



General Description

DNA pGAPZ $\alpha$  B

Entire molecule length: 3151 bp

Restriction Map

Enzyme	# of cuts	Positions
AatI	1	2122
AatII	1	1764
Acc65I	1	798
AccI	1	872
Acil	28	176 265(c) 341(c) 345(c) 540 809 811(c) 814(c) 818 1231(c) 1302 1419 1647(c) 1752 1772(c) 1871(c) 1923(c) 2026(c) 2104(c) 2206 2464 2492 2619 2638 2759 2869(c) 3004 3013(c)
Acsl	9	104 197 441 588 765 1347 1457 1484 2305
Acyl	2	1761 1980
AfIII	3	2092 2330 2419
AgeI	1	952
AluI	13	217 548 602 758 824 1091 1118 1252 1936 2408 2587 2723 2980
Alw44I	2	2063 2733
AlwI	8	801 863 1228(c) 1241 2124(c) 2980(c) 3066(c) 3068
AlwNI	1	2835
ApaLI	2	2063 2733
ApoI	9	104 197 441 588 765 1347 1457 1484 2305
Asel	1	1660
AsnI	1	1660
Asp718	1	798
AspHI	3	1749 2067 2737
AsuII	1	486
AvaI	4	737 803 1796 1806
Avall	6	1785 1840 1873 1879 2114 2249
AvrII	1	191
BamHI	1	1233
BanI	2	798 1888
BbrPI	1	772
BbsI	2	955 1540(c)

Bbvl	12	249 309 535(c) 542 700(c) 745(c) 1127 2026 2748(c) 2838 2841 3047
Bcgl	1	105
Bcll	1	1100
Bfal	7	192 294 829 962 1368 2246 2914
Bgll	3	782 814 2023
Bglll	1	2
Blnl	1	191
Bmyl	4	940 1749 2067 2737
Bpml	3	231 537(c) 2430
BpuAl	2	955 1540(c)
BsaAl	1	772
BsaBl	2	969 1125
BsaHl	2	1761 1980
Bsal	3	1210(c) 1409(c) 2406(c)
BsaJl	15	111 191 301 302 809 1716 1806 1902 1908 2018 2076 2109 2117 2123 2579
BsaWl	4	952 1741 2625 2772
BsiEl	7	323 786 818 1776 1792 2052 2759
BsiHKAl	3	1749 2067 2737
BsiWl	1	1084
BsiYl	12	192 307 414 1882 1908 1909 1914 2124 2441 2459 2625 2904
Bsll	12	192 307 414 1882 1908 1909 1914 2124 2441 2459 2625 2904
BsmAl	5	156 793 1210(c) 1409(c) 2406(c)
BsmFl	10	173(c) 301(c) 441(c) 1823 1859 1991 2100(c) 2120(c) 2235(c) 2395
Bsmll	1	993
Bsp1286l	4	940 1749 2067 2737
BspHl	1	356
BspMl	1	97
BspWl	13	338 539 548 710 758 782 814 817 1112 1753 2023 2472 3044
BsrBl	2	1772 2208(c)
BsrDl	2	247 708(c)
BsrFl	6	781 952 1791 1832

		1990 2051
BsrGI	1	2323
Bsrl	5	554(c) 1731(c) 2827 2840 2952(c)
BssHII	1	1754
BstBI	1	486
BstNI	10	303 1877 1883 1904 1909 1928 2119 2447 2568 2581
BstUI	11	811 1304 1754 1756 1758 1871 1923 2043 2332 2466 3047
BstYI	6	2 855 1233 2129 3060 3071
Cfol	12	868 1306 1756 1758 1871 1923 2043 2599 2666 2766 2940 3049
Cfr10I	6	781 952 1791 1832 1990 2051
Csp45I	1	486
Csp6I	9	285 799 1085 1200 1314 1389 1939 2324 2336
Ddel	8	616 846 906 923 1000 1641 2694 3103
Dpnl	12	4 795 857 1102 1235 2006 2131 2987 3062 3073 3081 3150
DpnII	12	2 793 855 1100 1233 2004 2129 2985 3060 3071 3079 3148
DraI	1	440
DraII	2	2114 2249
DraIII	1	2071
DrdI	2	2093 2527
Dsal	4	809 1716 2018 2109
DsaV	19	110 301 317 1805 1806 1842 1875 1881 1902 1907 1926 1974 1985 2046 2117 2445 2566 2579 2797
EaeI	7	320 783 815 1719 1992 2049 2073
EagI	4	320 783 815 2049
EarI	5	159 252 845(c) 1197 1286
EclXI	4	320 783 815 2049
Eco57I	5	618 774 1178(c)

		2260 2967
EcoO109I	2	2114 2249
EcoRI	1	765
EcoRII	10	301 1875 1881 1902 1907 1926 2117 2445 2566 2579
EcoRV	1	2156
Esp3I	2	156 793
Fnu4HI	20	238 298 531 549 714 759 809 812 815 818 1116 1924 2015 2105 2464 2619 2762 2827 2830 3036
FnuDII	11	811 1304 1754 1756 1758 1871 1923 2043 2332 2466 3047
FokI	4	319 520(c) 992 2189(c)
HaeII	2	869 2667
HaeIII	18	229 322 776 785 817 1721 1907 1926 1990 1994 2051 2075 2107 2122 2434 2445 2463 2897
HgaI	6	357 1988 2338 2392 2530 3108
HgiAI	3	1749 2067 2737
HhaI	12	868 1306 1756 1758 1871 1923 2043 2599 2666 2766 2940 3049
HinP1I	12	866 1304 1754 1756 1869 1921 2041 2597 2664 2764 2938 3047
HinCII	4	559 873 1654 1728
HindII	4	559 873 1654 1728
Hinfl	4	380 965 1298 2790
HpaII	21	111 319 593 782 953 1742 1767 1792 1807 1833 1843 1892 1975 1986 1991 2048 2052 2626 2773 2799 2989
HphI	2	1714 1741(c)
ItaI	20	238 298 531 549 714 759 809 812 815 818 1116 1924 2015 2105 2464 2619 2762 2827 2830

		3036
Kpnl	1	802
Ksp632l	5	159 252 845(c) 1197 1286
Kspl	1	812
Mael	7	192 294 829 962 1368 2246 2914
Maell	10	99 149 260 771 1468 1761 1851 2094 2289 3122
Maelll	10	181 611 1038 1514 1852 2173 2343 2775 2838 2954
Maml	2	969 1125
Mbol	12	2 793 855 1100 1233 2004 2129 2985 3060 3071 3079 3148
Mboll	15	146(c) 212(c) 239(c) 584 734 862 960 1070(c) 1184(c) 1217 1273(c) 1353(c) 1427(c) 1540(c) 3081
Mcrl	7	323 786 818 1776 1792 2052 2759
Mfel	1	470
Mlul	1	2330
MluNI	1	1721
Mnil	23	41 270(c) 547 742(c) 812 846(c) 932 970(c) 1200 1365 1375 1432 1529 1698(c) 1813(c) 1948(c) 1993 2071(c) 2133 2203 2527(c) 2601 2851(c)
MscI	1	1721
Msel	11	123 439 445 1210 1379 1532 1537 1660 2283 2397 3125
MspA1l	4	811 1118 2761 3006
Mspl	21	111 319 593 782 953 1742 1767 1792 1807 1833 1843 1892 1975 1986 1991 2048 2052 2626 2773 2799 2989
Munl	1	470
Mval	10	303 1877 1883 1904 1909 1928 2119 2447 2568 2581
Mvnl	11	811 1304 1754 1756

		1758 1871 1923 2043 2332 2466 3047
MwoI	13	338 539 548 710 758 782 814 817 1112 1753 2023 2472 3044
NaeI	3	783 1992 2053
NciI	9	112 319 1807 1808 1844 1976 1987 2048 2799
NcoI	1	1716
NdeI	12	2 793 855 1100 1233 2004 2129 2985 3060 3071 3079 3148
NgoMI	3	781 1990 2051
NlaIII	10	355 360 915 1720 1999 2162 2344 2423 3143 3147
NlaIV	11	68 141 230 800 1235 1890 2115 2116 2251 2451 2490
NotI	1	815
NsiI	1	3145
NspI	3	355 2344 2423
NspV	1	486
PaeR7I	2	737 803
PinAI	1	952
PleI	2	1292(c) 2798
PmaCI	1	772
PmlI	1	772
Ppu10I	1	3141
PpuMI	2	2114 2249
Psp1406I	1	2289
PstI	1	763
PvuII	1	1118
RcaI	1	356
RsaI	9	286 800 1086 1201 1315 1390 1940 2325 2337
SacII	1	812
SalI	1	871
SapI	1	252
Sau3AI	12	2 793 855 1100 1233 2004 2129 2985 3060 3071 3079 3148
Sau96I	10	228 775 1785 1840 1873 1879 1988 2106 2114 2249
ScrFI	19	112 303 319 1807 1808 1844 1877 1883 1904 1909

		1928 1976 1987 2048 2119 2447 2568 2581 2799
SexAI	1	1881
SfaNI	4	542 996(c) 1315 2516
Sfcl	3	759 2684 2875
Sfil	1	782
Sful	1	486
SgrAI	1	1832
Smal	1	1808
Snol	2	2063 2733
SspBI	1	2323
Stul	1	2122
Styl	2	191 1716
TaqI	12	383 486 636 738 804 872 1157 1441 1776 2152 2388 2519
Tfil	2	380 965
Thal	11	811 1304 1754 1756 1758 1871 1923 2043 2332 2466 3047
Tru9I	11	123 439 445 1210 1379 1532 1537 1660 2283 2397 3125
Tsp509I	18	104 197 410 441 446 470 507 588 765 1347 1380 1457 1484 1552 1657 2163 2305 2398
Xbal	1	828
XhoI	2	737 803
XhoII	6	2 855 1233 2129 3060 3071
XmaI	1	1806
XmaIII	4	320 783 815 2049

No cuts: AccIII, AflII, AoiI, ApaI, AscI, Asp700, AspEI, Aspl, AviII, BanII, BfrI, BpuI102I, BseAI, BsgI, Bsp120I, BspDI, BspEI, Bst1107I, BstEII, BstXI, Bsu36I, CelII, ClaI, Eam1105I, Ecl136II, Eco47III, EcoNI, EspI, FspI, HindIII, HpaI, KasI, MroI, MslI, NarI, NdeI, NheI, NruI, PacI, PflMI, PmeI, PvuI, RsrII, SacI, ScaI, SnaBI, SpeI, SphI, SspI, SwaI, Tth111I, Van9II, XcmI, XmnI