

## Gateway® HyPer-AS entry clone

### Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	5	83; 1148; 1627; 1833; 2038
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	2121; 3077; 4866
AatI	AGG!CCT	1	2871
AatII	GACGT!C	0	
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	2	809; 1466
AccII	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
AccIII	T!CCGGA	1	919
Acc16I	TGC!GCA	1	3152
Acc36I	ACCTGCNNNN!	2	3318; 3768
Acc36I	!NNNNNNNNGCAGGT	1	2937
Acc65I	G!GTACC	0	
AccB1I	G!GYRCC	3	2203; 3049; 3084
AccB7I	CCANNNN!NTGG	1	202
AccBSI	CCG!CTC	2	2474; 3663
AccBSI	GAG!CGG	2	2310; 3717
AceIII	CAGCTCNNNNNNN!	1	2006
AceIII	!NNNNNNNNNNGAGCTG	0	
AcI	C!CGC	27	518; 767; 1349; 2365; 2368; 2382; 2472; 2720; 2732; 2741; 2753; 2763; 2774; 2820; 2959; 3022; 3524; 3569; 3635; 3661; 3786; 3789; 3937; 4069; 4376; 4520; 5016
AcI	G!CGG	20	2310; 2337; 2425; 2535; 3116; 3180; 3281; 3284; 3564; 3619; 3717; 3855; 4002; 4142; 4385; 4630; 4751; 4770; 4897; 4925
AcII	AA!CGTT	0	
AcIWI	GGATCNNNN!	11	512; 746; 1581; 1590; 2918; 3229; 3475; 3867; 4226; 4324; 4410
AcIWI	!NNNNNGATCC	5	1568; 3294; 3838; 4225; 4322
AcoI	Y!GGCCR	7	458; 551; 1000; 2956; 3130; 3521; 3548
AcsI	R!AATY	4	907; 1864; 1968; 1979
AcuI	CTGAAGNNNNNNNNNNNNNNNN!	2	3196; 3628
AcuI	!NNNNNNNNNNNNNCTTCAG	2	1293; 4426
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	3	3050; 3752; 3831
AdeI	CACNNN!GTG	2	747; 2166
AfaI	GT!AC	8	98; 268; 620; 828; 975; 1258; 1612; 3356
AfeI	AGC!GCT	1	119
AfiI	CCNNNNN!NNGG	18	202; 276; 1586; 2062; 2388; 2780; 3031; 3575; 3856; 3888; 4020; 4055; 4105; 4137; 4490; 4769; 4935; 4953
AfIII	C!TTAAG	0	
AfIII	A!CRYGT	2	1936; 4968
AgeI	A!CCGGT	1	123
AgsI	TTS!AA	12	262; 588; 963; 1083; 1131; 1221; 1557; 2461; 2505; 2515; 2928; 4504
AhdI	GACNNN!NNGTC	0	
AhII	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	1	894
AjnI	!CCWGG	11	1473; 1525; 2584; 2639; 2656; 3435; 4014; 4117; 4807; 4820; 4941
AjuI	GAANNNNNNNTTGGNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNN!	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	2624; 2696
AlfI	!NNNNNNNNNNNGCANNNNNNNTGC	2	2590; 2662
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	1	2132
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	1	2100
AluI	AG!CT	17	340; 511; 798; 1203; 1251; 1603; 1829; 1996; 2253; 2548; 2836; 3156; 3614; 4411; 4668; 4714; 4804
AluBI	AG!CT	17	340; 511; 798; 1203; 1251; 1603; 1829; 1996; 2253; 2548; 2836; 3156; 3614; 4411; 4668; 4714; 4804
AlwI	GGATCNNNN!	11	512; 746; 1581; 1590; 2918; 3229; 3475; 3867; 4226; 4324; 4410
AlwI	!NNNNNGATCC	5	1568; 3294; 3838; 4225; 4322
Alw21I	GWGCW!C	3	3163; 3353; 4658
Alw26I	GTCTCN!	1	921
Alw26I	!NNNNNGAGAC	5	154; 2474; 2892; 3911; 4039
Alw44I	G!TGCAC	1	4654
AlwNI	CAGNNN!CTG	2	4151; 4559
Ama87I	C!YCGRG	0	
Aor13HI	T!CCGGA	1	919
Aor51HI	AGC!GCT	1	119
ApaI	GGGCC!C	0	
ApaBI	GCANNNNN!TGC	3	2618; 2690; 4152
ApaLI	G!TGCAC	1	4654
ApeKI	G!CWGC	15	111; 769; 1826; 2345; 3010; 3111; 3153; 3194; 3287; 3674; 4127; 4353; 4559; 4562; 4627
ApoI	R!AATTY	4	907; 1864; 1968; 1979
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3565
ApyPI	!NNNNNNNNNNNNNNNNNNNGTCGAT	3	3359; 4012; 4850
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3449
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	0	
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2878
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	1	1423
AquIV	!NNNNNNNNNNNNNNNNNNNCTCCYC	2	199; 3620
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	1	899
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	1	931
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGGCC	0	
AseI	AT!TAAT	1	967
Asi256I	G!ATC	23	415; 505; 739; 1490; 1574; 1583; 1708; 2888; 2892; 2911; 3222; 3300; 3381; 3390; 3468; 3844; 3860; 4219; 4231; 4309; 4317; 4328; 4403
AsiGI	A!CCGGT	1	123
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	2	165; 3168
Asp700I	GAANN!NNTTC	1	440
Asp718I	G!GTACC	0	
AspA2I	C!CTAGG	2	2872; 3887
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	21	120; 2316; 2324; 2350; 2372; 2381; 2394; 2425; 3044; 3052; 3116; 3153; 3419; 3679; 3855; 3941; 4344; 4453; 4627; 4727; 4794
AspS9I	G!GNCC	12	172; 205; 300; 425; 664; 1451; 2157; 3566; 4011; 4057; 4115; 4148
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	1280; 3732
AsuC2I	CC!SGG	4	3054; 3214; 3827; 4591
AsuHPI	GGTGANNNNNNNN!	8	169; 475; 670; 901; 940; 1200; 4121; 4237
AsuHPI	!NNNNNNNTCACC	4	409; 1472; 2167; 3228
AsuNHI	G!CTAGC	1	114
AvaI	C!YCGRG	0	
AvaII	G!GWCC	6	172; 205; 664; 1451; 3566; 4011
AviII	TGC!GCA	1	3152

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AvrII	C!CTAGG	2	2872; 3887
AxyI	CC!TNAGG	4	1020; 1097; 2530; 4162
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNGT	1	1172
BaeI	GRTACNNNNGTNNNNNNNNNNNN!	1	1205
BaeI	!NNNNNNNNNACNNNNGTAYC	0	
BaeGI	GKGCMI!C	3	2996; 3089; 4658
BalI	TGG!CCA	2	1002; 3132
BamHI	G!GATCC	1	1573
BanI	G!GYRCC	3	2203; 3049; 3084
BanII	GRGCY!C	3	2241; 3415; 4125
BanIII	AT!CGAT	1	2890
BarI	GAAGNNNNNTACNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNCTTC	1	1406
BarI	GTANNNNNNCTTCNNNNNNNNNN!	1	1438
BarI	!NNNNNNNGAAGNNNNNTAC	0	
BasI	CCANNNN!NTGG	1	202
BauI	C!ACGAG	3	274; 3768; 4795
BauI	C!TCGTG	1	3642
BbeI	GGCGC!C	1	3053
Bbr7I	GAAGACNNNNNN!	0	
Bbr7I	!NNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	0	
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2620; 2692; 3455
BbvI	GCAGCNNNNNNNN!	6	1838; 3123; 3165; 3686; 4139; 4639
BbvI	!NNNNNNNNNNGCTGC	8	98; 756; 2332; 2997; 3181; 3274; 4340; 4546
Bbv12I	GWGCW!C	3	3163; 3353; 4658
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	4	2180; 2744; 3270; 3772
BccI	!NNNNNGATGG	8	481; 604; 880; 1402; 1524; 2148; 2928; 3356
BceAI	ACGGCNNNNNNNNNN!	2	3476; 3963
BceAI	!NNNNNNNNNNGCCGT	4	1369; 2191; 3009; 4468
BceFI	ACGGCNNNNNNNNNN!	2	3476; 3963
BceFI	!NNNNNNNNNNGCCGT	4	1370; 2192; 3010; 4469
BcgI	CGANNNNNNTGCNNNNNNNNNN!	1	1304
BcgI	!NNNNNNNNNNGCANNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNCGANNNNNNTGC	1	1270
BciVI	GTATCCNNNNNN!	3	2479; 3269; 4770
BciVI	!NNNNNGGATAC	1	1293
BclI	T!GATCA	1	1707
BcnI	CC!SGG	4	3054; 3214; 3827; 4591
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNN!	2	1730; 4903
BdaI	!NNNNNNNNNNTGANNNNNNTCA	2	1696; 4869
BfaI	C!TAG	14	115; 337; 625; 1154; 1252; 1324; 1586; 1698; 1899; 2317; 2873; 3888; 4222; 4475
BfiI	ACTGGGNNNNN!	1	2999
BfiI	!NNNNCCCAGT	2	297; 2751
BfmI	C!TRYAG	4	1467; 2385; 4512; 4703
BfoI	RGCGC!Y	5	121; 2317; 2325; 3053; 4728
BfrI	C!TTAAG	0	
BfuI	GTATCCNNNNNN!	3	2479; 3269; 4770
BfuI	!NNNNNGGATAC	1	1293
BfuAI	ACCTGCNNNN!	2	3318; 3768
BfuAI	!NNNNNNNNGCAGGT	1	2937
BfuCI	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
BglI	GCCNNNN!NGGC	1	2825
BglII	A!GATCT	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BisI	GC!NGC	30	112; 770; 1349; 1827; 2346; 2368; 2382; 2820; 2959; 3011; 3022; 3112; 3117; 3154; 3195; 3282; 3288; 3524; 3620; 3661; 3675; 3789; 4128; 4143; 4354; 4560; 4563; 4628; 4771; 4926
BlnI	C!CTAGG	2	2872; 3887
BlpI	GC!TNAGC	0	
BlsI	GCN!GC	30	113; 771; 1350; 1828; 2347; 2369; 2383; 2821; 2960; 3012; 3023; 3113; 3118; 3155; 3196; 3283; 3289; 3525; 3621; 3662; 3676; 3790; 4129; 4144; 4355; 4561; 4564; 4629; 4772; 4927
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	6	172; 205; 664; 1451; 3566; 4011
Bme1390I	CC!NGG	15	1475; 1527; 2586; 2641; 2658; 3054; 3214; 3437; 3827; 4016; 4119; 4591; 4809; 4822; 4943
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	0	
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	1	894
BmgT120I	GG!NCC	12	173; 206; 301; 426; 665; 1452; 2158; 3567; 4012; 4058; 4116; 4149
BmiI	GGN!NCC	17	615; 834; 1266; 1575; 2205; 2226; 2238; 2429; 2590; 2662; 3051; 3086; 3934; 4013; 4058; 4901; 4940
BmrI	ACTGGGNNNNN!	1	2999
BmrI	!NNNNCCCAGT	2	297; 2751
BmrFI	CC!NGG	15	1475; 1527; 2586; 2641; 2658; 3054; 3214; 3437; 3827; 4016; 4119; 4591; 4809; 4822; 4943
BmsI	GCATCNNNNN!	6	1866; 2629; 2701; 3349; 3413; 3688
BmsI	!NNNNNNNNNGATGC	4	3008; 3263; 3479; 4871
BmtI	GCTAG!C	1	118
BmuI	ACTGGGNNNNN!	1	2999
BmuI	!NNNNCCCAGT	2	297; 2751
BoxI	GACNN!NNGTC	0	
BpiI	GAAGACNN!	0	
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNCTCNNNNNNNNNNNNN!	2	2839; 3738
BpI	!NNNNNNNNGAGNNNNNCTC	2	2807; 3706
BpmI	CTGGAGNNNNNNNNNNNNNNNNN!	1	3890
BpmI	!NNNNNNNNNNNNNNNNCTCCAG	1	3833
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	1280; 3732
Bpu1102I	GC!TNAGC	0	
BpuAI	GAAGACNN!	0	
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNNN!	5	502; 775; 1353; 4344; 4883
BpuEI	!NNNNNNNNNNNNNNNNCTCAAG	2	3426; 4585
BpuMI	CC!SGG	4	3054; 3214; 3827; 4591
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	1	4039
Bsa29I	AT!CGAT	1	2890
BsaAI	YAC!GTR	2	2166; 3354
BsaBI	GATNN!NNATC	2	1712; 2909
BsaHI	GR!CGYC	3	3050; 3752; 3831
BsaJI	C!CNNGG	19	134; 356; 421; 836; 997; 2584; 2656; 2779; 2814; 2823; 2872; 3213; 3482; 3887; 4014; 4015; 4117; 4118; 4808
BsaMI	GAATGCN!	2	442; 1801
BsaMI	G!CATTC	2	361; 1894
BsaWI	W!CCGGW	8	123; 919; 1267; 1579; 3081; 3925; 4615; 4762
BsaXI	ACNNNNNCTCCNNNNNNNNNNN!	1	2130
BsaXI	!NNNNNNNNGGAGNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	2100
BsbI	CAACACNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNGTGTG	3	728; 2051; 3958
Bsc4I	CCNNNNN!NNGG	18	202; 276; 1586; 2062; 2388; 2780; 3031; 3575; 3856; 3888; 4020; 4055; 4105; 4137; 4490; 4769; 4935; 4953
BscAI	GCATCNNNN!	6	1865; 2628; 2700; 3348; 3412; 3687

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BscAI	!NNNNNNGATGC	4	3011; 3266; 3482; 4874
BseI	ACTGGN!	4	984; 2994; 3195; 4441
BseI	C!CAGT	5	303; 2079; 2757; 4553; 4566
Bse8I	GATNN!NNATC	2	1712; 2909
Bse2II	CC!TNAGG	4	1020; 1097; 2530; 4162
Bse118I	R!CCGGY	9	123; 460; 520; 772; 1285; 2267; 3369; 3550; 3833
BseAI	T!CCGGA	1	919
BseBI	CC!WGG	11	1475; 1527; 2586; 2641; 2658; 3437; 4016; 4119; 4809; 4822; 4943
BseCI	AT!CGAT	1	2890
BseDI	C!CNNGG	19	134; 356; 421; 836; 997; 2584; 2656; 2779; 2814; 2823; 2872; 3213; 3482; 3887; 4014; 4015; 4117; 4118; 4808
Bse3DI	GCAATGNN!	2	77; 3283
Bse3DI	!CATTGC	2	175; 1635
BseGI	GGATGNN!	9	492; 798; 1413; 1535; 1539; 2910; 3367; 3392; 3846
BseGI	!CATCC	1	2736
BseJI	GATNN!NNATC	2	1712; 2909
BseLI	CCNNNNN!NNGG	18	202; 276; 1586; 2062; 2388; 2780; 3031; 3575; 3856; 3888; 4020; 4055; 4105; 4137; 4490; 4769; 4935; 4953
BseMI	GCAATGNN!	2	77; 3283
BseMI	!CATTGC	2	175; 1635
BseMII	CTCAGNNNNNNNNNN!	1	4176
BseMII	!NNNNNNNNCTGAG	6	1088; 2521; 2823; 3704; 4276; 4685
BseNI	ACTGGN!	4	984; 2994; 3195; 4441
BseNI	C!CAGT	5	303; 2079; 2757; 4553; 4566
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2868
BseRI	!NNNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	3	2996; 3089; 4658
BseXI	GCAGCNNNNNNNN!	6	1838; 3123; 3165; 3686; 4139; 4639
BseXI	!NNNNNNNNNNNNGCTGC	8	98; 756; 2332; 2997; 3181; 3274; 4340; 4546
BseX3I	C!GGCCG	1	2956
BseYI	C!CCAGC	4	1599; 2593; 2665; 4664
BseYI	G!CTGGG	1	3554
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNCTGCAC	0	
Bsh1236I	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
Bsh1285I	CGRY!CG	3	128; 2959; 4634
BshFI	GG!CC	24	301; 427; 460; 553; 580; 1002; 1473; 2016; 2158; 2813; 2819; 2828; 2871; 2958; 3132; 3523; 3550; 4059; 4116; 4149; 4494; 4928; 4946; 4957
BshNI	G!GYRCC	3	2203; 3049; 3084
BshTI	A!CCGGT	1	123
BshVI	AT!CGAT	1	2890
BsiEI	CGRY!CG	3	128; 2959; 4634
BsiHKAI	GWGCW!C	3	3163; 3353; 4658
BsiHKCI	C!YCGRG	0	
BsiSI	C!CGG	24	124; 461; 521; 773; 920; 1268; 1286; 1580; 2268; 2955; 3032; 3054; 3082; 3213; 3303; 3370; 3551; 3826; 3834; 3926; 4400; 4590; 4616; 4763
BsiWI	C!GTACG	0	
BsII	CCNNNNN!NNGG	18	202; 276; 1586; 2062; 2388; 2780; 3031; 3575; 3856; 3888; 4020; 4055; 4105; 4137; 4490; 4769; 4935; 4953
BsIFI	GGGACNNNNNNNNNN!	3	3201; 3733; 3842
BsIFI	!NNNNNNNNNNNNGTCCC	6	850; 979; 2566; 2638; 2702; 3997
BsmI	GAATGCN!	2	442; 1801
BsmI	G!CATTC	2	361; 1894
BsmAI	GTCTCN!	1	921
BsmAI	!NNNNNGAGAC	5	154; 2474; 2892; 3911; 4039
BsmBI	CGTCTCN!	0	
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	3	3201; 3733; 3842
BsmFI	!NNNNNNNNNNNNGTCCC	6	850; 979; 2566; 2638; 2702; 3997

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsnI	GG!CC	24	301; 427; 460; 553; 580; 1002; 1473; 2016; 2158; 2813; 2819; 2828; 2871; 2958; 3132; 3523; 3550; 4059; 4116; 4149; 4494; 4928; 4946; 4957
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	1	4039
BsoBI	C!YCGRG	0	
Bsp13I	T!CCGGA	1	919
Bsp19I	C!CATGG	5	134; 421; 997; 2779; 3482
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	619; 3853
Bsp24I	!NNNNNNCCANNNNNGTC	2	4274; 4452
Bsp24I	CCANNNNNGTCNNNNNNNNNN!	2	4306; 4484
Bsp24I	!NNNNNNNGACNNNNNTGG	2	587; 3821
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	1280; 3732
Bsp120I	G!GGCCC	0	
Bsp143I	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
Bsp1286I	GDGCH!C	8	2241; 2996; 3089; 3163; 3353; 3415; 4125; 4658
Bsp1407I	T!GTACA	3	96; 973; 1610
Bsp1720I	GC!TNAGC	0	
BspACI	C!CGC	27	518; 767; 1349; 2365; 2368; 2382; 2472; 2720; 2732; 2741; 2753; 2763; 2774; 2820; 2959; 3022; 3524; 3569; 3635; 3661; 3786; 3789; 3937; 4069; 4376; 4520; 5016
BspACI	G!CGG	20	2310; 2337; 2425; 2535; 3116; 3180; 3281; 3284; 3564; 3619; 3717; 3855; 4002; 4142; 4385; 4630; 4751; 4770; 4897; 4925
BspCNI	CTCAGNNNNNNNN!	1	4175
BspCNI	!NNNNNNCTGAG	6	1089; 2522; 2824; 3705; 4277; 4686
BspDI	AT!CGAT	1	2890
BspD6I	GACTCNNNN!	4	293; 2123; 3729; 4606
BspD6I	!NNNNNGAGTC	2	2086; 2518
BspEI	T!CCGGA	1	919
BspFNI	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
BspHI	T!CATGA	2	2476; 4248
BspLI	GGN!NCC	17	615; 834; 1266; 1575; 2205; 2226; 2238; 2429; 2590; 2662; 3051; 3086; 3934; 4013; 4058; 4901; 4940
BspMI	ACCTGCNNNN!	2	3318; 3768
BspMI	!NNNNNNNGCAGGT	1	2937
BspOI	GCTAG!C	1	118
BspPI	GGATCNNNN!	11	512; 746; 1581; 1590; 2918; 3229; 3475; 3867; 4226; 4324; 4410
BspPI	!NNNNNGATCC	5	1568; 3294; 3838; 4225; 4322
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3394; 3604
BspTI	C!TTAAG	0	
BspT104I	TT!CGAA	2	1280; 3732
BspT107I	G!GYRCC	3	2203; 3049; 3084
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	1	4039
BsrI	ACTGGN!	4	984; 2994; 3195; 4441
BsrI	C!CAGT	5	303; 2079; 2757; 4553; 4566
BsrBI	CCG!CTC	2	2474; 3663
BsrBI	GAG!CGG	2	2310; 3717
BsrDI	GCAATGNN!	2	77; 3283
BsrDI	!CATTGC	2	175; 1635
BsrFI	R!CCGGY	9	123; 460; 520; 772; 1285; 2267; 3369; 3550; 3833
BsrGI	T!GTACA	3	96; 973; 1610
BsrSI	ACTGGN!	4	984; 2994; 3195; 4441
BsrSI	C!CAGT	5	303; 2079; 2757; 4553; 4566
BssAI	R!CCGGY	9	123; 460; 520; 772; 1285; 2267; 3369; 3550; 3833
BssECI	C!CNNGG	19	134; 356; 421; 836; 997; 2584; 2656; 2779; 2814; 2823; 2872; 3213; 3482; 3887; 4014; 4015; 4117; 4118; 4808
BssHII	G!CGCGC	0	
BssKI	!CCNGG	15	1473; 1525; 2584; 2639; 2656; 3052; 3212; 3435; 3825; 4014; 4117; 4589; 4807; 4820; 4941

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssMI	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
BssNI	GR!CGYC	3	3050; 3752; 3831
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	274; 3768; 4795
BssSI	C!TCGTG	1	3642
BssT1I	C!CWWGG	8	134; 421; 836; 997; 2779; 2872; 3482; 3887
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	5	839; 1396; 2517; 3394; 3604
Bst98I	C!TTAAG	0	
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	3	3050; 3752; 3831
BstAFI	C!TTAAG	0	
BstAPI	GCANNNN!NTGC	3	2617; 2689; 4151
BstAUI	T!GTACA	3	96; 973; 1610
BstBI	TT!CGAA	2	1280; 3732
Bst2BI	C!ACGAG	3	274; 3768; 4795
Bst2BI	C!TCGTG	1	3642
BstBAI	YAC!GTR	2	2166; 3354
Bst4CI	ACN!GT	13	201; 901; 1030; 1141; 1505; 2141; 3430; 3546; 3654; 3977; 4468; 4938; 5009
BstC8I	GCN!NGC	27	109; 116; 1562; 2269; 2312; 2326; 2599; 2618; 2671; 2690; 2944; 3130; 3349; 3415; 3421; 3453; 3494; 3498; 3552; 3835; 4022; 4069; 4125; 4147; 4358; 4918; 4955
BstDEI	C!TNAG	8	1020; 1097; 2530; 2832; 3713; 4162; 4285; 4694
BstDSI	C!CRYGG	5	134; 421; 997; 2779; 3482
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	1	274
BstF5I	GGATGNN!	9	492; 798; 1413; 1535; 1539; 2910; 3367; 3392; 3846
BstF5I	!CATCC	1	2736
BstFNI	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
BstH2I	RGCGC!Y	5	121; 2317; 2325; 3053; 4728
BstHHI	GCG!C	21	120; 2316; 2324; 2350; 2372; 2381; 2394; 2425; 3044; 3052; 3116; 3153; 3419; 3679; 3855; 3941; 4344; 4453; 4627; 4727; 4794
BstKTI	GAT!C	23	417; 507; 741; 1492; 1576; 1585; 1710; 2890; 2894; 2913; 3224; 3302; 3383; 3392; 3470; 3846; 3862; 4221; 4233; 4311; 4319; 4330; 4405
BstMAI	GTCTCN!	1	921
BstMAI	!NNNNNGAGAC	5	154; 2474; 2892; 3911; 4039
BstMBI	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
BstMCI	CGRY!CG	3	128; 2959; 4634
BstMWI	GCNNNNN!NNGC	23	117; 457; 517; 1522; 2277; 2307; 2334; 2376; 2617; 2689; 2740; 2819; 3041; 3125; 3148; 3287; 3410; 3493; 3760; 3947; 4151; 4350; 4922
BstNI	CC!WGG	11	1475; 1527; 2586; 2641; 2658; 3437; 4016; 4119; 4809; 4822; 4943
BstNSI	RCATG!Y	4	2620; 2692; 3455; 4972
BstOI	CC!WGG	11	1475; 1527; 2586; 2641; 2658; 3437; 4016; 4119; 4809; 4822; 4943
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	0	
BstSCI	!CCNGG	15	1473; 1525; 2584; 2639; 2656; 3052; 3212; 3435; 3825; 4014; 4117; 4589; 4807; 4820; 4941
BstSFI	C!TRYAG	4	1467; 2385; 4512; 4703
BstSLI	GKGC!C	3	2996; 3089; 4658
BstSNI	TAC!GTA	0	
BstUI	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
Bst2UI	CC!WGG	11	1475; 1527; 2586; 2641; 2658; 3437; 4016; 4119; 4809; 4822; 4943
BstV1I	GCAGCNNNNNNN!	6	1838; 3123; 3165; 3686; 4139; 4639
BstV1I	!NNNNNNNNNNNGCTGC	8	98; 756; 2332; 2997; 3181; 3274; 4340; 4546

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstV2I	GAAGACNN!	0	
BstV2I	!NNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	2	141; 1461
BstX2I	R!GATCY	9	1573; 1582; 3221; 3467; 3859; 4218; 4230; 4316; 4327
BstYI	R!GATCY	9	1573; 1582; 3221; 3467; 3859; 4218; 4230; 4316; 4327
BstZI	C!GGCCG	1	2956
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2479; 3269; 4770
BsuI	!NNNNNGGATAC	1	1293
Bsu15I	AT!CGAT	1	2890
Bsu36I	CC!TNAGG	4	1020; 1097; 2530; 4162
BsuRI	GG!CC	24	301; 427; 460; 553; 580; 1002; 1473; 2016; 2158; 2813; 2819; 2828; 2871; 2958; 3132; 3523; 3550; 4059; 4116; 4149; 4494; 4928; 4946; 4957
BsuTUI	AT!CGAT	1	2890
BtgI	C!CRYGG	5	134; 421; 997; 2779; 3482
BtgZI	GCGATGNNNNNNNNNN!	2	2167; 3502
BtgZI	!NNNNNNNNNNNNNNNCATCGC	2	3321; 3665
BthCI	GCNG!C	30	114; 772; 1351; 1829; 2348; 2370; 2384; 2822; 2961; 3013; 3024; 3114; 3119; 3156; 3197; 3284; 3290; 3526; 3622; 3663; 3677; 3791; 4130; 4145; 4356; 4562; 4565; 4630; 4773; 4928
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	1	894
BtsI	GCAGTGNN!	1	1571
BtsI	!CACTGC	2	492; 1889
BtsCI	GGATGNN!	9	492; 798; 1413; 1535; 1539; 2910; 3367; 3392; 3846
BtsCI	!CATCC	1	2736
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	2	3318; 3768
BveI	!NNNNNNNNGCAGGT	1	2937
Cac8I	GCN!NGC	27	109; 116; 1562; 2269; 2312; 2326; 2599; 2618; 2671; 2690; 2944; 3130; 3349; 3415; 3421; 3453; 3494; 3498; 3552; 3835; 4022; 4069; 4125; 4147; 4358; 4918; 4955
CaiI	CAGNNN!CTG	2	4151; 4559
CciI	T!CATGA	2	2476; 4248
CciNI	GC!GGCCGC	0	
CdiI	CATC!G	4	3339; 3344; 3542; 3683
CdiI	C!GATG	3	384; 2153; 3488
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNN!	1	4922
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	2	2711; 2753
CelII	GC!TNAGC	0	
CfoI	GCG!C	21	120; 2316; 2324; 2350; 2372; 2381; 2394; 2425; 3044; 3052; 3116; 3153; 3419; 3679; 3855; 3941; 4344; 4453; 4627; 4727; 4794
CfrI	Y!GGCCR	7	458; 551; 1000; 2956; 3130; 3521; 3548
Cfr9I	C!CCGGG	0	
Cfr10I	R!CCGGY	9	123; 460; 520; 772; 1285; 2267; 3369; 3550; 3833
Cfr13I	G!GNCC	12	172; 205; 300; 425; 664; 1451; 2157; 3566; 4011; 4057; 4115; 4148
Cfr42I	CCGC!GG	0	
ChaI	GATC!	23	418; 508; 742; 1493; 1577; 1586; 1711; 2891; 2895; 2914; 3225; 3303; 3384; 3393; 3471; 3847; 3863; 4222; 4234; 4312; 4320; 4331; 4406
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	6	893; 1028; 2867; 4307; 4407; 4485
CjeI	!NNNNNNNNNACNNNNNNNTGG	7	326; 587; 2534; 2629; 3821; 4371; 4926
CjeI	ACNNNNNNTGGNNNNNNNNNNNNNNNN!	7	360; 621; 2568; 2663; 3855; 4405; 4960
CjeI	!NNNNNNNNCCANNNNNNGT	6	859; 994; 2833; 4273; 4373; 4451
CjePI	CCANNNNNNNNTCNNNNNNNNNNNNNNNN!	4	200; 712; 4307; 4485
CjePI	!NNNNNNNNGANNNNNNNTGG	7	406; 587; 1169; 1392; 1514; 3821; 4420
CjePI	GANNNNNNNTGGNNNNNNNNNNNNNNNN!	7	439; 620; 1202; 1425; 1547; 3854; 4453
CjePI	!NNNNNNNNCCANNNNNNNNTC	4	167; 679; 4274; 4452
ClaI	AT!CGAT	1	2890
CpoI	CG!GWCCG	1	3566
CseI	GACGCNNNNN!	3	946; 3760; 3839
CseI	!NNNNNNNNNNGCGTC	3	2383; 4278; 4856
CsiI	A!CCWGGT	1	2639



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CspI	CG!GWCCG	1	3566
Csp6I	G!TAC	8	97; 267; 619; 827; 974; 1257; 1611; 3355
Csp45I	TT!CGAA	2	1280; 3732
CspAI	A!CCGGT	1	123
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNNCAANNNNNGTGG	0	
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	2	2330; 3939
CstMI	!NNNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	21	135; 422; 549; 744; 998; 1072; 1341; 1427; 2477; 2617; 2689; 2780; 2921; 3266; 3452; 3483; 3509; 3865; 4249; 4969; 5020
CviJI	RG!CY	88	10; 111; 145; 301; 340; 427; 460; 511; 553; 580; 798; 1002; 1203; 1251; 1285; 1315; 1348; 1443; 1473; 1516; 1525; 1603; 1719; 1829; 1996; 2016; 2158; 2239; 2253; 2267; 2548; 2589; 2661; 2784; 2813; 2819; 2828; 2836; 2859; 2871; 2877; 2958; 2975; 2983; 3010; 3035; 3119; 3128; 3132; 3156; 3194; 3270; 3287; 3306; 3369; 3413; 3423; 3440; 3523; 3550; 3554; 3591; 3614; 3630; 3810; 3837; 3898; 4020; 4059; 4116; 4123; 4130; 4149; 4160; 4411; 4440; 4483; 4494; 4559; 4638; 4663; 4668; 4714; 4804; 4902; 4928; 4946; 4957
CviKI-1	RG!CY	88	10; 111; 145; 301; 340; 427; 460; 511; 553; 580; 798; 1002; 1203; 1251; 1285; 1315; 1348; 1443; 1473; 1516; 1525; 1603; 1719; 1829; 1996; 2016; 2158; 2239; 2253; 2267; 2548; 2589; 2661; 2784; 2813; 2819; 2828; 2836; 2859; 2871; 2877; 2958; 2975; 2983; 3010; 3035; 3119; 3128; 3132; 3156; 3194; 3270; 3287; 3306; 3369; 3413; 3423; 3440; 3523; 3550; 3554; 3591; 3614; 3630; 3810; 3837; 3898; 4020; 4059; 4116; 4123; 4130; 4149; 4160; 4411; 4440; 4483; 4494; 4559; 4638; 4663; 4668; 4714; 4804; 4902; 4928; 4946; 4957
CviQI	G!TAC	8	97; 267; 619; 827; 974; 1257; 1611; 3355
DdeI	C!TNAG	8	1020; 1097; 2530; 2832; 3713; 4162; 4285; 4694
DinI	GGC!GCC	1	3051
DpnI	GA!TC	23	416; 506; 740; 1491; 1575; 1584; 1709; 2889; 2893; 2912; 3223; 3301; 3382; 3391; 3469; 3845; 3861; 4220; 4232; 4310; 4318; 4329; 4404
DpnII	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
DraI	TTT!AAA	4	1034; 1752; 4194; 4213
DraII	RG!GNCCY	1	4148
DraIII	CACNNN!GTG	2	747; 2166
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	1	4530
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTG	0	
DrdI	GACNNNN!NNGTC	3	2121; 3077; 4866
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	0	
DriI	GACNNN!NNGTC	0	
DseDI	GACNNNN!NNGTC	3	2121; 3077; 4866
EaeI	Y!GGCCR	7	458; 551; 1000; 2956; 3130; 3521; 3548
EagI	C!GGCCG	1	2956
Eam1104I	CTCTTCN!	0	
Eam1104I	!NNNNGAAGAG	5	839; 1396; 2517; 3394; 3604
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTTCN!	0	
EarI	!NNNNGAAGAG	5	839; 1396; 2517; 3394; 3604
EciI	GGCGGANNNNNNNNNNNN!	4	2550; 3579; 4766; 4912
EciI	!NNNNNNNNNTCCGCC	4	507; 2721; 2742; 2763
Ecl136II	GAG!CTC	0	
EclXI	C!GGCCG	1	2956
Eco24I	GRGCY!C	3	2241; 3415; 4125
Eco31I	GGTTCN!	0	
Eco31I	!NNNNNGAGACC	1	4039
Eco32I	GAT!ATC	1	1051
Eco47I	G!GWCC	6	172; 205; 664; 1451; 3566; 4011
Eco47III	AGC!GCT	1	119
Eco52I	C!GGCCG	1	2956

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eco57I	CTGAAGNNNNNNNNNNNNNNNN!	2	3196; 3628
Eco57I	!NNNNNNNNNNNNNNCTTCAG	2	1293; 4426
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	4	1020; 1097; 2530; 4162
Eco88I	C!YCGRG	0	
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	0	
Eco130I	C!CWWGG	8	134; 421; 836; 997; 2779; 2872; 3482; 3887
Eco147I	AGG!CCT	1	2871
EcoHI	!CCSGG	4	3052; 3212; 3825; 4589
EcoICRI	GAG!CTC	0	
Eco57MI	CTGRAGNNNNNNNNNNNNNNNN!	3	3196; 3628; 3890
Eco57MI	!NNNNNNNNNNNNNNCTYCAG	3	1293; 3833; 4426
EcoNI	CCTNN!NNNAGG	1	274
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	4148
EcoRI	G!AATTC	0	
EcoRII	!CCWGG	11	1473; 1525; 2584; 2639; 2656; 3435; 4014; 4117; 4807; 4820; 4941
EcoRV	GAT!ATC	1	1051
EcoT14I	C!CWWGG	8	134; 421; 836; 997; 2779; 2872; 3482; 3887
EcoT22I	ATGCA!T	4	1432; 2622; 2694; 5025
EcoT38I	GRGCY!C	3	2241; 3415; 4125
Eco53kI	GAG!CTC	0	
EgeI	GGC!GCC	1	3051
EheI	GGC!GCC	1	3051
ErhI	C!CWWGG	8	134; 421; 836; 997; 2779; 2872; 3482; 3887
EsaBC3I	TC!GA	13	384; 1281; 2200; 2891; 3164; 3320; 3344; 3380; 3542; 3733; 3778; 4033; 4871
Esp3I	CGTCTC!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	21	138; 425; 552; 747; 1001; 1075; 1344; 1430; 2480; 2620; 2692; 2783; 2924; 3269; 3455; 3486; 3512; 3868; 4252; 4972; 5023
Fail	YA!TR	65	83; 136; 166; 182; 334; 367; 394; 410; 423; 514; 545; 550; 574; 599; 745; 790; 801; 999; 1063; 1073; 1093; 1106; 1123; 1148; 1342; 1428; 1499; 1519; 1627; 1712; 1722; 1788; 1833; 2038; 2466; 2478; 2609; 2618; 2681; 2690; 2714; 2781; 2805; 2922; 2986; 3267; 3292; 3453; 3484; 3510; 3582; 3798; 3866; 3944; 3996; 4157; 4176; 4178; 4250; 4528; 4717; 4833; 4906; 4970; 5021
FalI	AAGNNNNNCTTNNNNNNNNNNNN!	5	91; 394; 600; 1656; 3390
FalI	!NNNNNNNNAAGNNNNNCTT	5	59; 362; 568; 1624; 3358
FaqI	GGGACNNNNNNNNNN!	3	3201; 3733; 3842
FaqI	!NNNNNNNNNNNNNGTCCC	6	850; 979; 2566; 2638; 2702; 3997
FatI	!CATG	21	134; 421; 548; 743; 997; 1071; 1340; 1426; 2476; 2616; 2688; 2779; 2920; 3265; 3451; 3482; 3508; 3864; 4248; 4968; 5019
FauI	CCCGCNNNN!	5	2372; 2727; 2748; 3944; 4076
FauI	!NNNNNNGCGGG	5	2303; 3173; 3710; 3848; 3995
FauNDI	CA!TATG	1	1061
FbaI	T!GATCA	1	1707
FblI	GT!MKAC	2	809; 1466
FmuI	GGNC!C	12	175; 208; 303; 428; 667; 1454; 2160; 3569; 4014; 4060; 4118; 4151
Fnu4HI	GC!NGC	30	112; 770; 1349; 1827; 2346; 2368; 2382; 2820; 2959; 3011; 3022; 3112; 3117; 3154; 3195; 3282; 3288; 3524; 3620; 3661; 3675; 3789; 4128; 4143; 4354; 4560; 4563; 4628; 4771; 4926
FokI	GGATGNNNNNNNN!	8	499; 805; 1420; 1542; 2917; 3374; 3399; 3853
FokI	!NNNNNNNNNNNNNCATCC	1	2723
FriOI	GRGCY!C	3	2241; 3415; 4125
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	3152
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	14	115; 337; 625; 1154; 1252; 1324; 1586; 1698; 1899; 2317; 2873; 3888; 4222; 4475

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
FspEI	CCNNNNNNNNNNNN!	152	24; 58; 102; 137; 188; 208; 233; 256; 283; 315; 369; 389; 404; 433; 458; 474; 531; 567; 594; 630; 646; 663; 680; 700; 724; 780; 849; 880; 933; 957; 1004; 1032; 1067; 1109; 1281; 1299; 1344; 1362; 1388; 1403; 1439; 1457; 1487; 1539; 1590; 1612; 1733; 1772; 1786; 1927; 2022; 2046; 2069; 2092; 2110; 2132; 2153; 2172; 2191; 2220; 2241; 2255; 2281; 2369; 2395; 2444; 2485; 2503; 2542; 2558; 2596; 2653; 2668; 2725; 2745; 2759; 2776; 2790; 2827; 2842; 2885; 2968; 3035; 3066; 3086; 3101; 3146; 3160; 3226; 3240; 3259; 3275; 3316; 3336; 3383; 3433; 3449; 3469; 3494; 3514; 3537; 3564; 3582; 3608; 3648; 3674; 3698; 3754; 3768; 3796; 3839; 3860; 3895; 3939; 4027; 4051; 4073; 4093; 4109; 4130; 4144; 4163; 4247; 4267; 4295; 4310; 4344; 4386; 4413; 4428; 4473; 4497; 4511; 4533; 4559; 4579; 4603; 4629; 4677; 4696; 4715; 4741; 4776; 4821; 4851; 4865; 4916; 4930; 4955; 4971; 4992; 5021
FspEI	!NNNNNNNNNNNNNGG	134	93; 121; 139; 170; 188; 262; 283; 328; 408; 433; 469; 487; 506; 535; 554; 589; 641; 720; 758; 797; 815; 842; 872; 905; 932; 965; 984; 1007; 1084; 1124; 1159; 1193; 1214; 1247; 1271; 1296; 1320; 1343; 1383; 1434; 1455; 1479; 1498; 1516; 1534; 1556; 1604; 1648; 1721; 1821; 1890; 1998; 2047; 2069; 2097; 2133; 2178; 2207; 2243; 2262; 2290; 2310; 2373; 2396; 2504; 2536; 2554; 2583; 2626; 2655; 2766; 2795; 2838; 2859; 2887; 2920; 2940; 2965; 2992; 3017; 3039; 3067; 3093; 3114; 3165; 3186; 3204; 3252; 3288; 3344; 3369; 3393; 3422; 3445; 3469; 3495; 3517; 3536; 3561; 3601; 3637; 3702; 3787; 3811; 3840; 3874; 3895; 3915; 3960; 3987; 4006; 4039; 4091; 4122; 4149; 4201; 4299; 4370; 4415; 4476; 4541; 4575; 4601; 4619; 4655; 4725; 4748; 4770; 4794; 4827; 4875; 4910; 4928; 4985
Fsp4HI	GC!NGC	30	112; 770; 1349; 1827; 2346; 2368; 2382; 2820; 2959; 3011; 3022; 3112; 3117; 3154; 3195; 3282; 3288; 3524; 3620; 3661; 3675; 3789; 4128; 4143; 4354; 4560; 4563; 4628; 4771; 4926
GdiII	C!GGCCR	1	2956
GdiII	Y!GGCCG	5	458; 551; 2956; 3521; 3548
GlaI	GC!GC	21	119; 2315; 2323; 2349; 2371; 2380; 2393; 2424; 3043; 3051; 3115; 3152; 3418; 3678; 3854; 3940; 4343; 4452; 4626; 4726; 4793
Glul	GC!NGC	30	112; 770; 1349; 1827; 2346; 2368; 2382; 2820; 2959; 3011; 3022; 3112; 3117; 3154; 3195; 3282; 3288; 3524; 3620; 3661; 3675; 3789; 4128; 4143; 4354; 4560; 4563; 4628; 4771; 4926
GsaI	CCCAG!C	4	1603; 2597; 2669; 4668
GsaI	GCTGG!G	1	3558
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3890
GsuI	!NNNNNNNNNNNNNNCTCCAG	1	3833
HaeI	WGG!CCW	8	580; 1002; 1473; 2871; 3132; 4494; 4946; 4957
HaeII	RGCG!Y	5	121; 2317; 2325; 3053; 4728
HaeIII	GG!CC	24	301; 427; 460; 553; 580; 1002; 1473; 2016; 2158; 2813; 2819; 2828; 2871; 2958; 3132; 3523; 3550; 4059; 4116; 4149; 4494; 4928; 4946; 4957
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	3	1554; 1725; 3246
HaeIV	!NNNNNNNNNGAYNNNNNRTC	3	1520; 1691; 3212
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	3	1553; 1724; 3245
HaeIV	!NNNNNNNGAYNNNNNRTC	3	1522; 1693; 3214
HapII	C!CGG	24	124; 461; 521; 773; 920; 1268; 1286; 1580; 2268; 2955; 3032; 3054; 3082; 3213; 3303; 3370; 3551; 3826; 3834; 3926; 4400; 4590; 4616; 4763
HgaI	GACGCNNNNN!	3	946; 3760; 3839
HgaI	!NNNNNNNNNNNGCGTC	3	2383; 4278; 4856
HhaI	GCG!C	21	120; 2316; 2324; 2350; 2372; 2381; 2394; 2425; 3044; 3052; 3116; 3153; 3419; 3679; 3855; 3941; 4344; 4453; 4627; 4727; 4794
Hin1I	GR!CGYC	3	3050; 3752; 3831
Hin1II	CATG!	21	138; 425; 552; 747; 1001; 1075; 1344; 1430; 2480; 2620; 2692; 2783; 2924; 3269; 3455; 3486; 3512; 3868; 4252; 4972; 5023
Hin4I	GAYNNNNNVTCNNNNNNNNNNNNNN!	3	1553; 1724; 3245
Hin4I	!NNNNNNNNGABNNNNNRTC	5	151; 1521; 1692; 3213; 3243
Hin4I	GABNNNNNRTCNNNNNNNNNNNNNN!	5	183; 1553; 1724; 3245; 3275
Hin4I	!NNNNNNNNGAYNNNNNVTC	3	1521; 1692; 3213
Hin6I	G!CGC	21	118; 2314; 2322; 2348; 2370; 2379; 2392; 2423; 3042; 3050; 3114; 3151; 3417; 3677; 3853; 3939; 4342; 4451; 4625; 4725; 4792

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HinP1I	G!CGC	21	118; 2314; 2322; 2348; 2370; 2379; 2392; 2423; 3042; 3050; 3114; 3151; 3417; 3677; 3853; 3939; 4342; 4451; 4625; 4725; 4792
HincII	GTY!RAC	1	1813
HindII	GTY!RAC	1	1813
HindIII	A!AGCTT	0	
HinfI	G!ANTC	13	285; 352; 1217; 2093; 2115; 2525; 3535; 3669; 3721; 3779; 3816; 4598; 4994
HpaI	GTT!AAC	1	1813
HpaII	C!CGG	24	124; 461; 521; 773; 920; 1268; 1286; 1580; 2268; 2955; 3032; 3054; 3082; 3213; 3303; 3370; 3551; 3826; 3834; 3926; 4400; 4590; 4616; 4763
HphI	GGTGANNNNNNNN!	8	169; 475; 670; 901; 940; 1200; 4121; 4237
HphI	!NNNNNNNTCACC	4	409; 1472; 2167; 3228
Hpy8I	GTN!NAC	11	319; 810; 854; 897; 1467; 1480; 1813; 2097; 2114; 2169; 4656
Hpy99I	CGWCG!	8	1141; 3140; 3168; 3462; 3477; 3754; 4139; 4872
Hpy166II	GTN!NAC	11	319; 810; 854; 897; 1467; 1480; 1813; 2097; 2114; 2169; 4656
Hpy188I	TCN!GA	13	357; 534; 1216; 2224; 2833; 3017; 3361; 3714; 3815; 4294; 4428; 4781; 4859
Hpy188III	TC!NNGA	25	170; 274; 679; 920; 1054; 1083; 2477; 2529; 2842; 2895; 3068; 3384; 3393; 3476; 3532; 3576; 3666; 3699; 3768; 4249; 4323; 4406; 4504; 4602; 4736
HpyAV	CCTTCNNNNNN!	4	280; 3695; 3802; 4481
HpyAV	!NNNNNGAAGG	9	919; 1442; 2283; 3178; 3907; 3923; 4106; 4423; 4733
HpyCH4III	ACN!GT	13	201; 901; 1030; 1141; 1505; 2141; 3430; 3546; 3654; 3977; 4468; 4938; 5009
HpyCH4IV	A!CGT	11	539; 602; 893; 2110; 2122; 2165; 2275; 3166; 3353; 4134; 4267
HpyCH4V	TG!CA	21	55; 180; 1110; 1430; 1655; 1799; 1826; 1894; 2611; 2620; 2683; 2692; 2807; 2883; 2942; 3101; 3276; 3290; 4360; 4656; 5023
HpyF3I	C!TNAG	8	1020; 1097; 2530; 2832; 3713; 4162; 4285; 4694
HpyF10VI	GCNNNNN!NNGC	23	117; 457; 517; 1522; 2277; 2307; 2334; 2376; 2617; 2689; 2740; 2819; 3041; 3125; 3148; 3287; 3410; 3493; 3760; 3947; 4151; 4350; 4922
Hsp92I	GR!CGYC	3	3050; 3752; 3831
Hsp92II	CATG!	21	138; 425; 552; 747; 1001; 1075; 1344; 1430; 2480; 2620; 2692; 2783; 2924; 3269; 3455; 3486; 3512; 3868; 4252; 4972; 5023
HspAI	G!CGC	21	118; 2314; 2322; 2348; 2370; 2379; 2392; 2423; 3042; 3050; 3114; 3151; 3417; 3677; 3853; 3939; 4342; 4451; 4625; 4725; 4792
KasI	G!GCGCC	1	3049
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	0	
Kpn2I	T!CCGGA	1	919
KspI	CCGC!GG	0	
Ksp22I	T!GATCA	1	1707
KspAI	GTT!AAC	1	1813
Kzo9I	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
LguI	GCTCTTCN!	0	
LguI	!NNNNGAAGAGC	2	3394; 3604
LpnI	RGCI!GCY	5	119; 2315; 2323; 3051; 4726
LpnPI	CCDGNNNNNNNNN!	64	58; 137; 316; 474; 534; 680; 786; 933; 1004; 1067; 1109; 1281; 1299; 1388; 1406; 1451; 1487; 1539; 1593; 1613; 1787; 2092; 2281; 2504; 2542; 2558; 2598; 2653; 2670; 2770; 2855; 2968; 3045; 3067; 3090; 3226; 3240; 3259; 3316; 3383; 3433; 3449; 3506; 3564; 3773; 3839; 3863; 3939; 4028; 4131; 4164; 4395; 4413; 4559; 4579; 4603; 4629; 4678; 4776; 4821; 4851; 4930; 4955; 4992
LpnPI	!NNNNNNNNNNNNNCHGG	58	93; 139; 446; 506; 758; 815; 842; 905; 965; 1253; 1271; 1296; 1337; 1455; 1512; 1565; 1648; 2133; 2253; 2310; 2373; 2571; 2583; 2643; 2655; 2887; 2932; 2975; 3017; 3039; 3067; 3114; 3176; 3198; 3288; 3355; 3378; 3422; 3517; 3536; 3561; 3710; 3811; 3854; 3911; 4001; 4104; 4131; 4149; 4385; 4422; 4575; 4601; 4741; 4759; 4794; 4875; 4928
Lsp1109I	GCAGCNNNNNNNN!	6	1838; 3123; 3165; 3686; 4139; 4639
Lsp1109I	!NNNNNNNNNNNNGCTGC	8	98; 756; 2332; 2997; 3181; 3274; 4340; 4546

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LweI	GCATCNNNNN!	6	1866; 2629; 2701; 3349; 3413; 3688
LweI	!NNNNNNNNNGATGC	4	3008; 3263; 3479; 4871
MabI	A!CCWGGT	1	2639
MaeI	C!TAG	14	115; 337; 625; 1154; 1252; 1324; 1586; 1698; 1899; 2317; 2873; 3888; 4222; 4475
MaeII	A!CGT	11	539; 602; 893; 2110; 2122; 2165; 2275; 3166; 3353; 4134; 4267
MaeIII	!GTNAC	22	40; 523; 658; 762; 889; 901; 934; 1011; 1024; 1370; 1537; 1589; 1665; 1838; 2339; 2351; 3170; 3476; 4166; 4432; 4548; 4611
MalI	GA!TC	23	416; 506; 740; 1491; 1575; 1584; 1709; 2889; 2893; 2912; 3223; 3301; 3382; 3391; 3469; 3845; 3861; 4220; 4232; 4310; 4318; 4329; 4404
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNN!	0	
MaqI	!NNNNNNNNNNNNNNNNNNNGTCAAYG	0	
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2474; 3663
MbiI	GAG!CGG	2	2310; 3717
MboI	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
MboII	GAAGANNNNNNNN!	10	424; 576; 619; 856; 1413; 2306; 2534; 3411; 3621; 4240
MboII	!NNNNNNNTCTTC	7	1071; 1119; 1414; 3701; 3868; 4068; 4311
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1800
MflI	R!GATCY	9	1573; 1582; 3221; 3467; 3859; 4218; 4230; 4316; 4327
MhII	GDGCH!C	8	2241; 2996; 3089; 3163; 3353; 3415; 4125; 4658
MlsI	TGG!CCA	2	1002; 3132
MluI	A!CGCGT	1	1936
MluNI	TGG!CCA	2	1002; 3132
MlyI	GAGTCNNNNN!	2	2102; 2534
MlyI	!NNNNNGACTC	4	279; 2109; 3715; 4592
Mly113I	GG!CGCC	1	3050
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNN!	1	2143
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	3	183; 4575; 4759
MnII	CCTCNNNNNNN!	9	230; 386; 1769; 2833; 3651; 3857; 4171; 4541; 4865
MnII	!NNNNNNGAGG	27	270; 351; 477; 494; 808; 924; 1092; 1109; 1167; 1218; 1290; 1328; 1391; 1506; 1564; 1729; 2194; 2525; 2803; 2846; 2861; 2901; 2965; 3101; 3458; 3888; 4791
Mph1103I	ATGCA!T	4	1432; 2622; 2694; 5025
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	1	919
MroNI	G!CCGGC	3	2267; 3550; 3833
MroXI	GAANN!NNTTC	1	440
MscI	TGG!CCA	2	1002; 3132
MseI	T!TAA	18	967; 1033; 1205; 1433; 1751; 1812; 1933; 1954; 1965; 1977; 1988; 2005; 2103; 2374; 4193; 4207; 4212; 4264
MslI	CAYNN!NNRTG	3	139; 370; 3487
MspI	C!CGG	24	124; 461; 521; 773; 920; 1268; 1286; 1580; 2268; 2955; 3032; 3054; 3082; 3213; 3303; 3370; 3551; 3826; 3834; 3926; 4400; 4590; 4616; 4763
Msp20I	TGG!CCA	2	1002; 3132
MspA1I	CMG!CKG	5	769; 2548; 3156; 4385; 4630
MspCI	C!TTAAG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspJI	CNNRNNNNNNNNNN!	253	24; 47; 71; 101; 120; 136; 161; 182; 202; 221; 235; 255; 271; 286; 299; 314; 334; 349; 368; 403; 432; 457; 473; 487; 510; 533; 561; 574; 593; 610; 630; 655; 675; 691; 705; 723; 736; 754; 774; 796; 825; 842; 867; 880; 895; 916; 932; 951; 967; 992; 1008; 1032; 1056; 1072; 1095; 1108; 1123; 1143; 1166; 1216; 1233; 1252; 1275; 1293; 1308; 1323; 1336; 1353; 1387; 1405; 1439; 1456; 1482; 1505; 1523; 1538; 1573; 1592; 1606; 1620; 1653; 1671; 1690; 1710; 1723; 1738; 1757; 1774; 1787; 1828; 1842; 1855; 1873; 1911; 1926; 1944; 1985; 2009; 2029; 2047; 2068; 2091; 2123; 2138; 2160; 2178; 2191; 2212; 2229; 2242; 2255; 2271; 2284; 2314; 2329; 2354; 2372; 2385; 2400; 2424; 2438; 2462; 2487; 2503; 2541; 2557; 2596; 2610; 2624; 2652; 2668; 2682; 2696; 2725; 2738; 2759; 2768; 2790; 2820; 2836; 2854; 2884; 2907; 2931; 2955; 2974; 3002; 3028; 3044; 3057; 3080; 3094; 3114; 3127; 3141; 3160; 3174; 3187; 3203; 3218; 3231; 3247; 3262; 3278; 3303; 3322; 3338; 3351; 3364; 3382; 3396; 3410; 3426; 3448; 3464; 3483; 3505; 3521; 3544; 3563; 3577; 3593; 3607; 3627; 3643; 3656; 3678; 3711; 3725; 3745; 3758; 3772; 3826; 3839; 3862; 3875; 3894; 3911; 3938; 3974; 4007; 4026; 4051; 4072; 4099; 4112; 4129; 4143; 4158; 4174; 4234; 4259; 4275; 4297; 4310; 4324; 4355; 4369; 4394; 4412; 4427; 4440; 4459; 4472; 4487; 4516; 4535; 4553; 4578; 4593; 4612; 4628; 4647; 4665; 4681; 4695; 4714; 4741; 4764; 4786; 4805; 4820; 4833; 4850; 4870; 4897; 4910; 4929; 4954; 4977; 4991; 5004; 5021
MspJI	!NNNNNNNNNNNNYNG	211	16; 35; 53; 80; 101; 121; 140; 171; 189; 245; 262; 284; 308; 328; 368; 386; 408; 425; 442; 467; 484; 503; 535; 579; 602; 642; 665; 688; 715; 740; 759; 781; 816; 843; 860; 880; 899; 916; 957; 977; 995; 1013; 1032; 1058; 1078; 1097; 1140; 1157; 1200; 1226; 1254; 1272; 1296; 1318; 1338; 1361; 1379; 1413; 1431; 1448; 1473; 1493; 1512; 1529; 1547; 1566; 1586; 1605; 1635; 1659; 1680; 1702; 1731; 1760; 1802; 1885; 1923; 1947; 1970; 1999; 2043; 2065; 2097; 2133; 2150; 2171; 2208; 2228; 2245; 2262; 2297; 2315; 2333; 2350; 2374; 2396; 2423; 2451; 2477; 2515; 2536; 2553; 2571; 2594; 2615; 2643; 2666; 2687; 2705; 2726; 2743; 2766; 2790; 2810; 2828; 2850; 2881; 2903; 2929; 2948; 2965; 2993; 3012; 3031; 3049; 3067; 3088; 3110; 3134; 3167; 3187; 3205; 3226; 3252; 3279; 3296; 3313; 3330; 3356; 3378; 3400; 3418; 3438; 3457; 3479; 3517; 3537; 3561; 3581; 3601; 3628; 3652; 3685; 3704; 3732; 3754; 3783; 3811; 3836; 3855; 3874; 3895; 3912; 3929; 3960; 3987; 4007; 4030; 4050; 4087; 4104; 4123; 4149; 4169; 4208; 4235; 4254; 4272; 4309; 4327; 4368; 4386; 4412; 4429; 4461; 4490; 4518; 4539; 4562; 4581; 4602; 4620; 4637; 4655; 4681; 4702; 4722; 4742; 4760; 4781; 4807; 4824; 4843; 4862; 4891; 4910; 4928; 4947; 4965; 4983; 5006
MspR9I	CC!NGG	15	1475; 1527; 2586; 2641; 2658; 3054; 3214; 3437; 3827; 4016; 4119; 4591; 4809; 4822; 4943
MssI	GTTT!AAAC	0	
MunI	C!AATTG	1	1800
MvaI	CC!WGG	11	1475; 1527; 2586; 2641; 2658; 3437; 4016; 4119; 4809; 4822; 4943
Mva1269I	GAATGCN!	2	442; 1801
Mva1269I	G!CATTC	2	361; 1894
MvnI	CG!CG	14	1938; 1974; 2350; 2370; 2394; 2425; 3116; 3417; 3855; 3939; 4002; 4071; 4344; 4925
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	23	117; 457; 517; 1522; 2277; 2307; 2334; 2376; 2617; 2689; 2740; 2819; 3041; 3125; 3148; 3287; 3410; 3493; 3760; 3947; 4151; 4350; 4922
NaeI	GCC!GGC	3	2269; 3552; 3835
NarI	GG!CGCC	1	3050
NciI	CC!SGG	4	3054; 3214; 3827; 4591
NcoI	C!CATGG	5	134; 421; 997; 2779; 3482
NdeI	CA!TATG	1	1061
NdeII	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	744
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	0	
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNNNN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	708
NgoMIV	G!CCGGC	3	2267; 3550; 3833
NheI	G!CTAGC	1	114
NlaIII	CATG!	21	138; 425; 552; 747; 1001; 1075; 1344; 1430; 2480; 2620; 2692; 2783; 2924; 3269; 3455; 3486; 3512; 3868; 4252; 4972; 5023
NlaIV	GGN!NCC	17	615; 834; 1266; 1575; 2205; 2226; 2238; 2429; 2590; 2662; 3051; 3086; 3934; 4013; 4058; 4901; 4940
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	4	1343; 1882; 2197; 3789
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	1	4861
Nli3877I	CYCGR!G	0	
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2839; 3275
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	1	2804
NmeDI	RCCGGYNNNNNNN!	9	135; 472; 532; 784; 1297; 2279; 3381; 3562; 3845
NmeDI	!NNNNNNNNNNNNRCCGGY	9	110; 447; 507; 759; 1272; 2254; 3356; 3537; 3820
NmuCI	!GTSAC	10	40; 658; 889; 901; 934; 1537; 1665; 2339; 3170; 3476
NotI	GC!GGCCGC	0	
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	3152
NsiI	ATGCA!T	4	1432; 2622; 2694; 5025
NspI	RCATG!Y	4	2620; 2692; 3455; 4972
NspV	TT!CGAA	2	1280; 3732
OliI	CACNN!NNGTG	0	
PabI	GTA!C	8	99; 269; 621; 829; 976; 1259; 1613; 3357
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2620; 2692; 3455
PaeR7I	C!TCGAG	0	
PagI	T!CATGA	2	2476; 4248
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	2	4015; 4118
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2871
PciI	A!CATGT	1	4968
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3394; 3604
PcsI	WCGNNNN!NNNCGW	6	3344; 3421; 3664; 3738; 4131; 4649
PctI	GAATGCN!	2	442; 1801
PctI	G!CATTC	2	361; 1894
PdiI	GCC!GGC	3	2269; 3552; 3835
PdmI	GAANN!NNTTC	1	440
PfeI	G!AWTC	7	352; 1217; 3535; 3669; 3779; 3816; 4994
Pfl23II	C!GTACG	0	
PfI FI	GACN!NNGTC	2	165; 3168
PfIMI	CCANNNN!NTGG	1	202
PfoI	T!CCNGGA	1	3825
PhoI	GG!CC	24	301; 427; 460; 553; 580; 1002; 1473; 2016; 2158; 2813; 2819; 2828; 2871; 2958; 3132; 3523; 3550; 4059; 4116; 4149; 4494; 4928; 4946; 4957
PinAI	A!CCGGT	1	123
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3431
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2996; 3251
PleI	GAGTCNNNN!	2	2101; 2533
PleI	!NNNNNGACTC	4	279; 2109; 3715; 4592
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNCTCNNNNNNNNNNNN!	1	2132
PpiI	!NNNNNNNGAGNNNNNGTTC	2	425; 4262
PpiI	GAGNNNNGTTCNNNNNNNNNNNN!	2	457; 4294
PpiI	!NNNNNNNGAACNNNNNNCTC	1	2100
Ppsi	GAGTCNNNN!	2	2101; 2533
Ppsi	!NNNNNGACTC	4	279; 2109; 3715; 4592
Ppu10I	A!TGCAT	4	1428; 2618; 2690; 5021
Ppu21I	YAC!GTR	2	2166; 3354
PpuMI	RG!GWCCY	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PscI	A!CATGT	1	4968
PshAI	GACNN!NNGTC	0	
PshBI	AT!TAAT	1	967
PsiI	TTA!TAA	5	83; 1148; 1627; 1833; 2038
Psp03I	GGWC!C	6	175; 208; 667; 1454; 3569; 4014
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	11	1473; 1525; 2584; 2639; 2656; 3435; 4014; 4117; 4807; 4820; 4941
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	0	
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	11	1473; 1525; 2584; 2639; 2656; 3435; 4014; 4117; 4807; 4820; 4941
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	17	615; 834; 1266; 1575; 2205; 2226; 2238; 2429; 2590; 2662; 3051; 3086; 3934; 4013; 4058; 4901; 4940
PspOMI	G!GGCCC	0	
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	2	2780; 3779
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	3182
PspPI	G!GNCC	12	172; 205; 300; 425; 664; 1451; 2157; 3566; 4011; 4057; 4115; 4148
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNNNN!	3	2603; 2675; 4181
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	3	1083; 2516; 3711
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	4151
PstI	CTGCA!G	0	
PstNI	CAGNN!CTG	2	4151; 4559
PsuI	R!GATCY	9	1573; 1582; 3221; 3467; 3859; 4218; 4230; 4316; 4327
Psyl	GACN!NNGTC	2	165; 3168
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	2	2548; 3156
RcaI	T!CATGA	2	2476; 4248
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3565
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNNNN!	1	1779
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	8	98; 268; 620; 828; 975; 1258; 1612; 3356
RsaNI	G!TAC	8	97; 267; 619; 827; 974; 1257; 1611; 3355
RseI	CAYNN!NNRTG	3	139; 370; 3487
RsrII	CG!GWCCG	1	3566
Rsr2I	CG!GWCCG	1	3566
SacI	GAGCT!C	0	
SacII	CCGC!GG	0	
SalI	G!TCGAC	0	
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3394; 3604
SaqAI	T!TAA	18	967; 1033; 1205; 1433; 1751; 1812; 1933; 1954; 1965; 1977; 1988; 2005; 2103; 2374; 4193; 4207; 4212; 4264
SatI	GC!NGC	30	112; 770; 1349; 1827; 2346; 2368; 2382; 2820; 2959; 3011; 3022; 3112; 3117; 3154; 3195; 3282; 3288; 3524; 3620; 3661; 3675; 3789; 4128; 4143; 4354; 4560; 4563; 4628; 4771; 4926



Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Sau96I	G!GNCC	12	172; 205; 300; 425; 664; 1451; 2157; 3566; 4011; 4057; 4115; 4148
Sau3AI	!GATC	23	414; 504; 738; 1489; 1573; 1582; 1707; 2887; 2891; 2910; 3221; 3299; 3380; 3389; 3467; 3843; 3859; 4218; 4230; 4308; 4316; 4327; 4402
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	2102; 2534
SchI	!NNNNNGACTC	4	279; 2109; 3715; 4592
SciI	CTC!GAG	0	
ScrFI	CC!NGG	15	1475; 1527; 2586; 2641; 2658; 3054; 3214; 3437; 3827; 4016; 4119; 4591; 4809; 4822; 4943
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	7	588; 883; 1186; 2628; 2700; 2869; 4811
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	3205; 3690
SdeOSI	GACNNNNRTGANNNNNNNNNNNNN!	1	743
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	709
SduI	GDGCH!C	8	2241; 2996; 3089; 3163; 3353; 3415; 4125; 4658
SelI	!CGCG	14	1936; 1972; 2348; 2368; 2392; 2423; 3114; 3415; 3853; 3937; 4000; 4069; 4342; 4923
SetI	ASST!	69	47; 210; 272; 342; 393; 513; 542; 605; 669; 695; 800; 819; 828; 834; 896; 930; 946; 1021; 1026; 1205; 1212; 1253; 1333; 1479; 1498; 1553; 1591; 1605; 1667; 1740; 1761; 1770; 1782; 1831; 1998; 2113; 2125; 2168; 2205; 2255; 2278; 2402; 2550; 2645; 2838; 2951; 3079; 3158; 3169; 3241; 3312; 3356; 3616; 3762; 3806; 4137; 4168; 4227; 4270; 4413; 4434; 4533; 4670; 4685; 4704; 4716; 4760; 4806; 4857
SexAI	A!CCWGGT	1	2639
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	6	1866; 2629; 2701; 3349; 3413; 3688
SfaNI	!NNNNNNNNNGATGC	4	3008; 3263; 3479; 4871
SfcI	C!TRYAG	4	1467; 2385; 4512; 4703
SfiI	GGCCNNNN!NGGCC	1	2825
SfoI	GGC!GCC	1	3051
Sfr274I	C!TCGAG	0	
Sfr303I	CCGC!GG	0	
SfuI	TT!CGAA	2	1280; 3732
SgeI	CNNGNNNNNNNNN!	186	6; 57; 120; 136; 166; 182; 271; 286; 315; 334; 349; 369; 434; 473; 493; 510; 533; 561; 615; 637; 679; 756; 785; 842; 869; 895; 932; 992; 1010; 1058; 1084; 1108; 1123; 1166; 1252; 1280; 1298; 1323; 1336; 1353; 1387; 1405; 1439; 1457; 1482; 1505; 1538; 1573; 1592; 1612; 1675; 1710; 1757; 1786; 1828; 1911; 1949; 1985; 2069; 2091; 2123; 2160; 2178; 2197; 2212; 2254; 2271; 2288; 2323; 2337; 2354; 2376; 2400; 2424; 2489; 2503; 2541; 2557; 2597; 2610; 2629; 2652; 2669; 2682; 2701; 2731; 2752; 2769; 2792; 2827; 2854; 2885; 2907; 2933; 2955; 2974; 3002; 3038; 3057; 3080; 3094; 3114; 3127; 3141; 3160; 3174; 3193; 3225; 3239; 3252; 3278; 3309; 3322; 3339; 3356; 3370; 3387; 3405; 3420; 3448; 3464; 3483; 3505; 3521; 3544; 3563; 3588; 3607; 3627; 3654; 3678; 3711; 3730; 3758; 3772; 3838; 3862; 3877; 3900; 3921; 3938; 3986; 4013; 4027; 4056; 4080; 4113; 4130; 4150; 4163; 4176; 4234; 4261; 4280; 4310; 4335; 4355; 4369; 4394; 4412; 4449; 4487; 4516; 4544; 4558; 4578; 4593; 4614; 4628; 4647; 4665; 4681; 4721; 4741; 4768; 4786; 4807; 4820; 4833; 4850; 4874; 4897; 4929; 4954; 4981; 5003

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	166	31; 94; 121; 140; 245; 262; 289; 308; 343; 408; 447; 467; 484; 507; 535; 589; 611; 653; 730; 759; 816; 843; 869; 906; 966; 984; 1032; 1058; 1082; 1140; 1226; 1254; 1272; 1297; 1318; 1338; 1361; 1379; 1413; 1431; 1456; 1479; 1512; 1547; 1566; 1586; 1649; 1684; 1731; 1760; 1802; 1885; 1923; 1959; 2043; 2065; 2097; 2134; 2152; 2171; 2228; 2245; 2262; 2297; 2315; 2335; 2355; 2374; 2398; 2463; 2515; 2571; 2603; 2626; 2643; 2675; 2705; 2726; 2743; 2766; 2801; 2828; 2859; 2881; 2907; 2929; 2948; 2976; 3012; 3031; 3054; 3075; 3093; 3110; 3134; 3167; 3199; 3226; 3252; 3283; 3313; 3330; 3356; 3379; 3400; 3422; 3442; 3462; 3479; 3518; 3537; 3562; 3581; 3601; 3628; 3652; 3685; 3704; 3732; 3754; 3812; 3836; 3855; 3874; 3895; 3912; 3960; 3987; 4007; 4030; 4054; 4087; 4104; 4124; 4150; 4208; 4235; 4254; 4284; 4309; 4329; 4368; 4386; 4423; 4461; 4490; 4518; 4539; 4567; 4588; 4621; 4639; 4695; 4715; 4742; 4760; 4781; 4807; 4824; 4848; 4871; 4903; 4928; 4955; 4977; 5006
Sgfl	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	0	
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	3	2197; 3984; 4777
SimI	!GACCC	4	720; 3478; 4046; 4294
SinI	G!GWCC	6	172; 205; 664; 1451; 3566; 4011
SlaI	C!TCGAG	0	
SmaI	CCC!GGG	0	
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	3	139; 370; 3487
SmlI	C!TYRAG	8	481; 498; 754; 1332; 3441; 4323; 4600; 4862
SmoI	C!TYRAG	8	481; 498; 754; 1332; 3441; 4323; 4600; 4862
SmuI	CCCGCNNNN!	5	2372; 2727; 2748; 3944; 4076
SmuI	!NNNNNNGCGGG	5	2303; 3173; 3710; 3848; 3995
SnaBI	TAC!GTA	0	
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2620; 2692; 3455
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	16	60; 528; 590; 907; 964; 1143; 1646; 1800; 1864; 1942; 1968; 1979; 2626; 2698; 2790; 4208
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	1	2871
SsiI	C!CGC	27	518; 767; 1349; 2365; 2368; 2382; 2472; 2720; 2732; 2741; 2753; 2763; 2774; 2820; 2959; 3022; 3524; 3569; 3635; 3661; 3786; 3789; 3937; 4069; 4376; 4520; 5016
SsiI	G!CGG	20	2310; 2337; 2425; 2535; 3116; 3180; 3281; 3284; 3564; 3619; 3717; 3855; 4002; 4142; 4385; 4630; 4751; 4770; 4897; 4925
SspI	AAT!ATT	4	872; 1236; 1958; 2511
SspDI	G!GCGCC	1	3049
SspD5I	GGTGANNNNNNNN!	8	169; 475; 670; 901; 940; 1200; 4121; 4237
SspD5I	!NNNNNNNNNTCACC	4	408; 1471; 2166; 3227
SstI	GAGCT!C	0	
SstII	CCGC!GG	0	
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	0	
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	12	2249; 2371; 2726; 2747; 3060; 3463; 3602; 3673; 3943; 4075; 4305; 4743
Sth132I	!NNNNNNNNNCGGG	15	2250; 2302; 2403; 3130; 3172; 3205; 3709; 3818; 3847; 3994; 4098; 4129; 4582; 4626; 4834
Sth302II	CC!GG	24	125; 462; 522; 774; 921; 1269; 1287; 1581; 2269; 2956; 3033; 3055; 3083; 3214; 3304; 3371; 3552; 3827; 3835; 3927; 4401; 4591; 4617; 4764
StrI	C!TCGAG	0	
StsI	GGATGNNNNNNNNNN!	8	500; 806; 1421; 1543; 2918; 3375; 3400; 3854
StsI	!NNNNNNNNNNNNNNCATCC	1	2722
StuI	AGG!CCT	1	2871
StyI	C!CWWGG	8	134; 421; 836; 997; 2779; 2872; 3482; 3887

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	15	1473; 1525; 2584; 2639; 2656; 3052; 3212; 3435; 3825; 4014; 4117; 4589; 4807; 4820; 4941
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	13	201; 901; 1030; 1141; 1505; 2141; 3430; 3546; 3654; 3977; 4468; 4938; 5009
TaiI	ACGT!	11	542; 605; 896; 2113; 2125; 2168; 2278; 3169; 3356; 4137; 4270
TaqI	T!CGA	13	383; 1280; 2199; 2890; 3163; 3319; 3343; 3379; 3541; 3732; 3777; 4032; 4870
TaqII	GACCGANNNNNNNNNNN!	3	2070; 3087; 3755
TaqII	!NNNNNNNNNTCGGTC	2	175; 3999
TaqII	CACCCANNNNNNNNNNN!	1	434
TaqII	!NNNNNNNNNTGGGTG	2	2954; 3546
TasI	!AATT	16	60; 528; 590; 907; 964; 1143; 1646; 1800; 1864; 1942; 1968; 1979; 2626; 2698; 2790; 4208
TatI	W!GTACW	4	96; 973; 1256; 1610
TauI	GCSG!C	16	1351; 2370; 2384; 2822; 2961; 3024; 3119; 3284; 3287; 3526; 3622; 3663; 3791; 4145; 4773; 4928
TfiI	G!AWTC	7	352; 1217; 3535; 3669; 3779; 3816; 4994
TII	C!TCGAG	0	
TruII	T!TAA	18	967; 1033; 1205; 1433; 1751; 1812; 1933; 1954; 1965; 1977; 1988; 2005; 2103; 2374; 4193; 4207; 4212; 4264
Tru9I	T!TAA	18	967; 1033; 1205; 1433; 1751; 1812; 1933; 1954; 1965; 1977; 1988; 2005; 2103; 2374; 4193; 4207; 4212; 4264
TscAI	CASTGNN!	7	499; 1571; 1896; 3179; 4289; 4560; 4573
TseI	G!CWGC	15	111; 769; 1826; 2345; 3010; 3111; 3153; 3194; 3287; 3674; 4127; 4353; 4559; 4562; 4627
TsoI	TARCCANNNNNNNNNNN!	3	700; 2022; 2369
TsoI	!NNNNNNNNNTGGYTA	2	1827; 3579
Tsp45I	!GTSAC	10	40; 658; 889; 901; 934; 1537; 1665; 2339; 3170; 3476
Tsp509I	!AATT	16	60; 528; 590; 907; 964; 1143; 1646; 1800; 1864; 1942; 1968; 1979; 2626; 2698; 2790; 4208
TspDTI	ATGAANNNNNNNNNNN!	7	401; 425; 1078; 1514; 1808; 3109; 3813
TspDTI	!NNNNNNNNNTTCAT	4	354; 3527; 3983; 4190
TspEI	!AATT	16	60; 528; 590; 907; 964; 1143; 1646; 1800; 1864; 1942; 1968; 1979; 2626; 2698; 2790; 4208
TspGWI	ACGGANNNNNNNNNNN!	6	677; 827; 962; 1244; 1277; 3925
TspGWI	!NNNNNNNNNTCCGT	1	606
TspMI	C!CCGGG	0	
TspRI	CASTGNN!	7	499; 1571; 1896; 3179; 4289; 4560; 4573
TstI	CACNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNCCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	2	165; 3168
Tth111II	CAARCANNNNNNNNNNN!	3	574; 1577; 4377
Tth111III	!NNNNNNNNNTGYTTG	6	469; 486; 742; 3485; 4345; 4384
UnbI	!GGNCC	12	171; 204; 299; 424; 663; 1450; 2156; 3565; 4010; 4056; 4114; 4147
Van9II	CCANNNN!NTGG	1	202
Vha464I	C!TTAAG	0	
VneI	G!TGCAC	1	4654
VpaK11AI	!GGWCC	6	171; 204; 663; 1450; 3565; 4010
VpaK11BI	G!GWCC	6	172; 205; 664; 1451; 3566; 4011
VspI	AT!TAAT	1	967
XagI	CCTNN!NNNAGG	1	274
XapI	R!AATY	4	907; 1864; 1968; 1979
XbaI	T!CTAGA	0	
XceI	RCATG!Y	4	2620; 2692; 3455; 4972
XcmI	CCANNNN!NNNTGG	2	138; 310
XhoI	C!TCGAG	0	
XhoII	R!GATCY	9	1573; 1582; 3221; 3467; 3859; 4218; 4230; 4316; 4327
XmaI	C!CCGGG	0	
XmaJI	C!CTAGG	2	2872; 3887
XmiI	GT!MKAC	2	809; 1466
XmnI	GAANN!NNTTC	1	440

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
XspI	C!TAG	14	115; 337; 625; 1154; 1252; 1324; 1586; 1698; 1899; 2317; 2873; 3888; 4222; 4475
ZraI	GAC!GTC	0	
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	4	1432; 2622; 2694; 5025