

Enzyme Name	Sequence	Count	Cutting Position				
AatI	AGG!CCT	1	2006				
AatII	GACGT!C	0					
Acc65I	G!GTACC	1	64				
AccI	GT!MKAC	1	59				
AccII	CG!CG	19	70	519	672	744	762
			834	1109	1485	1505	1529
			1560	2251	2552	2990	3074
			3137	3206	3479	4060	
AccIII	T!CCGGA	0					
AciI	G!CGG	24	70	120	621	828	1445
			1472	1560	1670	2251	2315
			2416	2419	2699	2754	2852
			2990	3137	3277	3520	3765
			3886	3905	4032	4060	
AciI	C!CGC	33	68	126	328	391	469
			612	670	790	832	1500
			1503	1517	1607	1855	1867
			1876	1888	1898	1909	1955
			2094	2157	2659	2704	2770
			2796	2921	2924	3072	3204
			3511	3655	4151		
AcyI	GR!CGYC	3	2185	2887	2966		
AfaI	GT!AC	3	66	308	2491		
AflI	G!GWCC	2	2701	3146			
AflII	C!TTAAG	1	1067				
AflIII	A!CRYGT	3	555	750	4103		
AgeI	A!CCGGT	1	85				
AhaI	CC!SGG	7	76	77	687	2189	2349
			2962	3726			
AhaII	GR!CGYC	3	2185	2887	2966		
AhaIII	TTT!AAA	3	887	3329	3348		
AluI	AG!CT	18	37	43	268	279	445
			526	589	964	1131	1388
			1683	1971	2291	2749	3546
			3803	3849	3939		
Alw44I	G!TGCAC	2	242	3789			
AlwI	GGATCNNNN!	8	87	2053	2364	2610	3002
			3361	3459	3545		
AlwI	!NNNNNGATCC	7	74	295	676	2429	2973
			3360	3457			
AlwNI	CAGNNN!CTG	2	3286	3694			
AocI	CC!TNAGG	2	1665	3297			
AocII	GDGCH!C	13	39	76	246	318	789
			1376	2131	2224	2298	2488
			2550	3260	3793		
Aor51HI	AGC!GCT	1	15				
AosI	TGC!GCA	1	2287				
AosII	GR!CGYC	3	2185	2887	2966		
ApaI	GGGCC!C	1	76				
ApaLI	G!TGCAC	2	242	3789			
ApoI	R!AATTY	4	48	999	1103	1114	
ApyI	CC!WGG	10	359	1721	1776	1793	2572
			3151	3254	3944	3957	4078
AquI	C!YCGRG	3	32	75	371		
AscI	GG!CGCGCC	0					
AseI	AT!TAAT	0					

AsnI	AT!TAAT	0						
Asp700I	GAANN!NNTTC	0						
Asp718I	G!GTACC	1	64					
AspHI	GWGCW!C	5	39	246	2298	2488	3793	
AspI	GACN!NNGTC	1	2303					
AsuI	G!GNCC	14	72	73	122	376	506	
			569	634	689	1292	2701	
			3146	3192	3250	3283		
AsuII	TT!CGAA	2	46	2867				
AvaI	C!YCGRG	3	32	75	371			
AvaII	G!GWCC	2	2701	3146				
AvaIII	ATGCA!T	3	1757	1829	4160			
AviII	TGC!GCA	1	2287					
AvrI	!CYCGRG	3	31	74	370			
AvrII	C!CTAGG	2	2007	3022				
AxyI	CC!TNAGG	2	1665	3297				
BalI	TGG!CCA	1	2267					
BamHI	G!GATCC	1	79					
BanI	G!GYRCC	6	64	416	452	1338	2184	
			2219					
BanII	GRGCY!C	6	39	76	318	1376	2550	
			3260					
BanIII	AT!CGAT	1	2025					
BbeI	GGCGC!C	1	2188					
BbiII/AcyI	GR!CGYC	3	2185	2887	2966			
BbrPI	CAC!GTG	1	751					
BbsI	!GTCTTC	0						
BbsI	!GAAGAC	0						
BbvI	GCAGCNNNNNNNN!	9	222	225	678	973	2258	
			2300	2821	3274	3774		
BbvI	!NNNNNNNNNNNGCTGC	8	255	1467	2132	2316	2409	
			3475	3681	3684			
BbvII	GAAGACNN!	0						
BbvII	!NNNNNNGTCTTC	0						
BcefI	ACGGCNNNNNNNNNN!	15	184	196	223	244	325	
			355	430	466	505	520	
			583	634	679	2611	3098	
BcefI	!NNNNNNNNNNNGCCGT	5	234	564	1327	2145	3604	
BcgI	!GCANNNNNNTCG	0						
BcgI	!CGANNNNNNTGC	0						
BclI	T!GATCA	0						
BcnI	CC!SGG	7	76	77	687	2189	2349	
			2962	3726				
BfaI	C!TAG	8	11	840	1034	1452	2008	
			3023	3357	3610			
BfrI	C!TTAAG	1	1067					
BglI	GCCNNNN!NGGC	1	1960					
BglII	A!GATCT	1	28					
BinI	!NNNNNGATCC	7	74	295	676	2429	2973	
			3360	3457				
BinI	GGATCNNNN!	8	87	2053	2364	2610	3002	
			3361	3459	3545			
BlnI	C!CTAGG	2	2007	3022				
BmyI	GDGCH!C	13	39	76	246	318	789	
			1376	2131	2224	2298	2488	
			2550	3260	3793			
BpmI	!CTCCAG	1	2982					
BpmI	!CTGGAG	1	3003					
Bpu1102I	GC!TNAGC	0						

BsaAI	YAC!GTR	3	751	1301	2489		
BsaBI	GATNN!NNATC	2	847	2044			
BsaHI	GR!CGYC	3	2185	2887	2966		
BsaI	GGTCTCN!	0					
BsaI	!NNNNNGAGACC	3	251	542	3174		
BsaJI	C!CNNGG	22	68	75	96	226	357
			372	565	685	1719	1791
			1914	1949	1958	2007	2348
			2617	3022	3149	3150	3252
			3253	3943			
BseAI	T!CCGGA	0					
BsePI	!GCGCGC	0					
BsgI	!GTGCAG	0					
BsgI	!CTGCAC	0					
BsiEI	CGRY!CG	5	90	391	832	2094	3769
BsiWI	C!GTACG	0					
BsiYI	CCNNNNN!NNGG	21	279	529	631	763	1197
			1523	1915	2166	2710	2991
			3023	3024	3155	3190	3240
			3241	3272	3625	3904	4070
			4088				
BslI	CCNNNNN!NNGG	21	279	529	631	763	1197
			1523	1915	2166	2710	2991
			3023	3024	3155	3190	3240
			3241	3272	3625	3904	4070
			4088				
BsmAI	!GTCTC	0					
BsmAI	!GAGAC	6	256	547	1614	2032	3051
			3179				
BsmI	GAATGCN!	1	936				
BsmI	G!CATTC	1	1029				
Bsp1286I	GDGCH!C	13	39	76	246	318	789
			1376	2131	2224	2298	2488
			2550	3260	3793		
BspDI	AT!CGAT	1	2025				
BspEI	T!CCGGA	0					
BspHI	T!CATGA	2	1611	3383			
BspMI	ACCTGCNNNN!	3	464	2453	2903		
BspMI	!NNNNNNNNGCAGGT	1	2072				
BspMII	T!CCGGA	0					
BspWI	GCNNNNN!NNGC	30	261	390	399	465	523
			741	789	798	1412	1442
			1469	1511	1513	1752	1824
			1875	1954	1960	2176	2260
			2283	2422	2428	2545	2628
			2895	3082	3286	3485	4057
BsrFI	R!CCGGY	6	85	260	1402	2504	2685
			2968				
BsrI	ACTGGN!	3	2129	2330	3576		
BsrI	C!CAGT	5	304	1214	1892	3688	3701
BssHII	G!CGCGC	0					
Bst1107I	GTA!TAC	0					
BstBI	TT!CGAA	2	46	2867			
BstEII	G!GTNACC	1	766				
BstI	G!GATCC	1	79				
BstNI	CC!WGG	10	359	1721	1776	1793	2572
			3151	3254	3944	3957	4078
BstPI	G!GTNACC	1	766				
BstUI	CG!CG	19	70	519	672	744	762

			834	1109	1485	1505	1529
			1560	2251	2552	2990	3074
			3137	3206	3479	4060	
BstXI	CCANNNNN!NTGG	0					
BstYI	R!GATCY	10	28	79	681	2356	2602
			2994	3353	3365	3451	3462
Bsu36I	CC!TNAGG	2	1665	3297			
CbiI	TT!CGAA	2	46	2867			
CcrI	C!TCGAG	1	32				
CelII	GC!TNAGC	0					
CfoI	GCG!C	28	16	402	519	585	674
			744	762	803	1451	1459
			1485	1507	1516	1529	1560
			2179	2187	2251	2288	2554
			2814	2990	3076	3479	3588
			3762	3862	3929		
Cfr10I	R!CCGGY	6	85	260	1402	2504	2685
			2968				
Cfr13I	G!GNCC	14	72	73	122	376	506
			569	634	689	1292	2701
			3146	3192	3250	3283	
Cfr9I	C!CCGGG	1	75				
CfrI	Y!GGCCR	7	181	201	829	2091	2265
			2656	2683			
ClaI	AT!CGAT	1	2025				
CpoI	CG!GWCCG	1	2701				
Csp45I	TT!CGAA	2	46	2867			
CspI	CG!GSCCG	0					
CviJI	RG!CY	94	37	43	74	123	183
			203	268	279	286	316
			348	378	429	445	468
			492	499	507	526	570
			589	593	603	624	636
			669	690	831	854	964
			1131	1151	1293	1374	1388
			1402	1683	1724	1796	1919
			1948	1954	1963	1971	1994
			2006	2012	2093	2110	2118
			2145	2170	2254	2263	2267
			2291	2329	2405	2422	2441
			2504	2548	2558	2575	2658
			2685	2689	2726	2749	2765
			2945	2972	3033	3155	3194
			3251	3258	3265	3284	3295
			3546	3575	3618	3629	3694
			3773	3798	3803	3849	3939
			4037	4063	4081	4092	
CvnI	CC!TNAGG	2	1665	3297			
DdeI	C!TNAG	8	25	380	1665	1967	2848
			3297	3420	3829		
DpnI	GA!TC	21	30	81	302	683	844
			2024	2028	2047	2358	2436
			2517	2526	2604	2980	2996
			3355	3367	3445	3453	3464
			3539				
DpnII	!GATC	21	28	79	300	681	842
			2022	2026	2045	2356	2434
			2515	2524	2602	2978	2994
			3353	3365	3443	3451	3462

			3537				
DraI	TTT!AAA	3	887	3329	3348		
DraII	RG!GNCCY	2	376	3283			
DraIII	CACNNN!GTG	4	250	700	784	1301	
DrdI	GACNNNN!NNGTC	3	1256	2212	4001		
DsaI	C!CRYGG	6	68	96	226	565	1914
			2617				
DsaV	!CCNGG	17	74	75	357	685	1719
			1774	1791	2187	2347	2570
			2960	3149	3252	3724	3942
			3955	4076			
EaeI	Y!GGCCR	7	181	201	829	2091	2265
			2656	2683			
EagI	C!GGCCG	2	829	2091			
Eam1105I	GACNNN!NNGTC	0					
EarI	!CTCTTC	0					
EarI	!GAAGAG	3	1656	2533	2743		
Ecl136II	GAG!CTC	1	37				
EclXI	C!GGCCG	2	829	2091			
Eco105I	TAC!GTA	0					
Eco31I	GGTCTCN!	0					
Eco31I	!NNNNNGAGACC	3	251	542	3174		
Eco47I	G!GWCC	2	2701	3146			
Eco47III	AGC!GCT	1	15				
Eco52I	C!GGCCG	2	829	2091			
Eco57I	!CTGAAG	2	2309	2741			
Eco57I	!CTTCAG	1	3575				
Eco81I	CC!TNAGG	2	1665	3297			
EcoNI	CCTNN!NNNAGG	0					
EcoO109I	RG!GNCCY	2	376	3283			
EcoO65I	G!GTNACC	1	766				
EcoRI	G!AATTC	1	48				
EcoRII	!CCWGG	10	357	1719	1774	1791	2570
			3149	3252	3942	3955	4076
EcoRV	GAT!ATC	0					
EcoT14I	C!CWGGG	5	96	1914	2007	2617	3022
EcoT22I	ATGCA!T	3	1757	1829	4160		
EcoT38I	GRGCY!C	6	39	76	318	1376	2550
			3260				
EheI	GGC!GCC	1	2186				
Esp3I	CGTCTCN!	0					
Esp3I	!NNNNNGAGACG	0					
EspI	GC!TNAGC	0					
FbaI	T!GATCA	0					
FinI	!GTCCC	4	1715	1787	1851	3146	
FinI	!GGGAC	4	725	2321	2853	2962	
Fnu4HI	GC!NGC	38	121	211	214	269	469
			622	667	670	829	832
			962	1481	1503	1517	1955
			2094	2146	2157	2247	2252
			2289	2330	2417	2420	2423
			2659	2755	2796	2810	2924
			3263	3278	3489	3695	3698
			3763	3906	4061		
FokI	GGATGNNNNNNNNN!	5	119	2052	2509	2534	2988
FokI	!NNNNNNNNNNNNNCATCC	2	521	1858			
FspI	TGC!GCA	1	2287				
GdiII	!NNNNNYGGCCG	5	195	823	2085	2650	2677
GdiII	CGGCCRN!	3	187	835	2097		

GsuI	!CTCCAG	1	2982					
GsuI	!CTGGAG	1	3003					
HaeI	WGG!CCW	6	593	2006	2267	3629	4081	
			4092					
HaeII	RGCGC!Y	6	17	804	1452	1460	2188	
			3863					
HaeIII	GG!CC	29	74	123	183	203	378	
			507	570	593	624	636	
			690	831	1151	1293	1948	
			1954	1963	2006	2093	2267	
			2658	2685	3194	3251	3284	
			3629	4063	4081	4092		
HapII	C!CGG	21	20	76	86	261	687	
			1403	2090	2167	2189	2217	
			2348	2438	2505	2686	2961	
			2969	3061	3535	3725	3751	
			3898					
HgaI	GACGCNNNNN!	2	2895	2974				
HgaI	!NNNNNNNNNNNGCGTC	3	1518	3413	3991			
HgiAI	GWGCW!C	5	39	246	2298	2488	3793	
HgiEII	!ACCNNNNNNGGT	1	3515					
HhaI	GCG!C	28	16	402	519	585	674	
			744	762	803	1451	1459	
			1485	1507	1516	1529	1560	
			2179	2187	2251	2288	2554	
			2814	2990	3076	3479	3588	
			3762	3862	3929			
HinII	GR!CGYC	3	2185	2887	2966			
HinPII	G!CGC	28	14	400	517	583	672	
			742	760	801	1449	1457	
			1483	1505	1514	1527	1558	
			2177	2185	2249	2286	2552	
			2812	2988	3074	3477	3586	
			3760	3860	3927			
HincII	GTY!RAC	2	60	948				
HindIII	A!AGCTT	1	41					
HinfI	G!ANTC	12	23	836	1228	1250	1660	
			2670	2804	2856	2914	2951	
			3733	4129				
HpaI	GTT!AAC	1	948					
HpaII	C!CGG	21	20	76	86	261	687	
			1403	2090	2167	2189	2217	
			2348	2438	2505	2686	2961	
			2969	3061	3535	3725	3751	
			3898					
HphI	GGTGANNNNNNNN!	4	187	778	3256	3372		
HphI	!NNNNNNNTCACC	7	184	466	598	703	787	
			1302	2363				
KasI	G!GCGCC	1	2184					
KpnI	GGTAC!C	1	68					
Ksp632I	CTCTTCN!	0						
Ksp632I	!NNNNGAAGAG	3	1652	2529	2739			
KspI	CCGC!GG	1	71					
MaeI	C!TAG	8	11	840	1034	1452	2008	
			3023	3357	3610			
MaeII	A!CGT	10	240	750	1245	1257	1300	
			1410	2301	2488	3269	3402	
MaeIII	!GTNAC	11	700	766	973	1474	1486	
			2305	2611	3301	3567	3683	

			3746					
MamI	GATNN!NNATC	2	847	2044				
MboI	!GATC	21	28	79	300	681	842	
			2022	2026	2045	2356	2434	
			2515	2524	2602	2978	2994	
			3353	3365	3443	3451	3462	
			3537					
MboII	GAAGANNNNNNNN!	5	1441	1669	2546	2756	3375	
MboII	!NNNNNNNTCTTC	6	151	313	2836	3003	3203	
			3446					
McrI	!CGRYCG	5	86	387	828	2090	3765	
MfeI	!CAATTG	1	934					
MflI	R!GATCY	10	28	79	681	2356	2602	
			2994	3353	3365	3451	3462	
MluI	A!CGCGT	0						
MmeI	!TCCRAC	1	1252					
MmeI	!GTYGGA	2	3728	3912				
MnlI	CCTCNNNNNNN!	9	904	913	1968	1974	2786	
			2992	3306	3676	4000		
MnlI	!NNNNNNNGAGG	21	96	108	165	366	716	
			756	810	863	1328	1659	
			1937	1943	1980	1983	1995	
			2035	2099	2235	2592	3022	
			3925					
MroI	T!CCGGA	0						
MscI	TGG!CCA	1	2267					
MseI	T!TAA	15	823	886	947	1068	1089	
			1100	1112	1123	1140	1238	
			1509	3328	3342	3347	3399	
MspI	C!CGG	21	20	76	86	261	687	
			1403	2090	2167	2189	2217	
			2348	2438	2505	2686	2961	
			2969	3061	3535	3725	3751	
			3898					
MstI	TGC!GCA	1	2287					
MstII	CC!TNAGG	2	1665	3297				
MunI	C!AATTG	1	935					
MvaI	CC!WGG	10	359	1721	1776	1793	2572	
			3151	3254	3944	3957	4078	
MvnI	CG!CG	19	70	519	672	744	762	
			834	1109	1485	1505	1529	
			1560	2251	2552	2990	3074	
			3137	3206	3479	4060		
NaeI	GCC!GGC	3	1404	2687	2970			
NarI	GG!CGCC	1	2185					
NciI	CC!SGG	7	76	77	687	2189	2349	
			2962	3726				
NcoI	C!CATGG	3	96	1914	2617			
NdeI	CA!TATG	0						
NdeII	!GATC	21	28	79	300	681	842	
			2022	2026	2045	2356	2434	
			2515	2524	2602	2978	2994	
			3353	3365	3443	3451	3462	
			3537					
NgoMI	G!CCGGC	3	1402	2685	2968			
NheI	G!CTAGC	0						
NlaIII	CATG!	19	100	148	277	424	517	
			559	1615	1755	1827	1918	
			2059	2404	2590	2621	2647	

			3003	3387	4107	4158	
NlaIV	GGN!NCC	22	66	74	81	124	418
			454	508	571	691	1340
			1361	1373	1564	1725	1797
			2186	2221	3069	3148	3193
			4036	4075			
NotI	GC!GGCCGC	1	829				
NruI	TCG!CGA	0					
NsiI	ATGCA!T	3	1757	1829	4160		
Nsp(7524)I	RCATG!Y	5	559	1755	1827	2590	4107
Nsp(7524)V	TT!CGAA	2	46	2867			
NspBII	CMG!CKG	7	70	526	589	1683	2291
			3520	3765			
NspII	GDGCH!C	13	39	76	246	318	789
			1376	2131	2224	2298	2488
			2550	3260	3793		
NspIII	C!YCGRG	3	32	75	371		
NspIV	G!GNCC	14	72	73	122	376	506
			569	634	689	1292	2701
			3146	3192	3250	3283	
NunII	GG!CGCC	1	2185				
PacI	TTAAT!TAA	0					
Paer71	C!TCGAG	1	32				
PalI	GG!CC	29	74	123	183	203	378
			507	570	593	624	636
			690	831	1151	1293	1948
			1954	1963	2006	2093	2267
			2658	2685	3194	3251	3284
			3629	4063	4081	4092	
PflMI	CCANNNN!NTGG	2	279	529			
PleI	GAGTCNNNN!	2	1236	1668			
PleI	!NNNNNGACTC	5	17	830	1244	2850	3727
PmaCI	CAC!GTG	1	751				
PmeI	GTTT!AAAC	0					
PmlI	CAC!GTG	1	751				
PpuMI	RG!GWCCY	0					
PshAI	GACNN!NNGTC	0					
PstI	CTGCA!G	1	57				
PvuI	CGAT!CG	0					
PvuII	CAG!CTG	4	526	589	1683	2291	
RmaI	C!TAG	8	11	840	1034	1452	2008
			3023	3357	3610		
RsaI	GT!AC	3	66	308	2491		
RsrI	G!AATTC	1	48				
RsrII	CG!GWCCG	1	2701				
SacI	GAGCT!C	1	39				
SacII	CCGC!GG	1	71				
SalI	G!TCGAC	1	58				
Sau3AI	!GATC	21	28	79	300	681	842
			2022	2026	2045	2356	2434
			2515	2524	2602	2978	2994
			3353	3365	3443	3451	3462
			3537				
Sau96I	G!GNCC	14	72	73	122	376	506
			569	634	689	1292	2701
			3146	3192	3250	3283	
SauI	CC!TNAGG	2	1665	3297			
ScaI	AGT!ACT	0					
ScrFI	CC!NGG	17	76	77	359	687	1721

			1776	1793	2189	2349	2572
			2962	3151	3254	3726	3944
			3957	4078			
SduI	GDGCH!C	13	39	76	246	318	789
			1376	2131	2224	2298	2488
			2550	3260	3793		
SecI	C!CNNGG	22	68	75	96	226	357
			372	565	685	1719	1791
			1914	1949	1958	2007	2348
			2617	3022	3149	3150	3252
			3253	3943			
SexI	!CTCGAG	1	31				
SfaNI	GCATCNNNNN!	10	351	393	480	801	1001
			1764	1836	2484	2548	2823
SfaNI	!NNNNNNNNNGATGC	4	2143	2398	2614	4006	
SfcI	C!TRYAG	4	53	1520	3647	3838	
SfiI	GGCCNNNN!NGGCC	1	1960				
SfuI	TT!CGAA	2	46	2867			
SgrAI	CR!CCGGYG	0					
SinI	G!GWCC	2	2701	3146			
SmaI	CCC!GGG	1	77				
SnaBI	TAC!GTA	0					
SnaI	!GTATAC	0					
SnoI	G!TGCAC	2	242	3789			
SpeI	A!CTAGT	0					
SphI	GCATG!C	3	1755	1827	2590		
SpI	C!GTACG	0					
SrfI	GCCC!GGGC	0					
Sse8387I	CCTGCA!GG	0					
SspI	AAT!ATT	2	1093	1646			
SstI	GAGCT!C	1	39				
SstII	CCGC!GG	1	71				
SstIII	!ACGT	10	239	749	1244	1256	1299
			1409	2300	2487	3268	3401
StuI	AGG!CCT	1	2006				
StyI	C!CWGGG	5	96	1914	2007	2617	3022
StySJI	!GAGNNNNNNGTRC	0					
StySJI	!GYACNNNNNNNCTC	0					
SwaI	ATTT!AAAT	0					
TaqI	T!CGA	18	33	46	59	165	387
			405	642	1334	2025	2298
			2454	2478	2514	2676	2867
			2912	3167	4005		
TaqII	GACCGANNNNNNNNNN!	3	1205	2222	2890		
TaqII	!NNNNNNNNNTCGGTC	1	3134				
TaqII	CACCCANNNNNNNNNN!	0					
TaqII	!NNNNNNNNNTGGGTG	2	2089	2681			
TfiI	G!AWTC	5	2670	2804	2914	2951	4129
ThaI	CG!CG	19	70	519	672	744	762
			834	1109	1485	1505	1529
			1560	2251	2552	2990	3074
			3137	3206	3479	4060	
Tsp45I	!GTSAC	5	700	766	1474	2305	2611
TspEI	!AATT	10	48	935	999	1077	1103
			1114	1761	1833	1925	3343
Tth111I	GACN!NNGTC	1	2303				
Tth111II	CAARCANNNNNNNNN!	2	731	3512			
Tth111III	!NNNNNNNNNTGYTTG	3	2620	3480	3519		
TthHB8I	T!CGA	18	33	46	59	165	387

			405	642	1334	2025	2298
			2454	2478	2514	2676	2867
			2912	3167	4005		
Van91I	CCANNNN!NTGG	2	279	529			
VspI	AT!TAAT	0					
XbaI	T!CTAGA	1	839				
XcmI	!CCANNNNNNNNNNTCG	1	2460				
XcyI	C!CCGGG	1	75				
XhoI	C!TCGAG	1	32				
XhoII	R!GATCY	10	28	79	681	2356	2602
			2994	3353	3365	3451	3462
XmaI	C!CCGGG	1	75				
XmaIII	C!GGCCG	2	829	2091			
XmnI	GAANN!NNTTC	0					
XorII	CGAT!CG	0					