



## Article

# Supplementary Materials: Adsorption of Selected Molecules on (TiO<sub>2</sub>)<sub>20</sub> Nano-Clusters: A Density-Functional-Theory Study

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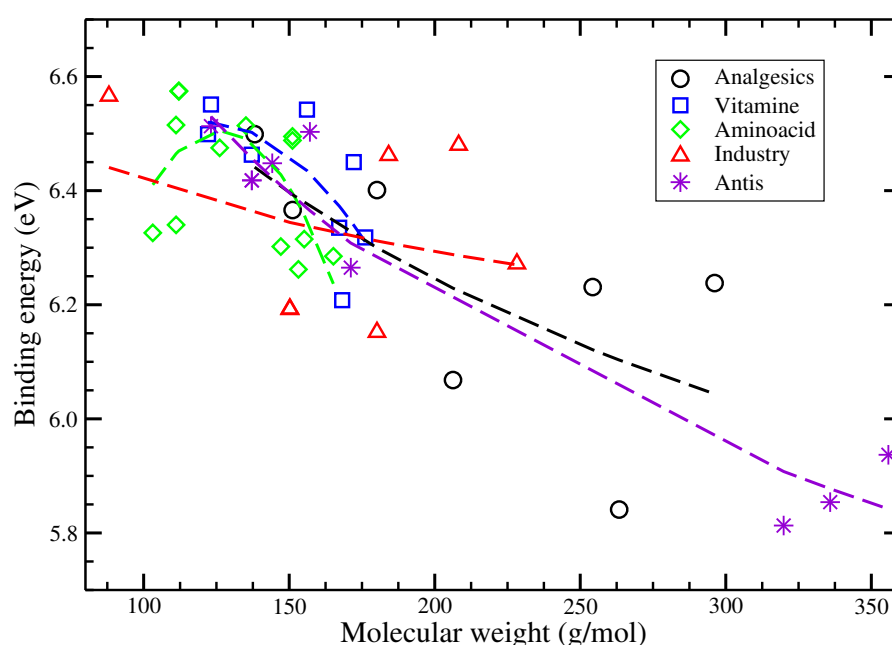
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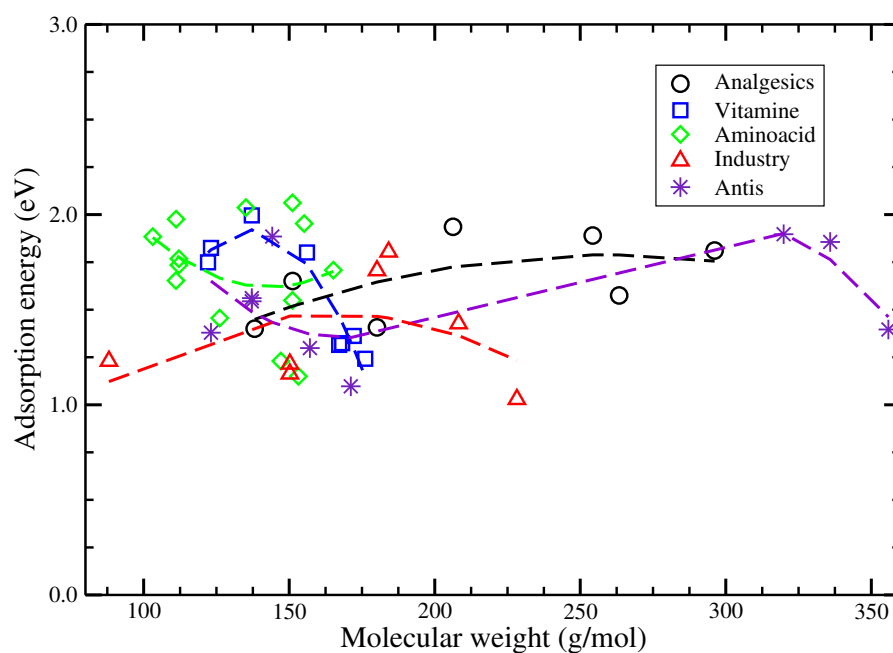
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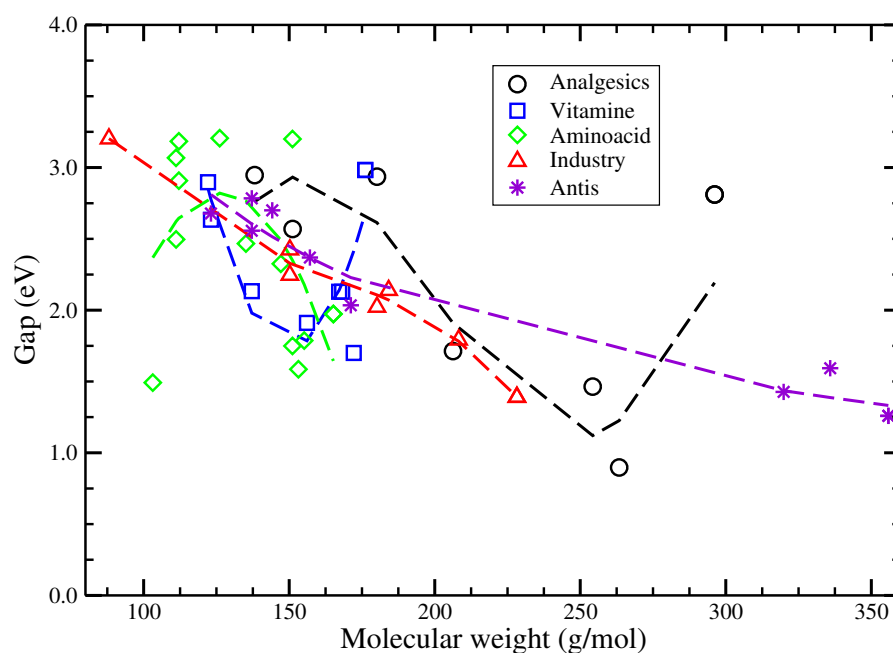
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**Figure S1.** Illustration of the Binding energies of the different molecules here considered as a function of the molecular weight. Calculated with the SIESTA code within the PBE approximation. The lines are a visual aid to illustrate the dependency.



**Figure S2.** Illustration of the Adsorption energies of the different molecules here considered as a function of the molecular weight. Calculated with the SIESTA code within the PBE approximation. The lines are a visual aid to illustrate the dependency.



**Figure S3.** Illustration of the Homo-Lumo gap of the different molecules here considered as a function of the molecular weight. Calculated with the SIESTA code within the PBE approximation. The lines are a visual aid to illustrate the dependency.

## 1. supplementary information

Type	Molecule	PBE (SIESTA)		
		Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Vitaminic-like	B3(1)	4.862	6.499	1.749
	B3(2)	5.014	6.551	1.825
	B10	4.875	6.463	1.996
	B13	5.071	6.542	1.801
	B6(1)	4.718	6.335	1.315
	B6(2)	4.474	6.208	1.324
	K3	5.160	6.450	1.362
	C	4.573	6.318	1.242
Aminoacid/hormones	DMG	4.132	6.326	1.884
	Cytosine	4.708	6.515	1.653
	Histamine	4.318	6.340	1.976
	Uracil-Bind O	4.905	6.574	1.735
	Uracil-Bind N		6.575	1.768
	Thymine	4.765	6.475	1.456
	Adenine	4.917	6.514	2.037
	Glutamic	4.415	6.302	1.230
	Guanine-Bind O	4.924	6.488	1.549
	Guanine-Bind N		6.495	2.062
	Dopamine	4.528	6.262	1.150
	Histidine	4.525	6.315	1.953
	Fenilalanine	4.663	6.285	1.708

Type	Molecule	PBE (SIESTA)		
		Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Analgesics	Salicylic	4.988	6.499	1.400
	Paracetamol	4.744	6.366	1.651
	Aspirin	4.966	6.401	1.407
	Ibuprofen	4.536	6.068	1.936
	Tramadol	4.391	5.841	1.575
Anti-inflammatory	Enantyum	4.995	6.231	1.890
	Diclofenac	4.897	6.238	1.811
Antibiotics	Pyrazinamide	4.845	6.513	1.379
	Isoniazid-Bind O	4.698	6.418	1.544
	Isoniazid-Bind N		6.418	1.561
Anti-virals	Favipiravir	4.913	6.503	1.298
	Chloroquine	4.440	5.813	1.897
	Hydroxychloroquine	4.534	5.854	1.856
Anti-parasites	Aminoquinoline	4.986	6.448	1.885
	Metronidazole	4.458	6.265	1.097
	Amodiaquine	4.705	5.937	1.396
Industry	Biotinidase	4.568	6.566	1.230
	Thymol	4.497	6.193	1.215
	Carva	4.498	6.192	1.163
	Glucose	4.263	6.152	1.706
	Galic-acid	4.970	6.462	1.804
	Anthraquinone	5.424	6.480	1.427
	Resveratrol	4.980	6.272	1.029

<b>B3LYP (G09)</b>				
Type	Molecule	Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Vitaminic-like	B3(1)	4.867	5.854	1.515
	B3(2)	5.010	5.893	1.449
	B10	4.896	5.838	1.730
	B13	4.983	5.874	1.278
	B6(1)	4.711	5.736	1.173
	B6(2)	4.481	5.634	1.141
	K3	5.196	5.863	1.230
	C	4.509	5.699	1.206
Aminoacid/hormones	DMG	4.175	5.696	1.563
	Cytosine	4.680	5.852	1.823
	Histamine	4.348	5.718	1.847
	Uracil-Bind O	4.863	5.893	1.436
	Uracil-Bind N		6.167	1.389
	Thymine	6.065	6.092	1.369
	Adenine	4.847	5.851	1.628
	Glutamic	4.401	5.688	1.169
	Guanine-Bind O	4.836	5.834	1.504
	Guanine-Bind N		5.834	1.491
	Dopamine	4.567	5.681	0.852
	Histidine	4.504	5.702	1.552
	Fenilalanine	4.699	5.711	1.385

<b>B3LYP (G09)</b>				
Type	Molecule	Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Analgesics	Salicylic	4.993	5.866	1.432
	Paracetamol	4.772	5.769	1.584
	Aspirin	4.969	5.805	1.294
	Ibuprofen	4.614	5.572	1.366
	Tramadol	4.451	5.398	1.020
Anti-inflammatory	Enantyum	5.039	5.722	1.343
	Diclofenac	4.890	5.694	1.273
Antibiotics	Pyrazinamide	4.802	5.854	1.410
	Isoniazid-Bind O	4.670	5.784	1.426
	Isoniazid-Bind N		5.781	1.231
Anti-virals	Favipiravir	4.829	5.844	1.359
	Chloroquine	4.495	5.385	1.354
	Hydroxychloroquine	4.483	5.371	1.299
Anti-parasites	Aminoquinoline	5.025	5.844	1.650
	Metronidazole	4.358	5.642	0.988
	Amodiaquine	4.838	5.492	0.617
Industry	Biotinidase	4.561	5.877	1.222
	Thymol	4.590	5.650	0.958
	Carva	4.591	5.651	1.003
	Glucose	4.225	5.563	1.373
	Galic-acid	4.923	5.828	1.423
	Anthraquinone	5.454	5.912	1.181
	Resveratrol	5.014	5.736	0.587

M06-L (G09)				
Type	Molecule	Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Vitaminic-like	B3(1)	4.898	6.299	1.648
	B3(2)	5.056	6.346	1.505
	B10	4.938	6.274	1.801
	B13	5.035	6.324	1.455
	B6(1)	4.748	6.153	1.319
	B6(2)	4.496	6.030	1.272
	K3	5.266	6.287	1.357
Aminoacid/hormones	C	4.541	6.118	1.322
	DMG	4.168	6.126	1.576
	Cytosine	4.692	6.303	1.828
	Histamine	4.339	6.144	1.989
	Uracil-Bind O	4.894	6.355	1.521
	Uracil-Bind N		6.638	1.593
	Thymine	6.097	6.542	1.431
	Adenine	4.858	6.293	1.788
	Glutamic	4.418	6.108	1.270
	Guanine-Bind O	4.854	6.271	1.569
	Guanine-Bind N		6.273	1.757
	Dopamine	4.589	6.088	0.968
	Histidine	4.514	6.115	1.604
	Fenilalanine	4.729	6.115	1.449

M06-L (G09)				
Type	Molecule	Ebind (eV/atom) Molecule	Ebind (eV/atom) Complex	Eads (eV) Molecule
Analgesics	Salicylic	5.049	6.311	1.534
	Paracetamol	4.808	6.189	1.669
	Aspirin	5.025	6.226	1.431
	Ibuprofen	4.646	5.937	1.500
	Tramadol	4.474	5.726	1.351
Anti-inflammatory	Enantyum	5.099	6.098	1.535
	Diclofenac	4.966	6.086	1.435
Antibiotics	Pyrazinamide	4.823	6.301	1.460
	Isoniazid-Bind O	4.687	6.215	1.541
	Isoniazid-Bind N		6.213	1.390
Anti-virals	Favipiravir	4.861	6.289	1.422
	Chloroquine	4.518	5.703	1.743
	Hydroxychloroquine	4.506	5.686	1.707
Anti-parasites	Aminoquinoline	5.067	6.272	1.900
	Metronidazole	4.375	6.054	1.151
	Amodiaquine	4.880	5.821	1.080
Industry	Biotinidase	4.584	6.348	1.207
	Thymol	4.617	6.045	1.079
	Carva	4.617	6.045	1.110
	Glucose	4.230	5.957	1.542
	Galic-acid	4.981	6.263	1.504
	Anthraquinone	5.539	6.329	1.416
	Resveratrol	5.071	6.125	0.750

### 1.1. coordinates

#### Vitaminic-like

##### B3(1)

74

C 0.642832 5.287764 1.019334

H 0.876245 6.376607 1.070211

N 0.142904 4.740412 2.149805

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**B3(2)**

74

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H 1.289708 5.090672 -1.077815  
C -0.160048 3.428532 2.104297  
C 0.579371 3.198767 -0.214136  
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**B10**

77

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**B13**

75

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O 0.040217 5.270064 3.307514  
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Ti 0.304602 -1.596647 -0.270915  
Ti 2.794389 -6.697393 1.716787  
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**B6(1)**

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**K3**

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#### **Aminoacid/hormones**

##### **DMG**

76

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H -1.417982 2.830274 1.408735  
N 0.345896 2.959309 0.153329  
C -0.371072 2.417248 1.297177

C -0.493069 0.899041 1.250245  
O -1.368175 0.349677 2.041171  
H -1.343137 -0.765653 1.786187  
O 0.252320 0.224459 0.441688  
C -0.483188 2.841179 -1.054533  
H -1.480854 3.348836 -0.921773  
H 0.037253 3.323389 -1.910124  
H -0.660310 1.772135 -1.308343  
O -0.659957 -3.993797 -3.962788  
O -4.767751 -6.644177 2.808088  
O 3.113623 -5.130077 1.766135  
O 2.060461 -8.906095 1.151253  
Ti -1.305714 -3.842025 1.492480  
Ti -3.053773 -5.998801 2.290263  
Ti -4.800265 -8.330562 2.018003  
O 4.053774 -8.080180 2.545695  
O 1.125715 -8.554400 -1.366379  
Ti -0.593437 -3.620963 -2.119347  
Ti 1.773261 -4.228100 0.806986  
O -0.044775 -1.826615 -1.794534  
O -1.708590 -7.866768 -1.203318  
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Ti -2.220621 -9.597815 1.899694  
Ti 3.496909 -9.782753 2.027144  
Ti -0.105734 -6.632064 2.110059  
Ti -0.201796 -8.289216 -5.418849  
Ti 2.996756 -9.070171 -0.710300  
Ti 0.317770 -1.765933 0.011003  
Ti 2.799918 -6.949009 1.696451  
Ti -0.624077 -9.501122 -0.790998  
Ti 0.602765 -10.212634 1.875625  
Ti 1.808064 -8.539730 -3.303758  
Ti -2.301929 -5.950971 -1.302289  
Ti 1.789230 -6.278320 -1.332548  
Ti -2.089455 -8.613642 -3.213294  
Ti -0.691501 -5.835579 -3.982920  
O -2.801654 -4.162193 2.543331  
O 4.135901 -10.166827 0.346017  
O 1.076485 -6.308486 0.537583  
O -3.958034 -6.572958 -0.978935  
O -1.061841 -10.073840 -2.438230  
O 0.185368 -4.567400 2.313114  
O -0.530649 -8.556654 1.457262  
O 2.344603 -6.812569 -3.079900  
O 2.157974 -10.854434 2.764604  
O 1.381232 -7.061184 3.020350  
O -1.818743 -5.635540 0.694971  
O 3.241247 -9.448607 -2.503016  
O -2.334380 -6.460200 -3.336968  
O -5.292784 -8.835214 0.286704  
O -0.362366 -6.484585 -5.742777  
O -0.138481 -7.824116 -3.576813  
O 2.412537 -4.626093 -0.960885  
O -2.440996 -10.037234 0.092386

O 0.374244 -10.820120 0.166768  
O -3.140232 -7.824933 1.260069  
O 1.473216 -9.042291 -5.109036  
O 1.912400 -2.355090 0.764378  
O -0.041368 -3.740639 -0.134744  
O -1.865550 -9.036965 -5.037108  
O -2.298273 -4.071426 -1.638817  
O -1.648012 -6.664508 3.244489  
O -1.007759 -10.766567 2.658544  
O -3.875966 -9.695069 2.834631  
O 3.357298 -7.264621 -0.379710  
O -1.160156 -1.949655 1.271289  
O -0.036769 -5.588690 -2.058836  
O -3.741365 -9.031270 -2.471111

### Cytosine

73

C -0.913885 2.235416 2.586674  
N -1.053286 2.207039 3.944458  
H -1.596393 2.952309 4.386208  
H -1.123588 1.276654 4.375330  
C -1.113893 3.490096 1.891878  
H -1.438427 4.403553 2.426987  
N -0.540940 1.089309 1.970813  
C -0.867991 3.493870 0.530139  
C -0.276433 1.152038 0.651197  
H -0.986597 4.392804 -0.108677  
N -0.452538 2.336444 -0.059805  
H -0.249913 2.273586 -1.065979  
O 0.163414 0.176748 -0.059850  
O -0.850680 -4.233147 -4.030074  
O -4.855074 -6.816977 2.836073  
O 2.961320 -5.030245 1.753724  
O 2.045662 -8.855857 1.210304  
Ti -1.506851 -3.904142 1.385973  
Ti -3.173125 -6.107493 2.281935  
Ti -4.807043 -8.529667 2.102364  
O 4.023229 -7.911465 2.563506  
O 1.127989 -8.685645 -1.346766  
Ti -0.806976 -3.778647 -2.193156  
Ti 1.569560 -4.210523 0.796423  
O -0.430151 -1.969006 -1.897968  
O -1.729010 -8.060607 -1.146469  
Ti -3.719120 -8.723388 -0.606108  
Ti -2.185678 -9.705848 2.017320  
Ti 3.512984 -9.642197 2.094728  
Ti -0.205714 -6.648644 2.111983  
Ti -0.211746 -8.530974 -5.370371  
Ti 3.001876 -9.026693 -0.677512  
Ti -0.002478 -1.859634 -0.062952  
Ti 2.707510 -6.859072 1.702888  
Ti -0.593152 -9.640570 -0.701339  
Ti 0.654913 -10.205478 1.999692  
Ti 1.823610 -8.590715 -3.278658  
Ti -2.397305 -6.158809 -1.296584

Ti 1.693089 -6.268329 -1.331880  
 Ti -2.095215 -8.871353 -3.138919  
 Ti -0.791521 -6.070720 -3.978596  
 O -3.012189 -4.259452 2.437831  
 O 4.160233 -10.063686 0.424007  
 O 0.973436 -6.333349 0.531416  
 O -4.030093 -6.842929 -0.956637  
 O -1.037518 -10.284268 -2.318905  
 O 0.010793 -4.568923 2.250179  
 O -0.543707 -8.610806 1.546495  
 O 2.244925 -6.830639 -3.082322  
 O 2.242586 -10.758342 2.889232  
 O 1.301491 -6.982454 3.036285  
 O -1.937277 -5.772554 0.672132  
 O 3.322863 -9.381149 -2.459511  
 O -2.410051 -6.743511 -3.323534  
 O -5.275174 -9.103266 0.386396  
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 O -0.160781 -8.027881 -3.539565  
 O 2.245542 -4.597858 -0.993104  
 O -2.380659 -10.205869 0.227451  
 O 0.444561 -10.884430 0.319535  
 O -3.166214 -7.984570 1.334619  
 O 1.523396 -9.149329 -5.070911  
 O 1.622706 -2.353921 0.755444  
 O -0.222499 -3.852652 -0.223120  
 O -1.849711 -9.334632 -4.952603  
 O -2.489343 -4.296297 -1.678630  
 O -1.738692 -6.669327 3.260009  
 O -0.929662 -10.796164 2.820609  
 O -3.845497 -9.847714 2.949147  
 O 3.276226 -7.200619 -0.368448  
 O -1.390243 -2.030073 1.145382  
 O -0.163536 -5.737004 -2.070824  
 O -3.726341 -9.322415 -2.369437

### Histamine

77

N 0.133956 1.079879 -0.473704  
 C 0.512628 2.347654 -0.837690  
 H 0.763949 2.647124 -1.864815  
 C -0.206819 1.120298 0.869470  
 H -0.695197 0.281584 1.410148  
 C 0.381820 3.128254 0.326141  
 C 0.518476 4.628580 0.384539  
 C -0.434289 5.327659 -0.614855  
 H -0.464265 6.425598 -0.379456  
 H -1.468454 4.929715 -0.461444  
 N -0.045594 5.033465 -2.021871  
 H 0.868075 5.490917 -2.182034  
 H -0.687771 5.545382 -2.648672  
 N -0.044247 2.340793 1.393731  
 H -0.015353 0.278707 -1.109708  
 H 1.571493 4.938142 0.157618  
 H 0.294923 4.971718 1.422787

O -0.688592 -3.774958 -3.589033  
O -4.745850 -6.704927 3.071193  
O 3.145459 -5.164584 2.110464  
O 2.063405 -8.896072 1.308448  
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Ti -3.034938 -6.044603 2.556340  
Ti -4.793945 -8.367159 2.229717  
O 4.058208 -8.141137 2.739327  
O 1.127430 -8.450097 -1.205283  
Ti -0.602044 -3.456153 -1.743391  
Ti 1.807850 -4.238273 1.206477  
O -0.131098 -1.657938 -1.281998  
O -1.701019 -7.767181 -0.989360  
Ti -3.722208 -8.397823 -0.495602  
Ti -2.209801 -9.630022 2.032828  
Ti 3.499041 -9.815767 2.144550  
Ti -0.103773 -6.664262 2.350987  
Ti -0.207375 -8.007195 -5.230350  
Ti 2.997194 -8.982572 -0.568221  
Ti 0.309451 -1.812435 0.549425  
Ti 2.806096 -6.980547 1.933967  
Ti -0.608099 -9.413363 -0.654901  
Ti 0.606905 -10.233101 1.993875  
Ti 1.811649 -8.336541 -3.137239  
Ti -2.292833 -5.856730 -1.006630  
Ti 1.803846 -6.133888 -1.079506  
Ti -2.092954 -8.434207 -3.031132  
Ti -0.692499 -5.622348 -3.680928  
O -2.797326 -4.211760 2.858077  
O 4.133143 -10.125445 0.447849  
O 1.104737 -6.268085 0.796912  
O -3.949049 -6.475674 -0.692456  
O -1.065350 -9.920997 -2.320569  
O 0.193587 -4.615388 2.634902  
O -0.525290 -8.563157 1.632020  
O 2.339328 -6.611958 -2.850171  
O 2.161609 -10.910540 2.851033  
O 1.386425 -7.125715 3.245645  
O -1.768859 -5.633937 0.985987  
O 3.246621 -9.274146 -2.377104  
O -2.332231 -6.269362 -3.056112  
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O 2.444125 -4.518429 -0.602027  
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O 1.471440 -8.763753 -4.959263  
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O 0.017533 -3.687320 0.221349  
O -1.872005 -8.769335 -4.870124  
O -2.276201 -3.954990 -1.222778  
O -1.634112 -6.733123 3.495308

O -0.996652 -10.824793 2.754465  
O -3.867080 -9.777471 2.961258  
O 3.359606 -7.198167 -0.166092  
O -1.069194 -1.949390 1.744669  
O -0.021475 -5.434382 -1.764042  
O -3.744943 -8.861941 -2.297044

#### Uracil-Bind O

72

N -0.155108 2.136718 3.624876  
H -0.359487 2.564429 4.536740  
C 0.504261 2.282804 1.332340  
C -0.373330 0.744108 3.594546  
C 0.280231 0.855556 1.221451  
C 0.265452 2.881868 2.557765  
N -0.061528 0.159568 2.360899  
H -0.465040 -0.815988 2.165504  
H 0.390040 3.973228 2.719140  
O -0.797490 0.123477 4.574096  
H 0.824317 2.851788 0.439823  
O 0.379400 0.225067 0.102001  
O -0.809991 -4.223694 -4.005960  
O -4.785434 -6.723497 2.828131  
O 3.021371 -5.041784 1.741867  
O 2.079813 -8.862008 1.228601  
Ti -1.400543 -3.832579 1.400400  
Ti -3.097362 -6.050513 2.257841  
Ti -4.763474 -8.456389 2.148026  
O 4.067501 -7.936955 2.572764  
O 1.136066 -8.663486 -1.317902  
Ti -0.768047 -3.772988 -2.179758  
Ti 1.642204 -4.217464 0.784002  
O -0.283673 -1.954381 -1.944019  
O -1.710435 -8.043547 -1.114184  
Ti -3.718702 -8.678624 -0.573075  
Ti -2.156430 -9.685200 2.049781  
Ti 3.552497 -9.665513 2.104950  
Ti -0.159184 -6.619258 2.144215  
Ti -0.218632 -8.526609 -5.342720  
Ti 3.008569 -9.051754 -0.656999  
Ti 0.156223 -1.820820 -0.150167  
Ti 2.757315 -6.876872 1.720064  
Ti -0.576845 -9.622454 -0.667332  
Ti 0.681193 -10.196726 2.038148  
Ti 1.829895 -8.610193 -3.258575  
Ti -2.351775 -6.138024 -1.264777  
Ti 1.719055 -6.291421 -1.324213  
Ti -2.072596 -8.863019 -3.097628  
Ti -0.775011 -6.065642 -3.950198  
O -2.932632 -4.190126 2.384099  
O 4.164581 -10.108371 0.428310  
O 1.019314 -6.312185 0.554994  
O -3.993369 -6.793851 -0.903179  
O -1.018258 -10.278454 -2.277733  
O 0.091034 -4.519149 2.262955

O -0.505869 -8.584948 1.606947  
O 2.255362 -6.846206 -3.078253  
O 2.271207 -10.751513 2.918600  
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O 3.310587 -9.418301 -2.444457  
O -2.389390 -6.718263 -3.285011  
O -5.274662 -9.009726 0.444520  
O -0.463197 -6.747508 -5.707696  
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O 2.284620 -4.620626 -1.003657  
O -2.368886 -10.175513 0.258668  
O 0.462682 -10.862122 0.351880  
O -3.115477 -7.949601 1.359331  
O 1.507845 -9.174779 -5.045588  
O 1.748462 -2.348388 0.676120  
O -0.165531 -3.804670 -0.224019  
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O -1.690497 -6.597654 3.284630  
O -0.900750 -10.785785 2.850651  
O -3.810252 -9.792797 2.988589  
O 3.308053 -7.228098 -0.366348  
O -1.181901 -1.937735 1.193772  
O -0.145998 -5.731791 -2.041721  
O -3.718016 -9.282078 -2.334524

#### Uracil-Bind N

71

N -0.051190 2.349292 1.207107  
H -0.001349 2.771457 2.141744  
C -0.277025 2.490549 -1.178334  
C 0.108465 0.971950 1.161098  
C -0.172175 1.022628 -1.254131  
C -0.215359 3.095564 0.062044  
N 0.051379 0.356975 -0.064542  
H -0.304570 4.195177 0.183349  
O 0.287818 0.259547 2.185397  
H -0.415262 3.067645 -2.112635  
O -0.274002 0.407067 -2.364083  
O -0.803869 -4.005189 -3.882642  
O -4.882860 -6.919894 2.770712  
O 2.961602 -5.089636 1.855345  
O 2.050346 -8.877189 1.164192  
Ti -1.529961 -3.928056 1.516317  
Ti -3.203286 -6.187386 2.249650  
Ti -4.828671 -8.613297 1.998157  
O 4.004109 -7.984382 2.576459  
O 1.125441 -8.568305 -1.376453  
Ti -0.781922 -3.660175 -2.036193  
Ti 1.567434 -4.236593 0.942403  
O -0.277365 -1.859277 -1.535973  
O -1.725044 -7.982281 -1.200253  
Ti -3.731966 -8.674867 -0.704090  
Ti -2.189161 -9.766242 1.879155

Ti 3.522032 -9.698828 2.039468  
Ti -0.240756 -6.712843 2.120812  
Ti -0.175399 -8.268501 -5.402597  
Ti 3.001228 -8.969430 -0.698086  
Ti 0.044978 -1.723667 0.364087  
Ti 2.690027 -6.910672 1.739689  
Ti -0.580059 -9.583369 -0.796633  
Ti 0.661897 -10.256300 1.868376  
Ti 1.838635 -8.448391 -3.293361  
Ti -2.387259 -6.091863 -1.285165  
Ti 1.715955 -6.178892 -1.292783  
Ti -2.064119 -8.710192 -3.213428  
Ti -0.764434 -5.857220 -3.935332  
O -3.073422 -4.346470 2.478853  
O 4.173592 -10.038444 0.355962  
O 0.977510 -6.305895 0.568882  
O -4.026221 -6.778245 -0.981557  
O -0.999796 -10.145101 -2.456262  
O -0.024592 -4.651303 2.358633  
O -0.551476 -8.651904 1.434385  
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O 2.235878 -10.837871 2.767260  
O 1.261693 -7.106514 3.034502  
O -1.921167 -5.780221 0.693093  
O 3.311697 -9.286228 -2.492951  
O -2.382488 -6.555513 -3.318632  
O -5.298028 -9.093880 0.258666  
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O 0.469478 -10.865238 0.157289  
O -3.184447 -8.032524 1.247380  
O 1.529793 -8.955882 -5.099057  
O 1.622699 -2.375211 1.095101  
O -0.222348 -3.758514 -0.057220  
O -1.815776 -9.083149 -5.046494  
O -2.461653 -4.197826 -1.584358  
O -1.785878 -6.798441 3.232459  
O -0.922751 -10.869388 2.657190  
O -3.847973 -9.950532 2.794279  
O 3.289294 -7.155698 -0.351138  
O -1.414321 -2.052261 1.429486  
O -0.152863 -5.596747 -2.000900  
O -3.708480 -9.191166 -2.490812

**Thymine**

75

C -0.832969 2.131879 2.842619  
O -0.994162 1.901002 4.049207  
C -0.988664 3.450665 2.183289  
C -1.388936 4.620685 3.037901  
H -2.477209 4.572641 3.284544  
H -1.190453 5.586296 2.523345  
H -0.843483 4.596133 4.008872



N -0.454398 1.077959 1.948870  
H -0.411559 0.114637 2.329047  
C -0.792244 3.539300 0.822294  
C -0.249030 1.190685 0.603644  
H -0.913374 4.496135 0.278027  
N -0.446276 2.432225 0.061032  
H -0.269070 2.500432 -0.947668  
O 0.123916 0.231649 -0.150097  
O -0.841672 -4.250024 -4.045098  
O -4.841359 -6.777772 2.833082  
O 2.963754 -5.025780 1.742784  
O 2.046501 -8.857923 1.213293  
Ti -1.488665 -3.873121 1.397888  
Ti -3.156076 -6.082152 2.284242  
Ti -4.803985 -8.497793 2.107088  
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O 1.121211 -8.691771 -1.338935  
Ti -0.794870 -3.785711 -2.215300  
Ti 1.581194 -4.212490 0.782462  
O -0.367019 -1.980171 -1.940565  
O -1.729319 -8.051010 -1.142284  
Ti -3.721173 -8.703397 -0.602470  
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Ti 3.513067 -9.645348 2.102048  
Ti -0.201878 -6.644333 2.107765  
Ti -0.218166 -8.556405 -5.365121  
Ti 2.998904 -9.047631 -0.667748  
Ti 0.024310 -1.860177 -0.104777  
Ti 2.710335 -6.861287 1.698791  
Ti -0.597919 -9.639008 -0.696568  
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Ti -2.392680 -6.149299 -1.300226  
Ti 1.696513 -6.280725 -1.347975  
Ti -2.099343 -8.870332 -3.132832  
Ti -0.784071 -6.086075 -3.986849  
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O 0.978186 -6.323357 0.525037  
O -4.026090 -6.822311 -0.957268  
O -1.046072 -10.286087 -2.309693  
O 0.027732 -4.554755 2.243805  
O -0.541301 -8.604036 1.546572  
O 2.244622 -6.864699 -3.086682  
O 2.239374 -10.756630 2.893789  
O 1.306296 -6.977928 3.030671  
O -1.932194 -5.740410 0.674479  
O 3.302081 -9.430199 -2.449151  
O -2.404615 -6.746724 -3.324584  
O -5.287099 -9.042273 0.392185  
O -0.447606 -6.773434 -5.737451  
O -0.163307 -8.042438 -3.536608  
O 2.244362 -4.603998 -1.007113  
O -2.394384 -10.188812 0.231433

O 0.439616 -10.883592 0.323121  
O -3.158338 -7.964571 1.340050  
O 1.499695 -9.213229 -5.053115  
O 1.631697 -2.336409 0.735048  
O -0.228132 -3.830494 -0.231078  
O -1.860576 -9.341604 -4.944562  
O -2.479983 -4.292056 -1.706884  
O -1.726721 -6.659095 3.260621  
O -0.935161 -10.787666 2.821832  
O -3.850893 -9.830755 2.946026  
O 3.274162 -7.219076 -0.373447  
O -1.327552 -1.981968 1.165110  
O -0.156938 -5.739408 -2.075416  
O -3.733267 -9.309628 -2.360931

#### Adenine

75

N -0.051772 2.240191 1.199611  
C -0.017028 2.318412 -1.233948  
C -0.002011 0.912208 1.095960  
C 0.037862 0.901401 -1.179963  
C -0.018773 1.611103 -3.255716  
H -0.039297 1.558343 -4.359140  
C -0.052672 2.970902 0.038861  
N 0.053512 0.162330 -0.042479  
N -0.052555 4.323074 0.155840  
H -0.314763 4.712670 1.066958  
H -0.285532 4.871983 -0.677494  
H -0.018558 0.334024 2.048707  
N -0.051202 2.749813 -2.559370  
N 0.050777 0.468316 -2.473894  
H -0.046632 -0.569788 -2.645145  
O -0.808992 -4.218468 -3.968684  
O -4.830123 -6.977656 2.791491  
O 2.999448 -5.159990 1.821005  
O 2.066479 -8.965201 1.193717  
Ti -1.470148 -4.034627 1.463238  
Ti -3.144166 -6.259820 2.259028  
Ti -4.784887 -8.678073 2.043744  
O 4.049487 -8.078656 2.567944  
O 1.127154 -8.682818 -1.365799  
Ti -0.779662 -3.829024 -2.132524  
Ti 1.607582 -4.336251 0.886628  
O -0.298022 -2.029304 -1.833945  
O -1.720952 -8.121202 -1.188612  
Ti -3.723008 -8.788539 -0.678663  
Ti -2.163365 -9.847984 1.932673  
Ti 3.533213 -9.799180 2.048159  
Ti -0.171538 -6.794263 2.140035  
Ti -0.183259 -8.485297 -5.401154  
Ti 2.996323 -9.096327 -0.690246  
Ti 0.046263 -1.979188 0.073438  
Ti 2.755695 -6.995915 1.729941  
Ti -0.576760 -9.704807 -0.773823  
Ti 0.674604 -10.345328 1.922132

Ti 1.842044 -8.584768 -3.295026  
Ti -2.378478 -6.215756 -1.290092  
Ti 1.716483 -6.316155 -1.308384  
Ti -2.064744 -8.890373 -3.193892  
Ti -0.769720 -6.065518 -3.954926  
O -2.991295 -4.413106 2.466317  
O 4.160383 -10.175304 0.364305  
O 1.013888 -6.413626 0.567137  
O -4.017140 -6.897843 -0.972021  
O -1.003048 -10.318741 -2.406709  
O 0.042397 -4.716530 2.315542  
O -0.517620 -8.734664 1.519382  
O 2.263180 -6.823891 -3.072061  
O 2.256840 -10.928989 2.800635  
O 1.336337 -7.141192 3.053608  
O -1.893782 -5.883188 0.683635  
O 3.312196 -9.414726 -2.482246  
O -2.385812 -6.737423 -3.319579  
O -5.273862 -9.186936 0.313575  
O -0.435051 -6.698078 -5.723286  
O -0.146144 -8.025504 -3.557378  
O 2.270052 -4.654247 -0.914254  
O -2.361884 -10.299717 0.128901  
O 0.481326 -10.956651 0.210437  
O -3.143527 -8.119283 1.282500  
O 1.545435 -9.110017 -5.098367  
O 1.632584 -2.455366 0.907126  
O -0.201633 -3.935004 -0.155322  
O -1.820956 -9.301362 -5.014840  
O -2.464777 -4.340415 -1.633604  
O -1.723000 -6.834435 3.252282  
O -0.907049 -10.971681 2.698363  
O -3.817089 -10.012539 2.863351  
O 3.305375 -7.284388 -0.359267  
O -1.307573 -2.148059 1.304653  
O -0.144321 -5.773035 -2.039661  
O -3.711863 -9.338395 -2.457552

#### **Glutamic**

#### **Guanine-Bind O**

76

N -0.051024 2.229307 0.900361  
H 0.039600 1.762297 1.813838  
C -0.056438 2.062839 -1.448285  
C -0.119274 3.607048 0.869522  
C -0.097457 3.498776 -1.363431  
C -0.048310 2.743869 -3.464375  
H -0.043096 2.793157 -4.568177  
C 0.049975 1.372438 -0.198223  
N -0.152590 4.304033 -0.261577  
O 0.267191 0.149611 0.062190  
N -0.054980 4.207297 2.129180  
H -0.441744 5.161123 2.123516  
H -0.497579 3.642282 2.864347  
N -0.043142 1.619074 -2.766154

N -0.057734 3.896714 -2.678722  
H -0.102340 4.868364 -3.002993  
O -0.879551 -4.128521 -3.985860  
O -4.858703 -6.880769 2.792167  
O 2.967160 -5.024804 1.804549  
O 2.057834 -8.834307 1.183511  
Ti -1.525707 -3.910615 1.415124  
Ti -3.177511 -6.154772 2.252664  
Ti -4.795194 -8.582501 2.042353  
O 4.031488 -7.920823 2.563575  
O 1.125888 -8.585592 -1.369715  
Ti -0.819801 -3.715866 -2.146186  
Ti 1.571023 -4.197192 0.855034  
O -0.447950 -1.918987 -1.829134  
O -1.724696 -8.029392 -1.184168  
Ti -3.727018 -8.695901 -0.678260  
Ti -2.164305 -9.737401 1.936301  
Ti 3.531258 -9.636724 2.050879  
Ti -0.209471 -6.652196 2.105995  
Ti -0.188573 -8.389429 -5.396494  
Ti 2.998687 -8.968221 -0.692518  
Ti -0.011204 -1.857090 0.005914  
Ti 2.717060 -6.850455 1.715744  
Ti -0.574190 -9.604374 -0.770963  
Ti 0.675229 -10.212660 1.930483  
Ti 1.839599 -8.481110 -3.296965  
Ti -2.390840 -6.130198 -1.298785  
Ti 1.712251 -6.194268 -1.321834  
Ti -2.068446 -8.797615 -3.191767  
Ti -0.782164 -5.964963 -3.955176  
O -3.030444 -4.303582 2.443351  
O 4.170201 -10.027172 0.370401  
O 0.990525 -6.295462 0.541749  
O -4.030992 -6.811209 -0.979934  
O -1.002695 -10.226070 -2.399256  
O -0.012229 -4.580777 2.280407  
O -0.535438 -8.615430 1.516150  
O 2.257893 -6.719732 -3.083647  
O 2.259656 -10.762176 2.827062  
O 1.299610 -7.005305 3.026055  
O -1.917135 -5.783974 0.676520  
O 3.315887 -9.302803 -2.482735  
O -2.395734 -6.665899 -3.319425  
O -5.282325 -9.094165 0.312754  
O -0.437019 -6.602972 -5.723363  
O -0.149864 -7.934541 -3.555435  
O 2.256466 -4.529048 -0.940995  
O -2.363576 -10.201581 0.137523  
O 0.483270 -10.848670 0.228779  
O -3.163133 -8.014616 1.281471  
O 1.542468 -9.012584 -5.100819  
O 1.601523 -2.341951 0.865292  
O -0.219593 -3.816702 -0.176266  
O -1.827044 -9.209997 -5.012224

O -2.494181 -4.262320 -1.627875  
O -1.747708 -6.712672 3.240293  
O -0.904224 -10.853245 2.707235  
O -3.821433 -9.909343 2.866853  
O 3.295278 -7.150355 -0.368932  
O -1.408608 -2.030108 1.205386  
O -0.151512 -5.665391 -2.054421  
O -3.712568 -9.261702 -2.451923

#### **Guanine-Bind N**

76

N 0.052241 2.231309 1.105844  
H 0.015262 2.703902 2.019146  
C 0.061760 2.352671 -1.265088  
C 0.034678 0.866494 1.094498  
C 0.053789 0.934551 -1.184192  
C 0.043565 1.612970 -3.273266  
H 0.033152 1.546506 -4.375063  
C 0.064832 3.136844 -0.038613  
N 0.055279 0.157192 -0.049968  
O 0.062885 4.357750 0.164468  
N 0.049454 0.167761 2.273195  
H -0.488674 -0.730246 2.212211  
H -0.195148 0.729185 3.096618  
N 0.053614 2.751515 -2.583545  
N 0.051333 0.477944 -2.470105  
H -0.014735 -0.551788 -2.647969  
O -0.786030 -4.238086 -3.968400  
O -4.781314 -6.894543 2.897245  
O 3.025158 -5.231734 1.823748  
O 2.076063 -9.010813 1.195384  
Ti -1.400950 -4.005988 1.517537  
Ti -3.097603 -6.201436 2.349291  
Ti -4.776005 -8.592295 2.128889  
O 4.061416 -8.142997 2.571007  
O 1.124389 -8.693630 -1.345979  
Ti -0.706020 -3.860219 -2.134211  
Ti 1.644827 -4.401130 0.880599  
O -0.158580 -2.073081 -1.841150  
O -1.721338 -8.076667 -1.127720  
Ti -3.733264 -8.728827 -0.597762  
Ti -2.170889 -9.818708 1.963868  
Ti 3.543761 -9.857358 2.052748  
Ti -0.153866 -6.809297 2.156641  
Ti -0.239514 -8.529241 -5.376562  
Ti 2.995035 -9.165482 -0.687081  
Ti 0.157947 -2.006938 0.043188  
Ti 2.763487 -7.060996 1.732756  
Ti -0.587072 -9.678658 -0.730817  
Ti 0.669940 -10.358690 1.936435  
Ti 1.822051 -8.657727 -3.293762  
Ti -2.360687 -6.185395 -1.222596  
Ti 1.733009 -6.393454 -1.312822  
Ti -2.105211 -8.850725 -3.139460  
Ti -0.773841 -6.086551 -3.949508

O -2.896563 -4.354673 2.562938  
O 4.161045 -10.238229 0.365330  
O 1.020948 -6.457234 0.574327  
O -4.007831 -6.828110 -0.898776  
O -1.038180 -10.282653 -2.358404  
O 0.099675 -4.726273 2.346420  
O -0.513717 -8.734539 1.523672  
O 2.279899 -6.905821 -3.074856  
O 2.247982 -10.959311 2.810856  
O 1.349616 -7.204407 3.060556  
O -1.870307 -5.849108 0.750494  
O 3.277527 -9.513253 -2.478941  
O -2.389072 -6.725230 -3.282932  
O -5.287700 -9.087562 0.401282  
O -0.470571 -6.740559 -5.715979  
O -0.159520 -8.042013 -3.539727  
O 2.296602 -4.731040 -0.913656  
O -2.393194 -10.252005 0.164686  
O 0.462069 -10.960831 0.225296  
O -3.134081 -8.054560 1.346913  
O 1.486855 -9.187145 -5.087378  
O 1.726253 -2.514624 0.870495  
O -0.169452 -3.950895 -0.130259  
O -1.886737 -9.298257 -4.958276  
O -2.400831 -4.321616 -1.619167  
O -1.674434 -6.822684 3.309720  
O -0.922253 -10.959282 2.714109  
O -3.820665 -9.953779 2.909224  
O 3.315677 -7.351494 -0.360754  
O -1.191932 -2.118649 1.343888  
O -0.106303 -5.790568 -2.040458  
O -3.737056 -9.290758 -2.370676

### **Dopamine**

82

C -0.035965 1.581194 0.147259  
C -0.089363 1.894883 -1.240068  
O 0.171926 0.237742 0.567415  
O 0.040920 0.974385 -2.259312  
H 0.124998 0.265577 1.556302  
H -0.123601 0.034000 -1.951991  
C -0.251548 3.267772 -1.585918  
H -0.272283 3.552955 -2.658685  
C -0.160558 2.567273 1.145848  
H -0.114524 2.259270 2.214063  
C -0.372455 4.279454 -0.596114  
C -0.580222 5.747889 -0.935782  
C 0.422302 6.360672 -1.933439  
H 1.450492 5.976520 -1.717790  
H 0.450233 7.472250 -1.769968  
N 0.055630 5.968656 -3.310233  
H 0.640737 6.492168 -3.980740  
H -0.900902 6.317965 -3.479667  
C -0.329767 3.915686 0.776793  
H -0.428842 4.701656 1.552910

H -0.544759 6.327052 0.017534  
H -1.612835 5.896368 -1.346964  
O -0.793424 -4.086532 -3.950138  
O -4.815736 -6.882137 2.791378  
O 2.996285 -5.082211 1.828695  
O 2.066783 -8.883447 1.188051  
Ti -1.472929 -3.937299 1.472616  
Ti -3.130709 -6.171136 2.255729  
Ti -4.780808 -8.579774 2.036835  
O 4.048135 -8.002373 2.568421  
O 1.125949 -8.578818 -1.355724  
Ti -0.779374 -3.663430 -2.124736  
Ti 1.617954 -4.244181 0.885627  
O -0.368665 -1.811767 -1.737066  
O -1.715164 -8.004729 -1.193789  
Ti -3.720582 -8.674258 -0.684864  
Ti -2.165312 -9.779919 1.917977  
Ti 3.530866 -9.720247 2.047506  
Ti -0.165154 -6.711551 2.138551  
Ti -0.175633 -8.371052 -5.399386  
Ti 2.998068 -9.011137 -0.686128  
Ti 0.042829 -1.876077 0.098535  
Ti 2.756283 -6.916721 1.728684  
Ti -0.582006 -9.603841 -0.783221  
Ti 0.671169 -10.275113 1.896372  
Ti 1.835896 -8.521774 -3.287261  
Ti -2.366041 -6.097931 -1.303335  
Ti 1.707225 -6.245964 -1.310115  
Ti -2.062353 -8.767518 -3.201639  
Ti -0.740554 -5.936390 -3.952967  
O -2.980196 -4.322100 2.482093  
O 4.160940 -10.096218 0.365203  
O 1.008261 -6.336404 0.568717  
O -4.003698 -6.782424 -0.980992  
O -1.001736 -10.202418 -2.424945  
O 0.044860 -4.629145 2.310494  
O -0.522372 -8.662392 1.516064  
O 2.268347 -6.762796 -3.066609  
O 2.248313 -10.850846 2.788819  
O 1.333785 -7.083848 3.051659  
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O 3.297195 -9.364591 -2.476631  
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O -5.273239 -9.076891 0.303399  
O -0.384649 -6.574936 -5.715262  
O -0.143333 -7.913133 -3.555277  
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O 0.485439 -10.864731 0.175623  
O -3.136744 -8.028340 1.274468  
O 1.531514 -9.046203 -5.090130  
O 1.650481 -2.368542 0.911972  
O -0.188355 -3.800782 -0.154994  
O -1.821458 -9.175438 -5.023812

O -2.446805 -4.210528 -1.636185  
O -1.719737 -6.764205 3.246051  
O -0.911286 -10.919686 2.662911  
O -3.819005 -9.924593 2.848436  
O 3.308893 -7.202074 -0.354716  
O -1.318007 -2.053727 1.329178  
O -0.140161 -5.640544 -2.034408  
O -3.709887 -9.214692 -2.465177

### Histidine

80

C 0.618757 3.579329 -3.029737  
N 0.758722 2.855021 -1.921276  
N 0.650317 4.928952 -2.765575  
H 0.557910 5.682732 -3.449769  
C 0.891053 3.781825 -0.891117  
C 1.029882 3.378452 0.553316  
C -0.043134 2.341973 1.000260  
H -0.983592 2.556095 0.436358  
O 1.324818 0.353882 1.289239  
H 1.394249 -0.715961 0.922111  
O -0.260451 0.328595 -0.344763  
C 0.365321 0.922162 0.607219  
N -0.338908 2.332290 2.451493  
H 0.483872 1.919987 2.925529  
H -0.327238 3.317365 2.762445  
C 0.819756 5.086292 -1.402140  
H 0.873692 6.067715 -0.903522  
H 0.484413 3.166888 -4.045381  
H 2.052840 2.986348 0.780501  
H 0.882343 4.280520 1.194351  
O -0.988337 -4.423360 -4.326985  
O -4.865899 -6.679033 2.737555  
O 2.809613 -4.516087 1.500860  
O 2.123727 -8.442583 1.266900  
Ti -1.713972 -3.749905 0.997131  
Ti -3.216457 -5.956264 2.107689  
Ti -4.780844 -8.433686 2.125823  
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O 1.205544 -8.552639 -1.283101  
Ti -1.010620 -3.822927 -2.542653  
Ti 1.399541 -3.839916 0.476095  
O -0.850990 -1.939191 -2.407134  
O -1.709292 -8.056696 -1.153639  
Ti -3.693080 -8.787081 -0.574323  
Ti -2.086777 -9.465211 2.115731  
Ti 3.617460 -9.083637 2.220928  
Ti -0.234338 -6.312158 1.956873  
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Ti 3.095741 -8.718285 -0.582528  
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Ti 1.908235 -8.563817 -3.197422



Ti -2.478132 -6.238469 -1.471735  
Ti 1.675780 -6.048032 -1.488033  
Ti -2.003236 -9.044186 -3.069269  
Ti -0.806412 -6.242765 -4.111051  
O -3.155453 -4.097395 2.118477  
O 4.302805 -9.601143 0.593322  
O 0.945031 -6.013960 0.363359  
O -4.078637 -6.955192 -1.077984  
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O -0.149173 -4.206074 1.921447  
O -0.485514 -8.331167 1.525320  
O 2.232545 -6.766720 -3.172563  
O 2.397994 -10.200783 3.082847  
O 1.278261 -6.485631 2.908949  
O -1.995650 -5.672378 0.465072  
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O -2.410145 -6.935633 -3.415819  
O -5.229387 -9.149158 0.456344  
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O -2.259319 -10.121982 0.376053  
O 0.628104 -10.634767 0.525093  
O -3.164321 -7.872516 1.291088  
O 1.642843 -9.294644 -4.933607  
O 1.252427 -1.944028 0.361904  
O -0.370558 -3.668978 -0.603359  
O -1.723127 -9.616567 -4.840982  
O -2.644428 -4.407468 -1.978526  
O -1.752778 -6.371424 3.113240  
O -0.765731 -10.414895 2.992135  
O -3.737785 -9.619752 3.062066  
O 3.277674 -6.855810 -0.443870  
O -1.858861 -1.919658 0.529453  
O -0.213728 -5.712810 -2.251744  
O -3.632956 -9.501637 -2.288001

### Phenylalanine

83

C 1.030267 4.180426 -3.685096  
H 0.962234 4.447081 -4.761971  
C 1.534152 2.539632 -1.927679  
C 1.447020 2.882109 -3.298219  
H 1.703894 2.123903 -4.068903  
C 0.699492 5.134462 -2.691866  
H 0.372954 6.156818 -2.980264  
C 1.202263 3.487115 -0.921631  
C 1.235534 3.148896 0.557870  
C 0.041504 2.251490 1.038629  
H -0.839300 2.491427 0.395171  
O 1.166784 0.155324 1.593000  
H 1.287727 -0.904111 1.196748  
O -0.140295 0.223930 -0.271202  
C 0.364740 0.782909 0.773713  
N -0.337058 2.429597 2.453509

H 0.412411 2.008605 3.030340  
H -0.257075 3.439173 2.655110  
C 0.782856 4.783182 -1.323378  
H 0.526589 5.523630 -0.535290  
H 1.854123 1.516738 -1.638035  
H 2.202726 2.677534 0.858462  
H 1.138656 4.098327 1.137375  
O -1.030805 -4.429586 -4.272868  
O -4.879734 -6.888972 2.665443  
O 2.819108 -4.717457 1.551978  
O 2.118898 -8.625104 1.193459  
Ti -1.708774 -3.903614 1.058394  
Ti -3.222873 -6.154236 2.072676  
Ti -4.782609 -8.634110 2.033942  
O 4.039217 -7.519788 2.500322  
O 1.206708 -8.653778 -1.364374  
Ti -1.012374 -3.889896 -2.468914  
Ti 1.401139 -4.014035 0.570318  
O -0.821314 -2.015269 -2.274353  
O -1.700376 -8.170907 -1.211060  
Ti -3.685644 -8.925478 -0.665042  
Ti -2.089261 -9.675850 2.015700  
Ti 3.613752 -9.302507 2.123322  
Ti -0.248979 -6.516271 1.952438  
Ti -0.108676 -8.748184 -5.379507  
Ti 3.094358 -8.844760 -0.672521  
Ti -0.418716 -1.788390 -0.488964  
Ti 2.690801 -6.577661 1.583656  
Ti -0.482582 -9.663106 -0.685231  
Ti 0.789368 -10.018000 2.030997  
Ti 1.910572 -8.599193 -3.280194  
Ti -2.475803 -6.346182 -1.477877  
Ti 1.680060 -6.141693 -1.479968  
Ti -1.996057 -9.096850 -3.165985  
Ti -0.810851 -6.251844 -4.121780  
O -3.171108 -4.292185 2.129090  
O 4.282146 -9.786080 0.478363  
O 0.940559 -6.167998 0.368903  
O -4.073705 -7.073554 -1.100709  
O -0.879714 -10.413033 -2.267912  
O -0.158930 -4.404774 1.980390  
O -0.489012 -8.517997 1.489084  
O 2.239286 -6.803406 -3.186498  
O 2.391486 -10.427007 2.968931  
O 1.269815 -6.710453 2.895593  
O -1.975686 -5.833417 0.469026  
O 3.448477 -9.265706 -2.433351  
O -2.406875 -6.987436 -3.446005  
O -5.228752 -9.301691 0.346468  
O -0.423297 -6.997096 -5.831646  
O -0.107007 -8.162567 -3.577216  
O 2.136014 -4.425932 -1.189711  
O -2.253670 -10.283397 0.253872  
O 0.632915 -10.790109 0.385429

O -3.158703 -8.058021 1.223174  
O 1.643856 -9.276840 -5.039501  
O 1.258724 -2.108423 0.546144  
O -0.361013 -3.787864 -0.528594  
O -1.714420 -9.612142 -4.951629  
O -2.641850 -4.496158 -1.910974  
O -1.774777 -6.582895 3.095541  
O -0.768870 -10.651002 2.864335  
O -3.744324 -9.844455 2.949756  
O 3.278732 -6.988050 -0.461815  
O -1.801502 -2.040987 0.669960  
O -0.199870 -5.770895 -2.255054  
O -3.621823 -9.588909 -2.399268

### **Analgesics**

#### **Salicylic**

76

C 0.073108 2.520150 1.210034  
C 0.026300 3.307102 2.402753  
C 0.027966 3.189259 -0.046562  
H 0.059291 2.562735 -0.963903  
C -0.056060 4.715866 2.338716  
C -0.052892 4.594044 -0.116990  
H -0.085065 5.099342 -1.104449  
H -0.091627 5.299118 3.285434  
C -0.093877 5.357857 1.080408  
H -0.158172 6.466442 1.037598  
C 0.165651 1.036132 1.228518  
O 0.250089 0.375514 2.394377  
H 0.210201 1.056264 3.130581  
O 0.170776 0.377933 0.143852  
O 0.057174 2.639807 3.626489  
H 0.037403 3.313928 4.346084  
O -0.769912 -4.037211 -4.035107  
O -4.862617 -6.705129 2.757631  
O 2.962451 -4.957092 1.742741  
O 2.036094 -8.778710 1.154495  
Ti -1.503002 -3.795757 1.369057  
Ti -3.179177 -5.997877 2.209530  
Ti -4.815848 -8.405818 2.008382  
O 3.992867 -7.859136 2.550034  
O 1.107107 -8.514594 -1.378043  
Ti -0.781383 -3.605884 -2.199200  
Ti 1.588429 -4.102415 0.781825  
O -0.367215 -1.794558 -1.878135  
O -1.748707 -7.904070 -1.216459  
Ti -3.765625 -8.550279 -0.710726  
Ti -2.206581 -9.611197 1.906065  
Ti 3.495223 -9.579444 2.048378  
Ti -0.211056 -6.543499 2.068482  
Ti -0.197675 -8.338406 -5.414407  
Ti 2.992532 -8.921356 -0.698036  
Ti 0.007907 -1.730092 -0.047542  
Ti 2.702925 -6.781814 1.674579  
Ti -0.608274 -9.500076 -0.784044

Ti 0.620834 -10.133841 1.902276  
 Ti 1.809631 -8.471101 -3.298305  
 Ti -2.398199 -6.001720 -1.373642  
 Ti 1.694897 -6.150934 -1.361789  
 Ti -2.096403 -8.689913 -3.213933  
 Ti -0.721339 -5.878879 -4.007435  
 O -2.991787 -4.155824 2.431222  
 O 4.160831 -9.970494 0.377377  
 O 0.973409 -6.219751 0.496648  
 O -4.044532 -6.667057 -1.051860  
 O -1.047340 -10.122345 -2.413141  
 O 0.014615 -4.472409 2.230853  
 O -0.557040 -8.521560 1.481041  
 O 2.257987 -6.713292 -3.106422  
 O 2.197577 -10.688712 2.812894  
 O 1.281824 -6.922614 2.990893  
 O -1.943888 -5.638104 0.616378  
 O 3.273470 -9.313294 -2.482665  
 O -2.368672 -6.534599 -3.386423  
 O -5.323124 -8.919646 0.282660  
 O -0.368957 -6.543916 -5.763879  
 O -0.160137 -7.862226 -3.579506  
 O 2.267223 -4.488722 -0.998725  
 O -2.418906 -10.067050 0.109155  
 O 0.431928 -10.770033 0.197993  
 O -3.183006 -7.863577 1.232124  
 O 1.507722 -9.017585 -5.098452  
 O 1.631543 -2.243325 0.777294  
 O -0.197545 -3.710915 -0.237172  
 O -1.854280 -9.118788 -5.035178  
 O -2.466795 -4.128450 -1.721027  
 O -1.758905 -6.598687 3.188225  
 O -0.969665 -10.760644 2.667337  
 O -3.859623 -9.740393 2.842678  
 O 3.284970 -7.106223 -0.386706  
 O -1.414031 -1.924645 1.115907  
 O -0.142799 -5.576966 -2.092336  
 O -3.746708 -9.127571 -2.479854

#### Paracetamol

80

C -0.046083 3.713988 0.421781  
 C -0.043337 4.192613 1.761236  
 C -0.062654 4.644401 -0.653369  
 H -0.047248 4.265249 -1.697706  
 C -0.061089 5.578200 2.016864  
 C -0.074562 6.029022 -0.401182  
 H -0.079290 6.754065 -1.244300  
 H -0.047006 5.953918 3.061186  
 C -0.069202 6.504516 0.937779  
 O -0.057670 7.851617 1.242454  
 H -0.064432 8.332865 0.379878  
 N 0.054412 2.346998 0.056177  
 C -0.055170 1.194305 0.745668  
 C -0.610881 1.099426 2.143604

H 0.372028 2.187031 -0.911754  
H -0.009516 3.485192 2.606892  
O 0.330797 0.141887 0.117704  
H -1.388403 1.864558 2.343973  
H 0.205952 1.236234 2.889698  
H -1.029983 0.076776 2.268817  
O -0.840985 -4.110122 -3.926823  
O -4.866311 -6.885262 2.791106  
O 2.968113 -5.124260 1.825706  
O 2.045493 -8.914893 1.155201  
Ti -1.494440 -3.936492 1.504219  
Ti -3.176618 -6.167461 2.283896  
Ti -4.806682 -8.583651 2.031173  
O 4.012957 -8.032781 2.558162  
O 1.130934 -8.647222 -1.391481  
Ti -0.798183 -3.722129 -2.079056  
Ti 1.585088 -4.271261 0.886687  
O -0.385482 -1.925648 -1.733404  
O -1.732036 -8.027287 -1.182517  
Ti -3.721857 -8.699295 -0.677879  
Ti -2.196065 -9.775828 1.920710  
Ti 3.505325 -9.742213 2.024601  
Ti -0.206928 -6.719535 2.139058  
Ti -0.206156 -8.359297 -5.398037  
Ti 3.005660 -9.026938 -0.722069  
Ti 0.031729 -1.875542 0.097447  
Ti 2.706515 -6.947987 1.721663  
Ti -0.599413 -9.622320 -0.792227  
Ti 0.637399 -10.281724 1.887566  
Ti 1.832132 -8.508126 -3.312797  
Ti -2.397835 -6.119970 -1.269596  
Ti 1.694000 -6.252545 -1.307282  
Ti -2.096904 -8.773946 -3.201846  
Ti -0.790389 -5.948629 -3.932942  
O -3.000038 -4.322060 2.532050  
O 4.156375 -10.110260 0.342353  
O 0.973348 -6.367485 0.563501  
O -4.033396 -6.805304 -0.962827  
O -1.042520 -10.218316 -2.427273  
O 0.017302 -4.644333 2.341353  
O -0.549261 -8.668826 1.507047  
O 2.249769 -6.750964 -3.070065  
O 2.216889 -10.861881 2.775949  
O 1.294820 -7.105184 3.048943  
O -1.939366 -5.775674 0.711289  
O 3.329373 -9.318178 -2.521422  
O -2.409804 -6.638568 -3.301210  
O -5.284986 -9.087794 0.300269  
O -0.449947 -6.570059 -5.707223  
O -0.160580 -7.925182 -3.557082  
O 2.252303 -4.596836 -0.910570  
O -2.393241 -10.214471 0.111377  
O 0.444195 -10.896796 0.178062  
O -3.162347 -8.026461 1.286002

O 1.527878 -8.994818 -5.127237  
O 1.645986 -2.417045 0.905091  
O -0.225948 -3.857553 -0.108184  
O -1.849562 -9.176081 -5.027070  
O -2.486839 -4.251477 -1.606723  
O -1.755767 -6.778675 3.260629  
O -0.947981 -10.922362 2.659875  
O -3.850812 -9.926802 2.851551  
O 3.282366 -7.214646 -0.364087  
O -1.352373 -2.043658 1.318886  
O -0.157515 -5.681422 -2.021837  
O -3.734142 -9.241445 -2.457722

### Aspirin

81

C 0.151811 2.500786 1.192155  
C 0.179867 3.320401 2.365381  
C 0.048282 3.132459 -0.078560  
H 0.026576 2.483132 -0.979384  
C 0.110891 4.727713 2.272547  
C -0.025088 4.536832 -0.179650  
H -0.104116 5.016590 -1.177541  
H 0.128475 5.344301 3.190997  
C 0.007546 5.329614 0.996352  
H -0.043133 6.436889 0.928945  
C 0.223312 1.010992 1.235300  
O 0.353646 0.378555 2.410471  
H 0.381484 1.100634 3.115423  
O 0.159835 0.333925 0.164677  
O 0.359985 2.655317 3.599947  
C -0.427846 3.053539 4.752308  
O -1.158695 4.025126 4.747495  
C -0.164451 2.067829 5.866345  
H 0.745315 1.462704 5.665155  
H -1.037638 1.376749 5.954451  
H -0.067953 2.608778 6.831969  
O -0.846846 -4.124328 -3.967742  
O -4.856054 -6.808542 2.832797  
O 2.956342 -4.996626 1.800463  
O 2.042187 -8.822177 1.208624  
Ti -1.505840 -3.876576 1.410501  
Ti -3.181957 -6.090164 2.265400  
Ti -4.816258 -8.508957 2.079878  
O 4.015997 -7.893952 2.570780  
O 1.117940 -8.599811 -1.331193  
Ti -0.803963 -3.688750 -2.132512  
Ti 1.582366 -4.154457 0.833742  
O -0.425742 -1.866773 -1.814117  
O -1.747687 -7.997703 -1.161830  
Ti -3.762091 -8.653685 -0.640584  
Ti -2.198927 -9.691960 1.967443  
Ti 3.504783 -9.624199 2.094546  
Ti -0.210897 -6.619181 2.123865  
Ti -0.208004 -8.406961 -5.354794  
Ti 2.997250 -8.977716 -0.663002

Ti -0.004169 -1.788418 0.007795  
 Ti 2.703234 -6.825992 1.725550  
 Ti -0.602867 -9.578843 -0.726187  
 Ti 0.640180 -10.186548 1.963467  
 Ti 1.815529 -8.507926 -3.258662  
 Ti -2.400382 -6.097261 -1.281907  
 Ti 1.695776 -6.201982 -1.311400  
 Ti -2.100535 -8.788835 -3.152730  
 Ti -0.789346 -5.965445 -3.934296  
 O -3.031905 -4.240402 2.427377  
 O 4.152801 -10.038059 0.423509  
 O 0.981940 -6.282830 0.555236  
 O -4.045207 -6.766941 -0.955576  
 O -1.046622 -10.212654 -2.348673  
 O 0.008519 -4.536300 2.279203  
 O -0.553709 -8.585664 1.527530  
 O 2.241741 -6.746464 -3.066172  
 O 2.221847 -10.741755 2.866889  
 O 1.290485 -6.966566 3.053014  
 O -1.912127 -5.752142 0.683326  
 O 3.300623 -9.326371 -2.451624  
 O -2.413954 -6.634742 -3.300762  
 O -5.317850 -9.024905 0.356008  
 O -0.443828 -6.621012 -5.695208  
 O -0.170180 -7.939518 -3.517437  
 O 2.254062 -4.534700 -0.955086  
 O -2.405323 -10.160013 0.170915  
 O 0.443359 -10.836236 0.267494  
 O -3.180748 -7.959879 1.306047  
 O 1.519153 -9.044108 -5.059199  
 O 1.632654 -2.291425 0.802079  
 O -0.204198 -3.782809 -0.176363  
 O -1.848815 -9.219421 -4.970013  
 O -2.478652 -4.221600 -1.621226  
 O -1.753218 -6.648465 3.257760  
 O -0.945447 -10.801804 2.754097  
 O -3.854601 -9.847866 2.895824  
 O 3.279307 -7.154128 -0.356554  
 O -1.395554 -1.998984 1.201026  
 O -0.163235 -5.658411 -2.032090  
 O -3.749322 -9.226156 -2.413875

### **Ibuprofen**

93

C 1.661718 2.989502 -0.921272  
 C 0.950959 3.408198 0.233997  
 C 1.875234 3.927527 -1.963927  
 H 2.425710 3.603119 -2.872141  
 C 0.484908 4.739235 0.341323  
 C 1.409074 5.256384 -1.851154  
 H 1.608142 5.980613 -2.667962  
 H -0.052705 5.069465 1.254031  
 C 0.707824 5.685593 -0.693052  
 C 0.268571 7.131047 -0.539714  
 H -0.409315 7.217299 0.344872

H -0.318244 7.453177 -1.436217  
C 1.456444 8.109662 -0.346075  
C 2.232503 7.772884 0.939643  
H 1.568337 7.896768 1.828597  
H 3.110969 8.443773 1.072019  
H 2.587709 6.717365 0.926733  
C 0.949282 9.561966 -0.328498  
H 1.789868 10.285222 -0.220906  
H 0.254771 9.714130 0.532025  
H 0.392215 9.807768 -1.263111  
C 2.245673 1.580013 -1.042173  
H 2.845143 1.553056 -1.983648  
H 3.566162 0.187378 0.055298  
H 3.930868 1.943381 0.301645  
H 2.498670 1.188143 1.097712  
C 3.115863 1.198710 0.173921  
H 0.780457 2.691605 1.062230  
C 1.137587 0.540978 -1.247024  
O 0.548121 0.066532 -0.152333  
O 0.835032 0.140387 -2.416183  
H 0.033981 -0.994594 -2.201886  
H 2.142744 7.976009 -1.224184  
O -0.835853 -4.112373 -3.942861  
O -4.882446 -6.913769 2.800607  
O 2.928803 -5.098354 1.834510  
O 2.034492 -8.904988 1.146719  
Ti -1.520085 -3.933567 1.492219  
Ti -3.197497 -6.193192 2.275137  
Ti -4.872925 -8.597045 2.005441  
O 3.989056 -8.013383 2.552436  
O 1.111051 -8.622151 -1.374956  
Ti -0.820622 -3.743577 -2.110566  
Ti 1.536156 -4.252251 0.908586  
O -0.450048 -1.874000 -1.765298  
O -1.752342 -8.031148 -1.205382  
Ti -3.782163 -8.702357 -0.700353  
Ti -2.233251 -9.767757 1.893812  
Ti 3.497194 -9.731974 2.018559  
Ti -0.233104 -6.735533 2.103040  
Ti -0.207003 -8.387420 -5.403302  
Ti 2.994973 -9.003135 -0.711656  
Ti 0.009545 -1.794145 0.219044  
Ti 2.695781 -6.928763 1.709879  
Ti -0.605810 -9.624686 -0.790119  
Ti 0.616890 -10.266208 1.892855  
Ti 1.814886 -8.490097 -3.295983  
Ti -2.406244 -6.144066 -1.284106  
Ti 1.694148 -6.204521 -1.304916  
Ti -2.100937 -8.796504 -3.205122  
Ti -0.795274 -5.965830 -3.967912  
O -3.041197 -4.344537 2.484709  
O 4.160073 -10.076824 0.339086  
O 0.953186 -6.328963 0.544688  
O -4.052270 -6.806190 -0.990085



O -1.044655 -10.225732 -2.427967  
 O -0.026970 -4.655274 2.330079  
 O -0.575278 -8.664987 1.447714  
 O 2.238294 -6.728367 -3.061621  
 O 2.203058 -10.855315 2.760331  
 O 1.264788 -7.121980 3.015942  
 O -1.944615 -5.789847 0.686534  
 O 3.299701 -9.318704 -2.505231  
 O -2.410517 -6.634883 -3.337432  
 O -5.347054 -9.091299 0.264556  
 O -0.456553 -6.597873 -5.730810  
 O -0.171488 -7.918708 -3.560295  
 O 2.219630 -4.536544 -0.898999  
 O -2.432415 -10.208715 0.090001  
 O 0.424269 -10.894496 0.187393  
 O -3.221969 -8.030325 1.252862  
 O 1.520496 -9.015739 -5.099286  
 O 1.565067 -2.393615 1.049055  
 O -0.255517 -3.766432 -0.127247  
 O -1.840750 -9.208257 -5.026917  
 O -2.490026 -4.257963 -1.643830  
 O -1.771459 -6.809650 3.236232  
 O -0.972829 -10.881523 2.666993  
 O -3.903724 -9.945375 2.795186  
 O 3.266773 -7.179609 -0.358235  
 O -1.347884 -2.029590 1.408308  
 O -0.174380 -5.666118 -2.029532  
 O -3.750766 -9.240467 -2.480849

### Tramadol

104

C 2.048589 2.276338 -3.579635  
 O 3.126529 1.557734 -4.068828  
 C 3.871059 2.199807 -5.119370  
 H 4.312000 3.169504 -4.779106  
 H 4.687589 1.503833 -5.400184  
 H 3.236873 2.407022 -6.014672  
 H -1.022174 4.093592 -1.919521  
 C -0.165304 3.575614 -2.386124  
 C 1.362357 1.669769 -2.495002  
 H 1.752984 0.721155 -2.086542  
 C 0.259386 2.311654 -1.890954  
 C 1.632170 3.542481 -4.068935  
 C 0.521398 4.179367 -3.462464  
 H 2.165247 4.025586 -4.907639  
 H 0.187145 5.167076 -3.840260  
 C 1.608177 2.740171 0.669415  
 H 1.774316 3.469802 -0.156053  
 H 1.827726 3.281458 1.634006  
 N 2.552448 1.639528 0.455934  
 C 2.786070 0.866852 1.680251  
 C 3.818306 2.157797 -0.069211  
 H 1.885154 0.288515 1.966866  
 H 3.632716 2.671088 -1.038238  
 H 3.608998 0.140475 1.509073

H 4.517005 1.312176 -0.245989  
H 3.061117 1.524467 2.550769  
H 4.327545 2.887367 0.621540  
H -0.409231 3.384277 0.624616  
O -0.042064 0.247436 -0.629455  
H -0.219529 -0.092871 -1.554335  
C -0.403247 1.701652 -0.645493  
C -1.951152 1.769974 -0.687342  
H -2.307094 1.250912 -1.609506  
H -2.239304 2.842175 -0.787160  
C 0.101096 2.385948 0.657359  
C -2.595034 1.156781 0.572173  
H -2.433767 0.052891 0.567561  
H -3.699116 1.313017 0.533608  
C -0.475202 1.672971 1.898682  
H -0.142294 0.609227 1.936427  
C -2.016547 1.744443 1.877333  
H -2.443175 1.205644 2.756687  
H -0.065100 2.158108 2.815410  
H -2.320866 2.817546 1.973455  
O -0.847752 -4.159434 -3.931148  
O -4.860192 -6.798267 2.849681  
O 2.950197 -5.028031 1.864227  
O 2.044491 -8.847745 1.249766  
Ti -1.495677 -3.869020 1.492376  
Ti -3.173844 -6.098324 2.308721  
Ti -4.815530 -8.510971 2.118355  
O 4.004474 -7.943813 2.639124  
O 1.133409 -8.641796 -1.290524  
Ti -0.802189 -3.722566 -2.099415  
Ti 1.577541 -4.184485 0.914393  
O -0.359548 -1.932701 -1.818326  
O -1.734767 -8.023557 -1.107117  
Ti -3.729262 -8.684458 -0.590563  
Ti -2.199790 -9.697028 2.030551  
Ti 3.506615 -9.667387 2.125592  
Ti -0.219701 -6.634749 2.191790  
Ti -0.198067 -8.437728 -5.302194  
Ti 3.008661 -8.983011 -0.617011  
Ti 0.006791 -1.795752 0.078897  
Ti 2.702657 -6.867568 1.794078  
Ti -0.597634 -9.603798 -0.672932  
Ti 0.636561 -10.197293 2.017260  
Ti 1.841120 -8.509343 -3.205964  
Ti -2.389910 -6.112190 -1.219764  
Ti 1.698020 -6.202266 -1.241183  
Ti -2.086311 -8.811363 -3.099971  
Ti -0.775611 -5.997134 -3.890966  
O -3.033034 -4.244381 2.471114  
O 4.158289 -10.056948 0.449055  
O 0.972953 -6.273075 0.618437  
O -4.026345 -6.784035 -0.879899  
O -1.044479 -10.241204 -2.291752  
O 0.007010 -4.549787 2.356913

O -0.552263 -8.591598 1.574644  
 O 2.245504 -6.743592 -2.993005  
 O 2.222743 -10.765711 2.905505  
 O 1.283354 -7.022910 3.104283  
 O -1.885253 -5.750548 0.749077  
 O 3.343431 -9.299325 -2.406037  
 O -2.395418 -6.663291 -3.247308  
 O -5.290085 -9.053239 0.398433  
 O -0.441306 -6.655611 -5.651847  
 O -0.156153 -7.959378 -3.466090  
 O 2.250920 -4.533435 -0.871367  
 O -2.400832 -10.174671 0.234048  
 O 0.433065 -10.860888 0.332673  
 O -3.166462 -7.965743 1.361635  
 O 1.537555 -9.056934 -5.002275  
 O 1.580623 -2.291944 0.930441  
 O -0.222963 -3.760286 -0.114929  
 O -1.838325 -9.248151 -4.916306  
 O -2.482024 -4.246915 -1.572051  
 O -1.757287 -6.660228 3.321015  
 O -0.945827 -10.796558 2.826027  
 O -3.858255 -9.842958 2.952699  
 O 3.273527 -7.158049 -0.280515  
 O -1.346872 -1.973288 1.300248  
 O -0.153528 -5.669881 -1.973012  
 O -3.736112 -9.247672 -2.360711

#### Anti-inflammatory

##### Enantyum

93

C 0.889467 3.351636 -1.188606  
 C 0.121248 3.668947 -0.034534  
 C 1.046635 4.333873 -2.192402  
 C -0.241633 5.946537 -0.867467  
 H -0.674583 6.959028 -0.737416  
 H 1.605730 4.105438 -3.120202  
 C -0.455565 4.950290 0.114728  
 C 0.516861 5.642709 -2.028944  
 C 0.766971 6.639126 -3.138619  
 O 0.800178 6.255020 -4.327999  
 C 1.019992 8.087037 -2.801697  
 C 1.474796 8.513630 -1.522877  
 H 1.607880 7.768867 -0.712756  
 C 0.889143 9.043533 -3.847108  
 H 0.566335 8.680313 -4.846657  
 C 1.632120 10.823149 -2.333935  
 H 1.874385 11.892561 -2.149889  
 C 1.781732 9.874683 -1.291886  
 H 2.148863 10.191554 -0.292431  
 C 1.183562 10.403685 -3.613827  
 H 1.070482 11.143332 -4.435466  
 H -1.063851 5.182303 1.013986  
 C 1.582128 1.985750 -1.287139  
 H 2.165332 1.842078 -0.344118  
 C 2.512342 1.835554 -2.505708

H 3.011344 0.841871 -2.501554  
H 3.301306 2.617437 -2.498334  
H 1.939003 1.926641 -3.452998  
H -0.014355 2.902214 0.758733  
C 0.556724 0.842237 -1.309555  
O 0.382216 0.183214 -0.163917  
O -0.036670 0.523369 -2.384229  
H -0.450231 -0.812786 -2.159345  
O -0.900813 -4.029308 -3.946457  
O -4.890474 -6.896803 2.706860  
O 2.901016 -5.051476 1.839849  
O 2.044968 -8.864645 1.164354  
Ti -1.525707 -3.897135 1.424881  
Ti -3.213665 -6.162509 2.170816  
Ti -4.828295 -8.609012 1.989965  
O 3.976974 -7.952519 2.579685  
O 1.122835 -8.573880 -1.381508  
Ti -0.892444 -3.669904 -2.120495  
Ti 1.530609 -4.204329 0.891220  
O -0.563907 -1.802248 -1.742469  
O -1.732030 -8.001621 -1.210711  
Ti -3.736139 -8.706679 -0.711338  
Ti -2.191601 -9.768275 1.876755  
Ti 3.518866 -9.679804 2.043228  
Ti -0.266038 -6.702294 2.054931  
Ti -0.176845 -8.293486 -5.407294  
Ti 3.000197 -8.961536 -0.698376  
Ti 0.006025 -1.720731 0.215363  
Ti 2.673814 -6.884363 1.728199  
Ti -0.576608 -9.591629 -0.797440  
Ti 0.663901 -10.250531 1.868577  
Ti 1.837706 -8.453615 -3.297275  
Ti -2.419035 -6.122656 -1.311373  
Ti 1.713810 -6.165040 -1.314864  
Ti -2.060703 -8.752756 -3.216218  
Ti -0.779641 -5.884344 -3.953492  
O -3.082741 -4.313211 2.361490  
O 4.172976 -10.024392 0.362230  
O 0.957410 -6.290314 0.521562  
O -4.047535 -6.805237 -0.985635  
O -0.994579 -10.174538 -2.452113  
O -0.046282 -4.616124 2.280624  
O -0.556444 -8.650256 1.424160  
O 2.259932 -6.691977 -3.071495  
O 2.239125 -10.824836 2.768492  
O 1.225211 -7.066448 2.998356  
O -1.908009 -5.783279 0.635543  
O 3.314465 -9.282219 -2.489359  
O -2.391817 -6.592681 -3.334608  
O -5.297984 -9.115568 0.257971  
O -0.396338 -6.493640 -5.713917  
O -0.149843 -7.849097 -3.561083  
O 2.245506 -4.504227 -0.898501  
O -2.378505 -10.215277 0.066956

O 0.474128 -10.866311 0.160181  
O -3.181070 -8.040466 1.227944  
O 1.530211 -8.971865 -5.099722  
O 1.567591 -2.338615 1.009407  
O -0.252364 -3.696900 -0.166148  
O -1.818393 -9.106849 -5.051204  
O -2.539919 -4.227668 -1.626958  
O -1.806233 -6.737158 3.184144  
O -0.918729 -10.861576 2.659235  
O -3.842726 -9.935558 2.802838  
O 3.277595 -7.140750 -0.357798  
O -1.328889 -1.995553 1.417640  
O -0.161461 -5.573067 -2.048825  
O -3.710982 -9.221567 -2.495488

#### Diclofenac

90

C -1.757447 0.876826 3.656891  
C -1.936099 1.348510 4.980288  
H -2.318794 0.661641 5.763643  
C -1.267991 1.736032 2.643530  
C -1.138145 3.565191 4.295648  
H -0.890858 4.621296 4.526269  
C -1.169642 1.234487 1.210401  
H -1.806585 1.867727 0.539415  
H -1.575251 0.198320 1.158639  
C 0.227885 1.196093 0.584646  
O 0.606388 0.165958 -0.054345  
O 1.036236 2.229561 0.659895  
H 0.518738 3.004345 1.187647  
C -1.627766 2.694006 5.297626  
C -0.959659 3.081624 2.981955  
N -0.458948 3.916681 1.892003  
H -1.228820 4.039268 1.205180  
C 0.035862 5.222787 2.198335  
C 1.270396 5.409935 2.888768  
Cl 2.191976 4.003058 3.403049  
C -0.657155 6.388728 1.756877  
Cl -2.173141 6.196006 0.862977  
C 1.051028 7.843488 2.715613  
H 1.446247 8.859711 2.919524  
C 1.766669 6.708208 3.162133  
H 2.725762 6.811995 3.711220  
C -0.158934 7.690991 2.000053  
H -0.728447 8.568802 1.630907  
H -1.767392 3.074679 6.330590  
H -1.996848 -0.172174 3.383426  
O -0.856323 -4.180996 -4.035211  
O -4.853897 -6.786539 2.788861  
O 2.964888 -5.066459 1.783776  
O 2.031457 -8.886060 1.214889  
Ti -1.485766 -3.877198 1.322957  
Ti -3.178098 -6.078672 2.219836  
Ti -4.806487 -8.501793 2.065408  
O 3.985594 -7.961640 2.608847

O 1.106355 -8.612242 -1.327247  
Ti -0.792123 -3.732620 -2.202420  
Ti 1.598050 -4.224932 0.802644  
O -0.352192 -1.928346 -1.911098  
O -1.733934 -8.021326 -1.167239  
Ti -3.729493 -8.672847 -0.638119  
Ti -2.204169 -9.726036 1.961825  
Ti 3.488295 -9.683830 2.121479  
Ti -0.217852 -6.637212 2.112831  
Ti -0.205751 -8.480160 -5.370852  
Ti 2.990734 -9.040428 -0.637465  
Ti 0.093266 -1.835069 -0.094763  
Ti 2.697230 -6.888938 1.723972  
Ti -0.601545 -9.614792 -0.739748  
Ti 0.619556 -10.241698 1.958973  
Ti 1.811032 -8.591419 -3.254429  
Ti -2.390900 -6.118952 -1.312474  
Ti 1.690573 -6.287088 -1.331181  
Ti -2.098809 -8.808969 -3.161471  
Ti -0.786447 -6.017240 -3.985949  
O -3.029014 -4.216060 2.317685  
O 4.157553 -10.078815 0.453648  
O 0.975794 -6.335421 0.544875  
O -4.027994 -6.783291 -0.963036  
O -1.038610 -10.243782 -2.361269  
O -0.002511 -4.541569 2.231607  
O -0.560422 -8.623234 1.572415  
O 2.267563 -6.836748 -3.072440  
O 2.185305 -10.789721 2.886692  
O 1.275903 -7.005571 3.040208  
O -1.884021 -5.773199 0.646380  
O 3.267165 -9.432689 -2.424362  
O -2.409711 -6.686479 -3.325878  
O -5.295899 -9.033846 0.349983  
O -0.441582 -6.698354 -5.739285  
O -0.163649 -7.977057 -3.541415  
O 2.277868 -4.630502 -0.974237  
O -2.406905 -10.176850 0.158661  
O 0.442071 -10.872639 0.251969  
O -3.161281 -7.967626 1.301865  
O 1.510137 -9.135928 -5.053702  
O 1.675267 -2.375978 0.774932  
O -0.170086 -3.824401 -0.249770  
O -1.853249 -9.269673 -4.971632  
O -2.468230 -4.243442 -1.661429  
O -1.765518 -6.615707 3.238138  
O -0.973476 -10.881127 2.713647  
O -3.857193 -9.843635 2.898626  
O 3.285056 -7.226632 -0.347115  
O -1.328180 -1.976278 1.084654  
O -0.145959 -5.690995 -2.092208  
O -3.739442 -9.246928 -2.407675

#### **Antibiotics**

#### **Pyrazinamide**

74

N -1.805176 0.995498 1.811714  
N -1.727584 3.803288 2.452190  
C -0.979932 1.873749 1.188451  
C -0.951174 3.258426 1.501728  
H -0.250855 3.940411 0.968156  
C -2.595910 1.546803 2.747096  
C -2.551807 2.932989 3.071711  
H -3.297099 0.860541 3.274097  
H -3.212973 3.345733 3.867334  
N 0.465855 2.141160 -0.781800  
H 0.136094 3.103224 -0.878508  
H 1.138512 1.764116 -1.457596  
C -0.000584 1.322362 0.180135  
O 0.439739 0.138218 0.257693  
O -0.787213 -4.120104 -3.920306  
O -4.849614 -6.832613 2.850291  
O 2.986792 -5.094399 1.826681  
O 2.030971 -8.894775 1.180686  
Ti -1.489969 -3.937321 1.493789  
Ti -3.150412 -6.152042 2.310690  
Ti -4.843336 -8.519586 2.065148  
O 4.023020 -8.017181 2.554844  
O 1.105595 -8.649170 -1.359903  
Ti -0.771901 -3.698471 -2.081217  
Ti 1.596202 -4.233638 0.902269  
O -0.386798 -1.888548 -1.719597  
O -1.745841 -8.010198 -1.167548  
Ti -3.768707 -8.654219 -0.651413  
Ti -2.231838 -9.722371 1.946438  
Ti 3.486847 -9.727818 2.048362  
Ti -0.188606 -6.692524 2.142778  
Ti -0.233840 -8.399521 -5.360994  
Ti 2.978167 -9.022475 -0.690464  
Ti 0.014231 -1.864273 0.124288  
Ti 2.729293 -6.919744 1.721729  
Ti -0.620575 -9.599589 -0.736135  
Ti 0.607712 -10.233371 1.949409  
Ti 1.815920 -8.505250 -3.279663  
Ti -2.379663 -6.100451 -1.268220  
Ti 1.702133 -6.214344 -1.294150  
Ti -2.115965 -8.786522 -3.157145  
Ti -0.767456 -5.965654 -3.915549  
O -2.984447 -4.311490 2.538722  
O 4.120001 -10.124221 0.364758  
O 0.993603 -6.332328 0.567969  
O -4.027488 -6.762698 -0.959804  
O -1.085130 -10.225582 -2.357911  
O 0.033367 -4.629520 2.338346  
O -0.570088 -8.628932 1.498526  
O 2.232585 -6.741884 -3.061264  
O 2.188208 -10.805364 2.845674  
O 1.313170 -7.082341 3.049475  
O -1.917454 -5.774363 0.716881

O 3.299155 -9.330324 -2.484275  
O -2.399010 -6.622392 -3.294680  
O -5.336810 -9.013871 0.333176  
O -0.459681 -6.610524 -5.687664  
O -0.177247 -7.946188 -3.521131  
O 2.260032 -4.555343 -0.908490  
O -2.441877 -10.175981 0.151502  
O 0.390925 -10.883656 0.257200  
O -3.193347 -7.980205 1.302496  
O 1.501003 -9.030890 -5.079761  
O 1.625680 -2.380517 0.960289  
O -0.189899 -3.824372 -0.113986  
O -1.870408 -9.214578 -4.975541  
O -2.457419 -4.225316 -1.603495  
O -1.726512 -6.755556 3.279618  
O -0.983014 -10.829680 2.745161  
O -3.895381 -9.872020 2.869198  
O 3.282108 -7.207716 -0.356405  
O -1.395197 -2.068342 1.296001  
O -0.157647 -5.679277 -1.995246  
O -3.769834 -9.214695 -2.427269

**Isoniazid-Bind O**

77

C -1.573449 1.074236 2.121863  
H -1.511084 -0.029635 1.982603  
C -1.813085 3.802294 2.522594  
H -1.919714 4.893188 2.716485  
C -0.805435 1.956175 1.320872  
C -0.924582 3.354531 1.521160  
H -0.330257 4.081894 0.928452  
C -2.435804 1.652156 3.080578  
N -2.557640 2.977810 3.287604  
H -3.063854 0.989781 3.718307  
N 0.578387 2.133701 -0.691743  
H 0.476259 3.149874 -0.651239  
N 1.508050 1.623688 -1.608841  
H 1.029907 1.540323 -2.524895  
H 1.656212 0.641808 -1.310468  
C 0.077813 1.366766 0.286035  
O 0.382246 0.124358 0.298362  
O -0.799189 -4.123870 -3.950920  
O -4.840089 -6.808855 2.860086  
O 2.987997 -5.065984 1.815567  
O 2.041263 -8.870297 1.193362  
Ti -1.483051 -3.909445 1.446572  
Ti -3.152859 -6.115177 2.304128  
Ti -4.827104 -8.506477 2.094609  
O 4.025144 -7.977272 2.564305  
O 1.108621 -8.617808 -1.348216  
Ti -0.775319 -3.698813 -2.116912  
Ti 1.603021 -4.219596 0.877241  
O -0.350729 -1.884827 -1.784639  
O -1.737275 -7.995929 -1.153244  
Ti -3.754151 -8.644958 -0.624315



Ti -2.206066 -9.692528 1.975054  
 Ti 3.507251 -9.694479 2.062092  
 Ti -0.192644 -6.652896 2.137775  
 Ti -0.233552 -8.408819 -5.356973  
 Ti 2.982127 -9.003680 -0.682834  
 Ti 0.042631 -1.849635 0.056585  
 Ti 2.725100 -6.893581 1.723765  
 Ti -0.614963 -9.589387 -0.724134  
 Ti 0.631830 -10.210349 1.962793  
 Ti 1.815831 -8.506167 -3.274418  
 Ti -2.378929 -6.094694 -1.269406  
 Ti 1.703783 -6.213612 -1.304970  
 Ti -2.112790 -8.782356 -3.144615  
 Ti -0.774612 -5.970188 -3.925942  
 O -2.988520 -4.262796 2.476996  
 O 4.138019 -10.081304 0.376603  
 O 0.994960 -6.311157 0.563538  
 O -4.022611 -6.750968 -0.934112  
 O -1.074261 -10.215186 -2.346525  
 O 0.035884 -4.578337 2.314709  
 O -0.554924 -8.600819 1.516987  
 O 2.238051 -6.743049 -3.067399  
 O 2.215296 -10.787798 2.848591  
 O 1.310777 -7.035880 3.048697  
 O -1.899426 -5.765439 0.710170  
 O 3.295451 -9.330870 -2.474171  
 O -2.404222 -6.624976 -3.291120  
 O -5.316204 -9.011995 0.364032  
 O -0.461254 -6.620797 -5.692612  
 O -0.175774 -7.942310 -3.519186  
 O 2.262705 -4.552092 -0.930482  
 O -2.421797 -10.158755 0.177545  
 O 0.412197 -10.861183 0.269042  
 O -3.181437 -7.960413 1.322144  
 O 1.499764 -9.040063 -5.071580  
 O 1.653079 -2.361865 0.883230  
 O -0.185748 -3.811815 -0.150451  
 O -1.872284 -9.215938 -4.962296  
 O -2.455872 -4.217191 -1.612701  
 O -1.728008 -6.703434 3.280605  
 O -0.957583 -10.802441 2.763360  
 O -3.868779 -9.849343 2.898993  
 O 3.284687 -7.187058 -0.358582  
 O -1.388837 -2.029675 1.226152  
 O -0.156262 -5.669971 -2.015655  
 O -3.758634 -9.213113 -2.396112

#### Isoniazid-Bind N

77

C 0.267545 1.997840 -1.830386  
 H 0.004447 2.439834 -2.814026  
 C 0.938457 0.813126 0.583978  
 H 1.207217 0.284661 1.523522  
 C 1.332551 2.554213 -1.080661  
 C 1.643239 1.959061 0.171606

H 2.458251 2.338713 0.817262  
C -0.386562 0.852157 -1.337795  
N -0.047910 0.257946 -0.162629  
H -1.175820 0.338186 -1.927781  
N 3.088566 4.225043 -0.878403  
H 3.391937 3.661457 -0.082077  
N 4.104255 5.046818 -1.408751  
H 3.872622 6.025282 -1.156743  
H 3.936728 5.023071 -2.435920  
C 2.118782 3.697342 -1.694091  
O 1.908504 4.110998 -2.857027  
O -1.204377 -4.257748 -3.917087  
O -4.992976 -7.221946 2.885816  
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O 2.033977 -8.803714 1.198650  
Ti -1.838184 -4.092547 1.499473  
Ti -3.360117 -6.411942 2.334463  
Ti -4.848381 -8.921305 2.143945  
O 3.941220 -7.762356 2.565238  
O 1.064114 -8.617454 -1.324481  
Ti -1.214784 -3.843141 -2.079002  
Ti 1.245262 -4.193496 0.874877  
O -1.004361 -2.002837 -1.733928  
O -1.825797 -8.205079 -1.105092  
Ti -3.790965 -8.996803 -0.575216  
Ti -2.147386 -9.932308 2.017345  
Ti 3.561196 -9.515103 2.066600  
Ti -0.369086 -6.753561 2.153387  
Ti -0.332087 -8.499511 -5.334768  
Ti 2.969433 -8.884220 -0.680749  
Ti -0.513854 -1.921805 0.091056  
Ti 2.555841 -6.790300 1.725265  
Ti -0.578514 -9.718189 -0.692853  
Ti 0.728553 -10.239150 1.976078  
Ti 1.732544 -8.487433 -3.264762  
Ti -2.608957 -6.362586 -1.238108  
Ti 1.486968 -6.196665 -1.299477  
Ti -2.147651 -9.003267 -3.099992  
Ti -1.011226 -6.092416 -3.903551  
O -3.302376 -4.556096 2.544116  
O 4.214709 -9.858722 0.380359  
O 0.782728 -6.324706 0.571676  
O -4.200843 -7.130712 -0.891269  
O -0.993084 -10.359995 -2.321035  
O -0.279303 -4.666886 2.339470  
O -0.578539 -8.725093 1.538872  
O 2.047014 -6.701813 -3.062539  
O 2.350892 -10.694362 2.858791  
O 1.164907 -7.032079 3.055852  
O -2.139635 -5.966790 0.747580  
O 3.273778 -9.212099 -2.473031  
O -2.583740 -6.882871 -3.256302  
O -5.324505 -9.455496 0.422384  
O -0.664890 -6.725036 -5.669744

O -0.284306 -8.030098 -3.497167  
O 1.934210 -4.498391 -0.915833  
O -2.339036 -10.410605 0.223186  
O 0.560928 -10.901185 0.280214  
O -3.253360 -8.268111 1.361018  
O 1.431351 -9.038314 -5.061069  
O 1.143186 -2.322494 0.904935  
O -0.579972 -3.906011 -0.128323  
O -1.910998 -9.411674 -4.925957  
O -2.843573 -4.504804 -1.584235  
O -1.893796 -6.918305 3.297865  
O -0.807047 -10.960974 2.772057  
O -3.786538 -10.184893 2.958969  
O 3.138122 -7.046312 -0.360488  
O -1.841365 -2.186795 1.310686  
O -0.402625 -5.755754 -2.003626  
O -3.756533 -9.553342 -2.347903

#### **Anti-virals**

##### **Favipiravir**

75

N -2.130855 0.901238 1.544970  
N -2.261815 3.689339 2.244296  
C -1.340245 1.832130 0.948938  
C -1.441622 3.221113 1.284862  
O -0.662640 4.153651 0.628283  
H -0.916803 5.022400 1.039599  
C -2.970867 1.390930 2.439953  
C -3.038444 2.763616 2.828191  
F -3.838571 0.515740 3.046846  
H -3.742108 3.082819 3.629862  
N 0.049990 2.141871 -1.051237  
H -0.185936 3.141028 -1.005153  
H 0.801514 1.816122 -1.669643  
C -0.315841 1.330801 -0.044470  
O 0.199749 0.179460 0.063866  
O -0.853007 -4.148623 -4.018738  
O -4.855248 -6.802073 2.848684  
O 2.969924 -5.063524 1.760145  
O 2.042392 -8.882235 1.190541  
Ti -1.497574 -3.908709 1.407415  
Ti -3.175012 -6.095435 2.288383  
Ti -4.816261 -8.505175 2.102283  
O 4.017411 -7.959314 2.559860  
O 1.109777 -8.644553 -1.345252  
Ti -0.800743 -3.714179 -2.181212  
Ti 1.591293 -4.222187 0.804832  
O -0.416050 -1.907197 -1.847332  
O -1.734616 -8.011676 -1.148678  
Ti -3.745394 -8.661012 -0.609352  
Ti -2.203711 -9.708901 1.993081  
Ti 3.507652 -9.680641 2.075845  
Ti -0.205844 -6.643722 2.117851  
Ti -0.231394 -8.456406 -5.375448  
Ti 2.992808 -9.030492 -0.681756

Ti 0.010571 -1.861141 -0.002972  
Ti 2.710762 -6.892740 1.698865  
Ti -0.603530 -9.614727 -0.707717  
Ti 0.633532 -10.219101 1.986169  
Ti 1.802892 -8.581496 -3.280119  
Ti -2.396743 -6.107075 -1.295919  
Ti 1.689023 -6.264531 -1.336938  
Ti -2.099567 -8.802685 -3.128174  
Ti -0.797773 -5.992520 -3.982983  
O -3.011970 -4.249175 2.447016  
O 4.158385 -10.077318 0.400418  
O 0.974956 -6.325929 0.530926  
O -4.033969 -6.776685 -0.948991  
O -1.049546 -10.236704 -2.334220  
O 0.030041 -4.576000 2.259069  
O -0.553781 -8.614700 1.544259  
O 2.258045 -6.826878 -3.075807  
O 2.221418 -10.782010 2.868672  
O 1.301521 -7.023349 3.026647  
O -1.926632 -5.766222 0.680779  
O 3.274821 -9.416263 -2.467476  
O -2.415970 -6.660141 -3.317852  
O -5.311474 -9.020777 0.377421  
O -0.456892 -6.669630 -5.736408  
O -0.170199 -7.959542 -3.543266  
O 2.262086 -4.601867 -0.979257  
O -2.413651 -10.170213 0.194623  
O 0.424744 -10.877509 0.292382  
O -3.174721 -7.966371 1.333601  
O 1.483411 -9.124994 -5.074373  
O 1.638162 -2.354988 0.794352  
O -0.206047 -3.820341 -0.209828  
O -1.869820 -9.245561 -4.952388  
O -2.476385 -4.238390 -1.655362  
O -1.739063 -6.665531 3.262060  
O -0.954547 -10.826272 2.775476  
O -3.858388 -9.844596 2.927774  
O 3.280580 -7.213991 -0.369038  
O -1.366902 -2.046754 1.209947  
O -0.151109 -5.677440 -2.082333  
O -3.743756 -9.239101 -2.378292

### Chloroquine

108  
C -0.126903 3.121896 -0.454887  
N 0.056123 0.266048 -0.065872  
C -0.048086 2.554005 0.889367  
C 0.049880 1.118872 1.030491  
C -0.058062 2.210842 -1.544971  
C 0.016690 0.829621 -1.295991  
H -0.103386 2.573399 -2.583527  
H 0.018663 0.114707 -2.145356  
N -0.250267 4.459516 -0.635130  
C -1.738282 4.922982 -2.580324  
C 0.091843 9.034504 -2.435978

C -0.763772 9.934068 -4.533277  
C 1.160925 12.245555 -4.115239  
H 0.421528 12.400669 -4.932038  
H -1.683334 9.488741 -4.066506  
H -1.021909 10.985613 -4.797798  
H -0.187177 8.095992 -5.590235  
H 0.536769 9.601070 -6.255705  
H -1.918460 3.839917 -2.751239  
H -1.788992 5.445451 -3.558409  
H -2.551226 5.316830 -1.929485  
H -0.333658 5.038500 0.201842  
C -0.366750 5.167973 -1.917932  
H 0.447615 4.794435 -2.592392  
C -0.018368 7.557715 -2.855539  
H 0.797663 6.769297 -1.003668  
H -0.981036 7.022154 -0.977959  
C -0.132647 6.661712 -1.615309  
H 0.931362 9.146296 -1.706353  
H -0.856385 9.310455 -1.878979  
N 0.347156 9.950080 -3.548532  
C -0.388242 9.167248 -5.813574  
H -1.203602 9.217992 -6.571649  
C 0.605474 11.308348 -3.033583  
H 1.345845 11.206426 -2.202933  
H -0.323414 11.758751 -2.571717  
H 2.082490 11.816958 -4.570822  
H 1.401611 13.245107 -3.689901  
H 0.872950 7.269100 -3.462854  
H -0.909696 7.420817 -3.510958  
C -0.060594 3.361570 2.070332  
C 0.139059 0.545849 2.339773  
H 0.210976 -0.557277 2.449331  
H -0.132925 4.464108 1.992460  
C 0.025873 2.795335 3.346856  
C 0.128358 1.373204 3.473504  
H 0.018861 3.431962 4.255072  
Cl 0.240840 0.666226 5.079486  
O -0.850432 -4.248716 -3.969482  
O -4.849750 -6.924240 2.846585  
O 2.965675 -5.112162 1.765803  
O 2.049298 -8.934961 1.206001  
Ti -1.500380 -3.990676 1.430318  
Ti -3.169545 -6.205969 2.290240  
Ti -4.803249 -8.627588 2.101899  
O 4.028255 -7.996561 2.561533  
O 1.121645 -8.715007 -1.342845  
Ti -0.801906 -3.817194 -2.130842  
Ti 1.573231 -4.290899 0.821335  
O -0.366739 -2.013691 -1.831577  
O -1.731584 -8.114353 -1.147060  
Ti -3.727365 -8.786464 -0.611497  
Ti -2.179197 -9.806567 1.995238  
Ti 3.518521 -9.723755 2.090741  
Ti -0.205760 -6.724202 2.127414

Ti -0.213541 -8.517896 -5.365783  
 Ti 2.998105 -9.093044 -0.671296  
 Ti -0.001514 -1.908620 0.025240  
 Ti 2.710614 -6.940813 1.706870  
 Ti -0.588936 -9.696848 -0.719410  
 Ti 0.658913 -10.298918 1.981560  
 Ti 1.818438 -8.617169 -3.273022  
 Ti -2.400962 -6.213572 -1.271186  
 Ti 1.694808 -6.315250 -1.321815  
 Ti -2.095592 -8.902153 -3.140539  
 Ti -0.796273 -6.087755 -3.939296  
 O -3.024555 -4.356799 2.447101  
 O 4.160930 -10.141389 0.417638  
 O 0.978868 -6.387926 0.543876  
 O -4.033544 -6.895406 -0.935148  
 O -1.036495 -10.327630 -2.342156  
 O 0.016592 -4.655267 2.291635  
 O -0.541437 -8.700195 1.556562  
 O 2.250562 -6.858766 -3.070687  
 O 2.244729 -10.842568 2.877055  
 O 1.308849 -7.071811 3.038697  
 O -1.912534 -5.861952 0.702140  
 O 3.299880 -9.441778 -2.460088  
 O -2.416480 -6.760664 -3.292194  
 O -5.285127 -9.160500 0.376353  
 O -0.455841 -6.735418 -5.707097  
 O -0.165190 -8.046595 -3.527924  
 O 2.245322 -4.642787 -0.965285  
 O -2.381884 -10.271169 0.193192  
 O 0.459115 -10.944899 0.281729  
 O -3.163650 -8.073158 1.334263  
 O 1.515274 -9.155140 -5.071482  
 O 1.595213 -2.415047 0.851250  
 O -0.231181 -3.917693 -0.171726  
 O -1.848530 -9.333857 -4.961734  
 O -2.485455 -4.345322 -1.631543  
 O -1.735139 -6.763008 3.273571  
 O -0.927949 -10.930422 2.760467  
 O -3.835098 -9.954976 2.930675  
 O 3.278205 -7.267314 -0.364100  
 O -1.365210 -2.108136 1.244898  
 O -0.156669 -5.776837 -2.041489  
 O -3.731655 -9.354993 -2.385004

### Hydroxychloroquine

109

C -0.125383 3.125565 -0.452196  
 N 0.057421 0.273395 -0.060982  
 C -0.230137 2.549341 0.884982  
 C -0.117158 1.116004 1.031221  
 C 0.124297 2.229106 -1.527270  
 C 0.184042 0.847050 -1.279831  
 H 0.221229 2.600457 -2.558879  
 H 0.310208 0.143844 -2.129360  
 N -0.251852 4.461825 -0.640893

C -1.538045 4.843566 -2.743190  
C 0.029444 9.042284 -2.444498  
C -0.690792 9.929630 -4.610248  
C 1.223195 12.264787 -4.065125  
O 0.273126 12.875754 -4.968856  
H 0.027187 12.177353 -5.617373  
H -1.394381 9.089514 -4.412647  
H -1.299109 10.869961 -4.569833  
H 0.553235 8.810810 -6.008406  
H 0.617107 10.575349 -6.271868  
H -1.647046 3.752350 -2.920606  
H -1.504330 5.355235 -3.727499  
H -2.436657 5.201619 -2.191817  
H -0.505430 5.027823 0.170375  
C -0.262367 5.159375 -1.935045  
H 0.639018 4.825509 -2.512282  
C 0.058046 7.558403 -2.853447  
H 0.714152 6.821575 -0.916349  
H -1.067332 6.980204 -1.082533  
C -0.138000 6.663406 -1.623050  
H 0.792272 9.212576 -1.645715  
H -0.976153 9.264308 -1.973407  
N 0.346428 9.952480 -3.547320  
C -0.066013 9.734981 -6.004102  
H -0.843544 9.655026 -6.798349  
C 0.583741 11.312515 -3.035289  
H 1.272588 11.216188 -2.161482  
H -0.366868 11.790872 -2.660026  
H 2.015025 11.711373 -4.630931  
H 1.709041 13.113682 -3.528021  
H 1.028170 7.326342 -3.356031  
H -0.745081 7.356780 -3.600195  
C -0.441101 3.348410 2.052951  
C -0.197556 0.538406 2.339334  
H -0.117968 -0.562700 2.454404  
H -0.533944 4.448771 1.967375  
C -0.529364 2.776411 3.326430  
C -0.400123 1.357327 3.461066  
H -0.693516 3.404900 4.225538  
Cl -0.505593 0.640923 5.063610  
O -0.842022 -4.245497 -4.014242  
O -4.851928 -6.824920 2.845175  
O 2.970300 -5.072359 1.756158  
O 2.053217 -8.887340 1.203602  
Ti -1.496189 -3.939450 1.402068  
Ti -3.168684 -6.120918 2.290570  
Ti -4.814063 -8.530665 2.103494  
O 4.036544 -7.960589 2.556472  
O 1.115306 -8.675613 -1.339227  
Ti -0.787566 -3.801518 -2.177319  
Ti 1.583432 -4.248079 0.802954  
O -0.350085 -1.992209 -1.881205  
O -1.740064 -8.067936 -1.143108  
Ti -3.748417 -8.712361 -0.607726

Ti -2.200353 -9.727055 2.006995  
 Ti 3.518875 -9.689250 2.093059  
 Ti -0.198743 -6.681672 2.125789  
 Ti -0.216949 -8.528602 -5.374116  
 Ti 2.994215 -9.076507 -0.671682  
 Ti 0.000527 -1.889531 -0.026060  
 Ti 2.721710 -6.904851 1.700735  
 Ti -0.600877 -9.645843 -0.698386  
 Ti 0.643743 -10.215087 2.000075  
 Ti 1.812142 -8.611604 -3.272626  
 Ti -2.397204 -6.173953 -1.295044  
 Ti 1.692992 -6.303132 -1.328813  
 Ti -2.100079 -8.889210 -3.137727  
 Ti -0.795353 -6.084246 -3.973350  
 O -2.999539 -4.275714 2.455528  
 O 4.149718 -10.127988 0.419580  
 O 0.981858 -6.356757 0.539056  
 O -4.040014 -6.835700 -0.959213  
 O -1.042863 -10.295443 -2.316237  
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 O -0.457344 -6.748236 -5.734596  
 O -0.169074 -8.039374 -3.539005  
 O 2.250761 -4.629668 -0.981174  
 O -2.403369 -10.218626 0.221047  
 O 0.445607 -10.886152 0.312582  
 O -3.173802 -7.995640 1.331245  
 O 1.511009 -9.158319 -5.071040  
 O 1.594177 -2.374371 0.829703  
 O -0.220613 -3.885417 -0.209314  
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 O -1.736503 -6.705506 3.262867  
 O -0.941815 -10.831727 2.791702  
 O -3.856807 -9.861229 2.939904  
 O 3.283756 -7.249392 -0.371841  
 O -1.389911 -2.064322 1.168243  
 O -0.156555 -5.759531 -2.066562  
 O -3.737740 -9.321508 -2.369225

#### Anti-parasites

##### Aminoquinoline

79

C -0.055829 3.142829 -0.041843  
 N 0.054115 0.271917 -0.043238  
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 C 0.181414 0.975551 1.150973  
 C -0.165607 2.389184 -1.234512



C -0.114997 0.978210 -1.178753  
H -0.303971 2.898761 -2.209471  
H -0.230318 0.375966 -2.107796  
N -0.052937 4.519602 -0.055576  
H -0.312718 4.989006 0.814983  
H -0.474382 4.950983 -0.882712  
C 0.226121 3.084489 2.464958  
C 0.370014 0.253147 2.376613  
H 0.437132 -0.855184 2.348190  
H 0.178316 4.191969 2.505064  
C 0.394085 2.356501 3.649966  
C 0.471794 0.930163 3.598298  
H 0.472567 2.885755 4.622468  
H 0.612799 0.347575 4.532398  
O -0.896994 -4.227789 -3.993162  
O -4.861926 -6.941851 2.788104  
O 2.939949 -5.058033 1.749388  
O 2.059637 -8.889049 1.181929  
Ti -1.527812 -3.991225 1.405150  
Ti -3.176577 -6.223754 2.256480  
Ti -4.797837 -8.650988 2.046591  
O 4.031679 -7.956773 2.544472  
O 1.125592 -8.684528 -1.370754  
Ti -0.872418 -3.805586 -2.157131  
Ti 1.541456 -4.245549 0.800402  
O -0.480680 -1.981197 -1.867258  
O -1.727294 -8.125200 -1.185347  
Ti -3.729139 -8.798468 -0.674752  
Ti -2.165481 -9.800148 1.946008  
Ti 3.531601 -9.686607 2.059365  
Ti -0.211452 -6.731476 2.099935  
Ti -0.191317 -8.493876 -5.395720  
Ti 2.998990 -9.056425 -0.692579  
Ti -0.066356 -1.901355 -0.035794  
Ti 2.713514 -6.895698 1.694521  
Ti -0.574231 -9.695894 -0.767041  
Ti 0.677128 -10.253331 1.944051  
Ti 1.837975 -8.583939 -3.298002  
Ti -2.402593 -6.231286 -1.301854  
Ti 1.703797 -6.284575 -1.334139  
Ti -2.070608 -8.902488 -3.190594  
Ti -0.787990 -6.066921 -3.957225  
O -3.020111 -4.379320 2.452560  
O 4.161070 -10.112057 0.381758  
O 0.981673 -6.367511 0.525321  
O -4.038416 -6.914465 -0.987935  
O -1.003817 -10.327444 -2.390566  
O -0.005535 -4.634463 2.260797  
O -0.535661 -8.674554 1.502888  
O 2.249237 -6.820228 -3.091874  
O 2.258061 -10.788225 2.858583  
O 1.304794 -7.057299 3.015413  
O -1.926183 -5.864672 0.673892  
O 3.316907 -9.399655 -2.480055

O -2.401238 -6.771062 -3.323130  
O -5.280241 -9.191396 0.323934  
O -0.438477 -6.707608 -5.723509  
O -0.152935 -8.036991 -3.554350  
O 2.236022 -4.608793 -0.981176  
O -2.363543 -10.282567 0.151220  
O 0.483119 -10.923143 0.254945  
O -3.169694 -8.081736 1.279781  
O 1.539402 -9.117669 -5.099272  
O 1.550273 -2.371550 0.793202  
O -0.255812 -3.902425 -0.215094  
O -1.828628 -9.315638 -5.009696  
O -2.538536 -4.361941 -1.642175  
O -1.742147 -6.795462 3.237825  
O -0.896808 -10.879814 2.747988  
O -3.819694 -9.969081 2.878096  
O 3.287960 -7.228737 -0.382776  
O -1.426113 -2.111830 1.189750  
O -0.169579 -5.753327 -2.062262  
O -3.713050 -9.368973 -2.446276

**Metronidazole**

81

C -0.165547 2.872604 -0.662184  
C -0.162832 2.250515 0.620410  
N -0.034564 0.895603 0.927121  
O 0.107107 0.152832 -0.113145  
O -0.034413 0.460335 2.088650  
N -0.255117 4.215544 -0.532115  
N -0.250000 3.286305 1.549101  
C -0.327385 3.147552 3.008194  
C -1.666989 2.504731 3.464651  
H -2.413267 3.300423 3.696302  
H -2.081795 1.885283 2.627195  
O -1.490168 1.743829 4.662255  
H -1.007551 0.927819 4.379666  
C -0.310548 4.442731 0.815691  
C -0.409312 5.807319 1.425345  
H -0.900967 5.786224 2.419636  
H -0.986466 6.471235 0.748677  
H 0.602619 6.259911 1.562153  
H -0.105661 2.354605 -1.638324  
H 0.512003 2.504889 3.355977  
H -0.191679 4.155978 3.445379  
O -0.855960 -4.253741 -4.025117  
O -4.857215 -6.905028 2.851528  
O 2.971230 -5.120289 1.763822  
O 2.045008 -8.932511 1.206881  
Ti -1.516698 -4.000354 1.401046  
Ti -3.179578 -6.194446 2.290387  
Ti -4.819442 -8.606988 2.102850  
O 4.025914 -8.003457 2.562696  
O 1.114202 -8.712825 -1.334689  
Ti -0.797764 -3.818544 -2.190460  
Ti 1.582124 -4.305382 0.810461

O -0.371291 -2.017482 -1.863560  
 O -1.738239 -8.097725 -1.145507  
 Ti -3.747304 -8.759019 -0.608855  
 Ti -2.202227 -9.791669 1.996076  
 Ti 3.508807 -9.731607 2.095774  
 Ti -0.206183 -6.723909 2.116917  
 Ti -0.220676 -8.563563 -5.365805  
 Ti 2.995999 -9.100307 -0.668210  
 Ti -0.005557 -1.973638 -0.020230  
 Ti 2.712663 -6.946844 1.706311  
 Ti -0.597779 -9.683560 -0.699941  
 Ti 0.637450 -10.280626 1.995821  
 Ti 1.806752 -8.662766 -3.266232  
 Ti -2.403899 -6.202980 -1.299627  
 Ti 1.693841 -6.336416 -1.335198  
 Ti -2.098660 -8.902519 -3.127577  
 Ti -0.798149 -6.096223 -3.986077  
 O -3.022324 -4.344821 2.447377  
 O 4.150037 -10.152809 0.421691  
 O 0.976965 -6.400008 0.534941  
 O -4.039553 -6.874887 -0.949535  
 O -1.041062 -10.320829 -2.322501  
 O 0.007358 -4.653366 2.261777  
 O -0.553771 -8.690100 1.542334  
 O 2.258676 -6.906940 -3.072461  
 O 2.223517 -10.814588 2.903811  
 O 1.300926 -7.071374 3.036248  
 O -1.936217 -5.853764 0.680545  
 O 3.281673 -9.489185 -2.451373  
 O -2.417470 -6.760829 -3.319438  
 O -5.311108 -9.123764 0.376996  
 O -0.453986 -6.780052 -5.735484  
 O -0.168636 -8.056859 -3.536886  
 O 2.251761 -4.666409 -0.976592  
 O -2.403016 -10.262871 0.201066  
 O 0.444138 -10.937407 0.301761  
 O -3.178355 -8.061098 1.333794  
 O 1.495915 -9.221762 -5.057643  
 O 1.606698 -2.440535 0.824307  
 O -0.220211 -3.923052 -0.207934  
 O -1.860856 -9.354020 -4.946205  
 O -2.476068 -4.335102 -1.661744  
 O -1.740910 -6.756404 3.261660  
 O -0.947300 -10.897234 2.783839  
 O -3.857842 -9.942709 2.926803  
 O 3.280993 -7.276106 -0.364054  
 O -1.420429 -2.124186 1.156879  
 O -0.152065 -5.773183 -2.083499  
 O -3.741415 -9.341539 -2.374980

#### **Amodiaquinine**

107

C -0.487569 6.237312 2.255597  
 N 0.236913 8.897965 1.356124  
 C -1.247361 6.886330 1.216245

C -0.822031 8.214463 0.797133  
C 0.567030 6.962481 2.832853  
C 0.873232 8.275611 2.347271  
H 1.173299 6.510007 3.644727  
H 1.724017 8.825909 2.810810  
N -0.841033 4.942738 2.741262  
C 0.522517 0.110678 3.025885  
C -1.333383 0.006047 4.588497  
C 0.664121 -0.896197 6.669406  
H -0.405325 -1.031682 6.944302  
H -1.805842 0.131419 3.585551  
H -1.569048 -1.041762 4.913286  
H -1.724581 2.056467 5.245802  
H -1.492826 0.887418 6.594176  
H -0.573219 4.852977 3.728358  
C -0.458731 3.756206 2.053676  
C 0.187015 1.367627 2.231523  
H -0.283563 2.617176 3.932481  
C -0.199575 2.587341 2.829670  
H 1.627123 -0.062028 2.970293  
H 0.059271 -0.774190 2.500003  
N 0.146543 0.155577 4.441543  
C -1.932651 1.015771 5.581780  
H -3.036131 0.891344 5.661786  
C 0.855025 -0.937833 5.148094  
H 1.939041 -0.847640 4.895233  
H 0.513344 -1.940278 4.753638  
H 1.003999 0.077295 7.090231  
H 1.242635 -1.713866 7.154194  
C -2.409840 6.295896 0.620982  
C -1.557024 8.874510 -0.246692  
H -1.223404 9.882990 -0.570622  
H -2.740792 5.300172 0.976720  
C -3.119075 6.961451 -0.381882  
C -2.675682 8.254351 -0.821432  
H -4.024866 6.508980 -0.837027  
Cl -3.583409 9.069032 -2.096744  
C -0.323165 3.692437 0.638092  
H -0.509298 4.589814 0.019036  
C 0.328140 1.349271 0.818911  
C 0.074913 2.483858 0.023503  
H 0.215471 2.428393 -1.075333  
O 0.793174 0.159349 0.167039  
H 1.559408 -0.224715 0.677404  
O -0.937962 -4.247065 -4.100647  
O -4.855442 -6.803383 2.798737  
O 2.923464 -4.923320 1.660740  
O 2.044958 -8.783589 1.194504  
Ti -1.575962 -3.853384 1.285691  
Ti -3.190169 -6.088995 2.210319  
Ti -4.804325 -8.530262 2.103015  
O 3.998728 -7.780142 2.541389  
O 1.125734 -8.683049 -1.357722  
Ti -0.892042 -3.758458 -2.286795

Ti 1.521742 -4.119141 0.704851  
 O -0.554390 -1.906194 -1.997890  
 O -1.729926 -8.058449 -1.156756  
 Ti -3.727935 -8.728371 -0.606782  
 Ti -2.171579 -9.691402 2.012808  
 Ti 3.519748 -9.530912 2.100124  
 Ti -0.228407 -6.586150 2.026520  
 Ti -0.219763 -8.571722 -5.372816  
 Ti 3.004407 -8.975686 -0.680847  
 Ti -0.119499 -1.806836 -0.204056  
 Ti 2.696276 -6.757030 1.638009  
 Ti -0.587393 -9.636390 -0.701155  
 Ti 0.678288 -10.151913 2.000076  
 Ti 1.815604 -8.594560 -3.283982  
 Ti -2.408954 -6.177762 -1.335761  
 Ti 1.689650 -6.202564 -1.400235  
 Ti -2.097600 -8.895175 -3.136690  
 Ti -0.804922 -6.089439 -4.012984  
 O -3.060202 -4.222060 2.331503  
 O 4.179411 -9.968682 0.439631  
 O 0.948929 -6.254800 0.452660  
 O -4.037802 -6.842797 -0.962240  
 O -1.042734 -10.298176 -2.308225  
 O -0.043231 -4.456373 2.153262  
 O -0.542418 -8.574140 1.536410  
 O 2.208923 -6.816737 -3.139341  
 O 2.266185 -10.656205 2.908395  
 O 1.278336 -6.866415 2.961196  
 O -1.927889 -5.755157 0.618894  
 O 3.334309 -9.337251 -2.458773  
 O -2.419554 -6.760239 -3.344431  
 O -5.278142 -9.106794 0.393142  
 O -0.453194 -6.792855 -5.754104  
 O -0.175012 -8.047664 -3.545058  
 O 2.220702 -4.525425 -1.074166  
 O -2.375684 -10.195382 0.226024  
 O 0.464753 -10.854185 0.328862  
 O -3.166037 -7.976862 1.318482  
 O 1.504199 -9.206567 -5.056619  
 O 1.553198 -2.262406 0.651508  
 O -0.259120 -3.775916 -0.327868  
 O -1.859324 -9.364233 -4.947628  
 O -2.539789 -4.312896 -1.735640  
 O -1.748750 -6.599959 3.197936  
 O -0.900868 -10.767993 2.811259  
 O -3.825117 -9.834246 2.950471  
 O 3.258838 -7.134181 -0.416988  
 O -1.515258 -1.962223 0.966629  
 O -0.179470 -5.692538 -2.132657  
 O -3.735255 -9.326048 -2.365351

# Industry

## Biotinidase

70

C 0.126789 1.575709 0.088494

O 0.058010 2.243132 -1.091675  
O 0.055458 2.369421 1.188837  
C -0.051138 3.682415 -0.802216  
C -0.055696 3.767282 0.743333  
O 0.255819 0.345628 0.166241  
H 0.822086 4.192391 -1.268689  
H -0.990630 4.055607 -1.268564  
H 0.813296 4.327721 1.156631  
H -0.998819 4.187068 1.160661  
O -0.847646 -4.106502 -3.977484  
O -4.861585 -6.780819 2.784371  
O 2.960994 -4.966126 1.796724  
O 2.050465 -8.789995 1.203636  
Ti -1.505980 -3.833780 1.413779  
Ti -3.179895 -6.065655 2.242288  
Ti -4.805972 -8.494448 2.063961  
O 4.020971 -7.859941 2.571609  
O 1.119710 -8.574957 -1.329937  
Ti -0.805065 -3.665222 -2.141954  
Ti 1.588661 -4.127141 0.834310  
O -0.436799 -1.843777 -1.824227  
O -1.741815 -7.975463 -1.160646  
Ti -3.732100 -8.640167 -0.643146  
Ti -2.187452 -9.678638 1.970791  
Ti 3.520685 -9.585568 2.085896  
Ti -0.211034 -6.592522 2.121884  
Ti -0.206242 -8.393132 -5.356202  
Ti 3.000056 -8.940229 -0.668731  
Ti 0.003120 -1.766145 0.001040  
Ti 2.705032 -6.796592 1.722870  
Ti -0.595821 -9.553399 -0.721349  
Ti 0.662008 -10.154516 1.957040  
Ti 1.814345 -8.489167 -3.258527  
Ti -2.398809 -6.075443 -1.291492  
Ti 1.694523 -6.174883 -1.312507  
Ti -2.095997 -8.771922 -3.157651  
Ti -0.785583 -5.944856 -3.945079  
O -3.028719 -4.216159 2.421260  
O 4.164948 -9.988284 0.410279  
O 0.983612 -6.246117 0.554537  
O -4.037838 -6.751140 -0.956529  
O -1.036905 -10.185002 -2.347311  
O 0.005630 -4.513892 2.272984  
O -0.545542 -8.563201 1.522380  
O 2.243705 -6.728199 -3.064071  
O 2.243238 -10.701331 2.864417  
O 1.293870 -6.939964 3.047100  
O -1.907971 -5.710373 0.673688  
O 3.298199 -9.309706 -2.454698  
O -2.408738 -6.620047 -3.306796  
O -5.292111 -9.022785 0.346236  
O -0.444239 -6.608017 -5.702337  
O -0.167242 -7.914774 -3.521295  
O 2.253722 -4.507701 -0.957187

O -2.386799 -10.150063 0.171051  
O 0.459988 -10.808409 0.265126  
O -3.161998 -7.947462 1.302008  
O 1.518534 -9.030073 -5.059017  
O 1.634241 -2.263266 0.803340  
O -0.204642 -3.733625 -0.178653  
O -1.844310 -9.211428 -4.970871  
O -2.478610 -4.201230 -1.630816  
O -1.756963 -6.625577 3.244441  
O -0.923646 -10.778660 2.752006  
O -3.846787 -9.833594 2.889725  
O 3.281198 -7.120556 -0.358792  
O -1.377878 -1.951852 1.204402  
O -0.161478 -5.630276 -2.034992  
O -3.739436 -9.216085 -2.414042

### Thymol

85

C -0.676308 2.433165 2.812818  
C -0.878632 2.508002 4.310773  
H -1.719272 3.190872 4.564999  
H 0.036277 2.904191 4.813361  
H -1.090988 1.505832 4.746376  
C -1.077698 3.498880 1.963790  
H -1.571279 4.385244 2.413736  
C -0.063525 1.305722 2.212329  
H 0.236650 0.430506 2.829015  
C -0.864989 3.444980 0.567149  
C 0.146940 1.282555 0.817182  
H -1.180545 4.294080 -0.068694  
C -0.233942 2.332892 -0.053310  
C -0.014560 2.235750 -1.562034  
H 0.851056 1.544401 -1.723508  
C 0.321644 3.596471 -2.201416  
H 1.234551 4.055000 -1.756404  
H 0.490784 3.466765 -3.293716  
H -0.519223 4.316389 -2.077462  
C -1.254941 1.613585 -2.246092  
H -1.474238 0.590015 -1.864234  
H -2.150775 2.251205 -2.071332  
H -1.091184 1.535531 -3.343902  
O 0.782410 0.134598 0.234924  
H 1.494045 -0.188153 0.848291  
O -0.922897 -4.230407 -4.105855  
O -4.861372 -6.822122 2.751195  
O 2.925040 -4.973139 1.691313  
O 2.047486 -8.814133 1.169339  
Ti -1.576484 -3.892531 1.274324  
Ti -3.191047 -6.107656 2.185726  
Ti -4.806677 -8.543341 2.036222  
O 4.008095 -7.854734 2.524199  
O 1.123125 -8.683024 -1.385497  
Ti -0.888392 -3.755876 -2.285502  
Ti 1.530407 -4.168845 0.727823  
O -0.547590 -1.908092 -1.974824

O -1.733850 -8.066717 -1.207078  
 Ti -3.721101 -8.737611 -0.673799  
 Ti -2.182853 -9.709703 1.954705  
 Ti 3.520049 -9.593658 2.064114  
 Ti -0.220625 -6.619683 2.035699  
 Ti -0.210013 -8.545686 -5.403942  
 Ti 3.002418 -8.992902 -0.701588  
 Ti -0.097729 -1.840767 -0.173322  
 Ti 2.700410 -6.810912 1.641132  
 Ti -0.593048 -9.644058 -0.754651  
 Ti 0.665485 -10.175744 1.949369  
 Ti 1.815283 -8.592767 -3.299107  
 Ti -2.410367 -6.183718 -1.380530  
 Ti 1.689924 -6.219988 -1.403068  
 Ti -2.095927 -8.892457 -3.197968  
 Ti -0.799891 -6.071463 -4.036193  
 O -3.058863 -4.244828 2.325084  
 O 4.161725 -10.029043 0.393025  
 O 0.956901 -6.291388 0.456274  
 O -4.039639 -6.854577 -1.014986  
 O -1.040798 -10.297611 -2.367185  
 O -0.048048 -4.523659 2.147685  
 O -0.546533 -8.594303 1.493419  
 O 2.212969 -6.816992 -3.146527  
 O 2.248620 -10.697020 2.864080  
 O 1.284154 -6.931891 2.965499  
 O -1.942347 -5.769913 0.586003  
 O 3.333678 -9.340498 -2.481692  
 O -2.420317 -6.748552 -3.384782  
 O -5.275107 -9.112767 0.325211  
 O -0.440699 -6.762243 -5.778926  
 O -0.177373 -8.033506 -3.577866  
 O 2.228260 -4.548216 -1.063660  
 O -2.380358 -10.211689 0.160948  
 O 0.458923 -10.867160 0.271520  
 O -3.164763 -7.990540 1.268422  
 O 1.504747 -9.199814 -5.074566  
 O 1.555919 -2.314173 0.697595  
 O -0.249062 -3.799264 -0.330462  
 O -1.853239 -9.343591 -5.009778  
 O -2.539207 -4.310635 -1.744868  
 O -1.756498 -6.634194 3.179681  
 O -0.917284 -10.787608 2.757563  
 O -3.838560 -9.856717 2.882317  
 O 3.262972 -7.155205 -0.422327  
 O -1.480784 -2.001212 1.003588  
 O -0.184618 -5.697432 -2.142300  
 O -3.734820 -9.326651 -2.437691

#### Carvacol

85

C -0.360846 2.392837 -0.152286  
 C -0.543631 2.401347 1.348590  
 H -1.223401 3.227104 1.649787  
 H 0.427105 2.556084 1.877659



H -0.965770 1.437377 1.714137  
C -0.757591 3.482793 -0.970492  
H -1.215387 4.366904 -0.480284  
C 0.220029 1.292139 -0.827840  
O 0.604349 0.148197 -0.042660  
H 1.533640 0.232226 0.280173  
C -0.592078 3.452358 -2.374674  
C 0.381348 1.229908 -2.226347  
H -0.913638 4.321484 -2.981234  
C -0.027013 2.323502 -3.029955  
C 0.090970 2.237846 -4.550493  
H 0.790405 1.389306 -4.766282  
C 0.664608 3.526420 -5.173890  
H 1.656225 3.792180 -4.741207  
H 0.780610 3.402031 -6.274145  
H -0.026089 4.384419 -5.003329  
C -1.280093 1.902861 -5.181632  
H -1.710099 0.968163 -4.755009  
H -2.000781 2.734399 -4.999515  
H -1.178944 1.774726 -6.283137  
H 0.801666 0.314688 -2.693161  
O -0.861564 -4.262126 -4.050360  
O -4.872771 -6.906112 2.766593  
O 2.914917 -4.988160 1.722063  
O 2.046236 -8.828514 1.204398  
Ti -1.591004 -3.922887 1.338614  
Ti -3.202028 -6.181870 2.214042  
Ti -4.805811 -8.623345 2.046246  
O 4.006646 -7.864370 2.560082  
O 1.122136 -8.689162 -1.354131  
Ti -0.894091 -3.792392 -2.230216  
Ti 1.504681 -4.198091 0.779954  
O -0.548238 -1.953480 -1.927533  
O -1.739500 -8.111207 -1.190043  
Ti -3.719886 -8.792451 -0.663753  
Ti -2.176296 -9.775459 1.970176  
Ti 3.519674 -9.607328 2.094591  
Ti -0.235457 -6.658436 2.083311  
Ti -0.205019 -8.578901 -5.376214  
Ti 3.001878 -8.990137 -0.670781  
Ti -0.107964 -1.881463 -0.106432  
Ti 2.693461 -6.827328 1.689418  
Ti -0.590065 -9.683747 -0.737103  
Ti 0.672072 -10.214344 1.967395  
Ti 1.819343 -8.597058 -3.272442  
Ti -2.409879 -6.212784 -1.335831  
Ti 1.630436 -6.252082 -1.354748  
Ti -2.095914 -8.929485 -3.177165  
Ti -0.803152 -6.111110 -4.002613  
O -3.086244 -4.319915 2.360423  
O 4.164970 -10.030320 0.426654  
O 0.939610 -6.315142 0.510963  
O -4.038451 -6.912811 -0.993903  
O -1.029072 -10.337075 -2.350652

O -0.064204 -4.555395 2.211070  
O -0.548870 -8.638187 1.526856  
O 2.177339 -6.814816 -3.102398  
O 2.256887 -10.734476 2.877560  
O 1.273719 -6.954297 3.010507  
O -1.949237 -5.812644 0.626409  
O 3.337583 -9.334697 -2.454808  
O -2.424543 -6.790503 -3.369635  
O -5.270203 -9.191230 0.335290  
O -0.452839 -6.799204 -5.750453  
O -0.178102 -8.065551 -3.550365  
O 2.161535 -4.572612 -1.022514  
O -2.366381 -10.266394 0.172658  
O 0.483878 -10.891763 0.281772  
O -3.165570 -8.059658 1.285980  
O 1.524219 -9.196846 -5.054532  
O 1.525997 -2.334454 0.749209  
O -0.286072 -3.836408 -0.265662  
O -1.837837 -9.401711 -4.980738  
O -2.557185 -4.345900 -1.725215  
O -1.772638 -6.707898 3.216131  
O -0.904454 -10.857930 2.759523  
O -3.835145 -9.940593 2.887152  
O 3.248289 -7.159550 -0.380767  
O -1.486319 -2.032318 1.090856  
O -0.241683 -5.763011 -2.069596  
O -3.734323 -9.381313 -2.428967

#### Glucose

84

O -0.154907 0.266715 0.104460  
C -0.379897 0.938319 1.423591  
H 0.147177 0.249661 2.125309  
C 0.355001 2.297330 1.453429  
H -0.027770 2.856748 2.342545  
C 0.076893 3.171366 0.191953  
C 0.336134 2.357725 -1.098586  
C -0.518720 1.073765 -1.091704  
H -0.237697 0.381050 -1.930948  
O 1.765458 2.117712 1.645116  
H 2.105342 1.862153 0.746518  
H 0.803879 4.018496 0.232637  
O 1.748759 2.036317 -1.149860  
H 1.859797 1.311716 -1.812266  
C -1.899684 1.022256 1.782740  
O -2.743500 0.164848 0.981517  
H -2.375480 -0.771516 1.106918  
H -2.261931 2.060571 1.625866  
O -1.246444 3.725756 0.166990  
H -1.793934 3.023980 -0.283737  
H 0.019505 2.976668 -1.977881  
O -1.886899 1.403163 -1.097643  
H -2.346252 0.766599 -0.423896  
H -2.015137 0.771208 2.863630  
O -0.845661 -4.134183 -3.953440

O -4.852524 -6.893668 2.850455  
O 2.958332 -5.067578 1.815137  
O 2.047992 -8.884257 1.199393  
Ti -1.505241 -3.944335 1.502157  
Ti -3.179831 -6.170673 2.305662  
Ti -4.812573 -8.586946 2.070690  
O 4.017088 -7.965483 2.573791  
O 1.109888 -8.609220 -1.328730  
Ti -0.795583 -3.725589 -2.122194  
Ti 1.586600 -4.236931 0.863076  
O -0.333362 -1.911580 -1.786025  
O -1.745259 -8.025085 -1.163782  
Ti -3.749379 -8.691969 -0.655270  
Ti -2.195274 -9.755997 1.948605  
Ti 3.515677 -9.692448 2.083929  
Ti -0.207408 -6.701795 2.143245  
Ti -0.210999 -8.418069 -5.365597  
Ti 2.993332 -9.030942 -0.667198  
Ti 0.009687 -1.870862 0.053609  
Ti 2.707278 -6.903825 1.728392  
Ti -0.601381 -9.621714 -0.740256  
Ti 0.647527 -10.251344 1.941956  
Ti 1.805752 -8.564864 -3.262135  
Ti -2.402930 -6.122852 -1.274404  
Ti 1.694764 -6.267726 -1.306176  
Ti -2.098036 -8.800639 -3.161491  
Ti -0.791537 -5.981269 -3.937824  
O -3.006165 -4.321466 2.529339  
O 4.161315 -10.077961 0.404501  
O 0.973375 -6.324942 0.568571  
O -4.041391 -6.801295 -0.954402  
O -1.041557 -10.231843 -2.371346  
O 0.011210 -4.622458 2.330624  
O -0.547582 -8.645777 1.517485  
O 2.254496 -6.806575 -3.053193  
O 2.227095 -10.798764 2.851718  
O 1.300129 -7.054518 3.057017  
O -1.937581 -5.774488 0.713737  
O 3.269952 -9.409328 -2.454488  
O -2.412591 -6.647905 -3.295683  
O -5.295262 -9.097459 0.342447  
O -0.441825 -6.624540 -5.694882  
O -0.169399 -7.948560 -3.525672  
O 2.247019 -4.594859 -0.917716  
O -2.395894 -10.202545 0.147066  
O 0.455646 -10.879243 0.236470  
O -3.175663 -8.013970 1.306032  
O 1.495825 -9.098507 -5.059370  
O 1.613548 -2.346727 0.855623  
O -0.237891 -3.817162 -0.128013  
O -1.851716 -9.219345 -4.981463  
O -2.473420 -4.244744 -1.620200  
O -1.746728 -6.757764 3.274251  
O -0.940787 -10.878336 2.712129

O -3.848452 -9.929023 2.872565  
O 3.279001 -7.209158 -0.352009  
O -1.389394 -2.046757 1.303310  
O -0.154812 -5.675437 -2.028841  
O -3.746678 -9.242476 -2.430771

**Galic-acid**

78

C 0.100248 4.366051 -0.164607  
C 0.100031 4.464026 2.314662  
C -0.024232 2.960468 -0.109396  
C -0.098294 3.064217 2.376477  
C 0.155319 5.108370 1.046782  
C -0.149448 2.331481 1.160004  
O 0.365757 6.504603 0.976174  
H -0.525004 6.935989 1.027861  
C -0.326681 0.856540 1.170813  
O 0.042723 0.182036 0.131133  
O -0.872587 0.281898 2.220112  
H -1.061100 -0.757624 1.923291  
O 0.166373 5.017136 -1.376414  
H -0.047634 2.358583 -1.041455  
O 0.228298 5.202821 3.471417  
H -0.177970 2.550701 3.356682  
H 0.331082 5.967528 -1.136313  
H 0.437475 6.122181 3.158228  
O -0.850093 -4.211933 -4.030142  
O -4.824092 -6.776329 2.842225  
O 2.976919 -5.061642 1.745267  
O 2.055477 -8.878537 1.203960  
Ti -1.438794 -3.891857 1.419302  
Ti -3.133352 -6.092860 2.284137  
Ti -4.803765 -8.493760 2.119504  
O 4.037987 -7.956396 2.554842  
O 1.115892 -8.657073 -1.340440  
Ti -0.777795 -3.778539 -2.197144  
Ti 1.603285 -4.239313 0.784453  
O -0.267082 -1.974544 -1.925136  
O -1.732142 -8.033604 -1.141350  
Ti -3.735851 -8.691380 -0.600471  
Ti -2.194591 -9.703381 2.016446  
Ti 3.521679 -9.686730 2.091330  
Ti -0.188912 -6.668175 2.111585  
Ti -0.228866 -8.507313 -5.374825  
Ti 2.995109 -9.070115 -0.675255  
Ti 0.107251 -1.840087 -0.112719  
Ti 2.727893 -6.899281 1.698437  
Ti -0.602813 -9.623514 -0.702136  
Ti 0.648574 -10.209583 1.994945  
Ti 1.807449 -8.611824 -3.275815  
Ti -2.394236 -6.135522 -1.292148  
Ti 1.695916 -6.304147 -1.343792  
Ti -2.101938 -8.826992 -3.130997  
Ti -0.798949 -6.049077 -3.991623  
O -2.949270 -4.241572 2.448292

O 4.149870 -10.120785 0.417449  
 O 0.985810 -6.339898 0.529775  
 O -4.028785 -6.803005 -0.942949  
 O -1.044402 -10.254977 -2.322327  
 O 0.060602 -4.572640 2.264040  
 O -0.543378 -8.614244 1.548615  
 O 2.259788 -6.856644 -3.085040  
 O 2.231054 -10.767687 2.891070  
 O 1.320644 -7.029576 3.026684  
 O -1.895078 -5.758117 0.682948  
 O 3.276972 -9.448886 -2.459596  
 O -2.417840 -6.715273 -3.318782  
 O -5.289731 -9.047754 0.404627  
 O -0.463290 -6.725340 -5.742738  
 O -0.166452 -7.997650 -3.542814  
 O 2.253989 -4.634127 -0.998761  
 O -2.401292 -10.179756 0.220592  
 O 0.444290 -10.870579 0.305014  
 O -3.158916 -7.965225 1.339861  
 O 1.487889 -9.165122 -5.065908  
 O 1.707638 -2.363943 0.665947  
 O -0.225582 -3.824295 -0.205956  
 O -1.866981 -9.292880 -4.946334  
 O -2.463622 -4.271086 -1.676953  
 O -1.708680 -6.671033 3.266227  
 O -0.941239 -10.819056 2.788005  
 O -3.847427 -9.829258 2.951874  
 O 3.285814 -7.244943 -0.376111  
 O -1.255730 -1.985968 1.249248  
 O -0.154558 -5.721436 -2.079286  
 O -3.738766 -9.272071 -2.366360

#### **Anthraquinone**

84

C 0.001552 3.683271 1.278598  
 C 0.009553 3.621862 -1.288464  
 C 0.056129 2.253251 1.306329  
 C 0.064253 2.190700 -1.251036  
 C -0.067437 3.702111 3.730152  
 C -0.047270 3.528170 -3.737811  
 C -0.028876 2.281964 3.754879  
 C -0.008866 2.108642 -3.697333  
 C -0.004092 4.436448 -0.023854  
 C 0.136390 1.488492 0.044876  
 O -0.033951 5.684001 -0.052538  
 O 0.275013 0.223719 0.084026  
 C -0.053170 4.399243 2.497464  
 C 0.037727 1.555978 2.545868  
 C -0.039401 4.281501 -2.538450  
 C 0.051343 1.434889 -2.457158  
 H -0.112970 4.270872 4.683359  
 H -0.088536 4.053395 -4.715992  
 H -0.048191 1.737949 4.722939  
 H -0.026126 1.520904 -4.640030  
 H -0.086931 5.508824 2.454760

H -0.073831 5.392084 -2.546733  
H 0.065729 0.444361 2.540748  
H 0.071182 0.322207 -2.405964  
O -0.806105 -4.126104 -3.954495  
O -4.832368 -6.790595 2.850408  
O 2.984921 -5.054309 1.811937  
O 2.038746 -8.860923 1.193877  
Ti -1.461406 -3.872711 1.455154  
Ti -3.145551 -6.095609 2.284420  
Ti -4.819605 -8.492914 2.098443  
O 4.021862 -7.965818 2.565133  
O 1.106555 -8.615375 -1.348499  
Ti -0.781439 -3.698610 -2.119602  
Ti 1.603895 -4.207184 0.871689  
O -0.363573 -1.891819 -1.808297  
O -1.738078 -7.995935 -1.152085  
Ti -3.752884 -8.643665 -0.621250  
Ti -2.206290 -9.691803 1.976364  
Ti 3.505359 -9.682270 2.063051  
Ti -0.198054 -6.647972 2.130145  
Ti -0.237882 -8.406495 -5.356546  
Ti 2.980284 -8.998762 -0.683007  
Ti 0.057695 -1.816005 0.044538  
Ti 2.720305 -6.883605 1.722807  
Ti -0.617173 -9.587921 -0.726299  
Ti 0.632349 -10.206791 1.962681  
Ti 1.813214 -8.505359 -3.275104  
Ti -2.378064 -6.090231 -1.261501  
Ti 1.703259 -6.209431 -1.307598  
Ti -2.117139 -8.778890 -3.144230  
Ti -0.779510 -5.970585 -3.923933  
O -2.984753 -4.243177 2.456870  
O 4.137291 -10.072126 0.378599  
O 0.995633 -6.299785 0.561725  
O -4.020794 -6.746299 -0.915668  
O -1.076353 -10.214203 -2.347539  
O 0.044684 -4.561745 2.316423  
O -0.555805 -8.596968 1.522394  
O 2.236904 -6.742611 -3.068797  
O 2.217157 -10.781560 2.848589  
O 1.307111 -7.026886 3.044184  
O -1.873430 -5.755277 0.709218  
O 3.293063 -9.329635 -2.474192  
O -2.408829 -6.626224 -3.287786  
O -5.312436 -9.008071 0.371255  
O -0.464410 -6.619384 -5.692128  
O -0.179195 -7.943100 -3.518769  
O 2.260685 -4.546275 -0.933158  
O -2.422935 -10.158144 0.178637  
O 0.414501 -10.856060 0.268575  
O -3.173474 -7.956591 1.323995  
O 1.496439 -9.037296 -5.072982  
O 1.657361 -2.338564 0.873908  
O -0.187685 -3.787960 -0.151269

O -1.878677 -9.212825 -4.962283  
O -2.461857 -4.218451 -1.611077  
O -1.727532 -6.678730 3.276107  
O -0.955369 -10.801849 2.763406  
O -3.865753 -9.841948 2.903967  
O 3.282944 -7.181557 -0.360061  
O -1.308959 -1.989555 1.271806  
O -0.157052 -5.669185 -2.014400  
O -3.762733 -9.210728 -2.393333

### Resveratrol

89

C -0.071870 4.479419 0.273945  
C 0.207588 1.661013 0.105323  
O 0.372027 0.261076 -0.056939  
H 0.064360 -0.068262 -0.966244  
C 1.213137 3.860439 0.330232  
C 1.364224 2.459651 0.243744  
C -1.221230 3.634139 0.166634  
C -1.088687 2.232530 0.086271  
H 2.107857 4.511028 0.418072  
H 2.365717 1.979786 0.251945  
H -2.232690 4.085096 0.132624  
H -1.980271 1.576594 -0.003982  
C -0.136268 5.949162 0.295272  
C -1.270638 6.723245 0.235571  
H 0.854714 6.451426 0.344715  
H -2.266071 6.228755 0.198303  
C -1.311129 8.195881 0.203332  
C -0.129055 8.992689 0.160315  
H 0.874774 8.525708 0.154682  
C -2.585491 8.830400 0.196566  
H -3.509906 8.217459 0.223880  
C -0.233118 10.400859 0.109988  
C -2.674926 10.243339 0.152227  
O 0.945935 11.135620 0.054670  
O -3.941967 10.813202 0.149316  
H 0.673667 12.083231 0.023045  
H -3.799527 11.788913 0.114612  
C -1.502607 11.038324 0.108443  
H -1.574947 12.150250 0.067459  
O -0.635222 -3.863025 -3.613948  
O -4.778794 -6.743414 3.039142  
O 3.112117 -5.250075 2.063042  
O 2.029575 -8.979232 1.271191  
Ti -1.296506 -3.892070 1.855491  
Ti -3.060610 -6.088637 2.543869  
Ti -4.824193 -8.399372 2.188257  
O 4.033450 -8.232284 2.695403  
O 1.102991 -8.554961 -1.240535  
Ti -0.602730 -3.525934 -1.766379  
Ti 1.756621 -4.311757 1.191903  
O -0.146189 -1.757670 -1.336639  
O -1.723327 -7.842209 -1.016857  
Ti -3.758257 -8.418215 -0.531444

Ti -2.260836 -9.697131 2.004525  
Ti 3.461107 -9.903022 2.107280  
Ti -0.116030 -6.750411 2.364113  
Ti -0.225227 -8.093865 -5.246971  
Ti 2.966782 -9.062712 -0.598711  
Ti 0.289378 -1.820850 0.571844  
Ti 2.781670 -7.068492 1.891712  
Ti -0.661162 -9.501853 -0.685374  
Ti 0.563583 -10.306827 1.971008  
Ti 1.804438 -8.402669 -3.162630  
Ti -2.277946 -5.902029 -1.022279  
Ti 1.759872 -6.206118 -1.086019  
Ti -2.121962 -8.497542 -3.059054  
Ti -0.683097 -5.707438 -3.690782  
O -2.818931 -4.260176 2.850922  
O 4.087296 -10.229968 0.408519  
O 1.058747 -6.350160 0.787966  
O -3.952264 -6.513963 -0.739430  
O -1.130251 -10.014922 -2.339745  
O 0.191415 -4.693546 2.633476  
O -0.558373 -8.636083 1.636655  
O 2.304450 -6.669853 -2.856684  
O 2.123764 -10.983055 2.826977  
O 1.378374 -7.235450 3.229490  
O -1.811491 -5.665279 0.970240  
O 3.242751 -9.335091 -2.408509  
O -2.328685 -6.342991 -3.091290  
O -5.334511 -8.778788 0.439483  
O -0.366249 -6.278003 -5.484079  
O -0.155167 -7.719692 -3.387452  
O 2.376043 -4.576318 -0.628024  
O -2.480217 -10.047097 0.186147  
O 0.336183 -10.847420 0.240363  
O -3.150911 -7.877053 1.455023  
O 1.462664 -8.840448 -4.983316  
O 1.861591 -2.432092 1.331997  
O -0.042635 -3.730705 0.221210  
O -1.901995 -8.842369 -4.897167  
O -2.305663 -4.023264 -1.311011  
O -1.656433 -6.778629 3.490537  
O -1.048921 -10.900188 2.719742  
O -3.924245 -9.830267 2.918258  
O 3.323009 -7.271188 -0.184205  
O -1.043447 -1.996879 1.803332  
O -0.063537 -5.533023 -1.748888  
O -3.784341 -8.896549 -2.328938