

General Description

DNA pDONR221-P1P5r

Entire molecule length: 4765 bp

Restriction/Methylation Map

Enzyme	# of cuts	Positions
AccI	5	804 852 1754 2749 2837
AccIII	1	2292
Acil	29	43 64 71 114(c) 138 148 204(c) 238 324(c) 337 375 384(c) 1246(c) 1585 1780 1841(c) 1948(c) 2312(c) 2993(c) 2997 3190 4168 4177(c) 4312 4422(c) 4543(c) 4562(c) 4689(c) 4717(c)
Acsl	3	2288 3198 3382
Acyl	1	328
AfIII	1	555
AfIII	3	231 4064 4760
AluI	17	57 175 560 663 1324 1687 2263 2392 2511 2520 3037 3051 4034 4203 4460 4506 4596
Alw44I	2	1386 4446
AlwI	8	1409 1828(c) 1841 3447(c) 3842 4114(c) 4116 4202
AlwNI	2	1514 4351
Apal	1	568
ApaLI	2	1386 4446
ApoI	3	2288 3198 3382
Asel	3	167 226 3784
AsnI	3	167 226 3784
Asp700	1	1053
AspEI	2	550 800
AspHI	2	1390 4450
Aval	2	561 1417
BamHI	1	1833
BanII	2	568 3240
BbsI	1	438(c)
BbvI	11	85 103 184 826(c) 1703(c) 2723(c) 3060 4132(c) 4338(c) 4341(c) 4431
Bfal	4	241 507 1015 4267

Bfrl	1	555
Bmyl	4	568 1390 3240 4450
Bpml	1	2172(c)
BpuAI	1	438(c)
BsaAI	1	2599
BsaBI	1	1406
BsaHI	1	328
Bsal	1	1277(c)
BsaJI	10	1395 1417 1987 2056 2057 2635 2636 3456 3858 4600
BsaWI	5	1646 2292 3720 4407 4554
BseAI	1	2292
BsiEI	6	85 808 856 2997 3585 4426
BsiHKAI	2	1390 4450
BsiYI	14	154 346 1279 1417 1598 2063 2630 3499 3831 3848 4282 4561 4727 4745
BsII	14	154 346 1279 1417 1598 2063 2630 3499 3831 3848 4282 4561 4727 4745
BsmAI	6	1277(c) 1358(c) 2064(c) 2617 3068 3601
BsmFI	2	2672 4036
BsmI	4	1894(c) 2301(c) 3469(c) 3546(c)
Bsp120I	1	564
Bsp1286I	4	568 1390 3240 4450
BspEI	1	2292
BspHI	2	3109 4036
BspMI	1	1171
BspWI	14	63 130 214 1563 1858 1954 2517 2721 3054 3297 3329 3543 4142 4714
BsrBI	2	66(c) 377(c)
BsrDI	4	633 2275(c) 2816 3083(c)
BsrFI	2	1286 3539
BsrGI	2	652 1442
BsrI	16	201 442(c) 524(c) 550(c) 758(c) 1175 1299 1395 2047 2487(c) 2941(c) 3376 4000 4233 4345(c)

		4358(c)
BssHII	1	1792
Bst1107I	2	1755 2838
BstNI	14	246 311 479 1396 2058 2114 2637 2665 3045 3475 3832 4601 4614 4735
BstUI	14	150 152 233 498 1246 1794 1841 2999 3192 3242 3587 4066 4136 4717
BstXI	1	1306
BstYI	4	1833 3834 4108 4119
CfoI	18	91 124 152 217 1320 1794 1796 2717 3300 3522 3539 3609 4030 4136 4245 4419 4519 4586
Cfr10I	2	1286 3539
Csp6I	7	235 653 1443 1874 2412 2983 3419
Ddel	14	298 398 454 779 847 1253 1562 2068 2516 2744 2962 3602 4077 4486
Dpnl	13	1258 1403 1835 2563 2606 2690 3454 3584 3836 4102 4110 4121 4196
DpnII	13	1256 1401 1833 2561 2604 2688 3452 3582 3834 4100 4108 4119 4194
DraI	2	2033 2372
Drall	1	565
DrdI	1	4658
Dsal	1	1987
DsaV	24	244 309 346 379 477 1346 1394 1416 1417 1552 2056 2112 2552 2635 2644 2663 3043 3456 3473 3830 4381 4599 4612 4733
EaeI	6	156 547 1296 1392 2023 2994
EagI	1	2994

Eam1105I	2	550 800
EarI	3	112(c) 244(c) 3398
EclXI	1	2994
Eco57I	1	4218(c)
EcoNI	1	3497
EcoO109I	1	565
EcoRI	1	2288
EcoRII	14	244 309 477 1394 2056 2112 2635 2663 3043 3473 3830 4599 4612 4733
EcoRV	1	3003
Esp3I	3	2064(c) 2617 3601
Fnu4HI	19	71 74 92 173 840 1717 1842 1949 2737 2994 2997 3049 3190 4146 4352 4355 4420 4563 4718
FnuDII	14	150 152 233 498 1246 1794 1841 2999 3192 3242 3587 4066 4136 4717
FokI	10	262(c) 298 527 1315(c) 1394(c) 1432(c) 1554(c) 2308 3223 3829(c)
HaeII	2	125 4520
HaeIII	22	158 274 290 351 440 549 566 1298 1394 2025 2112 2334 2379 2634 2996 3057 3189 3672 4286 4720 4738 4749
HgaI	5	317(c) 2713(c) 4055(c) 4070(c) 4648(c)
HgiAI	2	1390 4450
HhaI	18	91 124 152 217 1320 1794 1796 2717 3300 3522 3539 3609 4030 4136 4245 4419 4519 4586
HinP1I	18	89 122 150 215 1318 1792 1794 2715 3298 3520 3537 3607 4028 4134 4243 4417 4517 4584
HincII	5	502 805 853 1698 2750

HindII	5	502 805 853 1698 2750
Hinfl	14	21 96 161 769 887 1939 2952 3016 3496 3552 3724 3809 3815 4390
Hpal	1	502
HpaII	20	347 381 1287 1347 1418 1553 1647 1831 2165 2293 2335 2554 2646 3458 3540 3721 4192 4382 4408 4555
HphI	18	403(c) 845 1396(c) 1497(c) 2003 2045(c) 2057 2113(c) 2249(c) 2251 2257(c) 2590 2742 3435(c) 3514 3710(c) 3754 3874
Ital	19	71 74 92 173 840 1717 1842 1949 2737 2994 2997 3049 3190 4146 4352 4355 4420 4563 4718
Ksp632I	3	112(c) 244(c) 3398
MaeI	4	241 507 1015 4267
MaeII	12	365 533 675 1128 1384 2028 2203 2598 2610 2858 3181 4055
MaeIII	21	526 596 760 792 979 1702 2125 2230 2696 2779 2943 2975 3079 3345 3437 3732 3989 4060 4224 4340 4403
MamI	1	1406
MboI	13	1256 1401 1833 2561 2604 2688 3452 3582 3834 4100 4108 4119 4194
MboII	12	129 261 438(c) 819(c) 867(c) 1260(c) 2018 2683(c) 3385(c) 3496 4103(c) 4255(c)
McrI	6	85 808 856 2997 3585 4426
MluI	2	231 4064
MluNI	3	1298 1394 2025
MnlI	18	101(c) 151 354 928 951(c) 978 1122

		1571 1742 2447 2602 3179(c) 3401 3768(c) 3868 4333 4583(c) 4657
Mrol	1	2292
MscI	3	1298 1394 2025
MseI	17	167 226 501 556 702 931 1220 1493 1890 2032 2371 2885 3196 3575 3784 3980 4052
MseII	3	1304 1632 2576
MspA1I	5	175 1948 2392 4177 4422
MspI	20	347 381 1287 1347 1418 1553 1647 1831 2165 2293 2335 2554 2646 3458 3540 3721 4192 4382 4408 4555
MvaI	14	246 311 479 1396 2058 2114 2637 2665 3045 3475 3832 4601 4614 4735
MvnI	14	150 152 233 498 1246 1794 1841 2999 3192 3242 3587 4066 4136 4717
MwoI	14	63 130 214 1563 1858 1954 2517 2721 3054 3297 3329 3543 4142 4714
NciI	10	348 381 1348 1418 1419 1554 2554 2646 3458 4383
NcoI	1	1987
NdeII	13	1256 1401 1833 2561 2604 2688 3452 3582 3834 4100 4108 4119 4194
NheI	2	240 506
NlaIII	15	514 1318 1631 1909 1930 1991 2221 3030 3113 3210 3322 3437 3742 4040 4764
NlaIV	7	566 567 1188 1835 2590 4693 4732
NotI	1	2994
NruI	1	3242

Nsil	2	3435 3701
Nspl	1	4764
PfIMI	3	2063 2630 3848
PleI	4	104 3024 3817 4384(c)
Ppu10I	2	3431 3697
Psp1406I	2	365 2203
PstI	2	1168 2990
PvuI	1	3585
PvuII	2	175 2392
RcaI	2	3109 4036
RsaI	7	236 654 1444 1875 2413 2984 3420
SaII	3	803 851 2748
SapI	1	112(c)
Sau3AI	13	1256 1401 1833 2561 2604 2688 3452 3582 3834 4100 4108 4119 4194
Sau96I	6	349 439 564 565 2633 3056
Scal	1	1875
ScrFI	24	246 311 348 381 479 1348 1396 1418 1419 1554 2058 2114 2554 2637 2646 2665 3045 3458 3475 3832 4383 4601 4614 4735
SfaNI	14	296(c) 464(c) 826(c) 1051 1960 2445(c) 2723(c) 3201(c) 3285(c) 3420(c) 3507(c) 3627(c) 3938(c) 4663(c)
Sfcl	6	798 1164 2986 3009 4304 4495
SmaI	1	1419
SpeI	2	1386 4446
SspBI	2	652 1442
SspI	2	1980 3510
StyI	1	1987
TaqI	9	804 852 1159 2533 2749 3184 3550 3953 4662
TfiI	10	21 161 769 887 1939 2952 3496 3552 3724 3815
ThaI	14	150 152 233 498 1246 1794 1841 2999 3192 3242 3587 4066 4136

		4717
Tru9I	17	167 226 501 556 702 931 1220 1493 1890 2032 2371 2885 3196 3575 3784 3980 4052
Tsp509I	16	223 616 704 1052 1145 1883 2288 2799 2887 3198 3382 3564 3781 3931 3973 3981
Van91I	3	2063 2630 3848
XhoII	4	1833 3834 4108 4119
XmaI	1	1417
XmaIII	1	2994
XmnI	1	1053

No cuts: AatI, AatII, Acc65I, AgeI, AoiI, AscI, Asp718, AspI, AsuII, AvaII, AviII, AvrII, BanI, BbrPI, BcgI, BclI, BglI, BglIII, BlnI, Bpu1102I, BsgI, BsiWI, BspDI, BstBI, BstEII, Bsu36I, CelII, ClaI, Csp45I, DraIII, Ecl136II, Eco47III, EspI, FspI, HindIII, KasI, KpnI, KspI, MfeI, MunI, NaeI, NarI, NdeI, NgoMI, NspV, PacI, PaeR7I, PinAI, PmaCI, PmeI, PmlI, PpuMI, RsrII, SacI, SacII, SexAI, SfiI, SfuI, SgrAI, SnaBI, SpeI, SphI, StuI, SwaI, Tth111I, XbaI, XcmI, XhoI