A Novel Biomimetic Route to the 3-Acyl-5-hydroxy-3-pyrrolin-2-one and 3-Acyl-3,4-epoxy-5-hydroxy-pyrrolidin-2-one Ring Systems

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bjn-8-40-4

cdcl3

03-19-03

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	20552.322	204.464	2.8
2	16693.256	166.072	4.8
3	13822.991	137.518	8.3
4	12986.021	129.191	43.8
5	12927.272	128.606	2.5
6	12919.643	128.531	45.5
7	12725.850	126.603	22.4
8	7771.933	77.319	14.8
9	7739.889	77.000	15.6
10	7707.844	76.681	15.3
11	6429.119	63.960	20.5
12	5335.793	53.083	18.0
13	5003.141	49.774	16.3
14	3716.786	36.976	22.1
15	3094.972	30.790	9.9

bq-8-85-2

bjn-8-60-1

cdcl3

03-27-03

Pulse Sequence: s2pul

CC(=O)C1=CC=CC=C1C2=CC(=O)N2C3=CC=CC=C3

INDEX	FREQUENCY	PPM	HEIGHT
1	17282.264	171.932	3.9
2	17183.842	170.953	4.1
3	13770.346	136.994	8.4
4	13307.991	132.394	4.5
5	12945.583	128.789	45.8
6	12934.139	128.675	50.0
7	12754.080	126.883	24.8
8	10765.799	107.103	5.6
9	9892.207	98.412	21.0
10	7771.933	77.319	22.4
11	7739.889	77.000	23.2
12	7707.844	76.681	23.4
13	3489.423	34.714	31.6
14	1933.742	19.238	17.5

STANDARD 1H OBSERVE

Pulse Sequence: s2pul

6/11-8-94-3

INDEX	FREQUENCY	PPM	HEIGHT
1	19520.797	194.202	5.7
2	16895.441	168.084	7.8
3	15612.138	155.317	11.0
4	13560.531	134.906	5.0
5	13467.450	133.980	12.9
6	13104.279	130.367	49.7
7	12951.688	128.849	3.1
8	12918.880	128.523	50.0
9	12815.117	127.491	24.4
10	8693.592	86.488	12.1
11	7771.933	77.319	39.2
12	7739.889	77.000	41.5
13	7707.844	76.681	41.0
14	4401.164	43.785	17.4
15	2933.986	29.189	18.8

bjn-8-78-1

cdcl3

04-04-03

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	19757.314	196.555	4.3
2	16782.523	166.960	7.2
3	13367.502	132.986	9.4
4	13130.983	130.633	49.2
5	13109.620	130.421	6.5
6	13004.331	129.373	8.4
7	12976.102	129.092	10.4
8	12947.872	128.811	61.5
9	12927.272	128.606	8.8
10	12879.206	128.128	6.8
11	12837.242	127.711	26.9
12	12786.887	127.210	4.0
13	8496.748	84.530	10.4
14	7771.933	77.319	66.5
15	7739.889	77.000	67.9
16	7707.844	76.681	67.1
17	6381.815	63.489	25.1
18	6312.385	62.799	9.3
19	4372.171	43.496	18.6
20	2914.149	28.991	4.6
21	2757.742	27.435	16.1

endo-kg-8-62-1

bjn-8-102-2c

cdcl3

04-23-03

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	20064.789	199.614	3.5
2	16896.204	168.091	5.8
3	13511.702	134.421	8.0
4	13129.457	130.618	6.2
5	13112.672	130.451	49.0
6	13044.768	129.775	2.1
7	12966.183	128.994	2.6
8	12950.161	128.834	5.6
9	12926.509	128.599	46.8
10	12842.583	127.764	2.7
11	12831.902	127.658	1.4
12	12798.331	127.324	20.6
13	8553.970	85.099	10.9
14	7771.933	77.319	47.5
15	7759.726	77.197	3.2
16	7739.889	77.000	49.5
17	7707.844	76.681	50.0
18	6513.044	64.795	20.1
19	6378.000	63.451	2.8
20	6148.348	61.167	7.7
21	4358.438	43.360	2.6
22	4151.675	41.303	19.7
23	2760.794	27.466	1.4
24	2637.194	26.236	12.1
25	-2.657	-0.026	1.6

byn-8-102-2c

bjn-8-104-2

cdcl

04-25-03

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	19461.285	193.610	2.9
2	17028.960	169.412	1.6
3	14486.005	144.113	11.5
4	13535.353	134.656	3.8
5	13478.894	134.094	4.5
6	13224.828	131.567	2.0
7	13112.672	130.451	2.7
8	13023.405	129.563	18.6
9	13009.672	129.426	34.2
10	12999.754	129.328	28.4
11	12973.050	129.062	2.2
12	12623.613	125.586	-1.7
13	12081.909	120.196	8.2
14	7771.170	77.311	125.2
15	7759.726	77.197	6.9
16	7739.888	77.000	126.1
17	7707.844	76.681	129.2
18	2950.008	29.348	9.9
19	-2.657	-0.026	4.2

carb-bis-8-104-10

bjn-8-116-2.2

cdcl3

05-09-03

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	21102.418	209.937	5.0
2	16720.723	166.345	6.9
3	13830.621	137.593	6.6
4	12983.732	129.168	32.8
5	12911.250	128.447	32.7
6	12714.406	126.489	14.1
7	7771.933	77.319	9.3
8	7739.889	77.000	9.3
9	7707.845	76.681	9.5
10	6422.252	63.892	14.1
11	5335.793	53.083	13.1
12	5176.334	51.497	12.4
13	4728.475	47.041	13.3
14	3712.972	36.938	13.1
15	2804.283	27.898	15.3
16	2802.757	27.883	16.5
17	2570.816	25.576	15.6
18	2545.639	25.325	14.0
19	2541.824	25.287	14.6

bjn-9-002-2.1
cdcl3

Pulse Sequence: s2pul

STANDARD 1H OBSERVE

Pulse Sequence: s2pul

INDEX	FREQUENCY	PPM	HEIGHT
1	20138.033	200.342	7.4
2	16877.893	167.909	7.4
3	15512.190	154.322	21.0
4	13616.991	135.468	6.0
5	13473.554	134.041	14.8
6	13102.754	130.352	49.7
7	12918.880	128.523	51.3
8	12808.250	127.422	22.9
9	8711.140	86.662	12.5
10	7771.170	77.311	96.3
11	7739.889	77.000	98.8
12	7707.844	76.681	100.0
13	4860.467	48.354	21.2
14	4405.741	43.830	19.4
15	2818.016	28.035	23.0
16	2782.920	27.686	24.0
17	2589.890	25.765	25.2
18	2557.083	25.439	26.4
19	2544.112	25.310	26.5

b3y-9-072.12

bjn-9-011-2.2

cdc13

Pulse Sequence: s2pul

bjn-9-016-2tt1.5
cdcl3

Pulse Sequence: s2pul

bja-9-089-1.1

cdc13

Pulse Sequence: zgpg30

INDEX	FREQUENCY	PPM	HEIGHT
1	15393.168	153.138	13.0
2	7771.933	77.319	132.8
3	7760.489	77.205	8.7
4	7739.889	77.000	136.4
5	7707.844	76.681	133.2
6	4846.734	48.218	8.8
7	4248.571	42.267	11.5
8	3413.890	33.963	12.4
9	2862.268	28.475	14.1
10	2786.734	27.724	16.7
11	2785.209	27.709	15.9
12	2596.757	25.834	17.9
13	2577.683	25.644	19.9
14	2545.638	25.325	16.4
15	-2.657	-0.026	4.2

b9-09-052.c