

pType IIs

Entire molecule length: 3490 bp

Restriction/Methylation Map

Enzyme	# of cuts	Positions
AccI	2	17 612
AccIII	1	2967
Acil	29	186(c) 525 634 666(c) 670 717 745 872 891 1012 1122(c) 1257 1266(c) 1628 1719 1910(c) 1956 2077(c) 2121 2198 2307 2406(c) 2458(c) 2462 2513 2949 3313 3420 3481(c)
AcsI	1	2971
Acyl	1	2102
AluI	13	86 449 840 930 976 1233 1754 1854 1917 2743 2752 2871 3000
Alw44I	3	383 986 2232
AlwI	11	363(c) 1233(c) 1319(c) 1321 1417(c) 1418 1881(c) 2198 2202(c) 3421(c) 3434
AlwNI	3	262 1088 2485
AosI	2	650 1787
ApaLI	3	383 986 2232
ApoI	1	2971
Asel	1	1737
AsnI	1	1737
Asp700	1	2164
AspEI	1	1565
AspHI	4	387 990 2151 2236
AvaI	1	352
Avall	2	1703 1925
Avill	2	650 1787
BamHI	1	3426
BanI	1	1513
BbsI	2	624 2497(c)
BbvI	8	66 1001(c) 1091 1094 1300 1603(c) 1994 2536
BcgI	1	2104
BfaI	4	622 1167 1420 1755
BglI	2	1685 2467
BmyI	4	387 990 2151 2236
BpmI	3	1635(c) 2507 3093
BpuAI	2	624 2497(c)
BsaAI	1	2664
BsaBI	1	367
BsaHI	1	2102
BsaI	2	635 2485(c)
BsaJI	10	352 374 660 832 2465 2623 2624 3202 3203 3272
BsaWI	5	123 878 1025 1856 2967
BseAI	1	2967
BsiEI	6	670 1012 1935 2084 2462 2513
BsiHKAI	4	387 990 2151 2236
BsiYI	10	178 359 497 694 712 878 1157 2471 2636 3203
BsII	10	178 359 497 694 712 878 1157 2471 2636 3203
BsmAI	6	411 635 2402 2485(c) 2642(c) 3195

BsmFI	1	2587(c)
BsmI	2	2964 3371
Bsp1286I	4	387 990 2151 2236
BspEI	1	2967
BspHI	2	1392 2400
BspMI	3	598(c) 650 2470(c)
BspWI	12	213 642 725 1297 1685 2467 2476 2521 2545 2749 3312 3408
BsrBI	1	2406
BsrDI	3	1626 1800(c) 2990
BsrFI	2	483 1645
BsrGI	1	327
BsrI	14	380(c) 476(c) 600(c) 1080 1093 1205(c) 1611(c) 1729(c) 1772(c) 2041 2211(c) 2502 2778 3218(c)
BssHII	1	3467
Bst1107I	1	18
BstNI	8	376 700 821 834 2597 2625 3148 3204
BstUI	8	527 719 1300 1630 2123 2458 3422 3469
BstXI	1	471
BstYI	7	1313 1324 1410 1422 2190 2207 3426
CfoI	13	455 651 852 919 1019 1193 1302 1695 1788 2125 2548 3469 3471
Cfr10I	2	483 1645
Csp6I	4	328 2044 2849 3387
DdeI	9	208 517 947 1356 1522 2062 2516 2744 3192
DpnI	19	370 515 1240 1315 1326 1334 1412 1424 1529 1870 1888 1934 2192 2209 2245 2573 2657 2700 3428
DpnII	19	368 513 1238 1313 1324 1332 1410 1422 1527 1868 1886 1932 2190 2207 2243 2571 2655 2698 3426
DraI	5	1431 1450 2142 2891 3230
DrdI	1	780
DsaI	3	660 2465 3272
DsaV	17	216 351 352 374 422 698 819 832 1050 1746 2097 2595 2614 2623 2706 3146 3202
EaeI	7	377 473 667 1953 2459 2510 3236
EagI	3	667 2459 2510
Eam1105I	1	1565
EarI	1	2360
EclXI	3	667 2459 2510
Eco57I	2	1220 2232(c)
EcoRI	1	2971
EcoRII	8	374 698 819 832 2595 2623 3146 3202
EcoRV	2	657 2454
Esp3I	2	2642(c) 3195
Fnu4HI	20	55 667 670 717 872 1015 1080 1083 1289 1617 1956 1983 2078 2307 2459 2462 2513 2525 3313 3420
FnuDII	8	527 719 1300 1630 2123 2458 3422 3469
FokI	9	215 337 375 454 1531(c) 1712(c) 1999(c) 2513 2951(c)
FspI	2	650 1787
HaeII	1	920
HaeIII	17	379 475 669 687 698 716 1150 1608 1688 1955 2461 2512 2629 2884 2929 3151 3238
HgaI	4	783 1361 2091(c) 2545

HgiAI	4	387 990 2151 2236
Hhal	13	455 651 852 919 1019 1193 1302 1695 1788 2125 2548 3469 3471
HinP1I	13	453 649 850 917 1017 1191 1300 1693 1786 2123 2546 3467 3469
HincII	2	75 613
HindII	2	75 613
Hinfl	3	1043 1560 3321
HpaII	21	124 218 353 424 484 879 1026 1052 1242 1646 1680 1747 1857 2099 2509 2615 2707 2926 2968 3096 3430
HphI	18	277 378 631(c) 1408(c) 1635(c) 2051 2257(c) 2292 2461 2522(c) 2674(c) 3007 3013(c) 3015 3151 3207(c) 3219 3261(c)
ItaI	20	55 667 670 717 872 1015 1080 1083 1289 1617 1956 1983 2078 2307 2459 2462 2513 2525 3313 3420
Ksp632I	1	2360
MaeI	4	622 1167 1420 1755
MaeII	8	387 1375 1791 2164 2651 2663 3058 3233
MaeIII	12	66 1028 1091 1207 1490 1821 1879 2032 2220 2562 3028 3133
MamI	1	367
MboI	19	368 513 1238 1313 1324 1332 1410 1422 1527 1868 1886 1932 2190 2207 2243 2571 2655 2698 3426
MbolI	11	514 629 1182 1334 1405(c) 2160(c) 2238(c) 2347(c) 2497(c) 2581 3246(c)
McrI	6	670 1012 1935 2084 2462 2513
MluNI	3	379 475 3238
MnII	11	32(c) 203(c) 780(c) 854 1104(c) 1504(c) 1585(c) 1732 1938 2662(c) 2817(c)
MroI	1	2967
MscI	3	379 475 3238
MseI	13	278 551 1378 1430 1435 1449 1502 1737 1776 2141 2890 3229 3371
MsiI	8	141 469 644 650 1817 1976 2335 2687
MspA1I	5	1014 1259 2200 2871 3315
MspI	21	124 218 353 424 484 879 1026 1052 1242 1646 1680 1747 1857 2099 2509 2615 2707 2926 2968 3096 3430
MvaI	8	376 700 821 834 2597 2625 3148 3204
MvnI	8	527 719 1300 1630 2123 2458 3422 3469
MwoI	12	213 642 725 1297 1685 2467 2476 2521 2545 2749 3312 3408
NciI	9	218 353 354 424 1052 1748 2099 2616 2708
NcoI	3	660 2465 3272
NdeII	19	368 513 1238 1313 1324 1332 1410 1422 1527 1868 1886 1932 2190 2207 2243 2571 2655 2698 3426
NlaIII	18	146 459 629 649 655 664 676 1396 1887 1897 1975 2011 2404 2469 3046 3276 3337 3358
NlaIV	9	585 704 743 1515 1609 1650 1861 2673 3428
NotI	2	667 2459
NspI	2	649 676
PfIMI	2	2636 3203
PleI	2	1051 1554(c)
Psp1406I	3	1791 2164 3058

PstI	1	609
PvuI	1	1935
PvuII	1	2871
RcaI	2	1392 2400
RsaI	4	329 2045 2850 3388
SalI	1	611
Sau3AI	19	368 513 1238 1313 1324 1332 1410 1422 1527 1868 1886 1932 2190 2207 2243 2571 2655 2698 3426
Sau96I	5	1607 1686 1703 1925 2627
Scal	2	2045 3388
ScrFI	17	218 353 354 376 424 700 821 834 1052 1748 2099 2597 2616 2625 2708 3148 3204
SfaNI	8	645 769 1821 2012(c) 2261 2536 2814 3299(c)
Sfcl	4	605 937 1128 1806
SmaI	1	354
Snol	3	383 986 2232
SphI	1	649
SspBI	1	327
Sspl	2	2369 3283
StyI	3	660 2465 3272
TaqI	4	612 772 2216 2728
TfiI	1	3321
Thal	8	527 719 1300 1630 2123 2458 3422 3469
Tru9I	13	278 551 1378 1430 1435 1449 1502 1737 1776 2141 2890 3229 3371
Tsp509I	5	1432 1738 1993 2971 3376
Van91I	2	2636 3203
XcmI	1	2472
XhoII	7	1313 1324 1410 1422 2190 2207 3426
XmaI	1	352
XmaIII	3	667 2459 2510
XmnI	1	2164

No cuts: AatI, AatII, Acc65I, AflII, AflIII, AgeI, ApaI, AscI, Asp718, AspI, AsuII, AvrII, BanII, BbrPI, BclI, BfrI, BglII, BlnI, Bpu1102I, BsgI, BsiWI, Bsp120I, BspDI, BstBI, BstEII, Bsu36I, CclII, ClaI, Csp45I, DralI, DralII, Ecl136II, Eco47III, EcoNI, EcoO109I, EspI, HindIII, HpaI, KasI, KpnI, KspI, MfeI, MluI, MunI, NaeI, NarI, NdeI, NgoMI, NheI, Nrul, NsiI, NspV, PacI, PaeR7I, PinAI, PmaCI, PmeI, PmlI, Ppu10I, PpuMI, RsrII, SacI, SacII, SapI, SexAI, SfiI, SfuI, SgrAI, SnaBI, SpeI, StuI, SwaI, Tth111I, XbaI, XhoI