



1501 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600

1501 tggcccaactacgtgaaccatcacccctaatacaagtttttggggctcgaggtgcgcgtaaacgcaactaaatcggaaccctaaaggggagcccccgatttagagct 1600

1601 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700

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1701 1710 1720 1730 1740 1750 1760 1770 1780 1790 1800

1701 ccaccacacccgcgcgcttaatgcgcgcgtacagggcgcgctcaggtggcacttttcggggaaatgtgcgcggaaccctatttgtttattttctaaat 1800

1801 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900

1801 acattcaaatatgtatccgctcatgagacaataaccctgataaatgcttcaataatttgaaaaggaagagtcctgagcggaagaaccagctgtgga 1900

1901 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000

1901 atgtgtgtcagtttaggtgtggaaagtccccaggctccccagcaggcagaagtatgcaaagcatgcatctcaattagtcagcaaccagggtgtggaaagtc 2000

2001 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100

2001 ccaggtctccccagcaggcagaagtatgcaaagcatgcatctcaattagtcagcaaccatagtcgccgccctaaactcgcgccatcccgcccctaactccg 2100

2101 2110 2120 2130 2140 2150 2160 2170 2180 2190 2200

2101 ccaggttccgcccattctcgcgccatggctgactaattttttttatgtatgcagaggccgagggcgccctcgccctctgagctattccagaagtgtgag 2200

2201 2210 2220 2230 2240 2250 2260 2270 2280 2290 2300

2201 gaggtctttttggaggcctagggttttgcaaagatcgatcaagagacaggatgaggatcggttcgcatgattgaacaagatggattgcacgcaggtttctc 2300

kan r / Neo r

2301 2310 2320 2330 2340 2350 2360 2370 2380 2390 2400

2301 cgccgcgttgggtgagaggctattcggtatgactgggcacacagacaatcggtgctctgatgccgccgtgttcgcggtgtcagcgcagggcgccc 2400

kan r / Neo r

2401 2410 2420 2430 2440 2450 2460 2470 2480 2490 2500

2401 ggttctttttgtcaagaccgacctgtccggtgccctgaatgaactgcaagacgagcgagcggtatcggtggccacgacggcggttccttgccga 2500

kan r / Neo r

2501 2510 2520 2530 2540 2550 2560 2570 2580 2590 2600

2501 gctgtgctgcagcttgtcactgaagcgggaagggaactggctgctattgggcgaagtgcggggcgaggatctcctgtcatctcaccttgcctcctgccgaga 2600

kan r / Neo r

2601 2610 2620 2630 2640 2650 2660 2670 2680 2690 2700

2601 aagtatccatcatggctgatgcaatgcggcggtcgatacgcctgatccggctacctgcccattcgaccaccaagcgaaacatcgcatcgagcgagcagc 2700

kan r / Neo r

2701 2710 2720 2730 2740 2750 2760 2770 2780 2790 2800

2701 tactcggatggaagccggtcttctgcgatcaggatgatctggacgaagagcatcaggggctcgcgccagccgaactgttcgccaggtcgaaggcgagcatg 2800

kan r / Neo r

2801 2810 2820 2830 2840 2850 2860 2870 2880 2890 2900

2801 ccgcagcgcgaggatctcgtcgtgacccatggcgatgcctgctgcgaatatcatggtggaataatggccgcttttctggattcatgactgtggccggc 2900

kan r / Neo r

2901 2910 2920 2930 2940 2950 2960 2970 2980 2990 3000

2901 tgggtgtggcggaaccgctatcaggacatagcgttggttaccgtgatattgctgaagagcttggcgcggaatgggctgaccgcttctcgtgctttacgg 3000

kan r / Neo r

3001 3010 3020 3030 3040 3050 3060 3070 3080 3090 3100

3001 tatcgcgctcccgattcgcagcgcacgcctctctatgccttcttgacgagttcttctgagcgggactctggggttcgaatgaccgaccaagcgagcgc 3100

kan r / Neo r

3101 3110 3120 3130 3140 3150 3160 3170 3180 3190 3200

3101 ccaacctgccatcacgagatttcgattccaccgcgccttctatgaagggttgggcttcggaatcgttttccgggagcgcggctggatgatcctccagcg 3200

3201 3210 3220 3230 3240 3250 3260 3270 3280 3290 3300

3201 cggggatctcatgctgagttctctgccaccctaggggaggttaactgaaacacggaaggaagacaataaccggaaggaacccgcgctatgacggcaata 3300

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      3310      3320      3330      3340      3350      3360      3370      3380      3390      3400
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3301 aaaagacagaataaaaacgcacggtgttggtcggtttgttcataaacgcggggttcggtccagggtggcactctgtcgataccccaccgagacccatt 3400
      3410      3420      3430      3440      3450      3460      3470      3480      3490      3500
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3401 ggggccaaatacgcgcgtttcttcttttccccaccccaaccccccaagttcgggtgaaggccagggtcgcagccaacgtcggggcggcaggccctgc 3500
      3510      3520      3530      3540      3550      3560      3570      3580      3590      3600
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3501 catagcctcaggttactcatatatacttttagattgatttaaaacttcatttttaatttaaaaggatctaggtgaagatcctttttgataatctcatgacc 3600
      3610      3620      3630      3640      3650      3660      3670      3680      3690      3700
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3601 aaaatcccttaacgtgagttttcgttccactgagcgtcagaccccgtagaaaagatcaaaggatcttcttgagatcctttttttgcgcgtaaatctgct 3700
      3710      3720      3730      3740      3750      3760      3770      3780      3790      3800
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3701 gcttgcaaaaaaaaaccaccgctaccagcgggtggtttgtttgccgatcaagagctaccaactccttttccgaaggtaactggcttcagcagagcgca 3800
      3810      3820      3830      3840      3850      3860      3870      3880      3890      3900
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3801 gataccaaatactgtccttctagttagcgttagttaggccaccacttcaagaactctgtagcaccgcctacataccctcgctctgctaactcctgttacca 3900
      3910      3920      3930      3940      3950      3960      3970      3980      3990      4000
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
3901 gtggctgctgccagtgccgataagtcgtgtcttaccgggttgactcaagacgatagttaccggataaggcgcagcgggtcggggtgaacggggggttcgt 4000
      4010      4020      4030      4040      4050      4060      4070      4080      4090      4100
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
4001 gcacacagcccagcttgagcgaacgacctacaccgaactgagatacctacagcgtgagctatgagaagcgcacgcttcccgaaggagaaaggcgga 4100
      4110      4120      4130      4140      4150      4160      4170      4180      4190      4200
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
4101 caggatatccggtaaagcggcagggtcggaaacaggagagcgcacgagggagcttccaggggaaacgcctggtatctttatagtcctgtcggggtttcgcac 4200
      4210      4220      4230      4240      4250      4260      4270      4280      4290      4300
*   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
4201 ctctgacttgagcgtcgatttttgtgatgctcgtcagggggcgaggcctatggaaaaacgccagcaacgcggcctttttacggttcctggccttttgc 4300
      4310      4320      4330      4340      4350      4360      4370
*   *   *   *   *   *   *
4301 ggccttttgctcacatgttctttcctgcgttatccctgattctgtggataaccgtattaccgccatgcat 4371

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