

Supplementary Information

Common Pharmacophore of Structurally Distinct Small-Molecule Inhibitors of Intracellular Retrograde Trafficking of Ribosome Inactivating Proteins

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Dataset S1. Cartesian coordinates of **(S)-Retro-2^{cycl}** that is energy minimized at the HF/6-31G(d) level.

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|---------|----|----|----|--------|--------|--------|------|------|---|
| HETATM | 1 | N | 1 | -0.057 | -0.141 | 0.013 | 0.00 | 0.00 | N |
| HETATM | 2 | N | 1 | 2.170 | -0.936 | -0.108 | 0.00 | 0.00 | N |
| HETATM | 3 | C | 1 | 0.040 | 0.100 | 1.369 | 0.00 | 0.00 | C |
| HETATM | 4 | C | 1 | 0.835 | -1.113 | -0.631 | 0.00 | 0.00 | C |
| HETATM | 5 | C | 1 | -1.337 | 0.098 | -0.592 | 0.00 | 0.00 | C |
| HETATM | 6 | C | 1 | 1.280 | -0.377 | 2.030 | 0.00 | 0.00 | C |
| HETATM | 7 | C | 1 | -2.335 | -0.861 | -0.522 | 0.00 | 0.00 | C |
| HETATM | 8 | C | 1 | -1.576 | 1.295 | -1.242 | 0.00 | 0.00 | C |
| HETATM | 9 | C | 1 | 0.882 | -0.967 | -2.127 | 0.00 | 0.00 | C |
| HETATM | 10 | C | 1 | 1.414 | -0.268 | 3.410 | 0.00 | 0.00 | C |
| HETATM | 11 | C | 1 | 2.325 | -0.886 | 1.267 | 0.00 | 0.00 | C |
| HETATM | 12 | C | 1 | -3.563 | -0.631 | -1.118 | 0.00 | 0.00 | C |
| HETATM | 13 | C | 1 | -2.807 | 1.528 | -1.834 | 0.00 | 0.00 | C |
| HETATM | 14 | C | 1 | 0.350 | -1.801 | -3.036 | 0.00 | 0.00 | C |
| HETATM | 15 | C | 1 | 2.576 | -0.669 | 4.034 | 0.00 | 0.00 | C |
| HETATM | 16 | C | 1 | 3.505 | -1.283 | 1.893 | 0.00 | 0.00 | C |
| HETATM | 17 | C | 1 | -3.800 | 0.565 | -1.777 | 0.00 | 0.00 | C |
| HETATM | 18 | C | 1 | 1.290 | -0.243 | -4.479 | 0.00 | 0.00 | C |
| HETATM | 19 | C | 1 | 0.581 | -1.384 | -4.391 | 0.00 | 0.00 | C |
| HETATM | 20 | C | 1 | 3.619 | -1.173 | 3.263 | 0.00 | 0.00 | C |
| HETATM | 21 | C | 1 | 1.720 | 0.484 | -5.720 | 0.00 | 0.00 | C |
| HETATM | 22 | O | 1 | -0.822 | 0.672 | 1.975 | 0.00 | 0.00 | O |
| HETATM | 23 | S | 1 | 1.705 | 0.356 | -2.902 | 0.00 | 0.00 | S |
| HETATM | 24 | H | 1 | 0.465 | -2.119 | -0.423 | 0.00 | 0.00 | H |
| HETATM | 25 | H | 1 | 2.845 | -1.493 | -0.585 | 0.00 | 0.00 | H |
| HETATM | 26 | H | 1 | -2.157 | -1.780 | 0.008 | 0.00 | 0.00 | H |
| HETATM | 27 | H | 1 | -0.800 | 2.037 | -1.279 | 0.00 | 0.00 | H |
| HETATM | 28 | H | 1 | 0.593 | 0.138 | 3.968 | 0.00 | 0.00 | H |
| HETATM | 29 | H | 1 | -4.334 | -1.378 | -1.061 | 0.00 | 0.00 | H |
| HETATM | 30 | H | 1 | -2.988 | 2.461 | -2.336 | 0.00 | 0.00 | H |
| HETATM | 31 | H | 1 | -0.205 | -2.683 | -2.774 | 0.00 | 0.00 | H |
| HETATM | 32 | H | 1 | 2.679 | -0.589 | 5.101 | 0.00 | 0.00 | H |
| HETATM | 33 | H | 1 | 4.320 | -1.671 | 1.306 | 0.00 | 0.00 | H |
| HETATM | 34 | H | 1 | -4.755 | 0.746 | -2.237 | 0.00 | 0.00 | H |
| HETATM | 35 | H | 1 | 0.225 | -1.926 | -5.247 | 0.00 | 0.00 | H |
| HETATM | 36 | H | 1 | 4.532 | -1.484 | 3.739 | 0.00 | 0.00 | H |
| HETATM | 37 | H | 1 | 1.374 | -0.049 | -6.597 | 0.00 | 0.00 | H |
| HETATM | 38 | H | 1 | 2.801 | 0.565 | -5.777 | 0.00 | 0.00 | H |
| HETATM | 39 | H | 1 | 1.311 | 1.488 | -5.751 | 0.00 | 0.00 | H |
| CONNECT | 1 | 3 | 4 | 5 | | | | | |
| CONNECT | 2 | 4 | 11 | 25 | | | | | |
| CONNECT | 3 | 1 | 6 | | | | | | |
| CONNECT | 3 | 22 | | | | | | | |
| CONNECT | 3 | 22 | | | | | | | |
| CONNECT | 4 | 1 | 2 | 9 | 24 | | | | |
| CONNECT | 5 | 1 | | | | | | | |
| CONNECT | 5 | 7 | | | | | | | |
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| CONNECT | 5 | 7 | | | | | | | |
| CONNECT | 5 | 7 | | | | | | | |
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| CONECT | 5 | 8 |
| CONECT | 5 | 8 |
| CONECT | 6 | 3 |
| CONECT | 6 | 10 |
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| CONECT | 7 | 5 |
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| CONECT | 7 | 5 |
| CONECT | 7 | 5 |
| CONECT | 7 | 12 |
| CONECT | 7 | 12 |
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| CONECT | 7 | 26 |
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| CONECT | 8 | 13 |
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| CONECT | 8 | 27 |
| CONECT | 9 | 4 |
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| CONECT | 11 | 6 |
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| CONNECT | 11 | 16 |
| CONNECT | 12 | 7 |
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| CONNECT | 12 | 29 |
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| CONNECT | 13 | 30 |
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| CONNECT | 14 | 31 |
| CONNECT | 15 | 10 |
| CONNECT | 15 | 10 |
| CONNECT | 15 | 10 |
| CONNECT | 15 | 10 |
| CONNECT | 15 | 20 |
| CONNECT | 15 | 20 |
| CONNECT | 15 | 20 |
| CONNECT | 15 | 20 |
| CONNECT | 15 | 32 |
| CONNECT | 16 | 11 |
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| CONNECT | 16 | 11 |
| CONNECT | 16 | 20 |
| CONNECT | 16 | 20 |
| CONNECT | 16 | 20 |
| CONNECT | 16 | 20 |
| CONNECT | 16 | 33 |
| CONNECT | 17 | 12 |
| CONNECT | 17 | 12 |
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| CONNECT | 17 | 12 |
| CONNECT | 17 | 13 |
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| CONNECT | 17 | 13 |
| CONNECT | 17 | 13 |
| CONNECT | 17 | 34 |

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|--------|----|----|----|----|----|
| CONECT | 18 | 19 | | | |
| CONECT | 18 | 19 | | | |
| CONECT | 18 | 19 | | | |
| CONECT | 18 | 19 | | | |
| CONECT | 18 | 21 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 19 | 14 | | | |
| CONECT | 19 | 14 | | | |
| CONECT | 19 | 14 | | | |
| CONECT | 19 | 14 | | | |
| CONECT | 19 | 18 | | | |
| CONECT | 19 | 18 | | | |
| CONECT | 19 | 18 | | | |
| CONECT | 19 | 18 | | | |
| CONECT | 19 | 35 | | | |
| CONECT | 20 | 15 | | | |
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| CONECT | 20 | 15 | | | |
| CONECT | 20 | 16 | | | |
| CONECT | 20 | 16 | | | |
| CONECT | 20 | 16 | | | |
| CONECT | 20 | 16 | | | |
| CONECT | 20 | 36 | | | |
| CONECT | 21 | 18 | 37 | 38 | 39 |
| CONECT | 22 | 3 | | | |
| CONECT | 22 | 3 | | | |
| CONECT | 23 | 9 | | | |
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| CONECT | 23 | 9 | | | |
| CONECT | 23 | 18 | | | |
| CONECT | 23 | 18 | | | |
| CONECT | 23 | 18 | | | |
| CONECT | 23 | 18 | | | |
| CONECT | 24 | 4 | | | |
| CONECT | 25 | 2 | | | |
| CONECT | 26 | 7 | | | |
| CONECT | 27 | 8 | | | |
| CONECT | 28 | 10 | | | |
| CONECT | 29 | 12 | | | |
| CONECT | 30 | 13 | | | |
| CONECT | 31 | 14 | | | |
| CONECT | 32 | 15 | | | |
| CONECT | 33 | 16 | | | |
| CONECT | 34 | 17 | | | |
| CONECT | 35 | 19 | | | |
| CONECT | 36 | 20 | | | |
| CONECT | 37 | 21 | | | |
| CONECT | 38 | 21 | | | |
| CONECT | 39 | 21 | | | |
| END | | | | | |

Dataset S2. Cartesian coordinates of **(R)-Retro-2^{cycl}** that is energy minimized at the HF/6-31G(d) level and superimposed over **(S)-Retro-2^{cycl}**.

| | | | | | | | | | |
|---------|----|----|----|--------|--------|--------|------|------|---|
| HETATM | 1 | N | 1 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | N |
| HETATM | 2 | N | 1 | 2.160 | -0.959 | -0.106 | 0.00 | 0.00 | N |
| HETATM | 3 | C | 1 | 0.000 | 0.000 | 1.379 | 0.00 | 0.00 | C |
| HETATM | 4 | C | 1 | 1.275 | 0.000 | -0.729 | 0.00 | 0.00 | C |
| HETATM | 5 | C | 1 | -1.157 | 0.547 | -0.648 | 0.00 | 0.00 | C |
| HETATM | 6 | C | 1 | 1.282 | -0.373 | 2.029 | 0.00 | 0.00 | C |
| HETATM | 7 | C | 1 | -2.107 | -0.302 | -1.189 | 0.00 | 0.00 | C |
| HETATM | 8 | C | 1 | -1.330 | 1.920 | -0.733 | 0.00 | 0.00 | C |
| HETATM | 9 | C | 1 | 1.126 | -0.378 | -2.183 | 0.00 | 0.00 | C |
| HETATM | 10 | C | 1 | 1.404 | -0.294 | 3.413 | 0.00 | 0.00 | C |
| HETATM | 11 | C | 1 | 2.338 | -0.855 | 1.264 | 0.00 | 0.00 | C |
| HETATM | 12 | C | 1 | -3.222 | 0.220 | -1.824 | 0.00 | 0.00 | C |
| HETATM | 13 | C | 1 | -2.444 | 2.441 | -1.370 | 0.00 | 0.00 | C |
| HETATM | 14 | C | 1 | 0.953 | -1.609 | -2.696 | 0.00 | 0.00 | C |
| HETATM | 15 | C | 1 | 2.570 | -0.684 | 4.036 | 0.00 | 0.00 | C |
| HETATM | 16 | C | 1 | 3.515 | -1.260 | 1.891 | 0.00 | 0.00 | C |
| HETATM | 17 | C | 1 | -3.390 | 1.592 | -1.918 | 0.00 | 0.00 | C |
| HETATM | 18 | C | 1 | 1.022 | -0.393 | -4.678 | 0.00 | 0.00 | C |
| HETATM | 19 | C | 1 | 0.888 | -1.616 | -4.130 | 0.00 | 0.00 | C |
| HETATM | 20 | C | 1 | 3.621 | -1.170 | 3.264 | 0.00 | 0.00 | C |
| HETATM | 21 | C | 1 | 1.003 | -0.021 | -6.132 | 0.00 | 0.00 | C |
| HETATM | 22 | O | 1 | -0.980 | 0.266 | 2.016 | 0.00 | 0.00 | O |
| HETATM | 23 | S | 1 | 1.229 | 0.810 | -3.445 | 0.00 | 0.00 | S |
| HETATM | 24 | H | 1 | 1.701 | 1.004 | -0.676 | 0.00 | 0.00 | H |
| HETATM | 25 | H | 1 | 2.999 | -1.094 | -0.627 | 0.00 | 0.00 | H |
| HETATM | 26 | H | 1 | -1.968 | -1.363 | -1.107 | 0.00 | 0.00 | H |
| HETATM | 27 | H | 1 | -0.603 | 2.577 | -0.291 | 0.00 | 0.00 | H |
| HETATM | 28 | H | 1 | 0.567 | 0.071 | 3.976 | 0.00 | 0.00 | H |
| HETATM | 29 | H | 1 | -3.957 | -0.444 | -2.241 | 0.00 | 0.00 | H |
| HETATM | 30 | H | 1 | -2.573 | 3.507 | -1.431 | 0.00 | 0.00 | H |
| HETATM | 31 | H | 1 | 0.875 | -2.490 | -2.089 | 0.00 | 0.00 | H |
| HETATM | 32 | H | 1 | 2.666 | -0.619 | 5.104 | 0.00 | 0.00 | H |
| HETATM | 33 | H | 1 | 4.332 | -1.640 | 1.304 | 0.00 | 0.00 | H |
| HETATM | 34 | H | 1 | -4.257 | 1.996 | -2.411 | 0.00 | 0.00 | H |
| HETATM | 35 | H | 1 | 0.748 | -2.508 | -4.712 | 0.00 | 0.00 | H |
| HETATM | 36 | H | 1 | 4.534 | -1.481 | 3.740 | 0.00 | 0.00 | H |
| HETATM | 37 | H | 1 | 0.872 | -0.911 | -6.737 | 0.00 | 0.00 | H |
| HETATM | 38 | H | 1 | 1.930 | 0.457 | -6.433 | 0.00 | 0.00 | H |
| HETATM | 39 | H | 1 | 0.190 | 0.662 | -6.356 | 0.00 | 0.00 | H |
| CONNECT | 1 | 3 | 4 | 5 | | | | | |
| CONNECT | 2 | 4 | 11 | 25 | | | | | |
| CONNECT | 3 | 1 | 6 | | | | | | |
| CONNECT | 3 | 22 | | | | | | | |
| CONNECT | 3 | 22 | | | | | | | |
| CONNECT | 4 | 1 | 2 | 9 | 24 | | | | |
| CONNECT | 5 | 1 | | | | | | | |
| CONNECT | 5 | 7 | | | | | | | |
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| CONNECT | 7 | 5 |
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| CONNECT | 10 | 28 |
| CONNECT | 11 | 2 |
| CONNECT | 11 | 6 |
| CONNECT | 11 | 6 |
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| CONNECT | 11 | 6 |
| CONNECT | 11 | 16 |

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| CONNECT | 11 | 16 |
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| CONNECT | 12 | 7 |
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| CONNECT | 17 | 13 |

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| CONECT | 17 | 13 | | | |
| CONECT | 17 | 34 | | | |
| CONECT | 18 | 19 | | | |
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| CONECT | 18 | 19 | | | |
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| CONECT | 18 | 21 | | | |
| CONECT | 18 | 23 | | | |
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| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 19 | 14 | | | |
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| CONECT | 19 | 18 | | | |
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| CONECT | 20 | 16 | | | |
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| CONECT | 20 | 16 | | | |
| CONECT | 20 | 36 | | | |
| CONECT | 21 | 18 | 37 | 38 | 39 |
| CONECT | 22 | 3 | | | |
| CONECT | 22 | 3 | | | |
| CONECT | 23 | 9 | | | |
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| CONECT | 23 | 18 | | | |
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| CONECT | 23 | 18 | | | |
| CONECT | 24 | 4 | | | |
| CONECT | 25 | 2 | | | |
| CONECT | 26 | 7 | | | |
| CONECT | 27 | 8 | | | |
| CONECT | 28 | 10 | | | |
| CONECT | 29 | 12 | | | |
| CONECT | 30 | 13 | | | |
| CONECT | 31 | 14 | | | |
| CONECT | 32 | 15 | | | |
| CONECT | 33 | 16 | | | |
| CONECT | 34 | 17 | | | |
| CONECT | 35 | 19 | | | |
| CONECT | 36 | 20 | | | |
| CONECT | 37 | 21 | | | |
| CONECT | 38 | 21 | | | |

CONNECT 39 21
END

Dataset S3. Cartesian coordinates of **DA2MT** that is energy minimized at the HF/6-31G(d) level and superimposed over **(S)-Retro-2^{cycl}**.

| | | | | | | | | | |
|---------|----|---|---|--------|--------|--------|------|------|---|
| HETATM | 1 | N | 1 | 0.045 | -0.032 | 0.015 | 0.00 | 0.00 | N |
| HETATM | 2 | N | 1 | 2.198 | -0.957 | -0.099 | 0.00 | 0.00 | N |
| HETATM | 3 | C | 1 | 0.088 | 0.179 | 1.400 | 0.00 | 0.00 | C |
| HETATM | 4 | C | 1 | 1.128 | -0.571 | -0.668 | 0.00 | 0.00 | C |
| HETATM | 5 | C | 1 | -1.223 | 0.215 | -0.620 | 0.00 | 0.00 | C |
| HETATM | 6 | C | 1 | 1.320 | -0.270 | 2.049 | 0.00 | 0.00 | C |
| HETATM | 7 | C | 1 | -2.017 | -0.852 | -0.998 | 0.00 | 0.00 | C |
| HETATM | 8 | C | 1 | -1.653 | 1.516 | -0.818 | 0.00 | 0.00 | C |
| HETATM | 9 | C | 1 | 1.083 | -0.740 | -2.142 | 0.00 | 0.00 | C |
| HETATM | 10 | C | 1 | 1.475 | -0.147 | 3.433 | 0.00 | 0.00 | C |
| HETATM | 11 | C | 1 | 2.316 | -0.843 | 1.272 | 0.00 | 0.00 | C |
| HETATM | 12 | C | 1 | -3.238 | -0.617 | -1.609 | 0.00 | 0.00 | C |
| HETATM | 13 | C | 1 | -2.877 | 1.747 | -1.420 | 0.00 | 0.00 | C |
| HETATM | 14 | C | 1 | 1.658 | -1.783 | -2.774 | 0.00 | 0.00 | C |
| HETATM | 15 | C | 1 | 2.624 | -0.598 | 4.032 | 0.00 | 0.00 | C |
| HETATM | 16 | C | 1 | 3.487 | -1.300 | 1.890 | 0.00 | 0.00 | C |
| HETATM | 17 | C | 1 | -3.668 | 0.681 | -1.822 | 0.00 | 0.00 | C |
| HETATM | 18 | C | 1 | 1.038 | -0.539 | -4.629 | 0.00 | 0.00 | C |
| HETATM | 19 | C | 1 | 1.619 | -1.677 | -4.199 | 0.00 | 0.00 | C |
| HETATM | 20 | C | 1 | 3.632 | -1.177 | 3.249 | 0.00 | 0.00 | C |
| HETATM | 21 | C | 1 | 0.827 | -0.084 | -6.045 | 0.00 | 0.00 | C |
| HETATM | 22 | O | 1 | -0.836 | 0.671 | 1.978 | 0.00 | 0.00 | O |
| HETATM | 23 | S | 1 | 0.491 | 0.422 | -3.297 | 0.00 | 0.00 | S |
| HETATM | 24 | H | 1 | -1.678 | -1.857 | -0.822 | 0.00 | 0.00 | H |
| HETATM | 25 | H | 1 | -1.038 | 2.334 | -0.496 | 0.00 | 0.00 | H |
| HETATM | 26 | H | 1 | 0.682 | 0.299 | 4.003 | 0.00 | 0.00 | H |
| HETATM | 27 | H | 1 | -3.851 | -1.447 | -1.910 | 0.00 | 0.00 | H |
| HETATM | 28 | H | 1 | -3.212 | 2.756 | -1.575 | 0.00 | 0.00 | H |
| HETATM | 29 | H | 1 | 2.114 | -2.597 | -2.245 | 0.00 | 0.00 | H |
| HETATM | 30 | H | 1 | 2.755 | -0.508 | 5.095 | 0.00 | 0.00 | H |
| HETATM | 31 | H | 1 | 4.255 | -1.736 | 1.279 | 0.00 | 0.00 | H |
| HETATM | 32 | H | 1 | -4.617 | 0.864 | -2.292 | 0.00 | 0.00 | H |
| HETATM | 33 | H | 1 | 2.017 | -2.424 | -4.861 | 0.00 | 0.00 | H |
| HETATM | 34 | H | 1 | 4.533 | -1.528 | 3.721 | 0.00 | 0.00 | H |
| HETATM | 35 | H | 1 | 1.232 | -0.820 | -6.730 | 0.00 | 0.00 | H |
| HETATM | 36 | H | 1 | 1.323 | 0.861 | -6.234 | 0.00 | 0.00 | H |
| HETATM | 37 | H | 1 | -0.227 | 0.041 | -6.267 | 0.00 | 0.00 | H |
| CONNECT | 1 | | 3 | | | | | | |
| CONNECT | 1 | | 3 | | | | | | |
| CONNECT | 1 | | 3 | | | | | | |
| CONNECT | 1 | | 3 | | | | | | |
| CONNECT | 1 | | 4 | | | | | | |
| CONNECT | 1 | | 4 | | | | | | |
| CONNECT | 1 | | 4 | | | | | | |
| CONNECT | 1 | | 4 | | | | | | |
| CONNECT | 1 | | 5 | | | | | | |
| CONNECT | 2 | | 4 | | | | | | |
| CONNECT | 2 | | 4 | | | | | | |
| CONNECT | 2 | | 4 | | | | | | |

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|--------|---|----|
| CONECT | 2 | 4 |
| CONECT | 2 | 11 |
| CONECT | 2 | 11 |
| CONECT | 2 | 11 |
| CONECT | 2 | 11 |
| CONECT | 3 | 1 |
| CONECT | 3 | 1 |
| CONECT | 3 | 1 |
| CONECT | 3 | 1 |
| CONECT | 3 | 6 |
| CONECT | 3 | 6 |
| CONECT | 3 | 6 |
| CONECT | 3 | 6 |
| CONECT | 3 | 22 |
| CONECT | 3 | 22 |
| CONECT | 4 | 1 |
| CONECT | 4 | 1 |
| CONECT | 4 | 1 |
| CONECT | 4 | 1 |
| CONECT | 4 | 2 |
| CONECT | 4 | 2 |
| CONECT | 4 | 2 |
| CONECT | 4 | 2 |
| CONECT | 4 | 9 |
| CONECT | 5 | 1 |
| CONECT | 5 | 7 |
| CONECT | 5 | 7 |
| CONECT | 5 | 7 |
| CONECT | 5 | 7 |
| CONECT | 5 | 8 |
| CONECT | 5 | 8 |
| CONECT | 5 | 8 |
| CONECT | 5 | 8 |
| CONECT | 6 | 3 |
| CONECT | 6 | 3 |
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| CONECT | 6 | 3 |
| CONECT | 6 | 10 |
| CONECT | 6 | 10 |
| CONECT | 6 | 10 |
| CONECT | 6 | 10 |
| CONECT | 6 | 11 |
| CONECT | 6 | 11 |
| CONECT | 6 | 11 |
| CONECT | 6 | 11 |
| CONECT | 7 | 5 |
| CONECT | 7 | 5 |
| CONECT | 7 | 5 |
| CONECT | 7 | 5 |
| CONECT | 7 | 12 |
| CONECT | 7 | 12 |
| CONECT | 7 | 12 |
| CONECT | 7 | 12 |
| CONECT | 7 | 24 |
| CONECT | 8 | 5 |

| | | |
|---------|----|----|
| CONNECT | 8 | 5 |
| CONNECT | 8 | 5 |
| CONNECT | 8 | 5 |
| CONNECT | 8 | 13 |
| CONNECT | 8 | 13 |
| CONNECT | 8 | 13 |
| CONNECT | 8 | 13 |
| CONNECT | 8 | 25 |
| CONNECT | 9 | 4 |
| CONNECT | 9 | 14 |
| CONNECT | 9 | 14 |
| CONNECT | 9 | 14 |
| CONNECT | 9 | 14 |
| CONNECT | 9 | 23 |
| CONNECT | 9 | 23 |
| CONNECT | 9 | 23 |
| CONNECT | 9 | 23 |
| CONNECT | 10 | 6 |
| CONNECT | 10 | 6 |
| CONNECT | 10 | 6 |
| CONNECT | 10 | 6 |
| CONNECT | 10 | 15 |
| CONNECT | 10 | 15 |
| CONNECT | 10 | 15 |
| CONNECT | 10 | 15 |
| CONNECT | 10 | 26 |
| CONNECT | 11 | 2 |
| CONNECT | 11 | 2 |
| CONNECT | 11 | 2 |
| CONNECT | 11 | 2 |
| CONNECT | 11 | 6 |
| CONNECT | 11 | 6 |
| CONNECT | 11 | 6 |
| CONNECT | 11 | 6 |
| CONNECT | 11 | 16 |
| CONNECT | 11 | 16 |
| CONNECT | 11 | 16 |
| CONNECT | 11 | 16 |
| CONNECT | 12 | 7 |
| CONNECT | 12 | 7 |
| CONNECT | 12 | 7 |
| CONNECT | 12 | 7 |
| CONNECT | 12 | 17 |
| CONNECT | 12 | 17 |
| CONNECT | 12 | 17 |
| CONNECT | 12 | 17 |
| CONNECT | 12 | 27 |
| CONNECT | 13 | 8 |
| CONNECT | 13 | 8 |
| CONNECT | 13 | 8 |
| CONNECT | 13 | 8 |
| CONNECT | 13 | 17 |
| CONNECT | 13 | 17 |
| CONNECT | 13 | 17 |
| CONNECT | 13 | 17 |

| | | |
|--------|----|----|
| CONECT | 13 | 28 |
| CONECT | 14 | 9 |
| CONECT | 14 | 9 |
| CONECT | 14 | 9 |
| CONECT | 14 | 9 |
| CONECT | 14 | 19 |
| CONECT | 14 | 19 |
| CONECT | 14 | 19 |
| CONECT | 14 | 19 |
| CONECT | 14 | 29 |
| CONECT | 15 | 10 |
| CONECT | 15 | 10 |
| CONECT | 15 | 10 |
| CONECT | 15 | 10 |
| CONECT | 15 | 20 |
| CONECT | 15 | 20 |
| CONECT | 15 | 20 |
| CONECT | 15 | 20 |
| CONECT | 15 | 30 |
| CONECT | 16 | 11 |
| CONECT | 16 | 11 |
| CONECT | 16 | 11 |
| CONECT | 16 | 11 |
| CONECT | 16 | 20 |
| CONECT | 16 | 20 |
| CONECT | 16 | 20 |
| CONECT | 16 | 20 |
| CONECT | 16 | 31 |
| CONECT | 17 | 12 |
| CONECT | 17 | 12 |
| CONECT | 17 | 12 |
| CONECT | 17 | 12 |
| CONECT | 17 | 13 |
| CONECT | 17 | 13 |
| CONECT | 17 | 13 |
| CONECT | 17 | 13 |
| CONECT | 17 | 32 |
| CONECT | 18 | 19 |
| CONECT | 18 | 19 |
| CONECT | 18 | 19 |
| CONECT | 18 | 19 |
| CONECT | 18 | 21 |
| CONECT | 18 | 23 |
| CONECT | 18 | 23 |
| CONECT | 18 | 23 |
| CONECT | 18 | 23 |
| CONECT | 19 | 14 |
| CONECT | 19 | 14 |
| CONECT | 19 | 14 |
| CONECT | 19 | 14 |
| CONECT | 19 | 18 |
| CONECT | 19 | 18 |
| CONECT | 19 | 18 |
| CONECT | 19 | 18 |
| CONECT | 19 | 33 |

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CONNECT 20 15
CONNECT 20 15
CONNECT 20 15
CONNECT 20 15
CONNECT 20 16
CONNECT 20 16
CONNECT 20 16
CONNECT 20 16
CONNECT 20 34
CONNECT 21 18 35 36 37
CONNECT 22 3
CONNECT 22 3
CONNECT 23 9
CONNECT 23 9
CONNECT 23 9
CONNECT 23 9
CONNECT 23 18
CONNECT 23 18
CONNECT 23 18
CONNECT 23 18
CONNECT 24 7
CONNECT 25 8
CONNECT 26 10
CONNECT 27 12
CONNECT 28 13
CONNECT 29 14
CONNECT 30 15
CONNECT 31 16
CONNECT 32 17
CONNECT 33 19
CONNECT 34 20
CONNECT 35 21
CONNECT 36 21
CONNECT 37 21
END

```

Dataset S4. Cartesian coordinates of **Cpd 75** that is energy minimized at the HF/6-31G(d) level and superimposed over **(S)-Retro-2^{cycl}**.

```

HETATM 1 N 1 1.023 0.203 2.745 0.00 0.00 N
HETATM 2 N 1 1.090 -0.276 1.471 0.00 0.00 N
HETATM 3 N 1 2.945 -0.835 2.375 0.00 0.00 N
HETATM 4 N 1 2.325 -1.387 0.015 0.00 0.00 N
HETATM 5 N 1 -0.968 0.202 0.271 0.00 0.00 N
HETATM 6 C 1 2.145 -0.149 3.247 0.00 0.00 C
HETATM 7 C 1 2.231 -0.911 1.209 0.00 0.00 C
HETATM 8 C 1 0.319 -0.334 0.318 0.00 0.00 C
HETATM 9 C 1 1.113 -1.025 -0.550 0.00 0.00 C
HETATM 10 C 1 0.790 -1.426 -1.942 0.00 0.00 C
HETATM 11 C 1 -1.375 1.147 -0.705 0.00 0.00 C
HETATM 12 C 1 0.425 -2.738 -2.209 0.00 0.00 C
HETATM 13 C 1 0.859 -0.524 -3.003 0.00 0.00 C
HETATM 14 C 1 -0.754 2.399 -0.768 0.00 0.00 C
HETATM 15 C 1 -2.441 0.838 -1.557 0.00 0.00 C

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|---------|----|----|---|--------|--------|--------|------|------|----|
| HETATM | 16 | C | 1 | 0.104 | -3.136 | -3.493 | 0.00 | 0.00 | C |
| HETATM | 17 | C | 1 | 0.534 | -0.930 | -4.289 | 0.00 | 0.00 | C |
| HETATM | 18 | C | 1 | -1.188 | 3.309 | -1.721 | 0.00 | 0.00 | C |
| HETATM | 19 | C | 1 | -2.858 | 1.785 | -2.484 | 0.00 | 0.00 | C |
| HETATM | 20 | C | 1 | -3.142 | -0.500 | -1.486 | 0.00 | 0.00 | C |
| HETATM | 21 | C | 1 | 0.366 | 2.776 | 0.173 | 0.00 | 0.00 | C |
| HETATM | 22 | C | 1 | 0.150 | -2.235 | -4.538 | 0.00 | 0.00 | C |
| HETATM | 23 | C | 1 | -2.233 | 3.013 | -2.579 | 0.00 | 0.00 | C |
| HETATM | 24 | O | 1 | 1.277 | 0.733 | -2.746 | 0.00 | 0.00 | O |
| HETATM | 25 | Br | 1 | -0.410 | -4.936 | -3.821 | 0.00 | 0.00 | Br |
| HETATM | 26 | H | 1 | 2.438 | 0.069 | 4.251 | 0.00 | 0.00 | H |
| HETATM | 27 | H | 1 | 3.852 | -1.203 | 2.545 | 0.00 | 0.00 | H |
| HETATM | 28 | H | 1 | -1.675 | -0.458 | 0.508 | 0.00 | 0.00 | H |
| HETATM | 29 | H | 1 | 0.387 | -3.445 | -1.403 | 0.00 | 0.00 | H |
| HETATM | 30 | H | 1 | 0.594 | -0.227 | -5.100 | 0.00 | 0.00 | H |
| HETATM | 31 | H | 1 | 0.931 | 1.342 | -3.383 | 0.00 | 0.00 | H |
| HETATM | 32 | H | 1 | -0.713 | 4.274 | -1.773 | 0.00 | 0.00 | H |
| HETATM | 33 | H | 1 | -3.679 | 1.550 | -3.140 | 0.00 | 0.00 | H |
| HETATM | 34 | H | 1 | -2.443 | -1.325 | -1.581 | 0.00 | 0.00 | H |
| HETATM | 35 | H | 1 | -3.868 | -0.591 | -2.285 | 0.00 | 0.00 | H |
| HETATM | 36 | H | 1 | -3.681 | -0.629 | -0.550 | 0.00 | 0.00 | H |
| HETATM | 37 | H | 1 | 0.518 | 3.849 | 0.163 | 0.00 | 0.00 | H |
| HETATM | 38 | H | 1 | 0.142 | 2.472 | 1.189 | 0.00 | 0.00 | H |
| HETATM | 39 | H | 1 | 1.298 | 2.303 | -0.116 | 0.00 | 0.00 | H |
| HETATM | 40 | H | 1 | -0.101 | -2.545 | -5.534 | 0.00 | 0.00 | H |
| HETATM | 41 | H | 1 | -2.564 | 3.737 | -3.302 | 0.00 | 0.00 | H |
| CONNECT | 1 | 2 | | | | | | | |
| CONNECT | 1 | 2 | | | | | | | |
| CONNECT | 1 | 2 | | | | | | | |
| CONNECT | 1 | 2 | | | | | | | |
| CONNECT | 1 | 6 | | | | | | | |
| CONNECT | 1 | 6 | | | | | | | |
| CONNECT | 1 | 6 | | | | | | | |
| CONNECT | 1 | 6 | | | | | | | |
| CONNECT | 2 | 1 | | | | | | | |
| CONNECT | 2 | 1 | | | | | | | |
| CONNECT | 2 | 1 | | | | | | | |
| CONNECT | 2 | 7 | | | | | | | |
| CONNECT | 2 | 7 | | | | | | | |
| CONNECT | 2 | 7 | | | | | | | |
| CONNECT | 2 | 7 | | | | | | | |
| CONNECT | 2 | 8 | | | | | | | |
| CONNECT | 2 | 8 | | | | | | | |
| CONNECT | 2 | 8 | | | | | | | |
| CONNECT | 2 | 8 | | | | | | | |
| CONNECT | 3 | 6 | | | | | | | |
| CONNECT | 3 | 6 | | | | | | | |
| CONNECT | 3 | 6 | | | | | | | |
| CONNECT | 3 | 6 | | | | | | | |
| CONNECT | 3 | 7 | | | | | | | |
| CONNECT | 3 | 7 | | | | | | | |
| CONNECT | 3 | 7 | | | | | | | |
| CONNECT | 3 | 7 | | | | | | | |
| CONNECT | 3 | 27 | | | | | | | |

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|--------|----|----|----|----|
| CONECT | 4 | 7 | | |
| CONECT | 4 | 7 | | |
| CONECT | 4 | 7 | | |
| CONECT | 4 | 7 | | |
| CONECT | 4 | 9 | | |
| CONECT | 4 | 9 | | |
| CONECT | 4 | 9 | | |
| CONECT | 4 | 9 | | |
| CONECT | 5 | 8 | 11 | 28 |
| CONECT | 6 | 1 | | |
| CONECT | 6 | 1 | | |
| CONECT | 6 | 1 | | |
| CONECT | 6 | 1 | | |
| CONECT | 6 | 3 | | |
| CONECT | 6 | 3 | | |
| CONECT | 6 | 3 | | |
| CONECT | 6 | 3 | | |
| CONECT | 6 | 26 | | |
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| CONECT | 7 | 2 | | |
| CONECT | 7 | 2 | | |
| CONECT | 7 | 2 | | |
| CONECT | 7 | 3 | | |
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| CONECT | 7 | 3 | | |
| CONECT | 7 | 3 | | |
| CONECT | 7 | 4 | | |
| CONECT | 7 | 4 | | |
| CONECT | 7 | 4 | | |
| CONECT | 7 | 4 | | |
| CONECT | 8 | 2 | | |
| CONECT | 8 | 2 | | |
| CONECT | 8 | 2 | | |
| CONECT | 8 | 2 | | |
| CONECT | 8 | 5 | | |
| CONECT | 8 | 9 | | |
| CONECT | 8 | 9 | | |
| CONECT | 8 | 9 | | |
| CONECT | 8 | 9 | | |
| CONECT | 9 | 4 | | |
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| CONECT | 9 | 4 | | |
| CONECT | 9 | 4 | | |
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| CONECT | 9 | 8 | | |
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| CONECT | 10 | 9 | | |
| CONECT | 10 | 12 | | |
| CONECT | 10 | 12 | | |
| CONECT | 10 | 12 | | |
| CONECT | 10 | 12 | | |
| CONECT | 10 | 13 | | |
| CONECT | 10 | 13 | | |

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|---------|----|----|
| CONNECT | 10 | 13 |
| CONNECT | 10 | 13 |
| CONNECT | 11 | 5 |
| CONNECT | 11 | 14 |
| CONNECT | 11 | 14 |
| CONNECT | 11 | 14 |
| CONNECT | 11 | 14 |
| CONNECT | 11 | 15 |
| CONNECT | 11 | 15 |
| CONNECT | 11 | 15 |
| CONNECT | 11 | 15 |
| CONNECT | 12 | 10 |
| CONNECT | 12 | 10 |
| CONNECT | 12 | 10 |
| CONNECT | 12 | 10 |
| CONNECT | 12 | 16 |
| CONNECT | 12 | 16 |
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| CONNECT | 12 | 16 |
| CONNECT | 12 | 29 |
| CONNECT | 13 | 10 |
| CONNECT | 13 | 10 |
| CONNECT | 13 | 10 |
| CONNECT | 13 | 10 |
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| CONNECT | 13 | 17 |
| CONNECT | 13 | 17 |
| CONNECT | 13 | 17 |
| CONNECT | 13 | 24 |
| CONNECT | 14 | 11 |
| CONNECT | 14 | 11 |
| CONNECT | 14 | 11 |
| CONNECT | 14 | 11 |
| CONNECT | 14 | 18 |
| CONNECT | 14 | 18 |
| CONNECT | 14 | 18 |
| CONNECT | 14 | 18 |
| CONNECT | 14 | 21 |
| CONNECT | 15 | 11 |
| CONNECT | 15 | 11 |
| CONNECT | 15 | 11 |
| CONNECT | 15 | 11 |
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| CONNECT | 15 | 19 |
| CONNECT | 15 | 19 |
| CONNECT | 15 | 19 |
| CONNECT | 15 | 20 |
| CONNECT | 16 | 12 |
| CONNECT | 16 | 12 |
| CONNECT | 16 | 12 |
| CONNECT | 16 | 12 |
| CONNECT | 16 | 22 |
| CONNECT | 16 | 22 |
| CONNECT | 16 | 22 |
| CONNECT | 16 | 22 |

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|--------|----|----|----|----|----|
| CONECT | 16 | 25 | | | |
| CONECT | 17 | 13 | | | |
| CONECT | 17 | 13 | | | |
| CONECT | 17 | 13 | | | |
| CONECT | 17 | 13 | | | |
| CONECT | 17 | 22 | | | |
| CONECT | 17 | 22 | | | |
| CONECT | 17 | 22 | | | |
| CONECT | 17 | 22 | | | |
| CONECT | 17 | 30 | | | |
| CONECT | 18 | 14 | | | |
| CONECT | 18 | 14 | | | |
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| CONECT | 18 | 14 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 23 | | | |
| CONECT | 18 | 32 | | | |
| CONECT | 19 | 15 | | | |
| CONECT | 19 | 15 | | | |
| CONECT | 19 | 15 | | | |
| CONECT | 19 | 15 | | | |
| CONECT | 19 | 23 | | | |
| CONECT | 19 | 23 | | | |
| CONECT | 19 | 23 | | | |
| CONECT | 19 | 23 | | | |
| CONECT | 19 | 33 | | | |
| CONECT | 20 | 15 | 34 | 35 | 36 |
| CONECT | 21 | 14 | 37 | 38 | 39 |
| CONECT | 22 | 16 | | | |
| CONECT | 22 | 16 | | | |
| CONECT | 22 | 16 | | | |
| CONECT | 22 | 16 | | | |
| CONECT | 22 | 17 | | | |
| CONECT | 22 | 17 | | | |
| CONECT | 22 | 17 | | | |
| CONECT | 22 | 17 | | | |
| CONECT | 22 | 40 | | | |
| CONECT | 23 | 18 | | | |
| CONECT | 23 | 18 | | | |
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| CONECT | 23 | 18 | | | |
| CONECT | 23 | 19 | | | |
| CONECT | 23 | 19 | | | |
| CONECT | 23 | 19 | | | |
| CONECT | 23 | 19 | | | |
| CONECT | 23 | 41 | | | |
| CONECT | 24 | 13 | 31 | | |
| CONECT | 25 | 16 | | | |
| CONECT | 26 | 6 | | | |
| CONECT | 27 | 3 | | | |
| CONECT | 28 | 5 | | | |
| CONECT | 29 | 12 | | | |
| CONECT | 30 | 17 | | | |

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CONNECT 31 24
CONNECT 32 18
CONNECT 33 19
CONNECT 34 20
CONNECT 35 20
CONNECT 36 20
CONNECT 37 21
CONNECT 38 21
CONNECT 39 21
CONNECT 40 22
CONNECT 41 23
END

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Dataset S5. Cartesian coordinates of **(S)-Retro-1** that is energy minimized at the HF/6-31G(d) level and superimposed over **(S)-Retro-2^{cycl}**.

| | | | | | | | | | |
|--------|----|----|---|--------|--------|--------|------|------|----|
| HETATM | 1 | N | 1 | -2.734 | -1.342 | -1.020 | 0.00 | 0.00 | N |
| HETATM | 2 | N | 1 | 0.159 | -1.747 | -1.121 | 0.00 | 0.00 | N |
| HETATM | 3 | C | 1 | -2.216 | -0.058 | -0.728 | 0.00 | 0.00 | C |
| HETATM | 4 | C | 1 | -2.220 | -2.565 | -1.359 | 0.00 | 0.00 | C |
| HETATM | 5 | C | 1 | -3.048 | 1.020 | -1.009 | 0.00 | 0.00 | C |
| HETATM | 6 | C | 1 | -0.971 | 0.166 | -0.141 | 0.00 | 0.00 | C |
| HETATM | 7 | C | 1 | -0.725 | -2.863 | -1.342 | 0.00 | 0.00 | C |
| HETATM | 8 | C | 1 | -2.655 | 2.312 | -0.724 | 0.00 | 0.00 | C |
| HETATM | 9 | C | 1 | -0.572 | 1.468 | 0.112 | 0.00 | 0.00 | C |
| HETATM | 10 | C | 1 | -0.104 | -1.051 | 0.145 | 0.00 | 0.00 | C |
| HETATM | 11 | C | 1 | -1.411 | 2.528 | -0.168 | 0.00 | 0.00 | C |
| HETATM | 12 | C | 1 | 0.805 | -1.083 | -2.137 | 0.00 | 0.00 | C |
| HETATM | 13 | C | 1 | 1.090 | -0.854 | 1.074 | 0.00 | 0.00 | C |
| HETATM | 14 | C | 1 | 0.843 | -1.734 | -3.513 | 0.00 | 0.00 | C |
| HETATM | 15 | C | 1 | 2.400 | -1.141 | 0.723 | 0.00 | 0.00 | C |
| HETATM | 16 | C | 1 | 0.826 | -0.450 | 2.381 | 0.00 | 0.00 | C |
| HETATM | 17 | C | 1 | 1.688 | -0.936 | -4.500 | 0.00 | 0.00 | C |
| HETATM | 18 | C | 1 | 3.423 | -1.011 | 1.652 | 0.00 | 0.00 | C |
| HETATM | 19 | C | 1 | 1.844 | -0.314 | 3.306 | 0.00 | 0.00 | C |
| HETATM | 20 | C | 1 | 3.153 | -0.594 | 2.943 | 0.00 | 0.00 | C |
| HETATM | 21 | O | 1 | -2.966 | -3.455 | -1.654 | 0.00 | 0.00 | O |
| HETATM | 22 | O | 1 | 1.349 | -0.034 | -1.934 | 0.00 | 0.00 | O |
| HETATM | 23 | Br | 1 | -0.844 | 4.299 | 0.207 | 0.00 | 0.00 | Br |
| HETATM | 24 | H | 1 | -3.727 | -1.368 | -1.115 | 0.00 | 0.00 | H |
| HETATM | 25 | H | 1 | -4.009 | 0.847 | -1.459 | 0.00 | 0.00 | H |
| HETATM | 26 | H | 1 | -0.514 | -3.364 | -2.270 | 0.00 | 0.00 | H |
| HETATM | 27 | H | 1 | -0.582 | -3.603 | -0.562 | 0.00 | 0.00 | H |
| HETATM | 28 | H | 1 | -3.307 | 3.136 | -0.943 | 0.00 | 0.00 | H |
| HETATM | 29 | H | 1 | 0.399 | 1.650 | 0.527 | 0.00 | 0.00 | H |
| HETATM | 30 | H | 1 | -0.747 | -1.735 | 0.688 | 0.00 | 0.00 | H |
| HETATM | 31 | H | 1 | -0.173 | -1.830 | -3.886 | 0.00 | 0.00 | H |
| HETATM | 32 | H | 1 | 1.231 | -2.744 | -3.419 | 0.00 | 0.00 | H |
| HETATM | 33 | H | 1 | 2.637 | -1.457 | -0.271 | 0.00 | 0.00 | H |
| HETATM | 34 | H | 1 | -0.187 | -0.238 | 2.680 | 0.00 | 0.00 | H |
| HETATM | 35 | H | 1 | 1.299 | 0.067 | -4.622 | 0.00 | 0.00 | H |
| HETATM | 36 | H | 1 | 1.686 | -1.428 | -5.466 | 0.00 | 0.00 | H |
| HETATM | 37 | H | 1 | 2.711 | -0.851 | -4.159 | 0.00 | 0.00 | H |
| HETATM | 38 | H | 1 | 4.432 | -1.233 | 1.359 | 0.00 | 0.00 | H |

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|---------|----|----|----|----|-------|--------|-------|------|------|--|---|
| HETATM | 39 | H | | 1 | 1.616 | 0.003 | 4.308 | 0.00 | 0.00 | | H |
| HETATM | 40 | H | | 1 | 3.948 | -0.493 | 3.659 | 0.00 | 0.00 | | H |
| CONNECT | 1 | 3 | 4 | 24 | | | | | | | |
| CONNECT | 2 | 7 | 10 | 12 | | | | | | | |
| CONNECT | 3 | 1 | | | | | | | | | |
| CONNECT | 3 | 5 | | | | | | | | | |
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| CONNECT | 3 | 5 | | | | | | | | | |
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| CONNECT | 3 | 6 | | | | | | | | | |
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| CONNECT | 3 | 6 | | | | | | | | | |
| CONNECT | 4 | 1 | 7 | | | | | | | | |
| CONNECT | 4 | 21 | | | | | | | | | |
| CONNECT | 4 | 21 | | | | | | | | | |
| CONNECT | 5 | 3 | | | | | | | | | |
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| CONNECT | 5 | 8 | | | | | | | | | |
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| CONNECT | 5 | 8 | | | | | | | | | |
| CONNECT | 5 | 8 | | | | | | | | | |
| CONNECT | 5 | 25 | | | | | | | | | |
| CONNECT | 6 | 3 | | | | | | | | | |
| CONNECT | 6 | 3 | | | | | | | | | |
| CONNECT | 6 | 3 | | | | | | | | | |
| CONNECT | 6 | 3 | | | | | | | | | |
| CONNECT | 6 | 9 | | | | | | | | | |
| CONNECT | 6 | 9 | | | | | | | | | |
| CONNECT | 6 | 9 | | | | | | | | | |
| CONNECT | 6 | 9 | | | | | | | | | |
| CONNECT | 6 | 10 | | | | | | | | | |
| CONNECT | 7 | 2 | 4 | 26 | 27 | | | | | | |
| CONNECT | 8 | 5 | | | | | | | | | |
| CONNECT | 8 | 5 | | | | | | | | | |
| CONNECT | 8 | 5 | | | | | | | | | |
| CONNECT | 8 | 5 | | | | | | | | | |
| CONNECT | 8 | 11 | | | | | | | | | |
| CONNECT | 8 | 11 | | | | | | | | | |
| CONNECT | 8 | 11 | | | | | | | | | |
| CONNECT | 8 | 11 | | | | | | | | | |
| CONNECT | 8 | 28 | | | | | | | | | |
| CONNECT | 9 | 6 | | | | | | | | | |
| CONNECT | 9 | 6 | | | | | | | | | |
| CONNECT | 9 | 6 | | | | | | | | | |
| CONNECT | 9 | 6 | | | | | | | | | |
| CONNECT | 9 | 11 | | | | | | | | | |
| CONNECT | 9 | 11 | | | | | | | | | |
| CONNECT | 9 | 11 | | | | | | | | | |
| CONNECT | 9 | 11 | | | | | | | | | |
| CONNECT | 9 | 11 | | | | | | | | | |
| CONNECT | 9 | 29 | | | | | | | | | |
| CONNECT | 10 | 2 | 6 | 13 | 30 | | | | | | |
| CONNECT | 11 | 8 | | | | | | | | | |

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| CONECT | 11 | 8 | | | |
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| CONECT | 11 | 9 | | | |
| CONECT | 11 | 23 | | | |
| CONECT | 12 | 2 | 14 | | |
| CONECT | 12 | 22 | | | |
| CONECT | 12 | 22 | | | |
| CONECT | 13 | 10 | | | |
| CONECT | 13 | 15 | | | |
| CONECT | 13 | 15 | | | |
| CONECT | 13 | 15 | | | |
| CONECT | 13 | 15 | | | |
| CONECT | 13 | 16 | | | |
| CONECT | 13 | 16 | | | |
| CONECT | 13 | 16 | | | |
| CONECT | 13 | 16 | | | |
| CONECT | 14 | 12 | 17 | 31 | 32 |
| CONECT | 15 | 13 | | | |
| CONECT | 15 | 13 | | | |
| CONECT | 15 | 13 | | | |
| CONECT | 15 | 13 | | | |
| CONECT | 15 | 18 | | | |
| CONECT | 15 | 18 | | | |
| CONECT | 15 | 18 | | | |
| CONECT | 15 | 18 | | | |
| CONECT | 15 | 33 | | | |
| CONECT | 16 | 13 | | | |
| CONECT | 16 | 13 | | | |
| CONECT | 16 | 13 | | | |
| CONECT | 16 | 13 | | | |
| CONECT | 16 | 19 | | | |
| CONECT | 16 | 19 | | | |
| CONECT | 16 | 19 | | | |
| CONECT | 16 | 19 | | | |
| CONECT | 16 | 34 | | | |
| CONECT | 17 | 14 | 35 | 36 | 37 |
| CONECT | 18 | 15 | | | |
| CONECT | 18 | 15 | | | |
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| CONECT | 18 | 20 | | | |
| CONECT | 18 | 20 | | | |
| CONECT | 18 | 20 | | | |
| CONECT | 18 | 20 | | | |
| CONECT | 18 | 38 | | | |
| CONECT | 19 | 16 | | | |
| CONECT | 19 | 16 | | | |
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| CONECT | 19 | 20 | | | |
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| CONNECT | 19 | 20 |
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| CONNECT | 20 | 18 |
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| CONNECT | 20 | 40 |
| CONNECT | 21 | 4 |
| CONNECT | 21 | 4 |
| CONNECT | 22 | 12 |
| CONNECT | 22 | 12 |
| CONNECT | 23 | 11 |
| CONNECT | 24 | 1 |
| CONNECT | 25 | 5 |
| CONNECT | 26 | 7 |
| CONNECT | 27 | 7 |
| CONNECT | 28 | 8 |
| CONNECT | 29 | 9 |
| CONNECT | 30 | 10 |
| CONNECT | 31 | 14 |
| CONNECT | 32 | 14 |
| CONNECT | 33 | 15 |
| CONNECT | 34 | 16 |
| CONNECT | 35 | 17 |
| CONNECT | 36 | 17 |
| CONNECT | 37 | 17 |
| CONNECT | 38 | 18 |
| CONNECT | 39 | 19 |
| CONNECT | 40 | 20 |

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