNNNNNNNNNNN!	1	1841
PpiI	!NNNNNNNGAGNNNNNGTTC	1	3971
PpiI	GAGNNNNGTTCNNNNNNNNNNNN!	1	4003
PpiI	!NNNNNNNGAACNNNNNNCTC	1	1809
PpsI	GAGTCNNNN!	2	1810; 2242
PpsI	!NNNNNGACTC	5	404; 1404; 1818; 3424; 4301
Ppu10I	A!TGCAT	3	2327; 2399; 4730
Ppu21I	YAC!GTR	3	340; 1875; 3063
PpuMI	RG!GWCCY	0	
PscI	A!CATGT	1	4677
PshAI	GACNN!NNGTC	1	1332

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1542; 1747
Psp03I	GGWC!C	3	1292; 3278; 3723
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	14	88; 281; 874; 922; 1018; 2293; 2348; 2365; 3144; 3723; 3826; 4516; 4529; 4650
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	14	88; 281; 874; 922; 1018; 2293; 2348; 2365; 3144; 3723; 3826; 4516; 4529; 4650
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	18	467; 651; 688; 755; 815; 1914; 1935; 1947; 2138; 2299; 2371; 2760; 2795; 3643; 3722; 3767; 4610; 4649
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNN!	3	125; 2489; 3488
PspOMII	!NNNNNNNNNNNNNNNNNYTGGGCG	1	2891
PspPI	G!GNCC	13	83; 276; 641; 849; 1092; 1184; 1289; 1866; 3275; 3720; 3766; 3824; 3857
PspPPI	RG!GWCCY	0	
PspPRI	CCYCAGNNNNNNNNNNNNNNNN!	3	2312; 2384; 3890
PspPRI	!NNNNNNNNNNNNNNCTGRGG	4	944; 1372; 2225; 3420
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3860
PstI	CTGCA!G	0	
PstNI	CAGNNN!CTG	2	3860; 4268
PsuI	R!GATCY	11	585; 670; 686; 1239; 2930; 3176; 3568; 3927; 3939; 4025; 4036
PsyI	GACN!NNGTC	1	2877
PteI	G!CGCGC	1	662
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2257; 2865
RcaI	T!CATGA	2	2185; 3957
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3274
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1488
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; 744; 894; 1146; 1365; 3065
RsaNI	G!TAC	11	218; 243; 298; 331; 382; 539; 743; 893; 1145; 1364; 3064
RseI	CAYNN!NNRTG	4	365; 732; 1137; 3196
RsrII	CG!GWCCG	1	3275
Rsr2I	CG!GWCCG	1	3275
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3103; 3313
SaqAI	T!TAA	16	7; 943; 1460; 1521; 1642; 1663; 1674; 1686; 1697; 1714; 1812; 2083; 3902; 3916; 3921; 3973
SatI	GC!NGC	40	612; 615; 618; 621; 648; 660; 848; 899; 1043; 1118; 1160; 1341; 1406; 1536; 2055; 2077; 2091; 2529; 2668; 2720; 2731; 2821; 2826; 2863; 2904; 2991; 2997; 3233; 3329; 3370; 3384; 3498; 3837; 3852; 4063; 4269; 4272; 4337; 4480; 4635
Sau96I	G!GNCC	13	83; 276; 641; 849; 1092; 1184; 1289; 1866; 3275; 3720; 3766; 3824; 3857



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau3AI	!GATC	24	585; 670; 686; 715; 829; 1063; 1239; 1416; 2596; 2600; 2619; 2930; 3008; 3089; 3098; 3176; 3552; 3568; 3927; 3939; 4017; 4025; 4036; 4111
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	1	1365
SchI	GAGTCNNNNN!	2	1811; 2243
SchI	!NNNNNGACTC	5	404; 1404; 1818; 3424; 4301
SciI	CTC!GAG	0	
ScrFI	CC!NGG	20	90; 283; 644; 876; 924; 1020; 1273; 2295; 2350; 2367; 2763; 2923; 3146; 3536; 3725; 3828; 4300; 4518; 4531; 4652
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNNNN!	5	1130; 2337; 2409; 2578; 4520
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2914; 3399
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	12	756; 783; 816; 1393; 1950; 2705; 2798; 2872; 3062; 3124; 3834; 4367
SelI	!CGCG	18	58; 660; 662; 1115; 1406; 1681; 2057; 2077; 2101; 2132; 2823; 3124; 3562; 3646; 3709; 3778; 4051; 4632
SetI	ASST!	61	125; 137; 178; 261; 308; 342; 447; 552; 568; 715; 742; 838; 888; 1032; 1060; 1195; 1213; 1264; 1332; 1336; 1375; 1449; 1470; 1479; 1491; 1540; 1707; 1822; 1834; 1877; 1914; 1964; 1987; 2111; 2259; 2354; 2547; 2660; 2788; 2867; 2878; 2950; 3021; 3065; 3325; 3471; 3515; 3846; 3877; 3936; 3979; 4122; 4143; 4242; 4379; 4394; 4413; 4425; 4469; 4515; 4566
SexAI	A!CCWGGT	1	2348
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	8	937; 1054; 1575; 2338; 2410; 3058; 3122; 3397
SfaNI	!NNNNNNNNNGATGC	9	357; 1090; 1129; 1258; 1389; 2717; 2972; 3188; 4580
Sfci	C!TRYAG	3	2094; 4221; 4412
SfiI	GGCCNNNN!NGGCC	2	1168; 2534
SfoI	GGC!GCC	1	2760
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	1	3441
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; 722; 740; 758; 788; 812; 830; 845; 887; 902; 935; 969; 982; 1010; 1031; 1046; 1073; 1107; 1126; 1148; 1161; 1175; 1190; 1206; 1223; 1238; 1256; 1277; 1298; 1311; 1349; 1373; 1390; 1419; 1466; 1495; 1537; 1620; 1694; 1778; 1800; 1832; 1869; 1887; 1906; 1921; 1963; 1980; 1997; 2032; 2046; 2063; 2085; 2109; 2133; 2198; 2212; 2250; 2266; 2306; 2319; 2338; 2361; 2378; 2391; 2410; 2440; 2461; 2478; 2501; 2536; 2563; 2594; 2616; 2642; 2664; 2683; 2711; 2747; 2766; 2789; 2803; 2823; 2836; 2850; 2869; 2883; 2902; 2934; 2948; 2961; 2987; 3018; 3031; 3048; 3065; 3079; 3096; 3114; 3129; 3157; 3173; 3192; 3214; 3230; 3253; 3272; 3297; 3316; 3336; 3363; 3387; 3420; 3439; 3467; 3481; 3547; 3571; 3586; 3609; 3630; 3647; 3695; 3722; 3736; 3765; 3789; 3822; 3839; 3859; 3872; 3885; 3943; 3970; 3989; 4019; 4044; 4064; 4078; 4103; 4121; 4158; 4196; 4225; 4253; 4267; 4287; 4302; 4323; 4337; 4356; 4374; 4390; 4430; 4450; 4477; 4495; 4516; 4529; 4542; 4559; 4583; 4606; 4638; 4663; 4690; 4712

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; 696; 714; 732; 762; 786; 804; 828; 861; 909; 943; 984; 1005; 1047; 1081; 1100; 1122; 1149; 1173; 1197; 1230; 1251; 1272; 1296; 1323; 1347; 1364; 1393; 1440; 1469; 1511; 1594; 1668; 1752; 1774; 1806; 1843; 1861; 1880; 1937; 1954; 1971; 2006; 2024; 2044; 2064; 2083; 2107; 2172; 2224; 2280; 2312; 2335; 2352; 2384; 2414; 2435; 2452; 2475; 2510; 2537; 2568; 2590; 2616; 2638; 2657; 2685; 2721; 2740; 2763; 2784; 2802; 2819; 2843; 2876; 2908; 2935; 2961; 2992; 3022; 3039; 3065; 3088; 3109; 3131; 3151; 3171; 3188; 3227; 3246; 3271; 3290; 3310; 3337; 3361; 3394; 3413; 3441; 3463; 3521; 3545; 3564; 3583; 3604; 3621; 3669; 3696; 3716; 3739; 3763; 3796; 3813; 3833; 3859; 3917; 3944; 3963; 3993; 4018; 4038; 4077; 4095; 4132; 4170; 4199; 4227; 4248; 4276; 4297; 4330; 4348; 4404; 4424; 4451; 4469; 4490; 4516; 4533; 4557; 4580; 4612; 4637; 4664; 4686; 4715
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; 1906; 3693; 4486
SimI	!GACCC	4	106; 3187; 3755; 4003
SinI	G!GWCC	3	1289; 3275; 3720
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	4	365; 732; 1137; 3196
SmlI	C!TYRAG	6	1263; 1641; 3150; 4032; 4309; 4571
SmoI	C!TYRAG	6	1263; 1641; 3150; 4032; 4309; 4571
SmuI	CCCGCNNNN!	10	93; 119; 286; 1157; 1259; 2081; 2436; 2457; 3653; 3785
SmuI	!NNNNNNGCGGG	7	616; 1194; 2012; 2882; 3419; 3557; 3704
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2329; 2401; 3164
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	10	18; 1509; 1573; 1651; 1677; 1688; 2335; 2407; 2499; 3917
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	1	2580
SsiI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 612; 660; 1012; 1150; 1252; 1406; 2074; 2077; 2091; 2181; 2429; 2441; 2450; 2462; 2472; 2483; 2529; 2668; 2731; 3233; 3278; 3344; 3370; 3495; 3498; 3646; 3778; 4085; 4229; 4725
SsiI	G!CGG	30	370; 403; 528; 623; 647; 847; 1117; 1159; 1201; 1402; 2019; 2046; 2134; 2244; 2825; 2889; 2990; 2993; 3273; 3328; 3426; 3564; 3711; 3851; 4094; 4339; 4460; 4479; 4606; 4634
SspI	AAT!ATT	2	1667; 2220
SspDI	G!GCGCC	1	2758
SspD5I	GGTGANNNNNNNN!	4	376; 1085; 3830; 3946
SspD5I	!NNNNNNNNNTCACC	3	973; 1875; 2936
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	1018
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 650; 940; 1156; 1258; 1279; 1958; 2080; 2435; 2456; 2769; 3172; 3311; 3382; 3652; 3784; 4014; 4452
Sth132I	!NNNNNNNNNCGGG	22	15; 407; 470; 615; 989; 1061; 1193; 1959; 2011; 2112; 2839; 2881; 2914; 3418; 3527; 3556; 3703; 3807; 3838; 4291; 4335; 4543
Sth302II	CC!GG	19	645; 694; 1274; 1978; 2665; 2742; 2764; 2792; 2923; 3013; 3080; 3261; 3536; 3544; 3636; 4110; 4300; 4326; 4473
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	4	2627; 3084; 3109; 3563
StsI	!NNNNNNNNNNNNNNCATCC	5	769; 857; 914; 1069; 2431
StuI	AGG!CCT	1	2580
StyI	C!CWWGG	5	360; 2488; 2581; 3191; 3596

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	20	88; 281; 642; 874; 922; 1018; 1271; 2293; 2348; 2365; 2761; 2921; 3144; 3534; 3723; 3826; 4298; 4516; 4529; 4650
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	14	76; 198; 269; 543; 581; 758; 1850; 3139; 3255; 3363; 3686; 4177; 4647; 4718
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1060; 1336; 1822; 1834; 1877; 1987; 2878; 3065; 3846; 3979
TaqI	T!CGA	14	841; 868; 1336; 1908; 2599; 2872; 3028; 3052; 3088; 3250; 3441; 3486; 3741; 4579
TaqII	GACCGANNNNNNNNNNN!	3	1779; 2796; 3464
TaqII	!NNNNNNNNNTCGGTC	1	3708
TaqII	CACCCANNNNNNNNNNN!	2	831; 936
TaqII	!NNNNNNNNNTGGGTG	3	172; 2663; 3255
TasI	!AATT	10	18; 1509; 1573; 1651; 1677; 1688; 2335; 2407; 2499; 3917
TatI	W!GTACW	6	217; 297; 330; 381; 742; 1363
TauI	GCSG!C	22	614; 650; 662; 850; 1120; 1162; 1408; 2079; 2093; 2531; 2670; 2733; 2828; 2993; 2996; 3235; 3331; 3372; 3500; 3854; 4482; 4637
TfiI	G!AWTC	7	979; 1306; 3244; 3378; 3488; 3525; 4703
ThiI	C!TCGAG	0	
TruII	T!TAA	16	7; 943; 1460; 1521; 1642; 1663; 1674; 1686; 1697; 1714; 1812; 2083; 3902; 3916; 3921; 3973
Tru9I	T!TAA	16	7; 943; 1460; 1521; 1642; 1663; 1674; 1686; 1697; 1714; 1812; 2083; 3902; 3916; 3921; 3973
TscAI	CASTGNN!	7	661; 1221; 1605; 2888; 3998; 4269; 4282
TseI	G!CWGC	19	614; 617; 620; 898; 1042; 1340; 1535; 2054; 2719; 2820; 2862; 2903; 2996; 3383; 3836; 4062; 4268; 4271; 4336
TsoI	TARCCANNNNNNNNNNN!	2	1731; 2078
TsoI	!NNNNNNNNNTGGYTA	3	867; 1536; 3288
Tsp45I	!GTSAC	3	2048; 2879; 3185
Tsp509I	!AATT	10	18; 1509; 1573; 1651; 1677; 1688; 2335; 2407; 2499; 3917
TspDTI	ATGAANNNNNNNNNNN!	5	750; 840; 1517; 2818; 3522
TspDTI	!NNNNNNNNNTTCAT	6	26; 878; 899; 3236; 3692; 3899
TspEI	!AATT	10	18; 1509; 1573; 1651; 1677; 1688; 2335; 2407; 2499; 3917
TspGWI	ACGGANNNNNNNNNNN!	1	3634
TspGWI	!NNNNNNNNNTCCGT	1	590
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	7	661; 1221; 1605; 2888; 3998; 4269; 4282
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2877
Tth111II	CAARCANNNNNNNNNNN!	1	4086
Tth111II	!NNNNNNNNNTGYTTG	3	3194; 4054; 4093
UnbI	!GGNCC	13	82; 275; 640; 848; 1091; 1183; 1288; 1865; 3274; 3719; 3765; 3823; 3856
Van9II	CCANNNN!NTGG	3	680; 1286; 1298
Vha464I	C!TTAAG	1	1641
VneI	G!TGCAC	2	779; 4363
VpaK11AI	!GGWCC	3	1288; 3274; 3719
VpaK11BI	G!GWCC	3	1289; 3275; 3720
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	3	1573; 1677; 1688
XbaI	T!CTAGA	1	1413
XceI	RCATG!Y	6	599; 731; 2329; 2401; 3164; 4681
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	0	
XhoII	R!GATCY	11	585; 670; 686; 1239; 2930; 3176; 3568; 3927; 3939; 4025; 4036
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2581; 3596
XmiI	GT!MKAC	0	
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1378; 1414; 1608; 2026; 2582; 3597; 3931; 4184
ZraI	GAC!GTC	4	123; 176; 259; 445

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ZrmI	AGT!ACT	1	1365
Zsp2I	ATGCA!T	3	2331; 2403; 4734