```
ATOM      1 HO5'  G   1     3.429 -7.861  3.641 1.00 0.00          H
ATOM      2 O5'   G   1     4.232 -7.360  3.480 1.00 0.00          O
ATOM      3 C5'   G   1     5.480 -8.064  3.350 1.00 0.00          C
ATOM      4 H5'   G   1     5.429 -8.766  2.518 1.00 0.00          H
ATOM      5 H5''  G   1     5.679 -8.609  4.273 1.00 0.00          H
ATOM      6 C4'   G   1     6.614 -7.068  3.100 1.00 0.00          C
ATOM      7 H4'   G   1     7.569 -7.590  3.049 1.00 0.00          H
ATOM      8 O4'   G   1     6.436 -6.504  1.770 1.00 0.00          O
ATOM      9 C1'   G   1     6.837 -5.134  1.770 1.00 0.00          C
ATOM     10 H1'   G   1     7.552 -4.957  0.967 1.00 0.00          H
ATOM     11 N9    G   1     5.671 -4.305  1.390 1.00 0.00          N
ATOM     12 C8    G   1     4.338 -4.651  1.320 1.00 0.00          C
ATOM     13 H8    G   1     4.030 -5.656  1.568 1.00 0.00          H
ATOM     14 N7    G   1     3.550 -3.676  0.940 1.00 0.00          N
ATOM     15 C5    G   1     4.420 -2.604  0.740 1.00 0.00          C
ATOM     16 C6    G   1     4.148 -1.276  0.330 1.00 0.00          C
ATOM     17 O6    G   1     3.067 -0.759  0.040 1.00 0.00          O
ATOM     18 N1    G   1     5.325 -0.513  0.260 1.00 0.00          N
ATOM     19 H1    G   1     5.241  0.446 -0.012 1.00 0.00          H
ATOM     20 C2    G   1     6.597 -0.986  0.550 1.00 0.00          C
ATOM     21 N2    G   1     7.579 -0.093  0.420 1.00 0.00          N
ATOM     22 H21   G   1     7.491  0.869  0.126 1.00 0.00          H
ATOM     23 H22   G   1     8.514 -0.419  0.618 1.00 0.00          H
ATOM     24 N3    G   1     6.848 -2.225  0.940 1.00 0.00          N
ATOM     25 C4    G   1     5.712 -2.974  1.010 1.00 0.00          C
ATOM     26 C3'   G   1     6.646 -5.859  4.020 1.00 0.00          C
ATOM     27 H3'   G   1     5.915 -5.354  4.651 1.00 0.00          H
ATOM     28 C2'   G   1     7.380 -4.830  3.170 1.00 0.00          C
ATOM     29 H2'   G   1     7.201 -3.929  3.756 1.00 0.00          H
ATOM     30 O2'   G   1     8.772 -5.106  3.140 1.00 0.00          O
ATOM     31 HO2'  G   1     9.200 -4.348  2.736 1.00 0.00          H
```

```
ATOM  32 O3'  G  1     7.297 -6.145  5.250 1.00 0.00        O
ATOM  33 P    G  2     6.882 -5.338  6.560 1.00 0.00        P
ATOM  34 OP1  G  2     7.505 -5.970  7.750 1.00 0.00        O
ATOM  35 OP2  G  2     5.404 -5.201  6.610 1.00 0.00        O
ATOM  36 O5'  G  2     7.538 -3.907  6.290 1.00 0.00        O
ATOM  37 C5'  G  2     8.968 -3.825  6.160 1.00 0.00        C
ATOM  38 H5'  G  2     9.304 -4.443  5.327 1.00 0.00        H
ATOM  39 H5'' G  2     9.430 -4.176  7.083 1.00 0.00        H
ATOM  40 C4'  G  2     9.384 -2.375  5.910 1.00 0.00        C
ATOM  41 H4'  G  2    10.470 -2.299  5.860 1.00 0.00        H
ATOM  42 O4'  G  2     8.930 -1.996  4.580 1.00 0.00        O
ATOM  43 C1'  G  2     8.527 -0.626  4.580 1.00 0.00        C
ATOM  44 H1'  G  2     9.033 -0.091  3.776 1.00 0.00        H
ATOM  45 N9   G  2     7.098 -0.559  4.200 1.00 0.00        N
ATOM  46 C8   G  2     6.163 -1.571  4.130 1.00 0.00        C
ATOM  47 H8   G  2     6.447 -2.583  4.378 1.00 0.00        H
ATOM  48 N7   G  2     4.973 -1.176  3.750 1.00 0.00        N
ATOM  49 C5   G  2     5.126  0.197  3.550 1.00 0.00        C
ATOM  50 C6   G  2     4.180  1.167  3.140 1.00 0.00        C
ATOM  51 O6   G  2     2.991  1.018  2.850 1.00 0.00        O
ATOM  52 N1   G  2     4.758  2.445  3.070 1.00 0.00        N
ATOM  53 H1   G  2     4.170  3.207  2.798 1.00 0.00        H
ATOM  54 C2   G  2     6.084  2.734  3.360 1.00 0.00        C
ATOM  55 N2   G  2     6.428  4.017  3.230 1.00 0.00        N
ATOM  56 H21  G  2     5.834  4.779  2.936 1.00 0.00        H
ATOM  57 H22  G  2     7.391  4.248  3.428 1.00 0.00        H
ATOM  58 N3   G  2     6.964  1.827  3.750 1.00 0.00        N
ATOM  59 C4   G  2     6.413  0.584  3.820 1.00 0.00        C
ATOM  60 C3'  G  2     8.758 -1.340  6.830 1.00 0.00        C
ATOM  61 H3'  G  2     7.870 -1.310  7.461 1.00 0.00        H
ATOM  62 C2'  G  2     8.820 -0.077  5.980 1.00 0.00        C
```

```
ATOM   63 H2'  G   2     8.183  0.585  6.566 1.00 0.00        H
ATOM   64 O2'  G   2    10.140  0.443  5.950 1.00 0.00        O
ATOM   65 HO2' G   2    10.090  1.313  5.546 1.00 0.00        H
ATOM   66 O3'  G   2     9.461 -1.229  8.060 1.00 0.00        O
ATOM   67 P    G   3     8.676 -0.774  9.370 1.00 0.00        P
ATOM   68 OP1  G   3     9.541 -0.969 10.560 1.00 0.00        O
ATOM   69 OP2  G   3     7.357 -1.457  9.420 1.00 0.00        O
ATOM   70 O5'  G   3     8.454  0.784  9.100 1.00 0.00        O
ATOM   71 C5'  G   3     9.613  1.626  8.970 1.00 0.00        C
ATOM   72 H5'  G   3    10.231  1.288  8.138 1.00 0.00        H
ATOM   73 H5'' G   3    10.191  1.580  9.893 1.00 0.00        H
ATOM   74 C4'  G   3     9.180  3.072  8.720 1.00 0.00        C
ATOM   75 H4'  G   3    10.052  3.724  8.669 1.00 0.00        H
ATOM   76 O4'  G   3     8.593  3.144  7.390 1.00 0.00        O
ATOM   77 C1'  G   3     7.514  4.080  7.390 1.00 0.00        C
ATOM   78 H1'  G   3     7.651  4.804  6.587 1.00 0.00        H
ATOM   79 N9   G   3     6.275  3.365  7.010 1.00 0.00        N
ATOM   80 C8   G   3     6.035  2.008  6.940 1.00 0.00        C
ATOM   81 H8   G   3     6.821  1.310  7.188 1.00 0.00        H
ATOM   82 N7   G   3     4.820  1.697  6.560 1.00 0.00        N
ATOM   83 C5   G   3     4.207  2.935  6.360 1.00 0.00        C
ATOM   84 C6   G   3     2.887  3.240  5.950 1.00 0.00        C
ATOM   85 O6   G   3     1.967  2.473  5.660 1.00 0.00        O
ATOM   86 N1   G   3     2.683  4.629  5.880 1.00 0.00        N
ATOM   87 H1   G   3     1.777  4.953  5.609 1.00 0.00        H
ATOM   88 C2   G   3     3.643  5.588  6.170 1.00 0.00        C
ATOM   89 N2   G   3     3.239  6.853  6.040 1.00 0.00        N
ATOM   90 H21  G   3     2.327  7.173  5.747 1.00 0.00        H
ATOM   91 H22  G   3     3.924  7.568  6.238 1.00 0.00        H
ATOM   92 N3   G   3     4.874  5.300  6.560 1.00 0.00        N
ATOM   93 C4   G   3     5.082  3.956  6.630 1.00 0.00        C
```

```
ATOM   94 C3'  G   3     8.094  3.604  9.640 1.00 0.00        C
ATOM   95 H3'  G   3     7.330  3.148 10.270 1.00 0.00        H
ATOM   96 C2'  G   3     7.463  4.700  8.790 1.00 0.00        C
ATOM   97 H2'  G   3     6.569  4.913  9.376 1.00 0.00        H
ATOM   98 O2'  G   3     8.294  5.851  8.760 1.00 0.00        O
ATOM   99 HO2' G   3     7.783  6.556  8.356 1.00 0.00        H
ATOM  100 O3'  G   3     8.625  4.077 10.870 1.00 0.00        O
ATOM  101 P    G   4     7.719  4.035 12.180 1.00 0.00        P
ATOM  102 OP1  G   4     8.552  4.339 13.370 1.00 0.00        O
ATOM  103 OP2  G   4     6.978  2.749 12.230 1.00 0.00        O
ATOM  104 O5'  G   4     6.690  5.227 11.910 1.00 0.00        O
ATOM  105 C5'  G   4     7.211  6.562 11.780 1.00 0.00        C
ATOM  106 H5'  G   4     7.914  6.611 10.948 1.00 0.00        H
ATOM  107 H5'' G   4     7.722  6.835 12.703 1.00 0.00        H
ATOM  108 C4'  G   4     6.066  7.544 11.530 1.00 0.00        C
ATOM  109 H4'  G   4     6.448  8.564 11.479 1.00 0.00        H
ATOM  110 O4'  G   4     5.532  7.288 10.200 1.00 0.00        O
ATOM  111 C1'  G   4     4.119  7.492 10.200 1.00 0.00        C
ATOM  112 H1'  G   4     3.843  8.175  9.396 1.00 0.00        H
ATOM  113 N9   G   4     3.463  6.221  9.820 1.00 0.00        N
ATOM  114 C8   G   4     3.994  4.950  9.750 1.00 0.00        C
ATOM  115 H8   G   4     5.033  4.787  9.997 1.00 0.00        H
ATOM  116 N7   G   4     3.139  4.032  9.370 1.00 0.00        N
ATOM  117 C5   G   4     1.955  4.743  9.170 1.00 0.00        C
ATOM  118 C6   G   4     0.679  4.287  8.760 1.00 0.00        C
ATOM  119 O6   G   4     0.319  3.144  8.470 1.00 0.00        O
ATOM  120 N1   G   4    -0.243  5.344  8.690 1.00 0.00        N
ATOM  121 H1   G   4    -1.181  5.127  8.419 1.00 0.00        H
ATOM  122 C2   G   4     0.047  6.670  8.980 1.00 0.00        C
ATOM  123 N2   G   4    -0.976  7.517  8.850 1.00 0.00        N
ATOM  124 H21  G   4    -1.916  7.294  8.557 1.00 0.00        H
```

```
ATOM   125 H22  G   4    -0.785  8.489  9.048 1.00 0.00       H
ATOM   126 N3   G   4     1.238  7.093  9.370 1.00 0.00       N
ATOM   127 C4   G   4     2.139  6.074  9.440 1.00 0.00       C
ATOM   128 C3'  G   4     4.864  7.405 12.450 1.00 0.00       C
ATOM   129 H3'  G   4     4.467  6.609 13.080 1.00 0.00       H
ATOM   130 C2'  G   4     3.741  7.987 11.600 1.00 0.00       C
ATOM   131 H2'  G   4     2.873  7.684 12.186 1.00 0.00       H
ATOM   132 O2'  G   4     3.819  9.404 11.570 1.00 0.00       O
ATOM   133 HO2' G   4     3.008  9.721 11.166 1.00 0.00       H
ATOM   134 O3'  G   4     5.055  8.090 13.680 1.00 0.00       O
ATOM   135 P    G   5     4.315  7.566 14.990 1.00 0.00       P
ATOM   136 OP1  G   5     4.853  8.272 16.180 1.00 0.00       O
ATOM   137 OP2  G   5     4.387  6.083 15.040 1.00 0.00       O
ATOM   138 O5'  G   5     2.806  8.013 14.720 1.00 0.00       O
ATOM   139 C5'  G   5     2.523  9.418 14.590 1.00 0.00       C
ATOM   140 H5'  G   5     3.087  9.838 13.757 1.00 0.00       H
ATOM   141 H5'' G   5     2.806  9.926 15.512 1.00 0.00       H
ATOM   142 C4'  G   5     1.029  9.625 14.340 1.00 0.00       C
ATOM   143 H4'  G   5     0.801 10.690 14.290 1.00 0.00       H
ATOM   144 O4'  G   5     0.718  9.122 13.010 1.00 0.00       O
ATOM   145 C1'  G   5    -0.582  8.530 13.010 1.00 0.00       C
ATOM   146 H1'  G   5    -1.183  8.955 12.206 1.00 0.00       H
ATOM   147 N9   G   5    -0.447  7.106 12.630 1.00 0.00       N
ATOM   148 C8   G   5     0.687  6.323 12.560 1.00 0.00       C
ATOM   149 H8   G   5     1.649  6.746 12.807 1.00 0.00       H
ATOM   150 N7   G   5     0.463  5.089 12.180 1.00 0.00       N
ATOM   151 C5   G   5    -0.917  5.047 11.980 1.00 0.00       C
ATOM   152 C6   G   5    -1.744  3.974 11.570 1.00 0.00       C
ATOM   153 O6   G   5    -1.430  2.818 11.280 1.00 0.00       O
ATOM   154 N1   G   5    -3.092  4.366 11.500 1.00 0.00       N
ATOM   155 H1   G   5    -3.764  3.677 11.229 1.00 0.00       H
```

```
ATOM  156 C2   G   5    -3.564  5.638 11.790 1.00 0.00        C
ATOM  157 N2   G   5    -4.882  5.798 11.660 1.00 0.00        N
ATOM  158 H21  G   5    -5.553  5.102 11.366 1.00 0.00        H
ATOM  159 H22  G   5    -5.246  6.719 11.858 1.00 0.00        H
ATOM  160 N3   G   5    -2.790  6.637 12.180 1.00 0.00        N
ATOM  161 C4   G   5    -1.482  6.267 12.250 1.00 0.00        C
ATOM  162 C3'  G   5     0.093  8.860 15.260 1.00 0.00        C
ATOM  163 H3'  G   5     0.190  7.976 15.890 1.00 0.00        H
ATOM  164 C2'  G   5    -1.167  8.743 14.410 1.00 0.00        C
ATOM  165 H2'  G   5    -1.733  8.019 14.996 1.00 0.00        H
ATOM  166 O2'  G   5    -1.867  9.977 14.380 1.00 0.00        O
ATOM  167 HO2' G   5    -2.721  9.806 13.976 1.00 0.00        H
ATOM  168 O3'  G   5    -0.117  9.539 16.490 1.00 0.00        O
ATOM  169 P    G   6    -0.456  8.698 17.800 1.00 0.00        P
ATOM  170 OP1  G   6    -0.385  9.582 18.990 1.00 0.00        O
ATOM  171 OP2  G   6     0.406  7.489 17.850 1.00 0.00        O
ATOM  172 O5'  G   6    -1.968  8.259 17.530 1.00 0.00        O
ATOM  173 C5'  G   6    -2.964  9.288 17.400 1.00 0.00        C
ATOM  174 H5'  G   6    -2.716  9.946 16.567 1.00 0.00        H
ATOM  175 H5'' G   6    -3.000  9.868 18.322 1.00 0.00        H
ATOM  176 C4'  G   6    -4.334  8.655 17.150 1.00 0.00        C
ATOM  177 H4'  G   6    -5.101  9.427 17.100 1.00 0.00        H
ATOM  178 O4'  G   6    -4.324  8.064 15.820 1.00 0.00        O
ATOM  179 C1'  G   6    -5.098  6.864 15.820 1.00 0.00        C
ATOM  180 H1'  G   6    -5.834  6.897 15.017 1.00 0.00        H
ATOM  181 N9   G   6    -4.215  5.738 15.440 1.00 0.00        N
ATOM  182 C8   G   6    -2.838  5.692 15.370 1.00 0.00        C
ATOM  183 H8   G   6    -2.257  6.568 15.617 1.00 0.00        H
ATOM  184 N7   G   6    -2.360  4.533 14.990 1.00 0.00        N
ATOM  185 C5   G   6    -3.499  3.752 14.790 1.00 0.00        C
ATOM  186 C6   G   6    -3.615  2.402 14.380 1.00 0.00        C
```

```
ATOM  187 O6   G   6   -2.726  1.599  14.090 1.00 0.00      O
ATOM  188 N1   G   6   -4.960  2.004  14.310 1.00 0.00      N
ATOM  189 H1   G   6   -5.152  1.061  14.038 1.00 0.00      H
ATOM  190 C2   G   6   -6.045  2.819  14.600 1.00 0.00      C
ATOM  191 N2   G   6   -7.241  2.241  14.470 1.00 0.00      N
ATOM  192 H21  G   6   -7.429  1.293  14.176 1.00 0.00      H
ATOM  193 H22  G   6   -8.045  2.819  14.668 1.00 0.00      H
ATOM  194 N3   G   6   -5.934  4.078  14.990 1.00 0.00      N
ATOM  195 C4   G   6   -4.633  4.474  15.060 1.00 0.00      C
ATOM  196 C3'  G   6   -4.708  7.506  18.070 1.00 0.00      C
ATOM  197 H3'  G   6   -4.149  6.814  18.700 1.00 0.00      H
ATOM  198 C2'  G   6   -5.705  6.727  17.220 1.00 0.00      C
ATOM  199 H2'  G   6   -5.790  5.812  17.806 1.00 0.00      H
ATOM  200 O2'  G   6   -6.961  7.387  17.190 1.00 0.00      O
ATOM  201 HO2' G   6   -7.587  6.781  16.786 1.00 0.00      H
ATOM  202 O3'  G   6   -5.252  7.964  19.300 1.00 0.00      O
ATOM  203 P    G   7   -5.083  7.073  20.610 1.00 0.00      P
ATOM  204 OP1  G   7   -5.501  7.856  21.800 1.00 0.00      O
ATOM  205 OP2  G   7   -3.705  6.521  20.660 1.00 0.00      O
ATOM  206 O5'  G   7   -6.117  5.887  20.340 1.00 0.00      O
ATOM  207 C5'  G   7   -7.513  6.215  20.210 1.00 0.00      C
ATOM  208 H5'  G   7   -7.660  6.903  19.377 1.00 0.00      H
ATOM  209 H5'' G   7   -7.857  6.683  21.132 1.00 0.00      H
ATOM  210 C4'  G   7   -8.323  4.942  19.960 1.00 0.00      C
ATOM  211 H4'  G   7   -9.386  5.177  19.910 1.00 0.00      H
ATOM  212 O4'  G   7   -7.995  4.450  18.630 1.00 0.00      O
ATOM  213 C1'  G   7   -7.998  3.022  18.630 1.00 0.00      C
ATOM  214 H1'  G   7   -8.635  2.653  17.826 1.00 0.00      H
ATOM  215 N9   G   7   -6.647  2.552  18.250 1.00 0.00      N
ATOM  216 C8   G   7   -5.463  3.257  18.180 1.00 0.00      C
ATOM  217 H8   G   7   -5.448  4.308  18.427 1.00 0.00      H
```

```
ATOM   218 N7   G   7    -4.434  2.540 17.800 1.00 0.00        N
ATOM   219 C5   G   7    -4.971  1.267 17.600 1.00 0.00        C
ATOM   220 C6   G   7    -4.339  0.068 17.190 1.00 0.00        C
ATOM   221 O6   G   7    -3.157 -0.127 16.900 1.00 0.00        O
ATOM   222 N1   G   7    -5.257 -0.993 17.120 1.00 0.00        N
ATOM   223 H1   G   7    -4.909 -1.890 16.848 1.00 0.00        H
ATOM   224 C2   G   7    -6.610 -0.894 17.410 1.00 0.00        C
ATOM   225 N2   G   7    -7.304 -2.026 17.280 1.00 0.00        N
ATOM   226 H21  G   7    -6.950 -2.925 16.986 1.00 0.00         H
ATOM   227 H22  G   7    -8.293 -1.974 17.478 1.00 0.00         H
ATOM   228 N3   G   7    -7.196  0.226 17.800 1.00 0.00        N
ATOM   229 C4   G   7    -6.315  1.262 17.870 1.00 0.00        C
ATOM   230 C3'  G   7    -8.017  3.772 20.880 1.00 0.00        C
ATOM   231 H3'  G   7    -7.174  3.491 21.511 1.00 0.00        H
ATOM   232 C2'  G   7    -8.435  2.579 20.030 1.00 0.00        C
ATOM   233 H2'  G   7    -8.012  1.763 20.616 1.00 0.00        H
ATOM   234 O2'  G   7    -9.849  2.456 20.000 1.00 0.00        O
ATOM   235 HO2' G   7   -10.048  1.608 19.596 1.00 0.00         H
ATOM   236 O3'  G   7    -8.722  3.865 22.110 1.00 0.00        O
ATOM   237 P    G   8    -8.098  3.206 23.420 1.00 0.00        P
ATOM   238 OP1  G   8    -8.873  3.639 24.610 1.00 0.00         O
ATOM   239 OP2  G   8    -6.640  3.486 23.470 1.00 0.00         O
ATOM   240 O5'  G   8    -8.328  1.649 23.150 1.00 0.00        O
ATOM   241 C5'  G   8    -9.679  1.171 23.020 1.00 0.00        C
ATOM   242 H5'  G   8   -10.175  1.670 22.188 1.00 0.00         H
ATOM   243 H5'' G   8   -10.220  1.380 23.943 1.00 0.00         H
ATOM   244 C4'  G   8    -9.674 -0.338 22.770 1.00 0.00        C
ATOM   245 H4'  G   8   -10.696 -0.715 22.720 1.00 0.00         H
ATOM   246 O4'  G   8    -9.132 -0.575 21.440 1.00 0.00        O
ATOM   247 C1'  G   8    -8.363 -1.778 21.440 1.00 0.00        C
ATOM   248 H1'  G   8    -8.700 -2.433 20.637 1.00 0.00        H
```

```
ATOM   249 N9    G   8    -6.972 -1.444 21.060 1.00 0.00        N
ATOM   250 C8    G   8    -6.357 -0.211 20.990 1.00 0.00        C
ATOM   251 H8    G   8    -6.912  0.682 21.237 1.00 0.00        H
ATOM   252 N7    G   8    -5.103 -0.259 20.610 1.00 0.00        N
ATOM   253 C5    G   8    -4.868 -1.619 20.410 1.00 0.00        C
ATOM   254 C6    G   8    -3.689 -2.287 20.000 1.00 0.00        C
ATOM   255 O6    G   8    -2.589 -1.813 19.710 1.00 0.00        O
ATOM   256 N1    G   8    -3.887 -3.676 19.930 1.00 0.00        N
ATOM   257 H1    G   8    -3.110 -4.243 19.658 1.00 0.00        H
ATOM   258 C2    G   8    -5.079 -4.323 20.220 1.00 0.00        C
ATOM   259 N2    G   8    -5.052 -5.651 20.090 1.00 0.00        N
ATOM   260 H21   G   8    -4.269 -6.217 19.796 1.00 0.00         H
ATOM   261 H22   G   8    -5.913 -6.141 20.288 1.00 0.00         H
ATOM   262 N3    G   8    -6.178 -3.697 20.610 1.00 0.00        N
ATOM   263 C4    G   8    -5.996 -2.350 20.680 1.00 0.00        C
ATOM   264 C3'   G   8    -8.784 -1.156 23.690 1.00 0.00        C
ATOM   265 H3'   G   8    -7.923 -0.937 24.321 1.00 0.00        H
ATOM   266 C2'   G   8    -8.491 -2.387 22.840 1.00 0.00        C
ATOM   267 H2'   G   8    -7.694 -2.845 23.426 1.00 0.00        H
ATOM   268 O2'   G   8    -9.614 -3.254 22.810 1.00 0.00        O
ATOM   269 HO2'  G   8    -9.324 -4.075 22.406 1.00 0.00         H
ATOM   270 O3'   G   8    -9.428 -1.459 24.920 1.00 0.00        O
ATOM   271 P     G   9    -8.547 -1.677 26.230 1.00 0.00     P
ATOM   272 OP1   G   9    -9.432 -1.731 27.420 1.00 0.00        O
ATOM   273 OP2   G   9    -7.471 -0.654 26.280 1.00 0.00        O
ATOM   274 O5'   G   9    -7.899 -3.112 25.960 1.00 0.00        O
ATOM   275 C5'   G   9    -8.778 -4.244 25.830 1.00 0.00        C
ATOM   276 H5'   G   9    -9.465 -4.092 24.997 1.00 0.00        H
ATOM   277 H5''  G   9    -9.347 -4.361 26.753 1.00 0.00        H
ATOM   278 C4'   G   9    -7.958 -5.511 25.580 1.00 0.00        C
ATOM   279 H4'   G   9    -8.614 -6.380 25.529 1.00 0.00        H
```

```
ATOM   280 O4'  G   9    -7.374 -5.417 24.250 1.00 0.00       O
ATOM   281 C1'  G   9    -6.077 -6.014 24.250 1.00 0.00       C
ATOM   282 H1'  G   9    -6.007 -6.747 23.446 1.00 0.00       H
ATOM   283 N9   G   9    -5.087 -4.982 23.870 1.00 0.00       N
ATOM   284 C8   G   9    -5.235 -3.611 23.800 1.00 0.00       C
ATOM   285 H8   G   9    -6.184 -3.159 24.048 1.00 0.00       H
ATOM   286 N7   G   9    -4.155 -2.975 23.420 1.00 0.00       N
ATOM   287 C5   G   9    -3.221 -3.992 23.220 1.00 0.00       C
ATOM   288 C6   G   9    -1.868 -3.917 22.810 1.00 0.00       C
ATOM   289 O6   G   9    -1.199 -2.924 22.520 1.00 0.00       O
ATOM   290 N1   G   9    -1.285 -5.193 22.740 1.00 0.00       N
ATOM   291 H1   G   9    -0.324 -5.251 22.468 1.00 0.00       H
ATOM   292 C2   G   9    -1.939 -6.382 23.030 1.00 0.00       C
ATOM   293 N2   G   9    -1.199 -7.485 22.900 1.00 0.00       N
ATOM   294 H21  G   9    -0.234 -7.539 22.606 1.00 0.00       H
ATOM   295 H22  G   9    -1.658 -8.362 23.098 1.00 0.00       H
ATOM   296 N3   G   9    -3.201 -6.449 23.420 1.00 0.00       N
ATOM   297 C4   G   9    -3.776 -5.217 23.490 1.00 0.00       C
ATOM   298 C3'  G   9    -6.767 -5.719 26.500 1.00 0.00       C
ATOM   299 H3'  G   9    -6.160 -5.069 27.131 1.00 0.00       H
ATOM   300 C2'  G   9    -5.856 -6.596 25.650 1.00 0.00       C
ATOM   301 H2'  G   9    -4.938 -6.551 26.236 1.00 0.00       H
ATOM   302 O2'  G   9    -6.332 -7.932 25.620 1.00 0.00       O
ATOM   303 HO2' G   9    -5.644 -8.466 25.216 1.00 0.00       H
ATOM   304 O3'  G   9    -7.145 -6.321 27.730 1.00 0.00       O
ATOM   305 P    G  10    -6.287 -6.029 29.040 1.00 0.00       P
ATOM   306 OP1  G  10    -7.002 -6.553 30.230 1.00 0.00       O
ATOM   307 OP2  G  10    -5.934 -4.586 29.090 1.00 0.00       O
ATOM   308 O5'  G  10    -4.966 -6.886 28.770 1.00 0.00       O
ATOM   309 C5'  G  10    -5.094 -8.313 28.640 1.00 0.00       C
ATOM   310 H5'  G  10    -5.755 -8.556 27.808 1.00 0.00       H
```

```
ATOM  311 H5''  G  10    -5.509  -8.718 29.563 1.00 0.00      H
ATOM  312 C4'   G  10    -3.720  -8.937 28.390 1.00 0.00      C
ATOM  313 H4'   G  10    -3.802 -10.023 28.339 1.00 0.00      H
ATOM  314 O4'   G  10    -3.279  -8.542 27.060 1.00 0.00      O
ATOM  315 C1'   G  10    -1.865  -8.344 27.060 1.00 0.00      C
ATOM  316 H1'   G  10    -1.410  -8.923 26.256 1.00 0.00      H
ATOM  317 N9    G  10    -1.590  -6.940 26.680 1.00 0.00      N
ATOM  318 C8    G  10    -2.454  -5.867 26.610 1.00 0.00      C
ATOM  319 H8    G  10    -3.497  -5.999 26.858 1.00 0.00      H
ATOM  320 N7    G  10    -1.889  -4.748 26.230 1.00 0.00      N
ATOM  321 C5    G  10    -0.554  -5.100 26.030 1.00 0.00      C
ATOM  322 C6    G  10     0.544  -4.306 25.620 1.00 0.00      C
ATOM  323 O6    G  10     0.570  -3.108 25.330 1.00 0.00      O
ATOM  324 N1    G  10     1.724  -5.065 25.550 1.00 0.00      N
ATOM  325 H1    G  10     2.563  -4.595 25.278 1.00 0.00      H
ATOM  326 C2    G  10     1.816  -6.418 25.840 1.00 0.00      C
ATOM  327 N2    G  10     3.035  -6.946 25.710 1.00 0.00      N
ATOM  328 H21   G  10     3.876  -6.469 25.416 1.00 0.00      H
ATOM  329 H22   G  10     3.123  -7.933 25.908 1.00 0.00      H
ATOM  330 N3    G  10     0.790  -7.157 26.230 1.00 0.00      N
ATOM  331 C4    G  10    -0.359  -6.430 26.300 1.00 0.00      C
ATOM  332 C3'   G  10    -2.605  -8.468 29.310 1.00 0.00      C
ATOM  333 H3'   G  10    -2.445  -7.594 29.942 1.00 0.00      H
ATOM  334 C2'   G  10    -1.365  -8.714 28.460 1.00 0.00      C
ATOM  335 H2'   G  10    -0.617  -8.180 29.047 1.00 0.00      H
ATOM  336 O2'   G  10    -1.043 -10.096 28.430 1.00 0.00      O
ATOM  337 HO2'  G  10    -0.175 -10.173 28.026 1.00 0.00      H
ATOM  338 O3'   G  10    -2.598  -9.180 30.540 1.00 0.00      O
ATOM  339 P     G  11    -2.033  -8.469 31.850 1.00 0.00      P
ATOM  340 OP1   G  11    -2.352  -9.297 33.040 1.00 0.00      O
ATOM  341 OP2   G  11    -2.516  -7.065 31.900 1.00 0.00      O
```

```
ATOM  342 O5'  G  11   -0.459 -8.478 31.580 1.00 0.00      O
ATOM  343 C5'  G  11    0.204 -9.748 31.450 1.00 0.00      C
ATOM  344 H5'  G  11   -0.221 -10.309 30.617 1.00 0.00      H
ATOM  345 H5'' G  11    0.074 -10.314 32.372 1.00 0.00      H
ATOM  346 C4'  G  11    1.698 -9.530 31.200 1.00 0.00      C
ATOM  347 H4'  G  11    2.215 -10.488 31.150 1.00 0.00      H
ATOM  348 O4'  G  11    1.856 -8.960 29.870 1.00 0.00      O
ATOM  349 C1'  G  11    2.938 -8.029 29.870 1.00 0.00      C
ATOM  350 H1'  G  11    3.634 -8.270 29.067 1.00 0.00      H
ATOM  351 N9   G  11    2.412 -6.699 29.490 1.00 0.00      N
ATOM  352 C8   G  11    1.104 -6.263 29.420 1.00 0.00      C
ATOM  353 H8   G  11    0.298 -6.938 29.668 1.00 0.00      H
ATOM  354 N7   G  11    0.975 -5.016 29.040 1.00 0.00      N
ATOM  355 C5   G  11    2.289 -4.591 28.840 1.00 0.00      C
ATOM  356 C6   G  11    2.784 -3.329 28.430 1.00 0.00      C
ATOM  357 O6   G  11    2.159 -2.307 28.140 1.00 0.00      O
ATOM  358 N1   G  11    4.187 -3.330 28.360 1.00 0.00      N
ATOM  359 H1   G  11    4.639 -2.480 28.088 1.00 0.00      H
ATOM  360 C2   G  11    4.996 -4.420 28.650 1.00 0.00      C
ATOM  361 N2   G  11    6.306 -4.206 28.520 1.00 0.00      N
ATOM  362 H21  G  11    6.756 -3.351 28.226 1.00 0.00      H
ATOM  363 H22  G  11    6.913 -4.989 28.718 1.00 0.00      H
ATOM  364 N3   G  11    4.531 -5.595 29.040 1.00 0.00      N
ATOM  365 C4   G  11    3.171 -5.605 29.110 1.00 0.00      C
ATOM  366 C3'  G  11    2.383 -8.534 32.120 1.00 0.00      C
ATOM  367 H3'  G  11    2.044 -7.712 32.751 1.00 0.00      H
ATOM  368 C2'  G  11    3.559 -8.070 31.270 1.00 0.00      C
ATOM  369 H2'  G  11    3.900 -7.217 31.856 1.00 0.00      H
ATOM  370 O2'  G  11    4.576 -9.060 31.240 1.00 0.00      O
ATOM  371 HO2' G  11    5.348 -8.657 30.836 1.00 0.00      H
ATOM  372 O3'  G  11    2.773 -9.128 33.350 1.00 0.00      O
```

```
ATOM  373 P    G  12     2.864 -8.226 34.660 1.00 0.00      P
ATOM  374 OP1  G  12     3.043 -9.094 35.850 1.00 0.00      O
ATOM  375 OP2  G  12     1.700 -7.305 34.710 1.00 0.00      O
ATOM  376 O5'  G  12     4.194 -7.382 34.390 1.00 0.00      O
ATOM  377 C5'  G  12     5.438 -8.093 34.260 1.00 0.00      C
ATOM  378 H5'  G  12     5.384 -8.795 33.428 1.00 0.00      H
ATOM  379 H5"  G  12     5.634 -8.639 35.183 1.00 0.00      H
ATOM  380 C4'  G  12     6.577 -7.103 34.010 1.00 0.00      C
ATOM  381 H4'  G  12     7.530 -7.630 33.959 1.00 0.00      H
ATOM  382 O4'  G  12     6.402 -6.537 32.680 1.00 0.00      O
ATOM  383 C1'  G  12     6.810 -5.169 32.680 1.00 0.00      C
ATOM  384 H1'  G  12     7.526 -4.996 31.877 1.00 0.00      H
ATOM  385 N9   G  12     5.649 -4.334 32.300 1.00 0.00      N
ATOM  386 C8   G  12     4.313 -4.674 32.230 1.00 0.00      C
ATOM  387 H8   G  12     4.000 -5.677 32.477 1.00 0.00      H
ATOM  388 N7   G  12     3.530 -3.694 31.850 1.00 0.00      N
ATOM  389 C5   G  12     4.406 -2.627 31.650 1.00 0.00      C
ATOM  390 C6   G  12     4.141 -1.298 31.240 1.00 0.00      C
ATOM  391 O6   G  12     3.063 -0.775 30.950 1.00 0.00      O
ATOM  392 N1   G  12     5.323 -0.541 31.170 1.00 0.00      N
ATOM  393 H1   G  12     5.245  0.418 30.897 1.00 0.00      H
ATOM  394 C2   G  12     6.591 -1.020 31.460 1.00 0.00      C
ATOM  395 N2   G  12     7.579 -0.132 31.330 1.00 0.00      N
ATOM  396 H21  G  12     7.496  0.831 31.036 1.00 0.00      H
ATOM  397 H22  G  12     8.512 -0.463 31.528 1.00 0.00      H
ATOM  398 N3   G  12     6.836 -2.261 31.850 1.00 0.00      N
ATOM  399 C4   G  12     5.697 -3.004 31.920 1.00 0.00      C
ATOM  400 C3'  G  12     6.615 -5.894 34.930 1.00 0.00      C
ATOM  401 H3'  G  12     5.886 -5.385 35.561 1.00 0.00      H
ATOM  402 C2'  G  12     7.355 -4.868 34.080 1.00 0.00      C
ATOM  403 H2'  G  12     7.182 -3.966 34.666 1.00 0.00      H
```

```
ATOM  404 O2'  G  12    8.746 -5.152 34.050 1.00 0.00      O
ATOM  405 HO2' G  12    9.178 -4.396 33.646 1.00 0.00      H
ATOM  406 O3'  G  12    7.265 -6.183 36.160 1.00 0.00      O
ATOM  407 P    G  13    6.854 -5.374 37.470 1.00 0.00      P
ATOM  408 OP1  G  13    7.474 -6.009 38.660 1.00 0.00      O
ATOM  409 OP2  G  13    5.377 -5.229 37.520 1.00 0.00      O
ATOM  410 O5'  G  13    7.517 -3.947 37.200 1.00 0.00      O
ATOM  411 C5'  G  13    8.948 -3.872 37.070 1.00 0.00      C
ATOM  412 H5'  G  13    9.282 -4.492 36.238 1.00 0.00      H
ATOM  413 H5'' G  13    9.407 -4.226 37.993 1.00 0.00      H
ATOM  414 C4'  G  13    9.372 -2.424 36.820 1.00 0.00      C
ATOM  415 H4'  G  13   10.458 -2.353 36.769 1.00 0.00      H
ATOM  416 O4'  G  13    8.919 -2.043 35.490 1.00 0.00      O
ATOM  417 C1'  G  13    8.524 -0.671 35.490 1.00 0.00      C
ATOM  418 H1'  G  13    9.033 -0.139 34.686 1.00 0.00      H
ATOM  419 N9   G  13    7.095 -0.596 35.110 1.00 0.00      N
ATOM  420 C8   G  13    6.155 -1.603 35.040 1.00 0.00      C
ATOM  421 H8   G  13    6.434 -2.617 35.288 1.00 0.00      H
ATOM  422 N7   G  13    4.967 -1.202 34.660 1.00 0.00      N
ATOM  423 C5   G  13    5.127  0.170 34.460 1.00 0.00      C
ATOM  424 C6   G  13    4.186  1.145 34.050 1.00 0.00      C
ATOM  425 O6   G  13    2.997  1.003 33.760 1.00 0.00      O
ATOM  426 N1   G  13    4.771  2.421 33.980 1.00 0.00      N
ATOM  427 H1   G  13    4.187  3.186 33.708 1.00 0.00      H
ATOM  428 C2   G  13    6.098  2.702 34.270 1.00 0.00      C
ATOM  429 N2   G  13    6.449  3.983 34.140 1.00 0.00      N
ATOM  430 H21  G  13    5.859  4.748 33.846 1.00 0.00      H
ATOM  431 H22  G  13    7.413  4.209 34.338 1.00 0.00      H
ATOM  432 N3   G  13    6.974  1.791 34.660 1.00 0.00      N
ATOM  433 C4   G  13    6.416  0.550 34.730 1.00 0.00      C
ATOM  434 C3'  G  13    8.751 -1.386 37.740 1.00 0.00      C
```

```
ATOM   435 H3'  G   13     7.862 -1.352 38.370 1.00 0.00        H
ATOM   436 C2'  G   13     8.819 -0.123 36.890 1.00 0.00        C
ATOM   437 H2'  G   13     8.185  0.543 37.476 1.00 0.00        H
ATOM   438 O2'  G   13    10.143  0.390 36.860 1.00 0.00        O
ATOM   439 HO2' G   13    10.098  1.260 36.456 1.00 0.00         H
ATOM   440 O3'  G   13     9.454 -1.278 38.970 1.00 0.00        O
ATOM   441 P    G   14     8.671 -0.820 40.280 1.00 0.00        P
ATOM   442 OP1  G   14     9.536 -1.019 41.470 1.00 0.00        O
ATOM   443 OP2  G   14     7.349 -1.495 40.330 1.00 0.00        O
ATOM   444 O5'  G   14     8.458  0.740 40.010 1.00 0.00        O
ATOM   445 C5'  G   14     9.622  1.576 39.880 1.00 0.00        C
ATOM   446 H5'  G   14    10.238  1.235 39.048 1.00 0.00        H
ATOM   447 H5'' G   14    10.200  1.527 40.803 1.00 0.00        H
ATOM   448 C4'  G   14     9.196  3.023 39.630 1.00 0.00        C
ATOM   449 H4'  G   14    10.072  3.670 39.579 1.00 0.00         H
ATOM   450 O4'  G   14     8.609  3.099 38.300 1.00 0.00        O
ATOM   451 C1'  G   14     7.535  4.040 38.300 1.00 0.00        C
ATOM   452 H1'  G   14     7.676  4.763 37.497 1.00 0.00        H
ATOM   453 N9   G   14     6.292  3.332 37.920 1.00 0.00        N
ATOM   454 C8   G   14     6.045  1.976 37.850 1.00 0.00        C
ATOM   455 H8   G   14     6.827  1.273 38.098 1.00 0.00        H
ATOM   456 N7   G   14     4.829  1.672 37.470 1.00 0.00        N
ATOM   457 C5   G   14     4.223  2.913 37.270 1.00 0.00        C
ATOM   458 C6   G   14     2.904  3.225 36.860 1.00 0.00        C
ATOM   459 O6   G   14     1.980  2.463 36.570 1.00 0.00        O
ATOM   460 N1   G   14     2.707  4.614 36.790 1.00 0.00        N
ATOM   461 H1   G   14     1.802  4.942 36.519 1.00 0.00        H
ATOM   462 C2   G   14     3.672  5.568 37.080 1.00 0.00        C
ATOM   463 N2   G   14     3.275  6.836 36.950 1.00 0.00        N
ATOM   464 H21  G   14     2.365  7.161 36.657 1.00 0.00         H
ATOM   465 H22  G   14     3.964  7.547 37.148 1.00 0.00         H
```

```
ATOM  466 N3   G  14    4.901  5.274 37.470 1.00 0.00      N
ATOM  467 C4   G  14    5.102  3.929 37.540 1.00 0.00      C
ATOM  468 C3'  G  14    8.113  3.561 40.550 1.00 0.00      C
ATOM  469 H3'  G  14    7.347  3.109 41.180 1.00 0.00      H
ATOM  470 C2'  G  14    7.488  4.661 39.700 1.00 0.00      C
ATOM  471 H2'  G  14    6.595  4.879 40.286 1.00 0.00      H
ATOM  472 O2'  G  14    8.325  5.807 39.670 1.00 0.00      O
ATOM  473 HO2' G  14    7.818  6.515 39.266 1.00 0.00      H
ATOM  474 O3'  G  14    8.646  4.032 41.780 1.00 0.00      O
ATOM  475 P    G  15    7.740  3.995 43.090 1.00 0.00      P
ATOM  476 OP1  G  15    8.575  4.294 44.280 1.00 0.00      O
ATOM  477 OP2  G  15    6.992  2.712 43.140 1.00 0.00      O
ATOM  478 O5'  G  15    6.717  5.192 42.820 1.00 0.00      O
ATOM  479 C5'  G  15    7.246  6.524 42.690 1.00 0.00      C
ATOM  480 H5'  G  15    7.948  6.569 41.857 1.00 0.00      H
ATOM  481 H5'' G  15    7.759  6.795 43.612 1.00 0.00      H
ATOM  482 C4'  G  15    6.105  7.512 42.440 1.00 0.00      C
ATOM  483 H4'  G  15    6.493  8.529 42.389 1.00 0.00      H
ATOM  484 O4'  G  15    5.570  7.259 41.110 1.00 0.00      O
ATOM  485 C1'  G  15    4.158  7.471 41.110 1.00 0.00      C
ATOM  486 H1'  G  15    3.885  8.155 40.307 1.00 0.00      H
ATOM  487 N9   G  15    3.495  6.203 40.730 1.00 0.00      N
ATOM  488 C8   G  15    4.020  4.929 40.660 1.00 0.00      C
ATOM  489 H8   G  15    5.058  4.760 40.907 1.00 0.00      H
ATOM  490 N7   G  15    3.160  4.016 40.280 1.00 0.00      N
ATOM  491 C5   G  15    1.980  4.733 40.080 1.00 0.00      C
ATOM  492 C6   G  15    0.701  4.283 39.670 1.00 0.00      C
ATOM  493 O6   G  15    0.336  3.142 39.380 1.00 0.00      O
ATOM  494 N1   G  15   -0.215  5.346 39.600 1.00 0.00      N
ATOM  495 H1   G  15   -1.153  5.133 39.328 1.00 0.00      H
ATOM  496 C2   G  15    0.081  6.670 39.890 1.00 0.00      C
```

```
ATOM   497 N2   G   15    -0.937  7.522 39.760 1.00 0.00     N

ATOM   498 H21  G   15    -1.878  7.304 39.466 1.00 0.00     H

ATOM   499 H22  G   15    -0.741  8.493 39.958 1.00 0.00     H

ATOM   500 N3   G   15     1.275  7.086 40.280 1.00 0.00     N

ATOM   501 C4   G   15     2.171  6.063 40.350 1.00 0.00     C

ATOM   502 C3'  G   15     4.903  7.380 43.360 1.00 0.00     C

ATOM   503 H3'  G   15     4.503  6.586 43.990 1.00 0.00     H

ATOM   504 C2'  G   15     3.783  7.967 42.510 1.00 0.00     C

ATOM   505 H2'  G   15     2.914  7.668 43.096 1.00 0.00     H

ATOM   506 O2'  G   15     3.868  9.384 42.480 1.00 0.00     O

ATOM   507 HO2' G   15     3.059  9.705 42.076 1.00 0.00     H

ATOM   508 O3'  G   15     5.098  8.064 44.590 1.00 0.00     O

ATOM   509 HO3' G   15     4.363  8.009 45.205 1.00 0.00     H

TER

ATOM   510 HO5' C   16    -8.254  2.331 35.699 1.00 0.00     H

ATOM   511 O5'  C   16    -7.866  3.194 35.860 1.00 0.00     O

ATOM   512 C5'  C   16    -8.733  4.335 35.990 1.00 0.00     C

ATOM   513 H5'  C   16    -9.422  4.190 36.822 1.00 0.00     H

ATOM   514 H5'' C   16    -9.300  4.458 35.067 1.00 0.00     H

ATOM   515 C4'  C   16    -7.900  5.594 36.240 1.00 0.00     C

ATOM   516 H4'  C   16    -8.547  6.470 36.290 1.00 0.00     H

ATOM   517 O4'  C   16    -7.317  5.494 37.570 1.00 0.00     O

ATOM   518 C1'  C   16    -6.014  6.077 37.570 1.00 0.00     C

ATOM   519 H1'  C   16    -5.943  6.805 38.378 1.00 0.00     H

ATOM   520 N1   C   16    -5.035  5.035 37.950 1.00 0.00     N

ATOM   521 C6   C   16    -5.375  3.708 37.960 1.00 0.00     C

ATOM   522 H6   C   16    -6.376  3.410 37.684 1.00 0.00     H

ATOM   523 C5   C   16    -4.480  2.756 38.310 1.00 0.00     C

ATOM   524 H5   C   16    -4.775  1.707 38.318 1.00 0.00     H

ATOM   525 C4   C   16    -3.160  3.204 38.670 1.00 0.00     C

ATOM   526 N4   C   16    -2.240  2.327 39.030 1.00 0.00     N
```

```
ATOM  527 H41  C  16   -1.326  2.679 39.275 1.00 0.00      H
ATOM  528 H42  C  16   -2.458  1.341 39.054 1.00 0.00      H
ATOM  529 N3   C  16   -2.835  4.502 38.660 1.00 0.00      N
ATOM  530 C2   C  16   -3.753  5.441 38.300 1.00 0.00      C
ATOM  531 O2   C  16   -3.491  6.649 38.280 1.00 0.00      O
ATOM  532 C3'  C  16   -6.707  5.789 35.320 1.00 0.00      C
ATOM  533 H3'  C  16   -6.108  5.132 34.690 1.00 0.00      H
ATOM  534 C2'  C  16   -5.786  6.657 36.170 1.00 0.00      C
ATOM  535 H2'  C  16   -4.868  6.603 35.584 1.00 0.00      H
ATOM  536 O2'  C  16   -6.249  7.998 36.200 1.00 0.00      O
ATOM  537 HO2' C  16   -5.556  8.525 36.605 1.00 0.00      H
ATOM  538 O3'  C  16   -7.078  6.396 34.090 1.00 0.00      O
ATOM  539 P    C  17   -6.223  6.094 32.780 1.00 0.00      P
ATOM  540 OP1  C  17   -6.933  6.626 31.590 1.00 0.00      O
ATOM  541 OP2  C  17   -5.886  4.648 32.730 1.00 0.00      O
ATOM  542 O5'  C  17   -4.894  6.938 33.050 1.00 0.00      O
ATOM  543 C5'  C  17   -5.007  8.366 33.180 1.00 0.00      C
ATOM  544 H5'  C  17   -5.665  8.616 34.012 1.00 0.00      H
ATOM  545 H5"  C  17   -5.418  8.776 32.257 1.00 0.00      H
ATOM  546 C4'  C  17   -3.626  8.975 33.430 1.00 0.00      C
ATOM  547 H4'  C  17   -3.697 10.061 33.481 1.00 0.00      H
ATOM  548 O4'  C  17   -3.189  8.576 34.760 1.00 0.00      O
ATOM  549 C1'  C  17   -1.778  8.363 34.760 1.00 0.00      C
ATOM  550 H1'  C  17   -1.325  8.937 35.568 1.00 0.00      H
ATOM  551 N1   C  17   -1.517  6.957 35.140 1.00 0.00      N
ATOM  552 C6   C  17   -2.520  6.024 35.150 1.00 0.00      C
ATOM  553 H6   C  17   -3.523  6.313 34.874 1.00 0.00      H
ATOM  554 C5   C  17   -2.281  4.740 35.500 1.00 0.00      C
ATOM  555 H5   C  17   -3.097  4.017 35.508 1.00 0.00      H
ATOM  556 C4   C  17   -0.928  4.403 35.860 1.00 0.00      C
ATOM  557 N4   C  17   -0.627  3.168 36.220 1.00 0.00      N
```

```
ATOM   558 H41  C   17     0.333  2.971 36.465 1.00 0.00        H
ATOM   559 H42  C   17    -1.343  2.456 36.244 1.00 0.00        H
ATOM   560 N3   C   17     0.046  5.320 35.850 1.00 0.00        N
ATOM   561 C2   C   17    -0.219  6.606 35.490 1.00 0.00        C
ATOM   562 O2   C   17     0.655  7.481 35.470 1.00 0.00        O
ATOM   563 C3'  C   17    -2.516  8.495 32.510 1.00 0.00        C
ATOM   564 H3'  C   17    -2.366  7.619 31.879 1.00 0.00        H
ATOM   565 C2'  C   17    -1.273  8.728 33.360 1.00 0.00        C
ATOM   566 H2'  C   17    -0.530  8.187 32.774 1.00 0.00        H
ATOM   567 O2'  C   17    -0.938 10.107 33.390 1.00 0.00        O
ATOM   568 HO2' C   17    -0.070 10.176 33.794 1.00 0.00        H
ATOM   569 O3'  C   17    -2.501  9.206 31.280 1.00 0.00        O
ATOM   570 P    C   18    -1.945  8.490 29.970 1.00 0.00        P
ATOM   571 OP1  C   18    -2.255  9.321 28.780 1.00 0.00        O
ATOM   572 OP2  C   18    -2.442  7.091 29.920 1.00 0.00        O
ATOM   573 O5'  C   18    -0.370  8.482 30.240 1.00 0.00        O
ATOM   574 C5'  C   18     0.306  9.745 30.370 1.00 0.00        C
ATOM   575 H5'  C   18    -0.113 10.311 31.202 1.00 0.00        H
ATOM   576 H5'' C   18     0.182 10.311 29.447 1.00 0.00        H
ATOM   577 C4'  C   18     1.797  9.512 30.620 1.00 0.00        C
ATOM   578 H4'  C   18     2.324 10.465 30.671 1.00 0.00        H
ATOM   579 O4'  C   18     1.949  8.940 31.950 1.00 0.00        O
ATOM   580 C1'  C   18     3.022  7.998 31.950 1.00 0.00        C
ATOM   581 H1'  C   18     3.714  8.236 32.758 1.00 0.00        H
ATOM   582 N1   C   18     2.482  6.673 32.330 1.00 0.00        N
ATOM   583 C6   C   18     1.134  6.431 32.340 1.00 0.00        C
ATOM   584 H6   C   18     0.446  7.217 32.064 1.00 0.00        H
ATOM   585 C5   C   18     0.641  5.221 32.690 1.00 0.00        C
ATOM   586 H5   C   18    -0.436  5.053 32.698 1.00 0.00        H
ATOM   587 C4   C   18     1.598  4.207 33.050 1.00 0.00        C
ATOM   588 N4   C   18     1.184  3.005 33.410 1.00 0.00        N
```

```
ATOM   589 H41   C   18     1.885  2.321 33.655 1.00 0.00        H
ATOM   590 H42   C   18     0.197  2.793 33.434 1.00 0.00        H
ATOM   591 N3    C   18     2.913  4.452 33.040 1.00 0.00        N
ATOM   592 C2    C   18     3.385  5.678 32.680 1.00 0.00        C
ATOM   593 O2    C   18     4.593  5.942 32.660 1.00 0.00        O
ATOM   594 C3'   C   18     2.472  8.508 29.700 1.00 0.00        C
ATOM   595 H3'   C   18     2.124  7.690 29.070 1.00 0.00        H
ATOM   596 C2'   C   18     3.644  8.032 30.550 1.00 0.00        C
ATOM   597 H2'   C   18     3.977  7.175 29.964 1.00 0.00        H
ATOM   598 O2'   C   18     4.671  9.011 30.580 1.00 0.00        O
ATOM   599 HO2'  C   18     5.439  8.600 30.984 1.00 0.00        H
ATOM   600 O3'   C   18     2.869  9.098 28.470 1.00 0.00        O
ATOM   601 P     C   19     2.950  8.195 27.160 1.00 0.00        P
ATOM   602 OP1   C   19     3.138  9.062 25.970 1.00 0.00        O
ATOM   603 OP2   C   19     1.776  7.287 27.110 1.00 0.00        O
ATOM   604 O5'   C   19     4.271  7.338 27.430 1.00 0.00        O
ATOM   605 C5'   C   19     5.522  8.035 27.560 1.00 0.00        C
ATOM   606 H5'   C   19     5.475  8.737 28.393 1.00 0.00        H
ATOM   607 H5''  C   19     5.724  8.579 26.637 1.00 0.00        H
ATOM   608 C4'   C   19     6.651  7.033 27.810 1.00 0.00        C
ATOM   609 H4'   C   19     7.609  7.550 27.861 1.00 0.00        H
ATOM   610 O4'   C   19     6.470  6.470 29.140 1.00 0.00        O
ATOM   611 C1'   C   19     6.864  5.098 29.140 1.00 0.00        C
ATOM   612 H1'   C   19     7.574  4.925 29.948 1.00 0.00        H
ATOM   613 N1    C   19     5.694  4.275 29.520 1.00 0.00        N
ATOM   614 C6    C   19     4.428  4.799 29.530 1.00 0.00        C
ATOM   615 H6    C   19     4.273  5.832 29.254 1.00 0.00        H
ATOM   616 C5    C   19     3.360  4.047 29.880 1.00 0.00        C
ATOM   617 H5    C   19     2.363  4.487 29.888 1.00 0.00        H
ATOM   618 C4    C   19     3.617  2.677 30.240 1.00 0.00        C
ATOM   619 N4    C   19     2.620  1.889 30.600 1.00 0.00        N
```

```
ATOM   620 H41  C  19    2.841 0.934 30.845 1.00 0.00      H
ATOM   621 H42  C  19    1.674 2.243 30.624 1.00 0.00      H
ATOM   622 N3   C  19    4.856 2.172 30.230 1.00 0.00      N
ATOM   623 C2   C  19    5.916 2.949 29.870 1.00 0.00      C
ATOM   624 O2   C  19    7.075 2.519 29.850 1.00 0.00      O
ATOM   625 C3'  C  19    6.677 5.824 26.890 1.00 0.00      C
ATOM   626 H3'  C  19    5.942 5.323 26.259 1.00 0.00      H
ATOM   627 C2'  C  19    7.405 4.791 27.740 1.00 0.00      C
ATOM   628 H2'  C  19    7.222 3.890 27.154 1.00 0.00      H
ATOM   629 O2'  C  19    8.799 5.060 27.770 1.00 0.00      O
ATOM   630 HO2' C  19    9.223 4.299 28.174 1.00 0.00      H
ATOM   631 O3'  C  19    7.329 6.107 25.660 1.00 0.00      O
ATOM   632 P    C  20    6.910 5.302 24.350 1.00 0.00      P
ATOM   633 OP1  C  20    7.536 5.931 23.160 1.00 0.00      O
ATOM   634 OP2  C  20    5.431 5.172 24.300 1.00 0.00      O
ATOM   635 O5'  C  20    7.558 3.868 24.620 1.00 0.00      O
ATOM   636 C5'  C  20    8.988 3.778 24.750 1.00 0.00      C
ATOM   637 H5'  C  20    9.328 4.394 25.582 1.00 0.00      H
ATOM   638 H5'' C  20    9.451 4.127 23.827 1.00 0.00      H
ATOM   639 C4'  C  20    9.397 2.325 25.000 1.00 0.00      C
ATOM   640 H4'  C  20   10.483 2.242 25.051 1.00 0.00      H
ATOM   641 O4'  C  20    8.940 1.949 26.330 1.00 0.00      O
ATOM   642 C1'  C  20    8.530 0.582 26.330 1.00 0.00      C
ATOM   643 H1'  C  20    9.034 0.052 27.138 1.00 0.00      H
ATOM   644 N1   C  20    7.101 0.521 26.710 1.00 0.00      N
ATOM   645 C6   C  20    6.319 1.646 26.720 1.00 0.00      C
ATOM   646 H6   C  20    6.747 2.599 26.444 1.00 0.00      H
ATOM   647 C5   C  20    5.014 1.590 27.070 1.00 0.00      C
ATOM   648 H5   C  20    4.413 2.499 27.078 1.00 0.00      H
ATOM   649 C4   C  20    4.490 0.298 27.430 1.00 0.00      C
ATOM   650 N4   C  20    3.225 0.175 27.790 1.00 0.00      N
```

```
ATOM  651 H41  C  20    2.894 -0.747 28.035 1.00 0.00      H
ATOM  652 H42  C  20    2.622  0.985 27.814 1.00 0.00      H
ATOM  653 N3   C  20    5.260 -0.796 27.420 1.00 0.00      N
ATOM  654 C2   C  20    6.571 -0.714 27.060 1.00 0.00      C
ATOM  655 O2   C  20    7.315 -1.702 27.040 1.00 0.00      O
ATOM  656 C3'  C  20    8.765  1.294 24.080 1.00 0.00      C
ATOM  657 H3'  C  20    7.877  1.269 23.449 1.00 0.00      H
ATOM  658 C2'  C  20    8.820  0.031 24.930 1.00 0.00      C
ATOM  659 H2'  C  20    8.179 -0.628 24.344 1.00 0.00      H
ATOM  660 O2'  C  20   10.138 -0.496 24.960 1.00 0.00      O
ATOM  661 HO2' C  20   10.084 -1.365 25.364 1.00 0.00      H
ATOM  662 O3'  C  20    9.467  1.179 22.850 1.00 0.00      O
ATOM  663 P    C  21    8.679  0.729 21.540 1.00 0.00      P
ATOM  664 OP1  C  21    9.546  0.919 20.350 1.00 0.00      O
ATOM  665 OP2  C  21    7.365  1.418 21.490 1.00 0.00      O
ATOM  666 O5'  C  21    8.449 -0.828 21.810 1.00 0.00      O
ATOM  667 C5'  C  21    9.605 -1.676 21.940 1.00 0.00      C
ATOM  668 H5'  C  21   10.225 -1.341 22.772 1.00 0.00      H
ATOM  669 H5'' C  21   10.183 -1.633 21.017 1.00 0.00      H
ATOM  670 C4'  C  21    9.164 -3.120 22.190 1.00 0.00      C
ATOM  671 H4'  C  21   10.033 -3.777 22.241 1.00 0.00      H
ATOM  672 O4'  C  21    8.576 -3.189 23.520 1.00 0.00      O
ATOM  673 C1'  C  21    7.492 -4.119 23.520 1.00 0.00      C
ATOM  674 H1'  C  21    7.630 -4.837 24.328 1.00 0.00      H
ATOM  675 N1   C  21    6.257 -3.397 23.900 1.00 0.00      N
ATOM  676 C6   C  21    6.207 -2.029 23.910 1.00 0.00      C
ATOM  677 H6   C  21    7.082 -1.459 23.634 1.00 0.00      H
ATOM  678 C5   C  21    5.078 -1.370 24.260 1.00 0.00      C
ATOM  679 H5   C  21    5.062 -0.280 24.267 1.00 0.00      H
ATOM  680 C4   C  21    3.940 -2.175 24.620 1.00 0.00      C
ATOM  681 N4   C  21    2.808 -1.595 24.980 1.00 0.00      N
```

```
ATOM  682 H41  C  21    2.032 -2.193 25.226 1.00 0.00      H
ATOM  683 H42  C  21    2.737 -0.588 25.004 1.00 0.00      H
ATOM  684 N3   C  21    3.997 -3.511 24.610 1.00 0.00      N
ATOM  685 C2   C  21    5.144 -4.151 24.250 1.00 0.00      C
ATOM  686 O2   C  21    5.236 -5.384 24.230 1.00 0.00      O
ATOM  687 C3'  C  21    8.075 -3.646 21.270 1.00 0.00      C
ATOM  688 H3'  C  21    7.314 -3.187 20.639 1.00 0.00      H
ATOM  689 C2'  C  21    7.439 -4.739 22.120 1.00 0.00      C
ATOM  690 H2'  C  21    6.544 -4.947 21.533 1.00 0.00      H
ATOM  691 O2'  C  21    8.263 -5.894 22.150 1.00 0.00      O
ATOM  692 HO2' C  21    7.748 -6.596 22.554 1.00 0.00      H
ATOM  693 O3'  C  21    8.603 -4.122 20.040 1.00 0.00      O
ATOM  694 P    C  22    7.698 -4.076 18.730 1.00 0.00    P
ATOM  695 OP1  C  22    8.530 -4.384 17.540 1.00 0.00      O
ATOM  696 OP2  C  22    6.964 -2.785 18.680 1.00 0.00      O
ATOM  697 O5'  C  22    6.663 -5.262 19.000 1.00 0.00      O
ATOM  698 C5'  C  22    7.177 -6.600 19.130 1.00 0.00      C
ATOM  699 H5'  C  22    7.879 -6.653 19.962 1.00 0.00      H
ATOM  700 H5'' C  22    7.687 -6.877 18.207 1.00 0.00      H
ATOM  701 C4'  C  22    6.026 -7.576 19.380 1.00 0.00      C
ATOM  702 H4'  C  22    6.403 -8.598 19.431 1.00 0.00      H
ATOM  703 O4'  C  22    5.494 -7.317 20.710 1.00 0.00      O
ATOM  704 C1'  C  22    4.080 -7.514 20.710 1.00 0.00      C
ATOM  705 H1'  C  22    3.808 -8.193 21.518 1.00 0.00      H
ATOM  706 N1   C  22    3.430 -6.239 21.090 1.00 0.00      N
ATOM  707 C6   C  22    4.127 -5.060 21.100 1.00 0.00      C
ATOM  708 H6   C  22    5.171 -5.052 20.824 1.00 0.00      H
ATOM  709 C5   C  22    3.533 -3.897 21.450 1.00 0.00      C
ATOM  710 H5   C  22    4.110 -2.972 21.458 1.00 0.00      H
ATOM  711 C4   C  22    2.140 -3.958 21.810 1.00 0.00      C
ATOM  712 N4   C  22    1.501 -2.860 22.170 1.00 0.00      N
```

```
ATOM  713 H41  C  22    0.525 -2.944 22.415 1.00 0.00       H
ATOM  714 H42  C  22    1.985 -1.974 22.195 1.00 0.00       H
ATOM  715 N3   C  22    1.466 -5.114 21.800 1.00 0.00       N
ATOM  716 C2   C  22    2.086 -6.272 21.440 1.00 0.00       C
ATOM  717 O2   C  22    1.497 -7.359 21.420 1.00 0.00       O
ATOM  718 C3'  C  22    4.826 -7.431 18.460 1.00 0.00       C
ATOM  719 H3'  C  22    4.434 -6.633 17.829 1.00 0.00       H
ATOM  720 C2'  C  22    3.700 -8.007 19.310 1.00 0.00       C
ATOM  721 H2'  C  22    2.835 -7.698 18.724 1.00 0.00       H
ATOM  722 O2'  C  22    3.769 -9.424 19.340 1.00 0.00       O
ATOM  723 HO2' C  22    2.956 -9.736 19.744 1.00 0.00       H
ATOM  724 O3'  C  22    5.013 -8.117 17.230 1.00 0.00       O
ATOM  725 P    C  23    4.276 -7.588 15.920 1.00 0.00     P
ATOM  726 OP1  C  23    4.809 -8.297 14.730 1.00 0.00       O
ATOM  727 OP2  C  23    4.355 -6.106 15.870 1.00 0.00       O
ATOM  728 O5'  C  23    2.764 -8.027 16.190 1.00 0.00       O
ATOM  729 C5'  C  23    2.474 -9.431 16.320 1.00 0.00       C
ATOM  730 H5'  C  23    3.036 -9.854 17.153 1.00 0.00       H
ATOM  731 H5'' C  23    2.754 -9.940 15.398 1.00 0.00       H
ATOM  732 C4'  C  23    0.978 -9.630 16.570 1.00 0.00       C
ATOM  733 H4'  C  23    0.744 -10.693 16.621 1.00 0.00       H
ATOM  734 O4'  C  23    0.670 -9.125 17.900 1.00 0.00       O
ATOM  735 C1'  C  23   -0.626 -8.527 17.900 1.00 0.00       C
ATOM  736 H1'  C  23   -1.221 -8.951 18.709 1.00 0.00       H
ATOM  737 N1   C  23   -0.484 -7.104 18.280 1.00 0.00       N
ATOM  738 C6   C  23    0.739 -6.488 18.290 1.00 0.00       C
ATOM  739 H6   C  23    1.622 -7.046 18.014 1.00 0.00       H
ATOM  740 C5   C  23    0.868 -5.188 18.640 1.00 0.00       C
ATOM  741 H5   C  23    1.853 -4.721 18.648 1.00 0.00       H
ATOM  742 C4   C  23   -0.337 -4.487 19.000 1.00 0.00       C
ATOM  743 N4   C  23   -0.282 -3.218 19.360 1.00 0.00       N
```

```
ATOM  744 H41  C  23   -1.149 -2.762 19.605 1.00 0.00      H
ATOM  745 H42  C  23    0.604 -2.734 19.385 1.00 0.00      H
ATOM  746 N3   C  23   -1.529 -5.096 18.990 1.00 0.00      N
ATOM  747 C2   C  23   -1.633 -6.405 18.630 1.00 0.00      C
ATOM  748 O2   C  23   -2.716 -7.002 18.610 1.00 0.00      O
ATOM  749 C3'  C  23    0.046 -8.860 15.650 1.00 0.00      C
ATOM  750 H3'  C  23    0.147 -7.977 15.019 1.00 0.00      H
ATOM  751 C2'  C  23   -1.212 -8.736 16.500 1.00 0.00      C
ATOM  752 H2'  C  23   -1.774 -8.009 15.914 1.00 0.00      H
ATOM  753 O2'  C  23   -1.919 -9.967 16.530 1.00 0.00      O
ATOM  754 HO2' C  23   -2.772 -9.791 16.934 1.00 0.00      H
ATOM  755 O3'  C  23   -0.166 -9.539 14.420 1.00 0.00      O
ATOM  756 P    C  24   -0.501 -8.696 13.110 1.00 0.00      P
ATOM  757 OP1  C  24   -0.435 -9.580 11.920 1.00 0.00      O
ATOM  758 OP2  C  24    0.366 -7.491 13.060 1.00 0.00      O
ATOM  759 O5'  C  24   -2.011 -8.248 13.380 1.00 0.00      O
ATOM  760 C5'  C  24   -3.013 -9.273 13.510 1.00 0.00      C
ATOM  761 H5'  C  24   -2.769 -9.934 14.342 1.00 0.00      H
ATOM  762 H5'' C  24   -3.052 -9.851 12.587 1.00 0.00      H
ATOM  763 C4'  C  24   -4.380 -8.633 13.760 1.00 0.00      C
ATOM  764 H4'  C  24   -5.152 -9.400 13.811 1.00 0.00      H
ATOM  765 O4'  C  24   -4.366 -8.041 15.090 1.00 0.00      O
ATOM  766 C1'  C  24   -5.134 -6.837 15.090 1.00 0.00      C
ATOM  767 H1'  C  24   -5.864 -6.872 15.898 1.00 0.00      H
ATOM  768 N1   C  24   -4.245 -5.716 15.470 1.00 0.00      N
ATOM  769 C6   C  24   -2.883 -5.859 15.480 1.00 0.00      C
ATOM  770 H6   C  24   -2.442 -6.805 15.204 1.00 0.00      H
ATOM  771 C5   C  24   -2.072 -4.835 15.830 1.00 0.00      C
ATOM  772 H5   C  24   -0.991 -4.974 15.838 1.00 0.00      H
ATOM  773 C4   C  24   -2.708 -3.594 16.190 1.00 0.00      C
ATOM  774 N4   C  24   -1.975 -2.556 16.550 1.00 0.00      N
```

```
ATOM  775 H41  C  24   -2.457 -1.703 16.795 1.00 0.00      H
ATOM  776 H42  C  24   -0.968 -2.628 16.574 1.00 0.00      H
ATOM  777 N3   C  24   -4.039 -3.462 16.180 1.00 0.00      N
ATOM  778 C2   C  24   -4.834 -4.508 15.820 1.00 0.00      C
ATOM  779 O2   C  24   -6.068 -4.425 15.800 1.00 0.00      O
ATOM  780 C3'  C  24   -4.747 -7.481 12.840 1.00 0.00      C
ATOM  781 H3'  C  24   -4.185 -6.792 12.209 1.00 0.00      H
ATOM  782 C2'  C  24   -5.740 -6.697 13.690 1.00 0.00      C
ATOM  783 H2'  C  24   -5.820 -5.782 13.103 1.00 0.00      H
ATOM  784 O2'  C  24   -7.000 -7.350 13.720 1.00 0.00      O
ATOM  785 HO2' C  24   -7.622 -6.741 14.124 1.00 0.00      H
ATOM  786 O3'  C  24   -5.293 -7.937 11.610 1.00 0.00      O
ATOM  787 P    C  25   -5.120 -7.047 10.300 1.00 0.00      P
ATOM  788 OP1  C  25   -5.542 -7.827  9.110 1.00 0.00      O
ATOM  789 OP2  C  25   -3.739 -6.502 10.250 1.00 0.00      O
ATOM  790 O5'  C  25   -6.148 -5.855 10.570 1.00 0.00      O
ATOM  791 C5'  C  25   -7.545 -6.175 10.700 1.00 0.00      C
ATOM  792 H5'  C  25   -7.696 -6.862 11.532 1.00 0.00      H
ATOM  793 H5'' C  25   -7.891 -6.641  9.777 1.00 0.00      H
ATOM  794 C4'  C  25   -8.349 -4.898 10.950 1.00 0.00      C
ATOM  795 H4'  C  25   -9.413 -5.127 11.000 1.00 0.00      H
ATOM  796 O4'  C  25   -8.018 -4.408 12.280 1.00 0.00      O
ATOM  797 C1'  C  25   -8.014 -2.980 12.280 1.00 0.00      C
ATOM  798 H1'  C  25   -8.647 -2.615 13.089 1.00 0.00      H
ATOM  799 N1   C  25   -6.660 -2.517 12.660 1.00 0.00      N
ATOM  800 C6   C  25   -5.591 -3.373 12.670 1.00 0.00      C
ATOM  801 H6   C  25   -5.731 -4.408 12.394 1.00 0.00      H
ATOM  802 C5   C  25   -4.356 -2.949 13.020 1.00 0.00      C
ATOM  803 H5   C  25   -3.521 -3.650 13.028 1.00 0.00      H
ATOM  804 C4   C  25   -4.221 -1.561 13.380 1.00 0.00      C
ATOM  805 N4   C  25   -3.043 -1.084 13.740 1.00 0.00      N
```

```
ATOM   806 H41  C   25    -2.988 -0.106 13.985 1.00 0.00      H
ATOM   807 H42  C   25    -2.235 -1.689 13.764 1.00 0.00      H
ATOM   808 N3   C   25    -5.270 -0.731 13.370 1.00 0.00      N
ATOM   809 C2   C   25    -6.503 -1.182 13.010 1.00 0.00      C
ATOM   810 O2   C   25    -7.497 -0.445 12.990 1.00 0.00      O
ATOM   811 C3'  C   25    -8.036 -3.730 10.030 1.00 0.00      C
ATOM   812 H3'  C   25    -7.191 -3.453  9.399 1.00 0.00      H
ATOM   813 C2'  C   25    -8.448 -2.535 10.880 1.00 0.00      C
ATOM   814 H2'  C   25    -8.021 -1.722 10.293 1.00 0.00      H
ATOM   815 O2'  C   25    -9.861 -2.404 10.910 1.00 0.00      O
ATOM   816 HO2' C   25   -10.056 -1.555 11.314 1.00 0.00      H
ATOM   817 O3'  C   25    -8.742 -3.819  8.800 1.00 0.00      O
ATOM   818 P    C   26    -8.115 -3.164  7.490 1.00 0.00      P
ATOM   819 OP1  C   26    -8.892 -3.592  6.300 1.00 0.00      O
ATOM   820 OP2  C   26    -6.659 -3.451  7.440 1.00 0.00      O
ATOM   821 O5'  C   26    -8.337 -1.605  7.760 1.00 0.00      O
ATOM   822 C5'  C   26    -9.685 -1.121  7.890 1.00 0.00      C
ATOM   823 H5'  C   26   -10.183 -1.618  8.723 1.00 0.00      H
ATOM   824 H5"  C   26   -10.228 -1.327  6.968 1.00 0.00      H
ATOM   825 C4'  C   26    -9.672  0.388  8.140 1.00 0.00      C
ATOM   826 H4'  C   26   -10.692  0.770  8.190 1.00 0.00      H
ATOM   827 O4'  C   26    -9.129  0.622  9.470 1.00 0.00      O
ATOM   828 C1'  C   26    -8.354  1.821  9.470 1.00 0.00      C
ATOM   829 H1'  C   26    -8.690  2.470 10.278 1.00 0.00      H
ATOM   830 N1   C   26    -6.964  1.480  9.850 1.00 0.00      N
ATOM   831 C6   C   26    -6.527  0.182  9.860 1.00 0.00      C
ATOM   832 H6   C   26    -7.204 -0.613  9.584 1.00 0.00      H
ATOM   833 C5   C   26    -5.258 -0.129 10.210 1.00 0.00      C
ATOM   834 H5   C   26    -4.934 -1.170 10.218 1.00 0.00      H
ATOM   835 C4   C   26    -4.395  0.966 10.570 1.00 0.00      C
ATOM   836 N4   C   26    -3.146  0.732 10.930 1.00 0.00      N
```

```
ATOM   837 H41  C  26   -2.572  1.526 11.175 1.00  0.00      H
ATOM   838 H42  C  26   -2.792 -0.214 10.954 1.00  0.00      H
ATOM   839 N3   C  26   -4.829  2.231 10.560 1.00  0.00      N
ATOM   840 C2   C  26   -6.111  2.519 10.200 1.00  0.00      C
ATOM   841 O2   C  26   -6.549  3.675 10.180 1.00  0.00      O
ATOM   842 C3'  C  26   -8.778  1.202  7.220 1.00  0.00      C
ATOM   843 H3'  C  26   -7.918  0.977  6.590 1.00  0.00      H
ATOM   844 C2'  C  26   -8.478  2.431  8.070 1.00  0.00      C
ATOM   845 H2'  C  26   -7.679  2.885  7.484 1.00  0.00      H
ATOM   846 O2'  C  26   -9.597  3.305  8.100 1.00  0.00      O
ATOM   847 HO2' C  26   -9.302  4.124  8.504 1.00  0.00      H
ATOM   848 O3'  C  26   -9.420  1.509  5.990 1.00  0.00      O
ATOM   849 P    C  27   -8.538  1.722  4.680 1.00  0.00      P
ATOM   850 OP1  C  27   -9.423  1.781  3.490 1.00  0.00      O
ATOM   851 OP2  C  27   -7.468  0.693  4.630 1.00  0.00      O
ATOM   852 O5'  C  27   -7.883  3.153  4.950 1.00  0.00      O
ATOM   853 C5'  C  27   -8.756  4.289  5.080 1.00  0.00      C
ATOM   854 H5'  C  27   -9.443  4.140  5.913 1.00  0.00      H
ATOM   855 H5"  C  27   -9.324  4.410  4.158 1.00  0.00      H
ATOM   856 C4'  C  27   -7.929  5.552  5.330 1.00  0.00      C
ATOM   857 H4'  C  27   -8.581  6.424  5.380 1.00  0.00      H
ATOM   858 O4'  C  27   -7.346  5.455  6.660 1.00  0.00      O
ATOM   859 C1'  C  27   -6.046  6.046  6.660 1.00  0.00      C
ATOM   860 H1'  C  27   -5.978  6.774  7.469 1.00  0.00      H
ATOM   861 N1   C  27   -5.061  5.008  7.040 1.00  0.00      N
ATOM   862 C6   C  27   -5.394  3.680  7.050 1.00  0.00      C
ATOM   863 H6   C  27   -6.393  3.376  6.774 1.00  0.00      H
ATOM   864 C5   C  27   -4.494  2.733  7.400 1.00  0.00      C
ATOM   865 H5   C  27   -4.784  1.682  7.408 1.00  0.00      H
ATOM   866 C4   C  27   -3.176  3.188  7.760 1.00  0.00      C
ATOM   867 N4   C  27   -2.252  2.316  8.120 1.00  0.00      N
```

```
ATOM    868 H41  C  27   -1.340  2.673  8.365 1.00 0.00        H
ATOM    869 H42  C  27   -2.465  1.329  8.144 1.00 0.00        H
ATOM    870 N3   C  27   -2.858  4.487  7.750 1.00 0.00        N
ATOM    871 C2   C  27   -3.782  5.421  7.390 1.00 0.00        C
ATOM    872 O2   C  27   -3.526  6.631  7.370 1.00 0.00        O
ATOM    873 C3'  C  27   -6.737  5.754  4.410 1.00 0.00        C
ATOM    874 H3'  C  27   -6.134  5.100  3.780 1.00 0.00        H
ATOM    875 C2'  C  27   -5.821  6.626  5.260 1.00 0.00        C
ATOM    876 H2'  C  27   -4.903  6.577  4.674 1.00 0.00        H
ATOM    877 O2'  C  27   -6.291  7.965  5.290 1.00 0.00        O
ATOM    878 HO2' C  27   -5.601  8.496  5.694 1.00 0.00        H
ATOM    879 O3'  C  27   -7.112  6.359  3.180 1.00 0.00        O
ATOM    880 P    C  28   -6.255  6.061  1.870 1.00 0.00        P
ATOM    881 OP1  C  28   -6.968  6.589  0.680 1.00 0.00        O
ATOM    882 OP2  C  28   -5.910  4.617  1.820 1.00 0.00        O
ATOM    883 O5'  C  28   -4.930  6.912  2.140 1.00 0.00        O
ATOM    884 C5'  C  28   -5.051  8.340  2.270 1.00 0.00        C
ATOM    885 H5'  C  28   -5.710  8.586  3.103 1.00 0.00        H
ATOM    886 H5"  C  28   -5.464  8.748  1.347 1.00 0.00        H
ATOM    887 C4'  C  28   -3.673  8.956  2.520 1.00 0.00        C
ATOM    888 H4'  C  28   -3.750 10.042  2.571 1.00 0.00        H
ATOM    889 O4'  C  28   -3.234  8.559  3.850 1.00 0.00        O
ATOM    890 C1'  C  28   -1.821  8.354  3.850 1.00 0.00        C
ATOM    891 H1'  C  28   -1.371  8.930  4.659 1.00 0.00        H
ATOM    892 N1   C  28   -1.553  6.949  4.230 1.00 0.00        N
ATOM    893 C6   C  28   -2.551  6.011  4.240 1.00 0.00        C
ATOM    894 H6   C  28   -3.556  6.296  3.964 1.00 0.00        H
ATOM    895 C5   C  28   -2.306  4.728  4.590 1.00 0.00        C
ATOM    896 H5   C  28   -3.118  4.001  4.598 1.00 0.00        H
ATOM    897 C4   C  28   -0.951  4.398  4.950 1.00 0.00        C
ATOM    898 N4   C  28   -0.644  3.165  5.310 1.00 0.00        N
```

```
ATOM   899 H41  C  28    0.317  2.973  5.555 1.00 0.00      H
ATOM   900 H42  C  28   -1.356  2.449  5.334 1.00 0.00      H
ATOM   901 N3   C  28    0.019  5.320  4.940 1.00 0.00      N
ATOM   902 C2   C  28   -0.254  6.605  4.580 1.00 0.00      C
ATOM   903 O2   C  28    0.615  7.485  4.560 1.00 0.00      O
ATOM   904 C3'  C  28   -2.561  8.482  1.600 1.00 0.00      C
ATOM   905 H3'  C  28   -2.407  7.606  0.969 1.00 0.00      H
ATOM   906 C2'  C  28   -1.319  8.721  2.450 1.00 0.00      C
ATOM   907 H2'  C  28   -0.574  8.183  1.864 1.00 0.00      H
ATOM   908 O2'  C  28   -0.990 10.102  2.480 1.00 0.00      O
ATOM   909 HO2' C  28   -0.122 10.175  2.884 1.00 0.00      H
ATOM   910 O3'  C  28   -2.549  9.193  0.370 1.00 0.00      O
ATOM   911 P    C  29   -1.989  8.480 -0.940 1.00 0.00      P
ATOM   912 OP1  C  29   -2.304  9.309 -2.130 1.00 0.00      O
ATOM   913 OP2  C  29   -2.479  7.079 -0.990 1.00 0.00      O
ATOM   914 O5'  C  29   -0.415  8.480 -0.670 1.00 0.00      O
ATOM   915 C5'  C  29    0.255  9.747 -0.540 1.00 0.00      C
ATOM   916 H5'  C  29   -0.167 10.310  0.293 1.00 0.00      H
ATOM   917 H5'' C  29    0.128 10.313 -1.463 1.00 0.00      H
ATOM   918 C4'  C  29    1.747  9.521 -0.290 1.00 0.00      C
ATOM   919 H4'  C  29    2.269 10.477 -0.239 1.00 0.00      H
ATOM   920 O4'  C  29    1.902  8.950  1.040 1.00 0.00      O
ATOM   921 C1'  C  29    2.980  8.014  1.040 1.00 0.00      C
ATOM   922 H1'  C  29    3.670  8.255  1.848 1.00 0.00      H
ATOM   923 N1   C  29    2.447  6.686  1.420 1.00 0.00      N
ATOM   924 C6   C  29    1.100  6.437  1.430 1.00 0.00      C
ATOM   925 H6   C  29    0.408  7.219  1.155 1.00 0.00      H
ATOM   926 C5   C  29    0.614  5.224  1.780 1.00 0.00      C
ATOM   927 H5   C  29   -0.462  5.050  1.788 1.00 0.00      H
ATOM   928 C4   C  29    1.576  4.215  2.140 1.00 0.00      C
ATOM   929 N4   C  29    1.168  3.011  2.500 1.00 0.00      N
```

```
ATOM  930 H41  C  29    1.873 2.330  2.745 1.00 0.00        H
ATOM  931 H42  C  29    0.182 2.794  2.524 1.00 0.00        H
ATOM  932 N3   C  29    2.890 4.467  2.130 1.00 0.00        N
ATOM  933 C2   C  29    3.355 5.695  1.770 1.00 0.00        C
ATOM  934 O2   C  29    4.561 5.966  1.750 1.00 0.00        O
ATOM  935 C3'  C  29    2.427 8.521 -1.210 1.00 0.00        C
ATOM  936 H3'  C  29    2.083 7.701 -1.840 1.00 0.00        H
ATOM  937 C2'  C  29    3.601 8.051 -0.360 1.00 0.00        C
ATOM  938 H2'  C  29    3.938 7.196 -0.946 1.00 0.00        H
ATOM  939 O2'  C  29    4.624 9.036 -0.330 1.00 0.00        O
ATOM  940 HO2' C  29    5.394 8.629  0.074 1.00 0.00        H
ATOM  941 O3'  C  29    2.821 9.113 -2.440 1.00 0.00        O
ATOM  942 P    C  30    2.907 8.210 -3.750 1.00 0.00        P
ATOM  943 OP1  C  30    3.091 9.078 -4.940 1.00 0.00        O
ATOM  944 OP2  C  30    1.738 7.296 -3.800 1.00 0.00        O
ATOM  945 O5'  C  30    4.232 7.360 -3.480 1.00 0.00        O
ATOM  946 C5'  C  30    5.480 8.064 -3.350 1.00 0.00        C
ATOM  947 H5'  C  30    5.429 8.766 -2.518 1.00 0.00        H
ATOM  948 H5'' C  30    5.679 8.609 -4.273 1.00 0.00        H
ATOM  949 C4'  C  30    6.614 7.068 -3.100 1.00 0.00        C
ATOM  950 H4'  C  30    7.569 7.590 -3.049 1.00 0.00        H
ATOM  951 O4'  C  30    6.436 6.504 -1.770 1.00 0.00        O
ATOM  952 C1'  C  30    6.837 5.134 -1.770 1.00 0.00        C
ATOM  953 H1'  C  30    7.548 4.964 -0.962 1.00 0.00        H
ATOM  954 N1   C  30    5.671 4.305 -1.390 1.00 0.00        N
ATOM  955 C6   C  30    4.403 4.822 -1.380 1.00 0.00        C
ATOM  956 H6   C  30    4.243 5.854 -1.656 1.00 0.00        H
ATOM  957 C5   C  30    3.339 4.065 -1.030 1.00 0.00        C
ATOM  958 H5   C  30    2.340 4.501 -1.022 1.00 0.00        H
ATOM  959 C4   C  30    3.603 2.696 -0.670 1.00 0.00        C
ATOM  960 N4   C  30    2.610 1.903 -0.310 1.00 0.00        N
```

```
ATOM    961 H41  C   30     2.836  0.950 -0.065 1.00 0.00      H
ATOM    962 H42  C   30     1.663  2.252 -0.286 1.00 0.00      H
ATOM    963 N3   C   30     4.845  2.198 -0.680 1.00 0.00      N
ATOM    964 C2   C   30     5.900  2.980 -1.040 1.00 0.00      C
ATOM    965 O2   C   30     7.062  2.556 -1.060 1.00 0.00      O
ATOM    966 C3'  C   30     6.646  5.859 -4.020 1.00 0.00      C
ATOM    967 H3'  C   30     5.915  5.354 -4.651 1.00 0.00      H
ATOM    968 C2'  C   30     7.380  4.830 -3.170 1.00 0.00      C
ATOM    969 H2'  C   30     7.201  3.929 -3.756 1.00 0.00      H
ATOM    970 O2'  C   30     8.772  5.106 -3.140 1.00 0.00      O
ATOM    971 HO2' C   30     9.200  4.348 -2.736 1.00 0.00      H
ATOM    972 O3'  C   30     7.297  6.145 -5.250 1.00 0.00      O
ATOM    973 HO3' C   30     7.342  5.410 -5.865 1.00 0.00      H
TER
```