



General Description

DNA pDONR™222

Entire molecule length: 4718 bp

Restriction/Methylation Map

Enzyme	# of cuts	Positions
AccI	4	594 642 1544 2539
AccIII	1	2082
Acil	27	28 114(c) 127 165 174(c) 1036(c) 1375 1570 1631(c) 1738(c) 2102(c) 3676(c) 3837 3893(c) 3903(c) 3927 3970(c) 3977(c) 3998(c) 4089 4117 4244 4263 4384 4494(c) 4629 4638(c)
AcsI	3	2078 3482 3666
AcyI	1	118
AfIII	1	345
AfIII	3	21 3808 4044
AluI	18	350 453 1114 1477 2053 2182 2301 2310 2682 2784 2823 2837 3163 3868 3986 4212 4348 4605
Alw44I	2	1176 4358
AlwI	8	1199 1618(c) 1631 3025(c) 3420 4605(c) 4691(c) 4693
AlwNI	2	1304 4460
ApaI	1	358
ApaLI	2	1176 4358
ApoI	3	2078 3482 3666
Asel	3	3082 3815 3874
AsnI	3	3082 3815 3874
Asp700	1	843
AspEI	3	340 590 2546
AspHI	2	1180 4362
AvaI	4	351 1207 3407 3681
BamHI	1	1623
BanII	2	358 3632
BbsI	1	228(c)
BbvI	11	616(c) 1493(c) 2513(c) 2846 3855(c) 3936(c) 3954(c) 4373(c) 4463 4466 4672
BfaI	4	31 297 805 4539
BfrI	1	345
BglII	1	3716

BmyI	4	358 1180 3632 4362
Bpml	1	1962(c)
BpuAI	1	228(c)
BsaAI	1	2389
BsaBI	1	1196
BsaHI	1	118
Bsal	1	1067(c)
BsaJI	11	1185 1207 1777 1846 1847 2425 2426 3006 3407 3408 4204
BsaWI	5	1436 2082 3144 4250 4397
BseAI	1	2082
BsiEI	5	598 646 3285 3960 4384
BsiHKAI	2	1180 4362
BsiYI	14	136 1069 1207 1388 1853 2420 3023 3040 3372 3892 4066 4084 4250 4529
BsII	14	136 1069 1207 1388 1853 2420 3023 3040 3372 3892 4066 4084 4250 4529
BsmAI	6	1067(c) 1148(c) 1854(c) 2407 2854 3263(c)
BsmFI	1	2462
Bsml	4	1684(c) 2091(c) 3324 3401
Bsp120I	1	354
Bsp1286I	4	358 1180 3632 4362
BspDI	1	3590
BspEI	1	2082
BspMI	1	961
BspWI	14	1353 1648 1744 2307 2511 2840 3328 3542 3574 3832 3916 3983 4097 4669
BsrBI	2	167(c) 3977
BsrDI	4	423 2065(c) 2714(c) 2869(c)
BsrFI	2	1076 3325
BsrGI	3	442 1232 2689
BsrI	15	232(c) 314(c) 340(c) 548(c) 965 1089 1185 1837 2277(c) 2589 3494(c) 3844(c) 4452 4465 4577(c)
BssHII	1	1582

Bst1107I	1	1545
BstNI	14	36 101 269 1186 1848 1904 2427 2455 2831 3035 3392 4072 4193 4206
BstUI	13	23 288 1036 1584 1631 3281 3626 3676 3810 3891 3893 4091 4672
BstXI	1	1096
BstYI	5	1623 3030 3716 4685 4696
CfoI	17	1110 1584 1586 2507 3261 3331 3348 3570 3828 3893 3921 3954 4224 4291 4391 4565 4674
Cfr10I	2	1076 3325
Clal	1	3590
Csp6I	7	25 443 1233 1664 2202 2690 3447
Ddel	14	10 88 188 244 569 637 1043 1352 1858 2306 2534 2563 3263 4319
Dpnl	14	1048 1193 1625 2353 2396 2480 3032 3284 3414 3718 4612 4687 4698 4706
DpnII	14	1046 1191 1623 2351 2394 2478 3030 3282 3412 3716 4610 4685 4696 4704
Dral	2	1823 2162
Drall	1	355
DrdI	1	4152
Dsal	1	1777
DsaV	25	34 99 136 169 267 1136 1184 1206 1207 1342 1846 1902 2342 2425 2434 2453 2829 3033 3390 3406 3407 4070 4191 4204 4422
EaeI	5	337 1086 1182 1813 3883
Eam1105I	3	340 590 2546
EarI	3	34(c) 3467(c) 3928
Eco57I	1	4592

EcoNI	1	3370
EcoO109I	1	355
EcoRI	1	2078
EcoRII	14	34 99 267 1184 1846 1902 2425 2453 2829 3033 3390 4070 4191 4204
EcoRV	1	2789
Esp3I	3	1854(c) 2407 3263(c)
Fnu4HI	17	630 1507 1632 1739 2527 2835 3677 3869 3950 3968 3971 4089 4244 4387 4452 4455 4661
FnuDII	13	23 288 1036 1584 1631 3281 3626 3676 3810 3891 3893 4091 4672
FokI	11	52(c) 88 317 1105(c) 1184(c) 1222(c) 1344(c) 2098 2764(c) 3035 3641(c)
HaeII	2	3922 4292
HaeIII	21	64 80 141 230 339 356 1088 1184 1815 1902 2124 2169 2424 2843 3196 3679 3885 4059 4070 4088 4522
HgaI	5	15 29 107(c) 2503(c) 4155
HgiAI	2	1180 4362
HhaI	17	1110 1584 1586 2507 3261 3331 3348 3570 3828 3893 3921 3954 4224 4291 4391 4565 4674
HinP1I	17	1108 1582 1584 2505 3259 3329 3346 3568 3826 3891 3919 3952 4222 4289 4389 4563 4672
HincII	6	292 595 643 1488 2540 3775
HindII	6	292 595 643 1488 2540 3775
HindIII	1	3161
Hinfl	14	559 677 1729 2573 2802 3050 3056 3141 3313 3369 3879 3944 4019 4415

Hpal	1	292
Hpall	20	137 171 1077 1137 1208 1343 1437 1621 1955 2083 2125 2344 2436 3145 3326 3408 4251 4398 4424 4614
Hphl	18	193(c) 635 1186(c) 1287(c) 1793 1835(c) 1847 1903(c) 2039(c) 2041 2047(c) 2380 2532 2995(c) 3115(c) 3159 3355(c) 3434
Ital	17	630 1507 1632 1739 2527 2835 3677 3869 3950 3968 3971 4089 4244 4387 4452 4455 4661
Ksp632l	3	34(c) 3467(c) 3928
Mael	4	31 297 805 4539
Maell	12	155 323 465 918 1174 1818 1993 2388 2400 2668 3691 3799
Maelll	21	316 386 550 582 769 1492 1915 2020 2486 2548 2580 2744 2865 3131 3426 3518 3804 4400 4463 4532 4579
Maml	1	1196
Mbol	14	1046 1191 1623 2351 2394 2478 3030 3282 3412 3716 4610 4685 4696 4704
Mboll	12	51 228(c) 609(c) 657(c) 1050(c) 1808 2473(c) 3373(c) 3484 3915(c) 4554 4706
Mcrl	5	598 646 3285 3960 4384
Mlul	2	21 3808
MluNI	3	1088 1184 1815
Mnll	18	144 718 741(c) 768 912 1361 1532 2237 2392 3001(c) 3101 3468(c) 3690 3893(c) 3943 4152(c) 4226 4476(c)
Mrol	1	2082
MscI	3	1088 1184 1815

Msel	16	291 346 492 721 1010 1283 1680 1822 2161 2641 3082 3291 3670 3796 3815 3874
Msil	3	1094 1422 2366
MspA1I	6	1738 2182 2784 3868 4386 4631
Mspl	20	137 171 1077 1137 1208 1343 1437 1621 1955 2083 2125 2344 2436 3145 3326 3408 4251 4398 4424 4614
Mval	14	36 101 269 1186 1848 1904 2427 2455 2831 3035 3392 4072 4193 4206
Mvnl	13	23 288 1036 1584 1631 3281 3626 3676 3810 3891 3893 4091 4672
Mwol	14	1353 1648 1744 2307 2511 2840 3328 3542 3574 3832 3916 3983 4097 4669
Ncil	11	138 171 1138 1208 1209 1344 2344 2436 3408 3409 4424
Ncol	1	1777
Ndell	14	1046 1191 1623 2351 2394 2478 3030 3282 3412 3716 4610 4685 4696 4704
Nhel	2	30 296
NlaIII	15	304 1108 1421 1699 1720 1781 2011 2816 2899 3130 3435 3550 3662 3784 4048
NlaIV	7	356 357 978 1625 2380 4076 4115
Nrul	1	3626
Nsil	2	3171 3437
Nspl	1	4048
PaeR7I	1	3681
PfIMI	3	1853 2420 3023
PleI	4	2810 3050(c) 3938(c) 4423
Ppu10I	2	3167 3433

Psp1406I	2	155 1993
PstI	1	958
PvuI	1	3285
PvuII	3	2182 2784 3868
RsaI	7	26 444 1234 1665 2203 2691 3448
Sall	3	593 641 2538
SapI	1	3928
Sau3AI	14	1046 1191 1623 2351 2394 2478 3030 3282 3412 3716 4610 4685 4696 4704
Sau96I	6	139 229 354 355 2423 2842
Scal	1	1665
ScrFI	25	36 101 138 171 269 1138 1186 1208 1209 1344 1848 1904 2344 2427 2436 2455 2831 3035 3392 3408 3409 4072 4193 4206 4424
SfaNI	14	86(c) 254(c) 616(c) 841 1750 2235(c) 2513(c) 2926 3237 3357 3444 3579 3663 4141
Sfcl	6	588 954 2543 2795 4309 4500
SmaI	2	1209 3409
SpeI	2	1176 4358
SspBI	3	442 1232 2689
SspI	2	1770 3358
StyI	1	1777
TaqI	10	594 642 949 2323 2539 2913 3316 3590 3682 4144
TfiI	10	559 677 1729 2573 3050 3141 3313 3369 3879 4019
ThaI	13	23 288 1036 1584 1631 3281 3626 3676 3810 3891 3893 4091 4672
Tru9I	16	291 346 492 721 1010 1283 1680 1822 2161 2641 3082 3291 3670 3796 3815 3874
Tsp509I	14	406 494 842 935 1673 2078 2637 2725 2933 3083

		3300 3482 3666 3816
Van911	3	1853 2420 3023
XhoI	1	3681
XhoII	5	1623 3030 3716 4685 4696
XmaI	2	1207 3407
XmnI	1	843

No cuts: AatI, AatII, Acc65I, AgeI, AoiI, AscI, Asp718, AspI, AsuII, AvaII, AviII, AvrII, BanI, BbrPI, BcgI, BclI, BglI, BlnI, Bpu1102I, BsgI, BsiWI, BspHI, BstBI, BstEII, Bsu36I, CelII, Csp45I, DraIII, EagI, Ecl136II, EclXI, Eco47III, EspI, FspI, KasI, KpnI, KspI, MfeI, MunI, NaeI, NarI, NdeI, NgoMI, NotI, NspV, PacI, PinAI, PmaCI, PmeI, PmlI, PpuMI, RcaI, RsrII, SacI, SacII, SexAI, SfiI, SfuI, SgrAI, SnaBI, SpeI, SphI, StuI, SwaI, Tth111I, XbaI, XcmI, XmaIII