

ONIOM2(B3LYP/6-31G*:PM3) optimized Cartesian coordinates for the transition states located for the acyl transfer reaction to cyclohexane-1,2-diol. Electronic energies (in a.u) at the ONIOM2(B3LYP/6-31G*:PM3) and single-point energies calculated at the B3LYP/6-31G**/ONIOM2(B3LYP/6-31G*:PM3) level of theory are given in parenthesis

Catalyst Moc-(π -Me)His-^AGly-Cha-Phe-OMe

(1R,2R)e,e- α Et= -844.665214 (-2913.1550836)	6 -5.511126 2.614834 4.592775	1 -3.929120 6.456043 -1.308261
6 -1.661134 3.301105 -0.640261	6 -5.482490 1.734581 3.516088	1 -3.125461 5.621009 -2.630039
6 -3.006163 3.076363 -1.338270	6 -3.600354 -3.230638 -1.561398	1 -4.209076 4.340710 -0.056222
6 -3.932306 4.289593 -1.119819	8 -1.463973 -0.272128 -0.840560	1 -4.864088 4.141346 -1.674936
6 -3.271660 5.612501 -1.541531	8 7.710033 0.544706 0.370433	1 2.977910 6.916112 -0.782585
6 -1.911061 5.819083 -0.845138	6 -3.153255 -0.720565 2.581869	1 1.294531 7.367281 -0.421632
6 -1.040522 4.606383 -1.119210	8 -1.908442 -0.570850 3.125443	1 2.113170 6.173634 0.612698
6 1.523587 5.493376 -1.327558	6 -1.513177 -1.409693 4.190991	1 -2.057950 -2.149214 -2.599839
8 1.407648 5.372985 -2.485415	8 -3.973050 -1.443166 3.104726	1 -4.093103 -3.237564 -0.562531
6 2.021576 6.546835 -0.405154	1 4.341452 -4.367577 0.626789	1 -3.379500 -4.295587 -1.783106
7 2.883818 3.853042 -0.659867	1 3.343040 -4.018637 -0.798221	1 -3.483682 2.171139 -0.922800
6 3.017385 2.650331 -1.321431	1 2.841077 -6.282989 0.090803	6 -4.978278 -2.322892 -5.062772
6 4.277091 2.136356 -1.119493	1 3.431729 -5.851522 2.486221	6 -4.011155 -2.865219 -4.023939
7 4.928010 3.073010 -0.320238	1 1.805014 -6.537258 2.353729	6 -4.570900 -2.685892 -2.611907
6 4.055120 4.074323 -0.075522	1 2.310636 -2.309225 3.072497	6 -5.923230 -3.389878 -2.498161
6 4.917601 0.875621 -1.634996	1 3.727730 -3.367639 2.921489	6 -6.896589 -2.858885 -3.539326
6 5.089562 -0.198679 -0.543476	1 1.816101 -4.591509 3.927913	6 -6.333501 -3.003196 -4.944603
7 6.320182 -1.019845 -0.726753	1 -0.234804 -5.040886 2.572627	1 -3.808604 -3.937923 -4.217526
6 7.562774 -0.438429 -0.348285	1 -0.053267 -3.305796 2.881928	1 -3.025383 -2.353527 -4.095111
6 3.918243 -1.206405 -0.507887	1 1.267827 -2.456204 -0.557763	1 -5.092024 -1.227278 -4.940323
8 3.288623 -1.513067 -1.508409	1 0.873168 -1.783786 1.042073	1 -4.564319 -2.472402 -6.078358
7 3.576700 -1.703559 0.774765	1 1.003557 -4.997798 -0.983178	1 -5.790131 -4.483380 -2.623638
6 2.733475 -2.928479 1.006925	1 0.365178 -6.026170 0.312929	1 -6.341333 -3.249997 -1.481977
6 3.300913 -4.175089 0.298071	1 4.328954 -1.644300 1.429193	1 -7.860873 -3.396807 -3.460485
6 2.424550 -5.388681 0.611619	1 5.174118 0.307736 0.453305	1 -7.126600 -1.794454 -3.332648
6 0.999136 -5.139541 0.115635	1 6.329792 -1.535053 -1.582625	1 -6.239342 -4.076599 -5.204178
6 0.414630 -3.906568 0.824892	1 5.896620 1.125036 -2.090852	1 -7.038896 -2.574401 -5.681937
6 1.292154 -2.675130 0.533230	1 4.291521 0.499029 -2.465317	1 -4.726978 -1.593269 -2.429111
6 2.408803 -5.639036 2.119365	1 2.201959 2.220689 -1.888733	1 -0.801139 4.513310 -2.183795
6 1.831762 -4.412840 2.826862	1 4.315979 4.936811 0.521187	8 0.258636 4.711051 -0.410071
6 0.404217 -4.165831 2.339989	1 -0.275265 -2.917122 -1.445810	1 0.584244 3.778705 -0.326469
6 2.704355 -3.192771 2.531381	1 -4.020598 -1.654842 0.319956	1 -1.427418 6.730493 -1.215506
6 -1.005693 -3.626400 0.310989	1 -2.412847 0.745591 1.142435	8 8.600085 -1.166844 -0.834211
8 -2.013026 -3.730051 0.991637	1 -0.641434 -0.886469 4.592848	6 9.909022 -0.823111 -0.418857
7 -1.143324 -3.247297 -1.064738	1 -2.277267 -1.526349 4.966864	1 10.026829 -0.916107 0.665632
6 -2.295115 -2.425523 -1.530661	1 -1.215046 -2.393679 3.796057	1 10.513935 -1.569692 -0.940066
6 -2.350998 -1.118403 -0.717833	1 -4.563657 1.592803 0.367522	1 10.179932 0.188101 -0.739443
7 -3.430259 -0.860299 0.144660	1 -5.482361 0.385357 1.300054	6 6.335146 3.088923 0.071601
6 -3.312199 0.089416 1.288563	1 -2.959750 3.160591 1.720820	1 6.696257 2.070962 0.323341
6 -4.554382 0.993328 1.310524	1 -3.016562 4.723991 3.650530	1 6.950453 3.488508 -0.740258
6 -4.565204 1.923408 2.480801	1 -4.651817 4.379348 5.492111	1 6.450415 3.725607 0.950465
6 -3.682394 3.003353 2.535760	1 -6.232652 2.460423 5.402680	1 -2.048597 5.932911 0.237483
6 -3.712729 3.880047 3.613094	1 -6.179433 0.887764 3.484482	1 -1.837092 3.369657 0.451410
6 -4.627424 3.687463 4.643465	1 -2.831966 2.900788 -2.407320	8 -0.648925 2.332630 -0.906576
		1 -0.968825 1.427350 -0.690262