Supporting Information

Bile Acid Amphiphiles with Tunable Head Groups as Highly Selective Antitubercular Agents

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Table S1: Topological parameters of *E. coli* and *M. bovis* BCG probed by AFM showing the selective membrane perturbations of *E. coli* by CA-AMM_3 and of *M. bovis* BCG by CA-$DMAP_3$.

E. coli	**Length (µm)**	**Width (µm)**	**Height (nm)**	**Corrugation (nm)**
Control	2.57 ± 0.19	1.06 ± 0.01	180.66 ± 9.70	6.42 ± 0.79
CA-AMM_3	2.61 ± 0.25	1.01 ± 0.01	157.67 ± 3.81	40.96 ± 4.40
CA-$DMAP_3$	2.78 ± 0.29	1.15 ± 0.05	176.80 ± 11.09	10.93 ± 1.62
***M. bovis* (BCG)**	**Length (µm)**	**Width (µm)**	**Height (nm)**	**Corrugation (nm)**
Control	4.14 ± 0.39	0.61 ± 0.02	207.60 ± 1.48	18.77 ± 1.57
CA-AMM_3	4.27 ± 0.02	0.67 ± 0.01	184.95 ± 13.31	18.77 ± 1.28
CA-$DMAP_3$	2.84 ± 0.37	0.69 ± 0.05	145.0 ± 11.31	48.24 ± 2.70

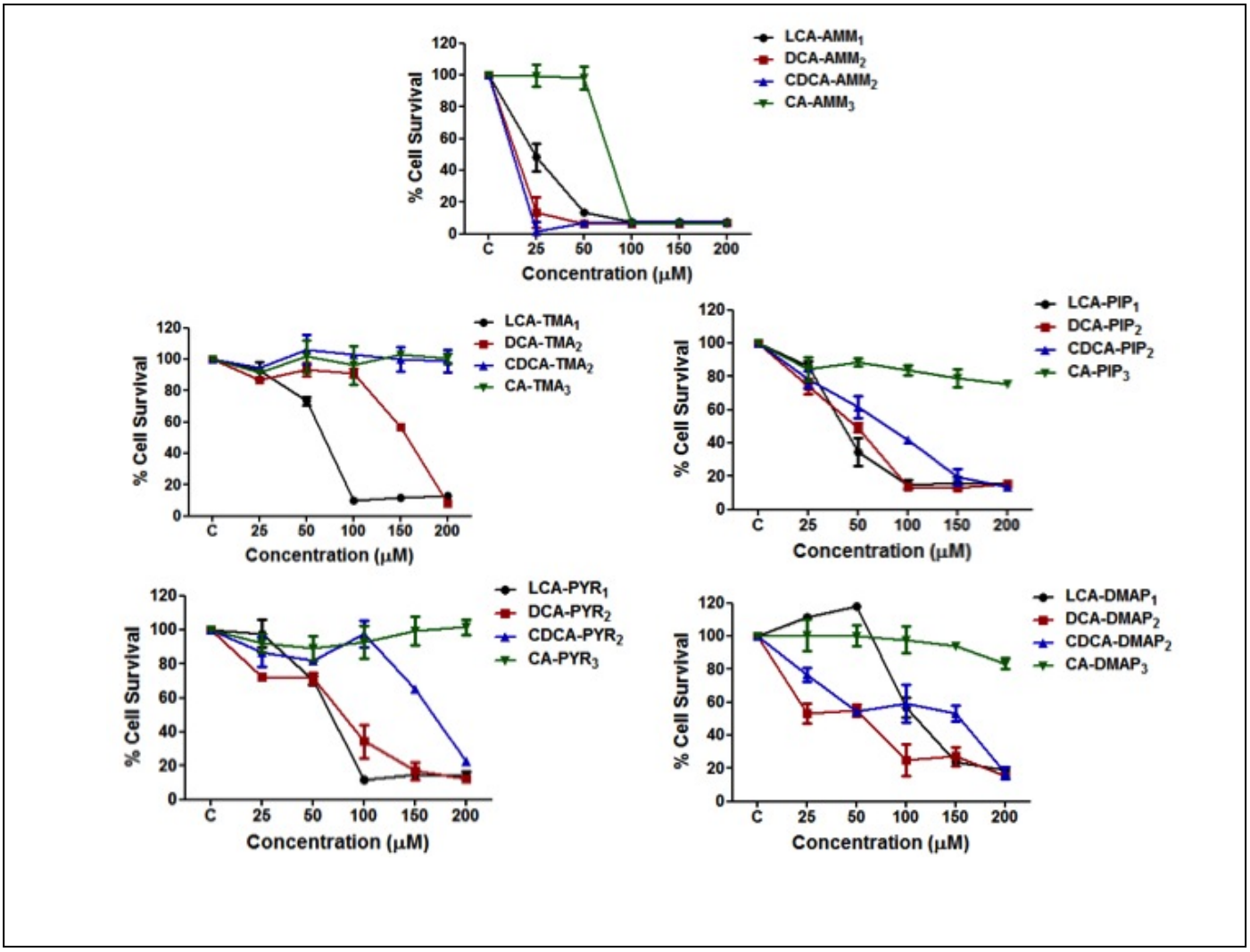


Fig. S1. Cytotoxic activities of bile acid facial amphiphiles at different concentrations against lung epithelial A549 cells.

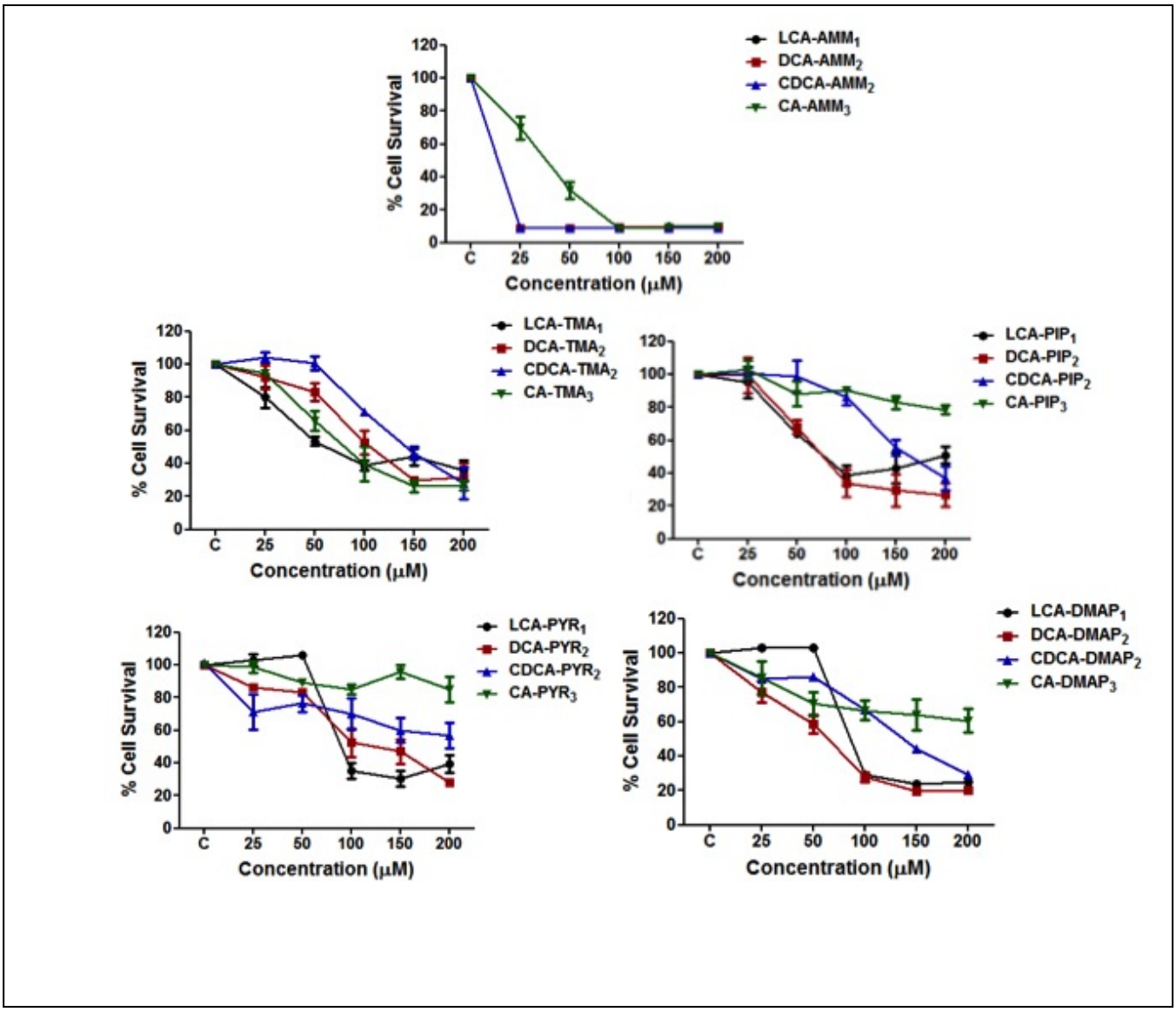


Fig. S2. Cytotoxic activities of bile acid facial amphiphiles at different concentrations against macrophage THP-1 cells.

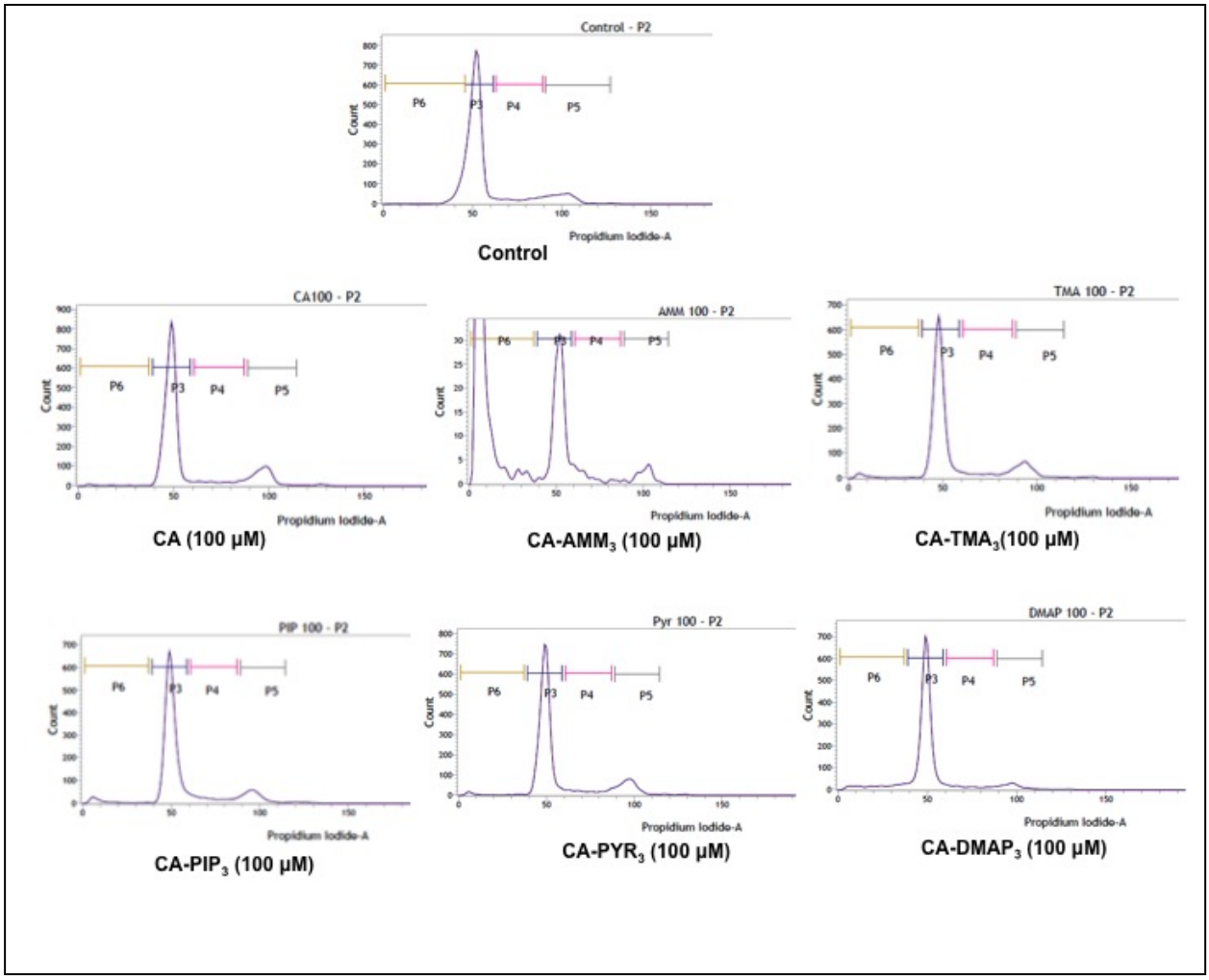


Fig. S3: Cell cycle analysis of cholic acid based amphiphiles against A549 cells showing no change in cell cycle phase of cells up at 100 µM concentration of hard-charged amphiphiles.

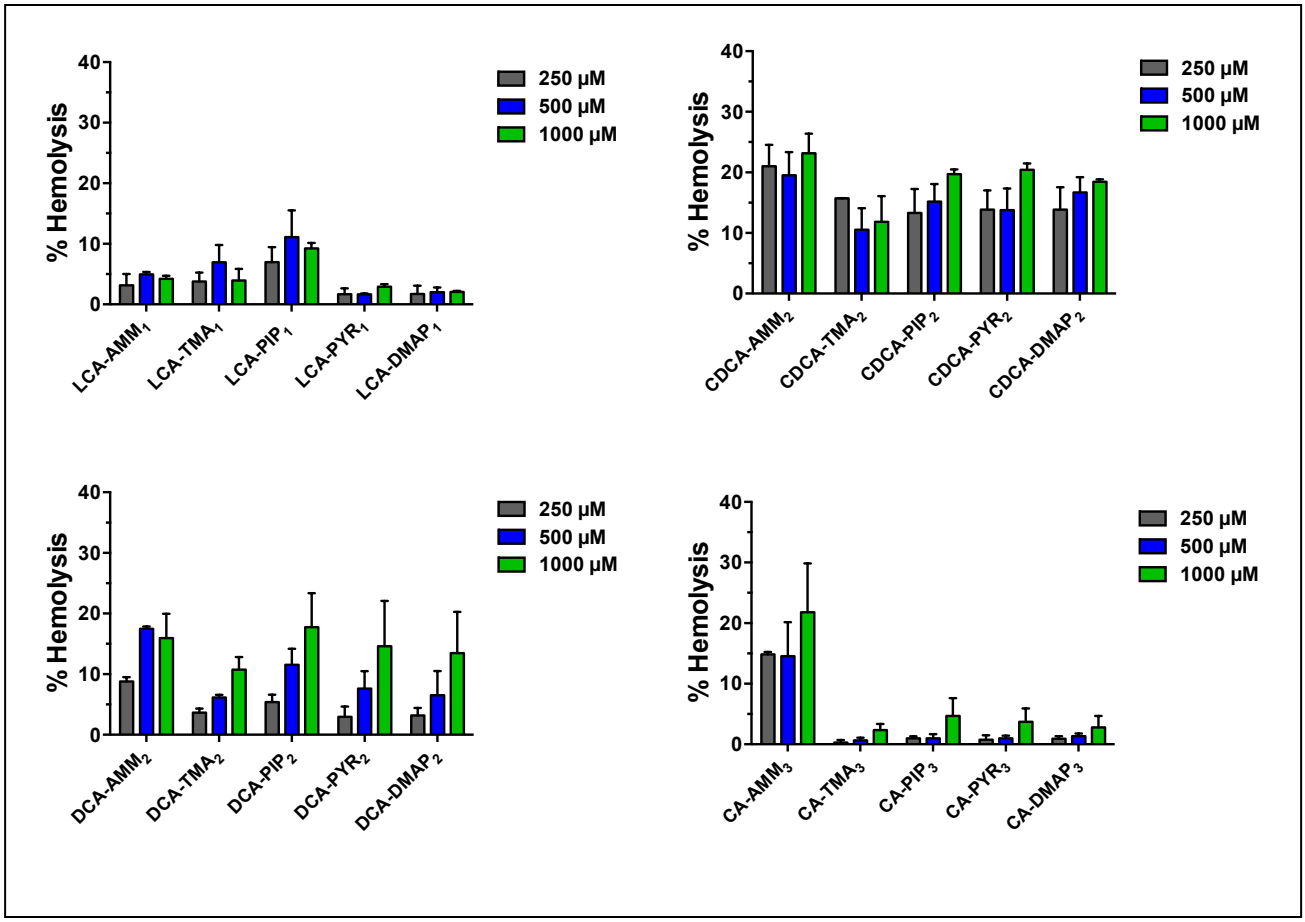


Fig. S4: Hemolytic activities of bile acid amphiphiles showing percentage of hemolysis at 250, 500 and 1000 µM concentrations of bile acid amphiphiles.

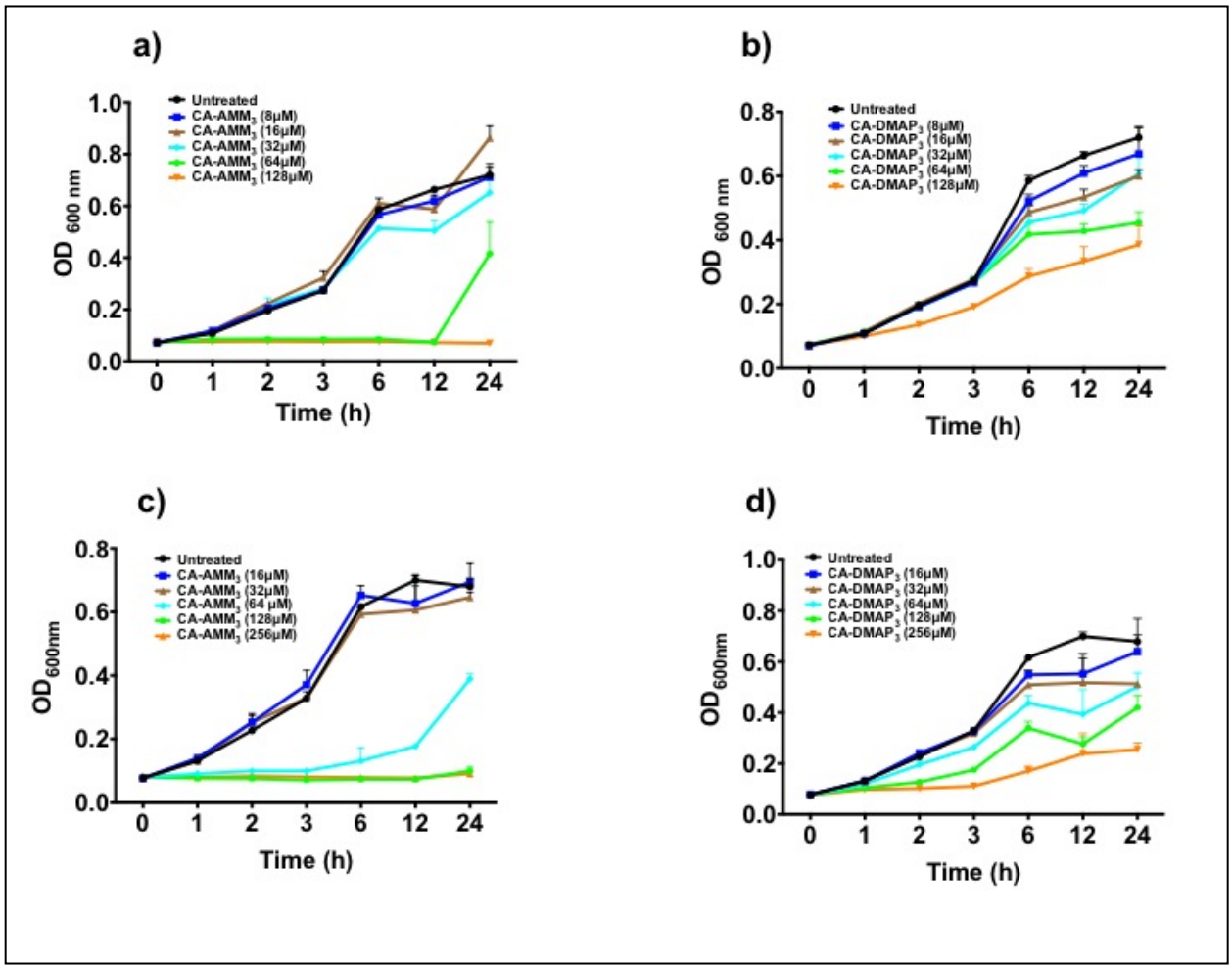
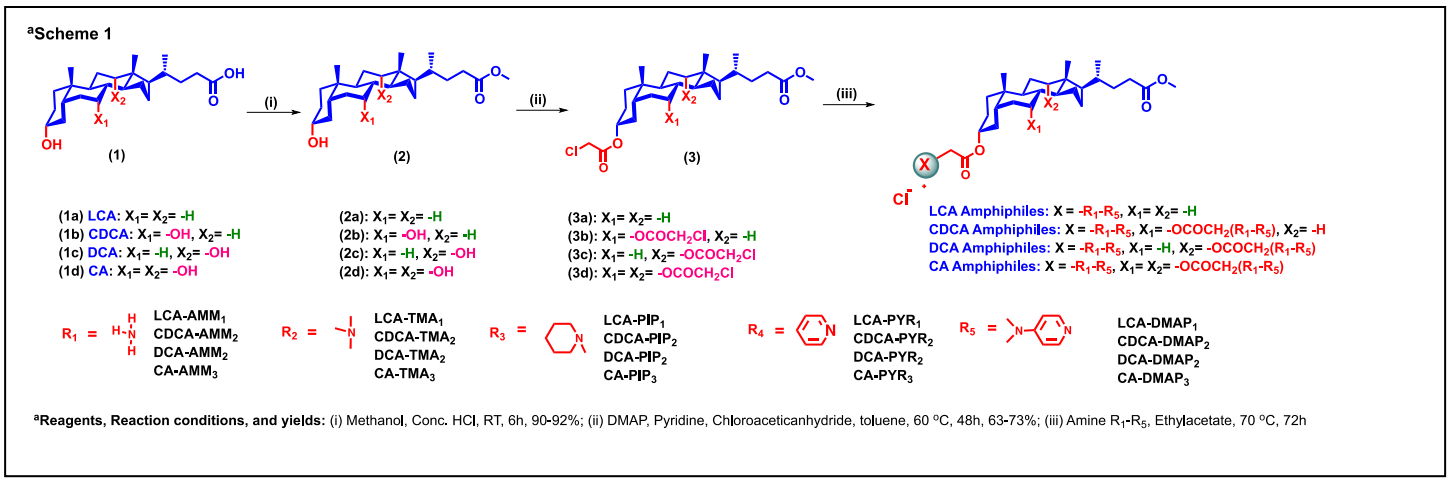


Fig. S5. Concentration and time dependent activities of CA-AMM_3 (a, c) and CA-$DMAP_3$ (b, d) against *E. coli* (a, b) and *S. aureus* (c, d) bacteria showing their selective killing by soft-charged amphiphile CA-AMM_3.



Synthesis of bile acid facial amphiphiles:

Synthesis of Bile Acid Amphiphiles

Chloroacteryl derivatives of bile acid methyl esters (**3a-3d**) was synthesized as described earlier (Biochim. Biophys. Acta Biomembr. 2013, 1828, 1926). Bile Acid amphiphiles were synthesized by quaterinization of corresponding chloroacteryl derivatives of bile acid methyl esters in ethyl acetate (5 mL) in seal tube with corresponding amine derivative. The reaction mixture was heated at 70 °C for 48h-72h. After completion of reaction, solvent was removed and repeated washing with ethyl acetate or acetone give purified product.

LCA-AMM$_1$: ^{1}H NMR ($CDCl_3$, 400 MHz) δ: 0.64 (s, 3H, -C*H*$_3$), 0.91 (s, 6H, -2 x C*H*$_3$), 1.02-2.35 (steroid), 3.66 (s, 3H, -CO-OC*H*$_3$), 3.90 (m, 2H, -CO-C*H*$_2$-N-), 4.82 (s, 1H, -O-C*H*), 8.49 (bs, 2H, -N*H*$_2$). ^{13}C-NMR (DMSO, 100 MHz) δ: 12.30, 18.56, 20.84, 23.22, 24.27, 26.40, 26.54, 27.00, 28.15, 30.82, 31.06, 32.13, 34.59, 34.74, 35.25, 35.73, 41.47, 42.72, 51.69, 55.91, 56.37, 76.09, 167.58, 174.26. HRMS (ESI-MS): m/z $(C_{27}H_{46}NO_4)^+$ calculated 448.3427; found $(M)^+$ 448.3431.

LCA-TMA$_1$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.63 (s, 3H, -C*H*$_3$), 0.91 (s, 6H, -2 x C*H*$_3$), 1.02-2.35 (steroid), 3.64(s, 9H, -N-(C*H*$_3$)$_3$; 3H, -CO-OC*H*$_3$), 4.78 (m, 1H, -O-C*H*), 4.84 (m, 2H, -CO-C*H*$_2$-N-).^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.05, 18.28, 20.25, 23.22, 24.17, 26.21, 26.40, 26.94, 28.18, 31.01,

31.08, 31.98, 34.55, 34.86, 35.37, 35.76, 39.98, 40.37, 41.94, 42.73, 51.51, 54.28, 55.89, 56.28, 63.34, 77.24, 77.96, 164.24, 174.83. HRMS (ESI-MS): m/z $(C_{30}H_{52}NO_4)^+$ calculated $(M)^+$ 490.3896; found $(M)^+$ 490.3897.

LCA-PIP$_1$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.61 (s, 3H, -C*H*$_3$), 0.88 (s, 3H, -C*H*$_3$), 0.90 (s, 3H, -C*H*$_3$), 1.02-2.35 (steroid), 3.59 (s, 3H, -N-C*H*$_3$), 3.63 (s, 3H, -CO-OC*H*$_3$), 3.91 (m, 2H, -N-C*H*$_2$), 4.12 (m, 2H, -N-C*H*$_2$), 4.91 (m, 3H, -O-C*H,* -CO-C*H*$_2$-N-). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.04, 18.27, 20.25, 20.83, 23.22, 24.16, 26.22, 26.41, 26.93, 28.17, 31.00, 31.07, 31.98, 34.55, 34.86, 35.36, 35.76, 40.00, 40.39, 41.92, 42.72, 47.89, 51.49, 55.91, 56.33, 61.06, 61.42, 77.25, 77.73, 164.27, 174.79. HRMS (ESI-MS): m/z $(C_{33}H_{56}NO_4)^+$ calculated 530.4179; found $(M)^+$ 530.4193.

LCA-PYR$_1$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.62 (s, 3H, -C*H*$_3$), 0.90 (s, 6H, -2 x C*H*$_3$), 0.98-2.34 (steroid), 3.65 (s, 3H, -CO-OC*H*$_3$), 4.78 (m, 1H, -O-C*H*), 6.26 (s, 2H, -CO-C*H*$_2$-N-), 8.05 (s, 2H, ArH), 8.46-8.47 (m, 1H, Ar*H*), 9.40 (s, 2H, Ar*H*). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.05, 18.28, 20.86, 23.24, 24.18, 26.25, 26.48, 26.95, 28.18, 31.08, 32.01, 34.55, 34.88, 35.38, 35.77, 40.01, 40.39, 41.94, 42.73, 51.50, 55.91, 56.34, 61.27, 78.53, 127.55, 139.52, 145.94, 165.55, 174.83. HRMS (ESI-MS): m/z $(C_{32}H_{48}NO_4)^+$ calculated $(M)^+$ 510.3583; found $(M)^+$ 510.3592.

LCA-DMAP$_1$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.63 (s, 3H, -C*H*$_3$), 0.89 (s, 3H, -C*H*$_3$), 0.90 (s, 3H, -C*H*$_3$) 0.98-2.34 (steroid), 3.26 (s, 6H, -N(C*H*$_3$)$_2$), 3.65 (s, 3H, -CO-OC*H*$_3$), 4.76 (m, 1H, -O-C*H*), 4.84 (m, 2H, -CO-C*H*$_2$-N-), 6.89 (d, *J* = 7.2 Hz, 2H, Ar*H*), 8.48 (d, *J* = 6.8 Hz, 2H, Ar*H*). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.04, 18.27, 20.84, 23.25, 24.17, 26.24, 26.48, 26.97, 28.16, 31.01, 31.07, 32.05, 34.55, 34.92, 35.35, 35.78, 40.02, 40.38, 40.42, 41.95, 42.73, 51.47, 55.90, 56.32, 57.82, 77.23, 77.70, 107.57, 143.98, 156.54, 166.74, 174.79. HRMS (ESI-MS) : m/z $(C_{34}H_{53}N_2O_4)^+$ calculated $(M)^+$ 553.3993; found $(M)^+$ 553.3994.

CDCA-AMM$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.64 (s, 3H, -C*H*$_3$), 0.92 (s, 6H, -2 x C*H*$_3$), 1.06-2.34 (steroid), 3.65 (s, 3H, -CO-OC*H*$_3$), 3.41-4.2 (m, 4H, (-CO-C*H*$_2$-N-)$_2$), 4.62 (s, 1H, -O-C*H*), 4.90 (s, 1H, -O-C*H*). ^{13}C-NMR (DMSO, 100 MHz) δ: 11.96, 18.55, 20.65, 22.93, 23.70, 26.76, 28.03, 30.76, 31.01, 31.28, 34.00, 34.56, 34.78, 35.17, 37.53, 41.51, 41.67, 42.73, 50.17, 51.69, 55.63, 72.74, 75.23, 169.53, 169.91, 174.24. HRMS (ESI-MS): m/z $(C_{29}H_{49}N_2O_6)^+$ calculated 521.3591; found $(M)^+$ 521.3648.

CDCA-TMA$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.64 (s, 3H, -C*H*$_3$), 0.92 (d, J=6.4, 3H, -C*H*$_3$), 0.93 (s, 3H, -CH_3), 1.08-2.36 (steroid), 3.60(m, 9H, -N-(C*H*$_3$)$_3$, 3.63(s, 3H, -CO-OC*H*$_3$), 3.65(s, 9H, -N-(C*H*$_3$)$_3$, 4.68 (m, 2H, -CO-C*H*$_2$-N-), 4.80 (m, 1H, -CO-C*H*$_2$-N-; 1H, -O-C*H*), 5.04 (s, 1H, -O-C*H*), 5.46 (m, 1H, -CO-C*H*$_2$-N-), 5.66 (m, 1H, -CO-C*H*$_2$-N-). -). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 11.70, 18.23, 20.57, 22.53, 23.75, 26.37, 28.07, 29.70, 31.02, 31.08, 31.31, 34.00, 34.64, 34.73, 35.35, 37.92, 39.21, 40.58, 42.79, 50.07, 51.49, 53.99, 54.10, 55.41, 62.74, 63.10, 74.43, 75.38, 77,23, 164.64, 164.82, 174.75. HRMS (ESI-MS): m/z $(C_{35}H_{62}N_2O_6)^{+2}$ calculated 303.2303; found $(M)^{+2}/2$ 303.2308, $M^{+2}Cl^-$ calculated 641.4296; found $M^{2+}Cl^-$ 641.4279.

CDCA-PIP$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.63 (s, 3H, -C*H*$_3$), 0.91 (s, 6H, 2 x -C*H*$_3$), 1.04-2.36 (steroid), 3.55 (s, 6H, -N-(C*H*$_3$)$_2$), 3.63 (s, 3H, -CO-OC*H*$_3$), 3.82-4.13 (m, 8H, 2 × -C*H*$_2$-N-C*H*$_2$-), 4.55 (m, 1H, -CO-C*H*$_2$-N-), 4.82 (m, 1H, -CO-C*H*$_2$-N-; 1H, -O-C*H*), -), 5.02 (s, 1H, -O-C*H*), -), 5.59 (m, 2H, -CO-C*H*$_2$-N-). ^{13}C-NMR (DMSO, 100 MHz) δ: 11.71, 18.21, 20.16, 20.24, 20.56, 20.84, 20.89, 22.47, 23.79, 26.35, 28.07, 29.69, 30.97, 31.11, 31.22, 34.11, 34.59, 34.63, 34.71, 35.37, 37.86, 39.25, 42.81, 46.55, 50.26, 51.48, 55.47, 80.52, 61.10, 61.56, 61.90, 62.41, 65.84, 74.39, 75.08, 164.48, 164.73, 174.76. HRMS (ESI-MS): m/z $(C_{41}H_{70}N_2O_6)^{2+}$ calculated 343.2616; found $(M)^{2+}/2$ 343.2615, $M^{2+}Cl^-$ calculated 721.4922; found $M^{2+}Cl^-$ 721.4911.

CDCA-PYR$_2$: ^{1}H NMR (MeOH, 400 MHz) δ: 0.72 (s, 3H, -C*H*$_3$), 0.98 (s, 6H, -2 x C*H*$_3$), 1.02-2.35 (steroid), 3.68 (s, 3H, -CO-OC*H*$_3$), 4.82 (m, 1H, -O-C*H*), 5.11 (s, 1H, -O-C*H*), 5.65-5.98 (m, 4H, -CO-

C*H*$_2$-N-, -CO-C*H*$_2$-N-), 8.21 (t, 2H, *J* = 6.8Hz, Ar*H*), 8.28 (t, 2H, *J* = 6.8Hz, Ar*H*), 9.19 (m, 1H, Ar*H*). ^{13}C-NMR (DMSO, 100 MHz) δ: 10.65, 17.30, 20.24, 21.51, 23.14, 26.33, 27.64, 30.41, 30.74, 30.80, 34.04, 34.29, 34.41, 34.50, 35.25, 37.75, 39.39, 40.67, 42.59, 50.31, 50.63, 55.79, 60.70, 75.21, 77.18, 127.70, 128.01, 146.28, 146.61, 146.80, 164.89, 165.64, 175.01. HRMS (ESI-MS): m/z $(C_{39}H_{54}N_2O_6)^{2+}$ calculated 323.1990; found $(M)^{2+}/2$ 323.1989, $M^{2+}Cl^-$ calculated 681.3670; found $M^{2+}Cl^-$ 681.3663.

CDCA-DMAP$_2$: ^{1}H NMR ($CDCl_3$, 400 MHz) δ: 0.61 (s, 3H, -C*H*$_3$), 0.98 (s, 6H, -2 x C*H*$_3$), 1.03-2.35 (steroid), 3.24 (s, 6H, -N(C*H*$_3$)$_2$), 3.30 (s, 6H, -N(C*H*$_3$)$_2$), 3.65 (s, 3H, -CO-OC*H*$_3$), 4.72 (m, 1H, -O-C*H*), 4.93 (m, 1H, -O-C*H*), 5.29-5.56 (m, 2H, -CO-C*H*$_2$-N-), 5.58-6.03 (m, 2H, -CO-C*H*$_2$-N-), 6.93 (d, *J* = 6.4 Hz, 2H, Ar*H*), 7.00 (d, *J* = 6.4 Hz, 2H, Ar*H*), 8.56 (d, *J* = 6Hz, 2H, Ar*H*), 8.79 (s, 2H, Ar*H*). ^{13}C-NMR (DMSO, 100 MHz) δ: 11.65, 18.32, 20.53, 22.50, 23.60, 28.02, 29.70, 31.00, 31.09, 34.08, 34.61, 34.71, 35.29, 37.85, 39.44, 40.44, 40.55, 40.67, 42.77, 50.21, 51.57, 55.94, 57.64.70, 57.76 74.56, 77.26, 107.55, 107.73, 143.98, 144.26, 156.50, 156.52, 166.49, 167.22, 174.74. HRMS (ESI-MS): m/z $(C_{43}H_{64}N_4O_6)^{2+}$ calculated 366.2412; found $(M)^{2+}/2$ 366.2414, $M^{2+}Cl^-$ calculated 767.4514; found $M^{2+}Cl^-$ 767.4512.

DCA-AMM$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.73 (s, 3H, -C*H*$_3$), 0.83 (s, 3H, -C*H*$_3$), 0.99 (s, 3H, -C*H*$_3$), 1.06-2.34 (steroid), 3.64 (s, 3H, -CO-OC*H*$_3$), 3.46-4.19 (m, 4H, (-CO-C*H*$_2$-N-)$_2$), 4.74 (s, 1H, -O-C*H*), 5.16 (s, 1H, -O-C*H*). ^{13}C-NMR (DMSO, 100 MHz) δ: 11.27, 16.64, 20.65, 21.99, 23.05, 25.37, 25.69, 26.22, 26.58, 27.00, 30.40, 30.52, 31.76, 33.82, 34.28, 34.35, 34.72, 35.56, 40.30, 41.78, 44.96, 49.40, 50.63, 76.34, 78.02, 167.61, 168.00, 174.99, HRMS (ESI-MS): m/z $(C_{29}H_{49}N_2O_6)^+$ calculated 521.3591; found $(M)^+$ 521.3590.

DCA-TMA$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.75 (s, 3H, -C*H*$_3$), 0.84 (d, *J* = 12, 3H, -CH$_3$), 0.92 (s, 3H, -C*H*$_3$), 1.03-2.36 (steroid), 3.55 (m, 9H, -N-(C*H*$_3$)$_3$, 3.60 (s, 4H, -N-(C*H*$_3$)$_3$, 3.66 (s, 3H, -CO-OC*H*$_3$), 3.68 (s, 5H, -N-(C*H*$_3$)$_3$, 4.63 (d, *J* = 17.6 Hz, 1H, -CO-C*H*$_2$-N-), 4.80 (m, 1H, -O-C*H*), 5.16 (d,

J=16.8, 1H, -CO-CH_2-N-), 5.28 (s, 1H, -O-C*H*), 5.53 (d, *J* = 17.2 Hz, 1H, -CO-CH_2-N-), 5.62 (d, *J* = 17.2 Hz, 1H, -CO-CH_2-N-). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.27, 17.68, 22.53, 23.35, 25.84, 26.46, 27.32, 30.51, 31.03, 33.81, 33.95, 34.38, 34.64, 35.31, 41.32, 45.13, 49.30, 51.57, 54.04, 55.98, 63.12, 77.23, 78.99, 164.64, 164.82, 174.93. HRMS (ESI-MS): m/z $(C_{35}H_{62}N_2O_6)^{2+}$ calculated 303.2303; found $(M)^{2+}/2$ 303.2308, $M^{2+}Cl^-$ calculated 641.4296; found $M^{2+}Cl^-$ 641.4279.

DCA-PIP$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.78 (s, 3H, -CH_3), 0.83 (d, *J* = 6.4, 3H, -CH_3), 0.97 (s, 3H, -CH_3), 1.04-2.34 (steroid), 3.50 (s, 3H, -N-CH_3), 3.62 (s, 3H, -N-CH_3), 3.64 (s, 3H, -CO-OCH_3), 3.79-4.17 (m, 8H, 2 × -CH_2-N-CH_2-), 4.58 (m, 1H, -CO-CH_2-N-), 4.78 (s, 1H, -O-C*H*), 5.09 (m, 1H, -CO-CH_2-N-, 5.23 (s, 1H, -O-C*H*), -), 5.27 (m, 2H, -CO-CH_2-N-), 5.42 (m, 2H, -CO-CH_2-N-), ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.27, 17.73, 20.15, 20.36, 20.80, 20.85, 22.50, 23.37, 25.25, 25.82, 25.99, 26.44, 27.39, 30.57, 31.04, 31.10, 33.79, 34.44, 34.73, 35.32, 41.30, 45.11, 49.19, 51.60, 60.38, 61.04, 61.43, 62.68, 75.88, 77.24, 79.02, 164.32, 164.80, 174.81. HRMS (ESI-MS): m/z $(C_{41}H_{70}N_2O_6)^{2+}$ calculated 343.2616; found $(M)^{2+}/2$ 343.2611, $M^{2+}Cl^-$ calculated 721.4922; found $M^{2+}Cl^-$ 721.4910.

DCA-PYR$_2$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.71 (s, 3H, -CH_3), 0.85 (d, *J* = 6.4, 3H, -CH_3), 0.88 (s, 3H, -CH_3), 1.02-2.41 (steroid), 3.67 (s, 3H, -CO-OCH_3), 4.82 (m, 1H, -O-C*H*), 5.29 (m, 1H, -O-C*H*), 6.25 (d, *J* = 17.2 Hz, 2H, -CO-CH_2-N-), 6.44 (d, *J* =15.6 Hz, 2H, -CO-CH_2-N-), 8.05 (t, 2H, *J* = 6.8 Hz, Ar*H*), 8.26 (t, *J* = 6.8 Hz, 2H, Ar*H*), 8.48 (t, *J* = 7.2 Hz, 1H, Ar*H*), 8.70 (t, *J* = 7.2 Hz, 2H, Ar*H*), 9.58 (m, 4H, Ar*H*). ^{13}C-NMR (MeOH, 100 MHz) δ: 11.24, 16.76, 21.92, 23.07, 25.36, 25.80, 26.32, 26.57, 27.02, 30.45, 30.58, 31.76, 33.87, 34.23, 34.39, 34.83, 35.46, 41.72, 45.12, 47.10, 48.12, 49.11, 50.71, 60.72, 77.56, 79.11, 128.75, 128.21, 146.26, 146.63, 146.96, 164.58, 165.71, 175.19. HRMS (ESI-MS): m/z $(C_{39}H_{54}N_2O_6)^{2+}$ calculated 323.1990; found $(M)^{2+}/2$ 323.1992, $M^{2+}Cl^-$ calculated 681.3670; found $M^{2+}Cl^-$ 681.3671.

DCA-DMAP$_2$: ^{1}H NMR ($CDCl_3$, 400 MHz) δ: 0.70 (s, 3H, -C*H*$_3$), 0.82 (s, 3H, -C*H*$_3$), 0.86 (s, 3H, -C*H*$_3$), 1.03-2.33 (steroid), 3.23 (s, 6H, -N(C*H*$_3$)$_2$), 3.33 (s, 6H, -N(C*H*$_3$)$_2$), 3.66 (s, 3H, -CO-OC*H*$_3$), 4.78 (s, 1H, -O-C*H*), 5.20 (s, 1H, -O-C*H*), 5.52-5.72 (m, 2H, -CO-C*H*$_2$-N-), 5.82-6.14 (m, 2H, -CO-C*H*$_2$-N-), 6.85 (s, 2H, Ar*H*), 7.07 (s, 2H, Ar*H*), 8.56 (s, 2H, Ar*H*), 8.83 (s, 2H, Ar*H*). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.24, 17.77, 22.48, 23.35, 25.27, 25.96, 26.26, 26.45, 27.37, 30.71, 31.16, 31.30, 33.72, 33.85, 24.51, 34.77, 35.24, 40.32, 40.83, 41.34, 45.16, 47.24, 49.46, 51.59, 57.66, 57.82, 76.49, 77.35, 78.60, 107.37, 107.89, 143.93, 144.42, 156.49, 156.57, 165.94, 167.35, 174.89. HRMS (ESI-MS): m/z $(C_{43}H_{64}N_4O_6)^{+2}$ calculated 366.2412; found $(M)^{+2}/2$ 366.2415, $M^{+2}Cl^-$ calculated 767.4514; found $M^{2+}Cl^-$ 767.4509.

CA-AMM$_3$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.74 (s, 6H, -2C*H*$_3$), 0.94 (d, *J* = 12.8 Hz, 3H, -C*H*$_3$), 1.08-2.33 (steroid), 3.65 (s, 3H, -CO-OC*H*$_3$), 3.46-4.19 (m, 4H, (-CO-C*H*$_2$-N-)$_2$), 4.70 (s, 1H, -O-C*H*), 5.16 (s, 1H, -O-C*H*), 5.24 (s, 1H, -O-C*H*). ^{13}C-NMR (DMSO, 100 MHz) δ: 12.26, 17.63, 21.58, 22.53, 22.66, 22.72, 22.96, 25.65, 30.78, 34.42, 34.48, 34.68, 37.34, 39.41, 39.62, 39.83, 40.03, 40.24, 40.45, 40.66, 41.68, 43.09, 45.18, 45.21, 47.16, 51.65, 72.22, 75.34, 76.35, 169.77, 170.00, 171.90, 174.20. HRMS (ESI-MS): m/z $(C_{31}H_{52}N_3O_8)^+$ calculated 594.3754; found $(M)^+$ 594.3773.

CA-TMA$_3$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.74 (s, 3H, -C*H*$_3$), 0.84 (s, 3H, -C*H*$_3$), 0.94 (s, 3H, -C*H*$_3$), 1.07-2.36 (steroid), 3.52 (s, 9H, -N-(C*H*$_3$)$_3$, 3.61 (s, 12H, -N-(C*H*$_3$)$_3$; -CO-OC*H*$_3$), 3.65(s, 9H, -N-(C*H*$_3$)$_3$), 4.80 (s, 1H, -O-C*H*), 5.12 (s, 1H, -O-C*H*), 5.18 (d, *J* = 16.0 Hz, 1H, -CO-C*H*$_2$-N-), 5.29 (s, 1H, -O-C*H*), 5.36 (d, *J* =15.6, 2H, -CO-C*H*$_2$-N-), 5.57 (d, *J* =15.6, 1H, -CO-C*H*$_2$-N-), 5.36 (s, 1H, -CO-C*H*$_2$-N-), 5.76 (d, *J* = 17.6, 2H, -CO-C*H*$_2$-N-). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.01, 17.88, 21.77, 23.36, 24.87, 26.07, 27.26, 27.83, 30.64, 30.80, 31.28, 34.04, 34.41, 34.76, 37.95, 39.97, 41.83, 45.37, 46.55, 51.48, 53.93, 54.16, 54.28, 60.40, 62.14, 64.06, 73.10, 74.71, 77.23, 164.29, 164.92, 174.63.

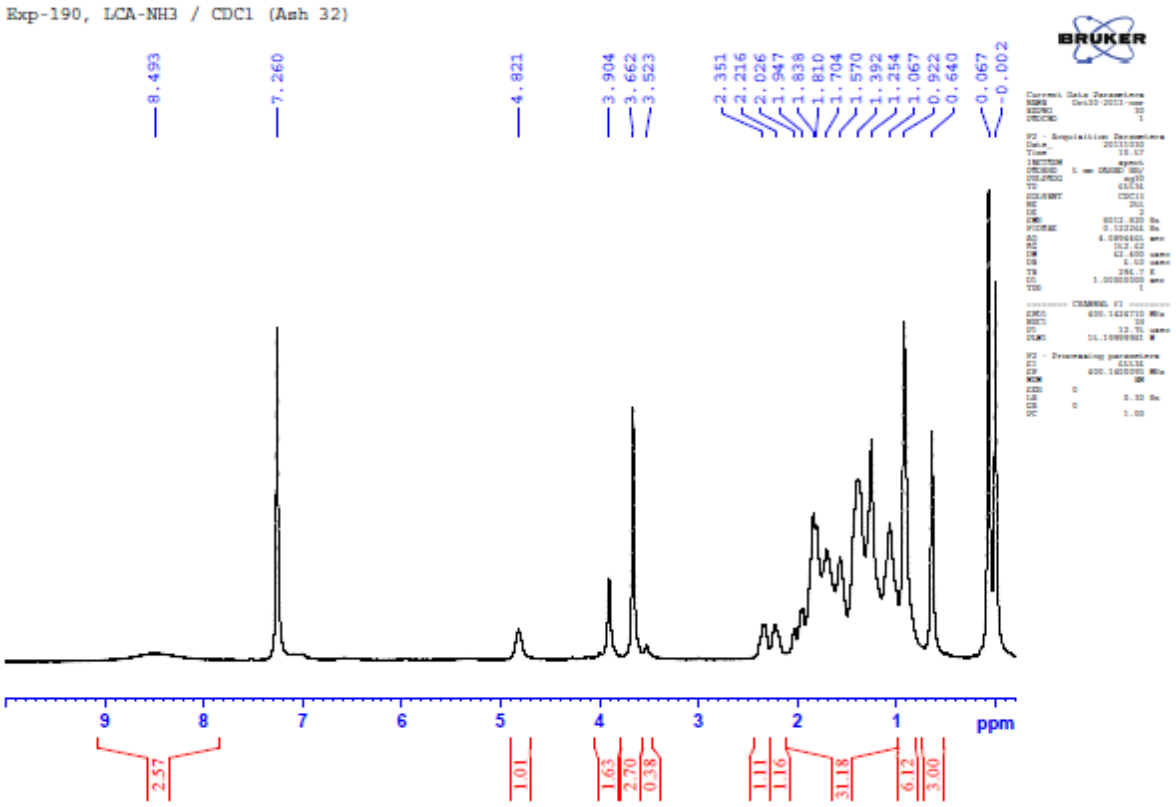
HRMS (ESI-MS): m/z $(C_{40}H_{72}N_3O_8)^{+3}$ calculated 240.8439; found $(M)^{3+}/3$ 240.8429, $M^{3+}Cl^{-}/2$ calculated 378.7504; found $M^{3+}Cl^{-}/2$ 378.7507, $M^{3+}Cl^{2-}$ calculated 792.4696; found $M^{3+}Cl^{2-}$ 792.4687.

CA-PIP$_3$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.73 (s, 3H, -C*H*$_3$), 0.83 (d, *J* = 5.2, 3H, -CH$_3$), 0.93 (s, 3H, -C*H*$_3$), 1.03-2.41 (steroid), 3.46 (s, 3H, -N-C*H*$_3$), 3.50 (s, 3H, -N-C*H*$_3$), 3.53 (s, 3H, -N-C*H*$_3$), 3.61 (s, 3H, -CO-OC*H*$_3$), 3.68-4.13 (m, 12H, 3 × -C*H*$_2$-N-C*H*$_2$-), 4.79 (m, 1H, -CO-C*H*$_2$-N-), 4.95 (d, *J* = 7.2 Hz, 2H, -O-C*H*), 5.53 (d, *J* =17.2 Hz, 1H, -CO-CH$_2$-N-), 5.09 (s, 3H, -CO-OC*H*$_3$), 5.29 (s, 3H, 1H, -O-C*H*; -CO-C*H*$_2$-N-), 5.32 (d, *J* =7.2 Hz, 1H, -CO-C*H*$_2$-N-), 5.53 (d, *J* =17.2 Hz, 1H, -CO-C*H*$_2$-N-), 5.70 (d, *J* = 17.2 Hz, 1H, -CO-C*H*$_2$-N-), 5.77 (d, *J* =17.2 Hz, 1H, -CO-C*H*$_2$-N-). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.03, 17.89, 21.11, 21.30, 21.35, 21.42, 21.69, 21.79, 23.39, 24.97, 26.11, 27.31, 27.77, 30.61, 30.78, 31.36, 34.07, 34.47, 34.77, 37.98, 40.83, 45.34, 46.52, 47.65, 48.91, 51.48, 62.69, 62.90, 64.54, 64.97, 65.37, 65.50, 72.95, 74.19, 77.24, 77.62, 164.82, 165.39, 165.39, 174.67. HRMS (ESI-MS): m/z $(C_{49}H_{84}N_3O_8)^{3+}$ calculated 280.8752; found $(M)^{3+}/3$ 280.8750, $M^{3+}Cl^{-}/2$ calculated 438.7973; found $M^{3+}Cl^{-}/2$ 438.7971.

CA-PYR$_3$: ^{1}H-NMR ($CDCl_3$, 400 MHz) δ: 0.72 (s, 3H, -C*H*$_3$), 0.90 (s, 6H, 2 X -CH$_3$), 1.02-2.41 (steroid), 3.64 (s, 3H, -CO-OC*H*$_3$), 4.66 (m, 1H, -O-C*H*), 5.05 (m, 1H, -O-C*H*), 6.29-6.39 (m, 2H, -CO-C*H*$_2$-N-), 6.51-6.70 (m, 2H, -CO-C*H*$_2$-N-), 6.77-6.88 (m, 2H, -CO-C*H*$_2$-N-), 8.01 (m, 2H, Ar*H*), 8.16 (m, 2H, Ar*H*), 8.43 (m, 2H, Ar*H*), 8.44 (m, H, Ar*H*), 8.62 (m, 1H, Ar*H*), 8.93 (m, 1H, Ar*H*), 9.52 (s, 3H, Ar*H*), 8.61 (s, 3H, Ar*H*). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.25, 17.76, 21.99, 23.12, 25.53, 26.19, 26.44, 27.11, 28.49, 29.67, 30.49, 31.15, 31.34, 34.04, 34.17, 34.40, 34.76, 37.73, 40.30, 42.116, 42.53, 45.45, 46.81, 51.54, 60.70, 61.16, 74.12, 77.26, 78.24, 127.61, 127.81, 128.77, 145.47, 145.87, 146.36, 146.71, 146.92, 147.02, 164.80, 165.81, 165.99, 175.08. HRMS (ESI-MS): m/z $(C_{46}H_{60}N_3O_8)^{3+}$ calculated 260.8126; found $(M)^{3+}/3$ 260.8132, $M^{3+}Cl^{-}/2$ calculated 408.7034; found $M^{3+}Cl^{-}/2$ 408.7029.

CA-DMAP$_3$: ^{1}H NMR ($CDCl_3$, 400 MHz) δ: 0.72 (s, 3H, -C*H*$_3$), 0.82 (d, *J* =5.2 3H, -C*H*$_3$), δ: 0.90 (s, 3H, -C*H*$_3$) 1.04-2.35 (steroid), 3.19 (s, 6H, -N(C*H*$_3$)$_2$), 3.25 (s, 6H, -N(C*H*$_3$)$_2$), 3.31 (s, 6H, -N(C*H*$_3$)$_2$), 3.63 (s, 3H, -CO-OC*H*$_3$), 4.66 (m, 1H, -O-C*H*), 5.04 (s, 1H, -O-C*H*), 5.23 (s, 1H, -O-C*H*), 5.55 (m, H, -CO-C*H*$_2$-N-), 5.88 (m, 3H, -CO-C*H*$_2$-N-; -CO-C*H*$_2$-N-), 6.84 (d, *J* =7.2 Hz, 2H, Ar*H*), 6.94 (d, *J* = 6.8 Hz, 2H, Ar*H*), 7.20 (d, *J* =7.2 Hz, 2H, Ar*H*), 8.56 (d, *J* =7.2 Hz, 2H, Ar*H*), 8.87 (s, 2H, Ar*H*), 8.87 (s, 2H, Ar*H*). ^{13}C-NMR ($CDCl_3$, 100 MHz) δ: 12.09, 17.679, 22.09, 23.12, 25.06, 26.21, 27.25, 28.14, 29.68, 30.53, 31.20, 34.00, 34.22, 34.675, 34.88, 37.97, 40.36, 40. 47, 40.63, 42.35, 45.29, 46.91, 51.52, 57.67, 63.03, 73.389, 77.27, 107.42, 107.60, 108.06, 143.64, 144.06, 144.17, 156.33, 156.44, 156.513, 167.13, 167.43, 167.58, 174.81. HRMS (ESI-MS): m/z $(C_{52}H_{75}N_6O_8)^{3+}$ calculated 303.8548; found $(M)^{3+}/3$ 303.8537, $M^{3+}Cl^-/2$ calculated 473.2667; found $M^{3+}Cl^-/2$ 473.2650.

^{1}H, LCA-AMM$_{1}$


Exp-190, LCA-NH3 / CDCl (Ash 32)
BRUKER
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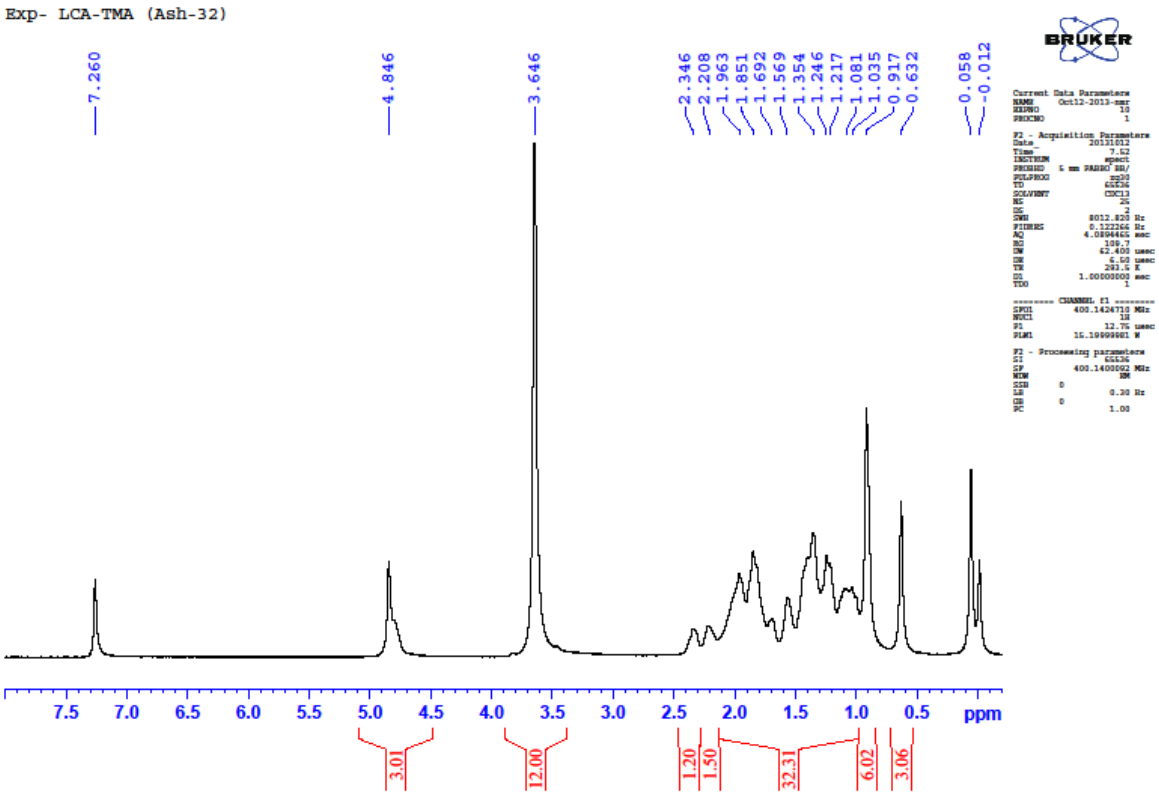
7.260
4.821
3.904
3.662
3.523
2.351
2.216
2.026
1.947
1.838
1.810
1.704
1.570
1.392
1.254
1.067
0.922
0.640
0.067
-0.002
9
8
7
6
5
4
3
2
1
ppm
2.57
1.01
1.63
2.70
0.38
1.11
1.16
31.18
6.12
3.00

^{1}H, LCA-TMA$_{1}$


Exp- LCA-TMA (Ash-32)
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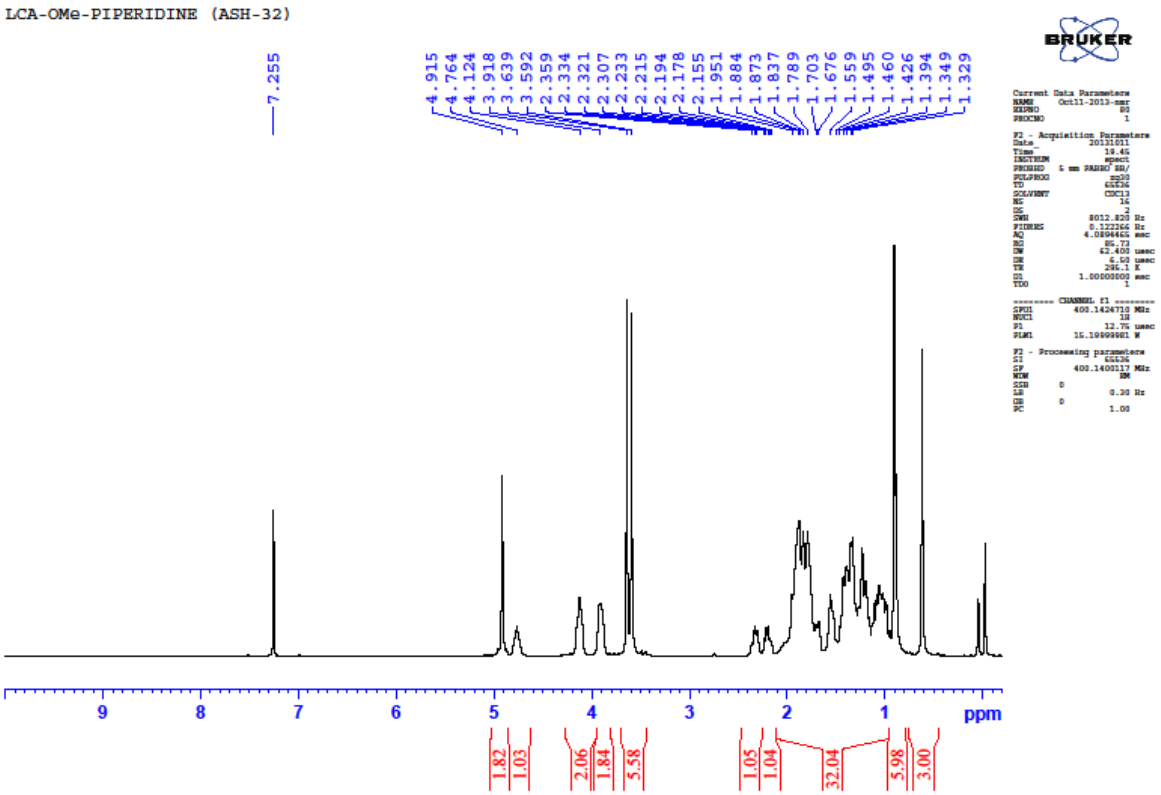
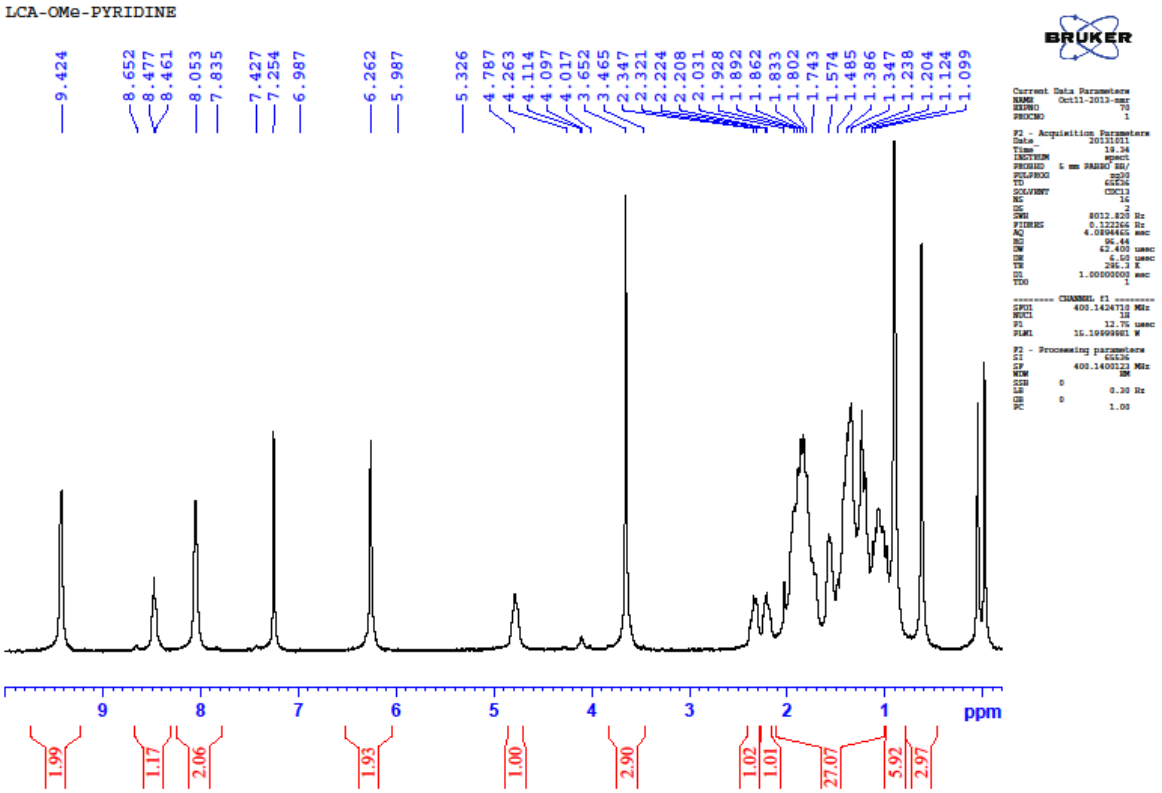
4.846
3.646
2.346
2.208
1.963
1.851
1.692
1.569
1.354
1.246
1.217
1.081
1.035
0.917
0.632
0.058
-0.012
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
3.01
12.00
1.20
1.50
32.31
6.02
3.06

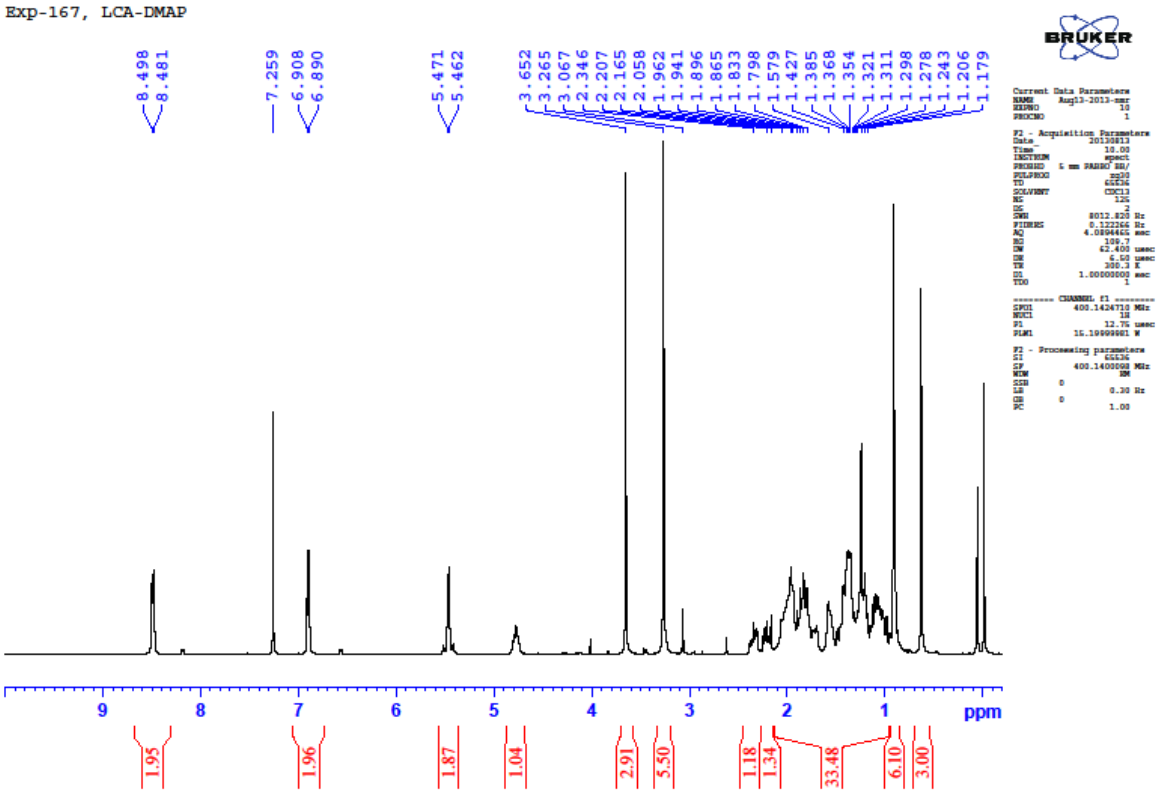
^{1}H, LCA-PIP$_{1}$


LCA-OMe-PIPERIDINE (ASH-32)
7.255
4.915
4.764
4.124
3.918
3.639
3.592
2.359
2.334
2.321
2.307
2.233
2.215
2.194
2.178
2.155
1.951
1.884
1.873
1.837
1.789
1.703
1.676
1.559
1.495
1.460
1.426
1.394
1.349
1.329
BRUKER
9
8
7
6
5
4
3
2
1
ppm
1.82
1.03
2.06
1.84
5.58
1.05
1.04
32.04
5.98
3.00

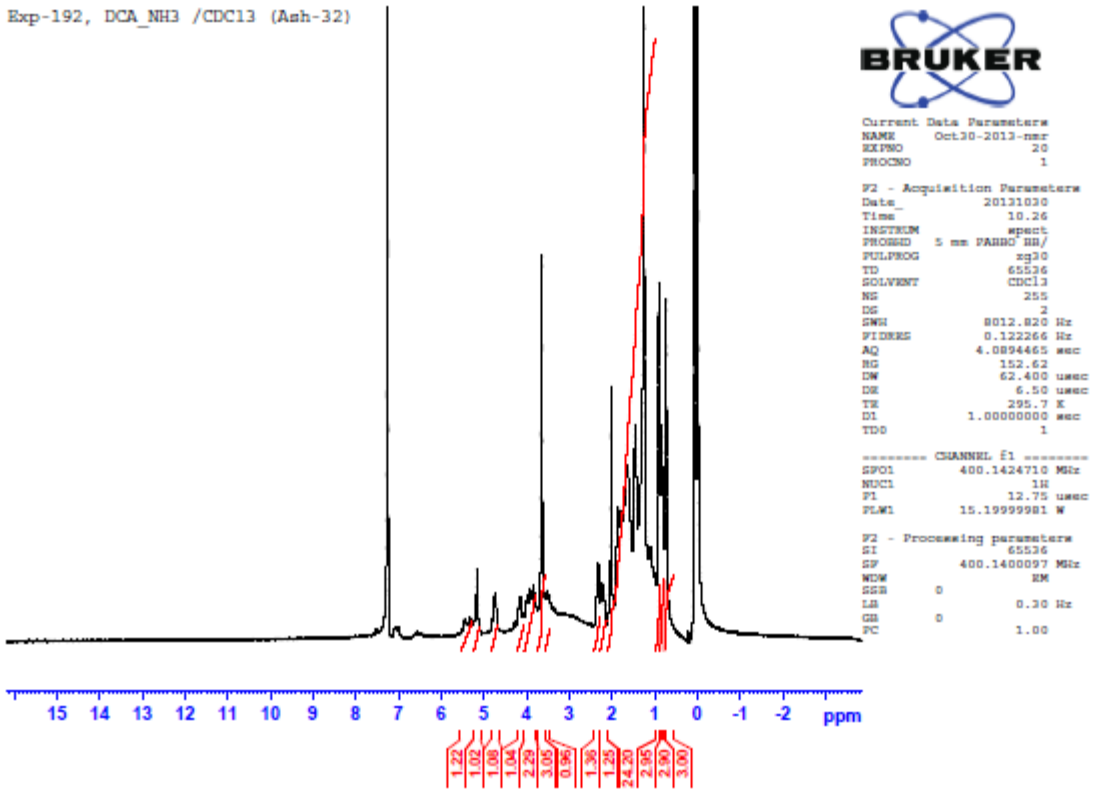
^{1}H, LCA-PYR$_{1}$


LCA-OMe-PYRIDINE
9.424
8.652
8.477
8.461
8.053
7.835
7.427
7.254
6.987
6.262
5.987
5.326
4.787
4.263
4.114
4.097
4.017
3.652
3.465
2.347
2.321
2.224
2.208
2.031
1.928
1.892
1.862
1.833
1.802
1.743
1.574
1.485
1.386
1.347
1.238
1.204
1.124
1.099
9
8
7
6
5
4
3
2
1
ppm
1.99
1.17
2.06
1.93
1.00
2.90
1.02
1.01
27.07
5.92
2.97

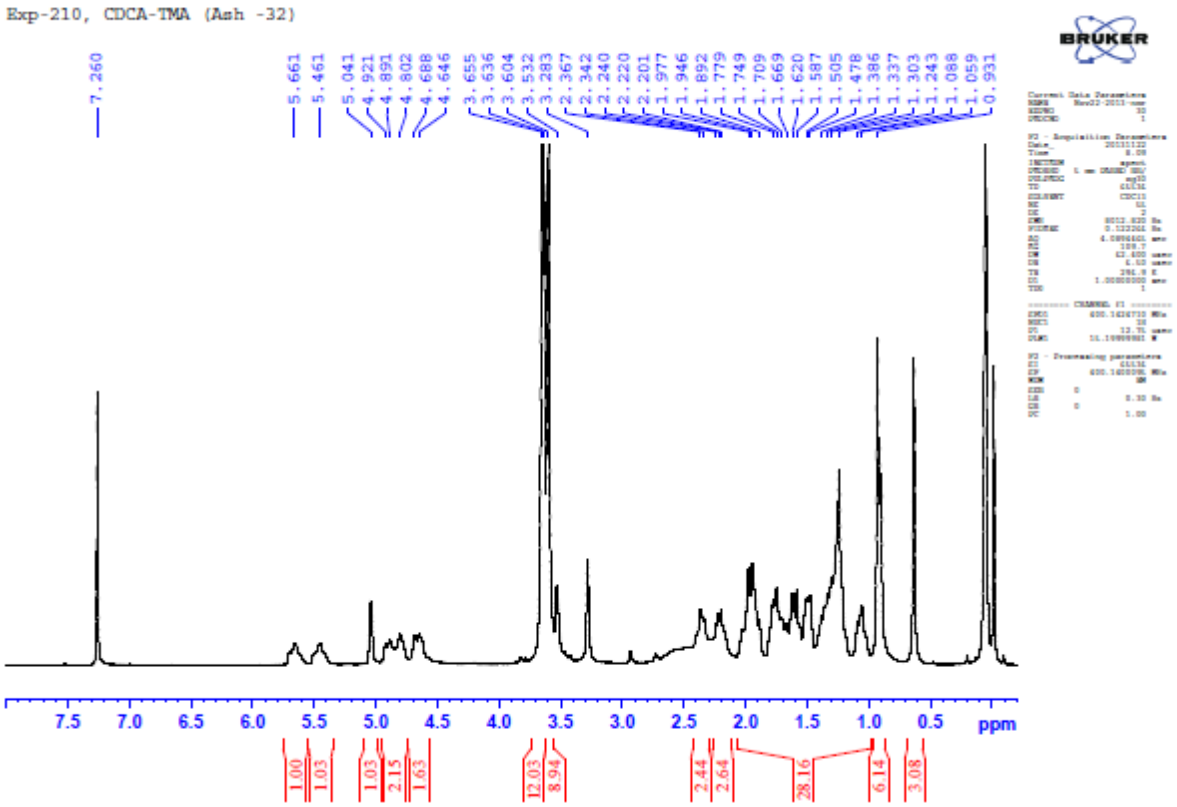
^{1}H, LCA-DMAP$_{1}$


Exp-167, LCA-DMAP
8.498
8.481
7.259
6.908
6.890
5.471
5.462
3.652
3.265
3.067
2.346
2.207
2.165
2.058
1.962
1.941
1.896
1.865
1.833
1.798
1.579
1.427
1.385
1.368
1.354
1.321
1.311
1.298
1.278
1.243
1.206
1.179
9
8
7
6
5
4
3
2
1
ppm
1.95
1.96
1.87
1.04
2.91
5.50
1.18
1.34
33.48
6.10
3.00

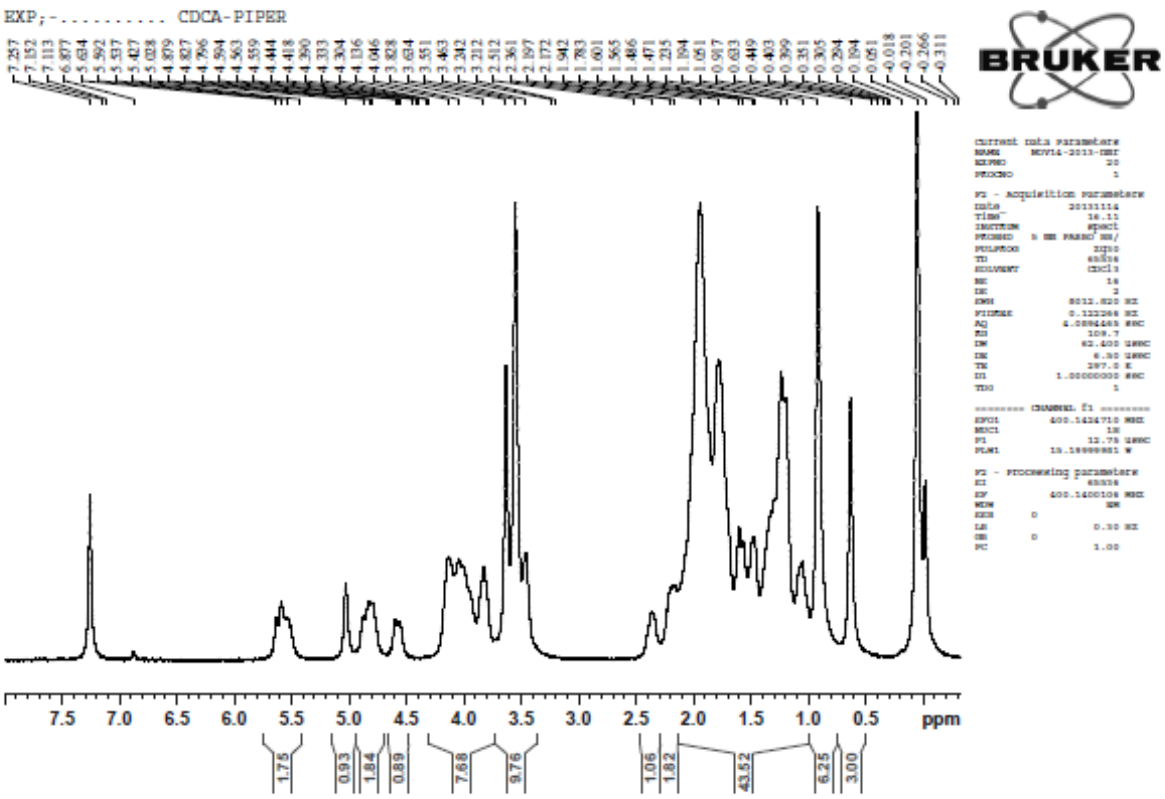
^{1}H, CDCA-AMM$_2$


Exp-192, DCA_NH3 /CDCl3 (Ash-32)
BRUKER
Current Data Parameters
NAME Oct30-2013-nmr
EXPNO 20
PROCNO 1
F2 - Acquisition Parameters
Date_ 20131030
Time 10.26
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 256
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 152.62
DW 62.400 usec
DE 6.50 usec
TE 295.7 K
D1 1.00000000 sec
TD0 1
======== CHANNEL f1 ========
SFO1 400.1424710 MHz
NUC1 1H
P1 12.75 usec
PLW1 15.19999981 W
F2 - Processing parameters
SI 65536
SF 400.1400097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 ppm
1.22 1.02 1.08 1.04 2.29 3.05 0.96 1.36 1.25 24.20 2.85 2.90 3.00

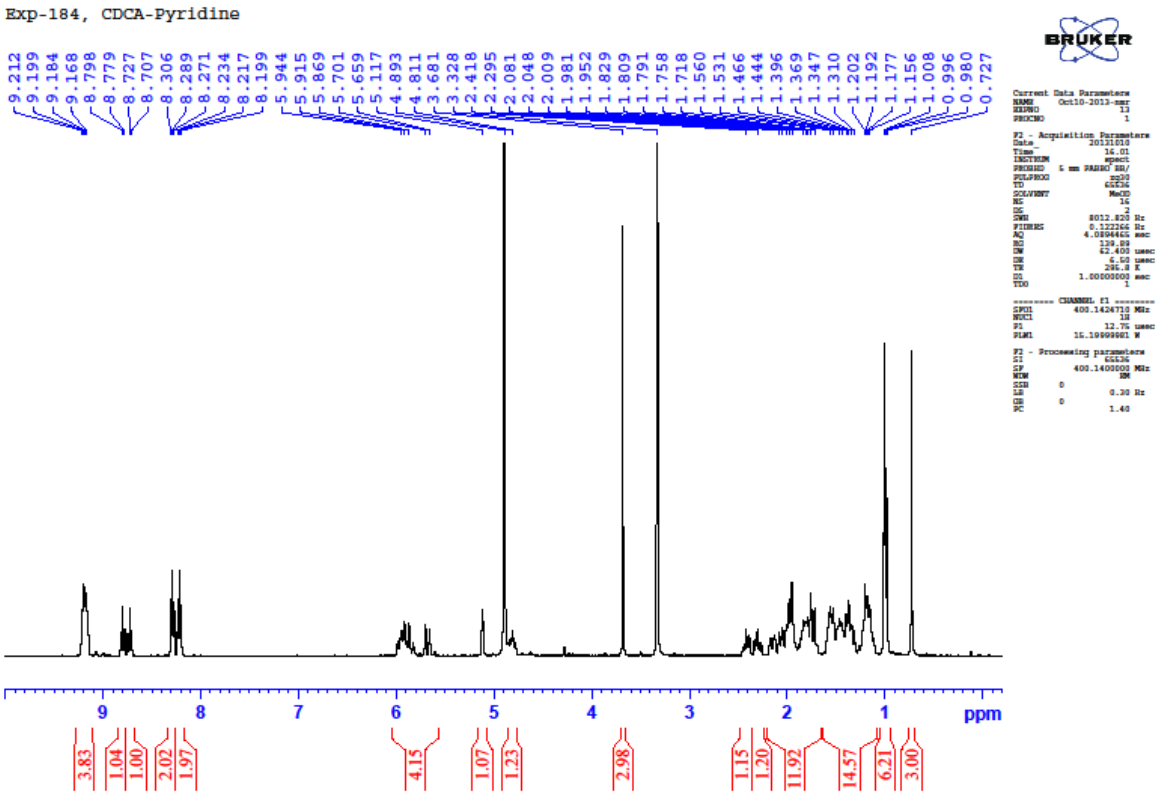
^{1}H, CDCA-TMA$_2$


Exp-210, CDCA-TMA (Ash -32)
7.260
5.661
5.461
5.041
4.921
4.891
4.802
4.688
4.646
3.655
3.636
3.604
3.532
3.283
2.367
2.342
2.240
2.220
2.201
1.977
1.946
1.892
1.779
1.749
1.709
1.669
1.620
1.587
1.505
1.478
1.386
1.337
1.303
1.243
1.088
1.059
0.931
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.00
1.03
1.03
2.15
1.63
12.03
8.94
2.44
2.64
28.16
6.14
3.08

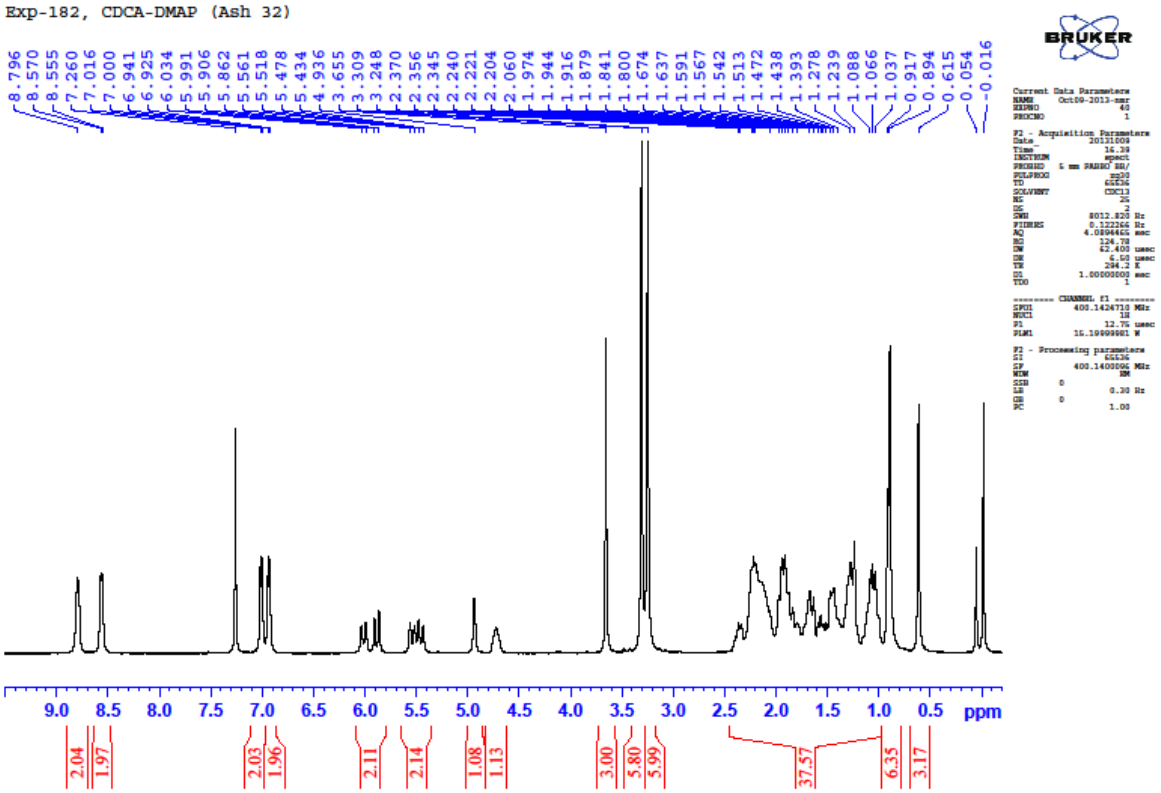
^{1}H, CDCA-PIP$_2$


EXP;-.......... CDCA-PIPER
BRUKER
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.75
0.93
1.84
0.89
7.68
9.76
1.06
1.82
43.52
6.25
3.00

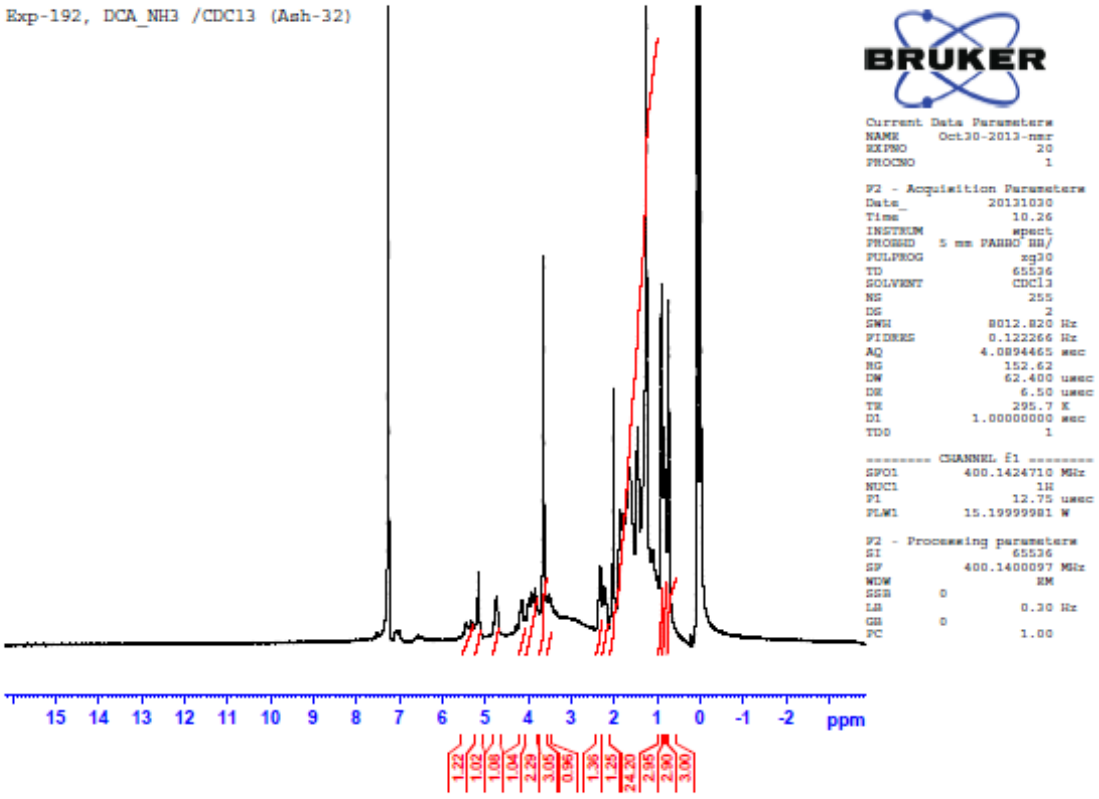
^{1}H, CDCA-PYR_2


Exp-184, CDCA-Pyridine
9.212
9.199
9.184
9.168
8.798
8.779
8.727
8.707
8.306
8.289
8.271
8.234
8.217
8.199
5.944
5.915
5.869
5.701
5.659
5.117
4.893
4.811
3.681
3.328
2.418
2.295
2.081
2.048
2.009
1.981
1.952
1.829
1.809
1.791
1.758
1.718
1.560
1.531
1.466
1.444
1.396
1.369
1.347
1.310
1.202
1.192
1.177
1.156
1.008
0.996
0.980
0.727
9
8
7
6
5
4
3
2
1
ppm
3.83
1.04
1.00
2.02
1.97
4.15
1.07
1.23
2.98
1.15
1.20
11.92
14.57
6.21
3.00

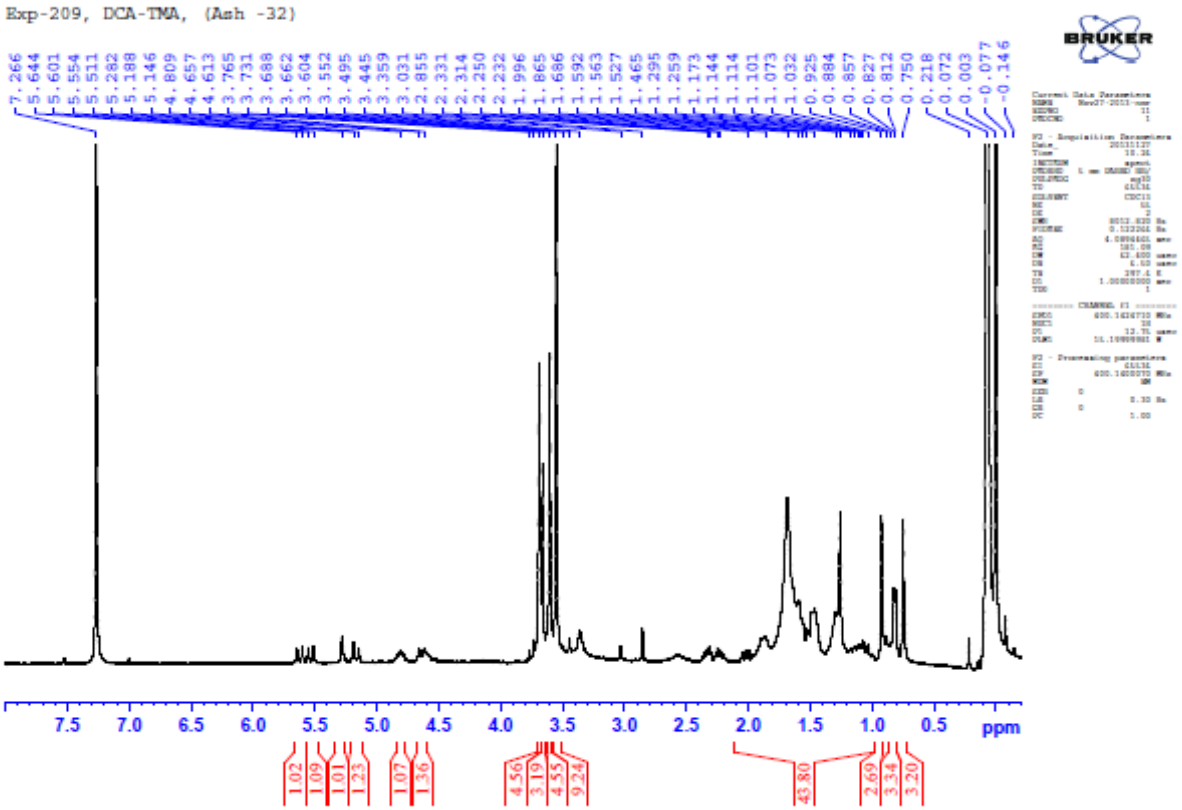
^{1}H, CDCA-DMAP$_2$



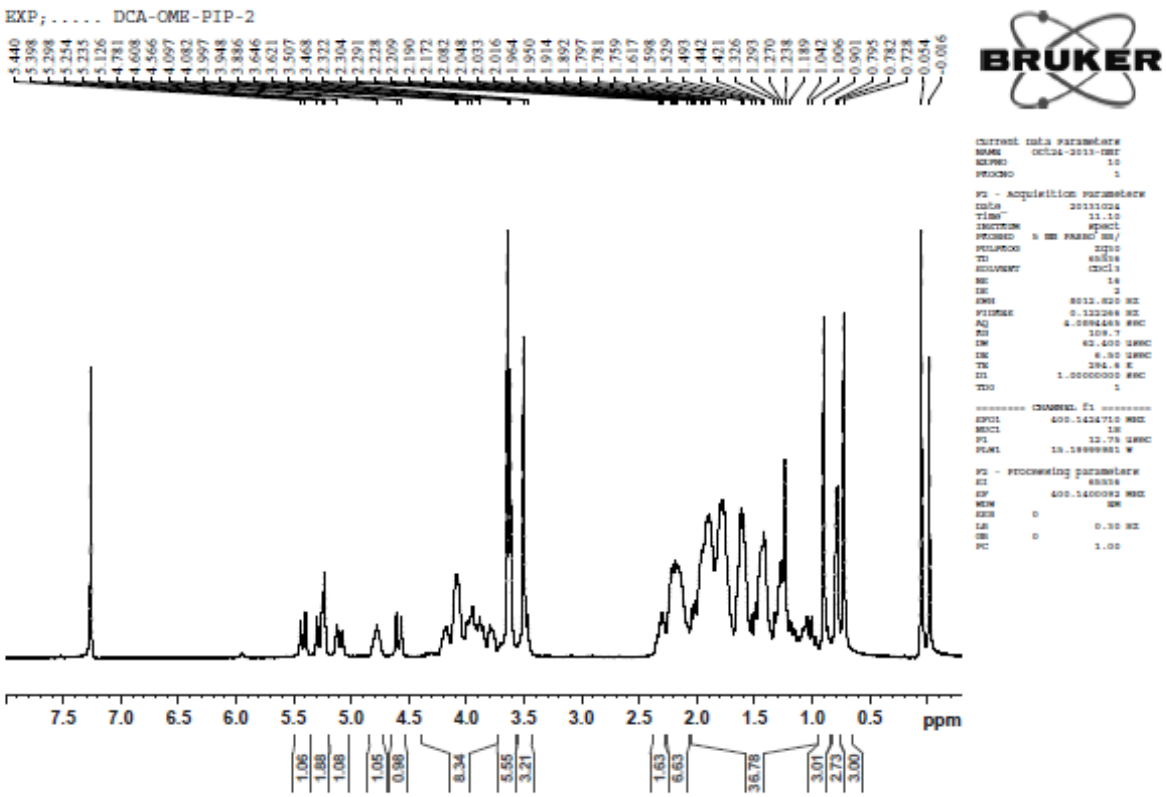
^{1}H, DCA-AMM$_2$


Exp-192, DCA_NH3 /CDCl3 (Anh-32)
BRUKER
Current Data Parameters
NAME Oct30-2013-nmr
EXPNO 20
PROCNO 1
F2 - Acquisition Parameters
Date_ 20131030
Time 10.26
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 256
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 152.62
DW 62.400 usec
DE 6.50 usec
TE 295.7 K
D1 1.00000000 sec
TD0 1
======== CHANNEL f1 ========
SFO1 400.1424710 MHz
NUC1 1H
P1 12.75 usec
PLW1 15.19999981 W
F2 - Processing parameters
SI 65536
SF 400.1400097 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 ppm
1.22 1.02 1.08 1.04 2.29 3.05 0.96 1.36 1.25 4.20 2.95 2.90 3.00

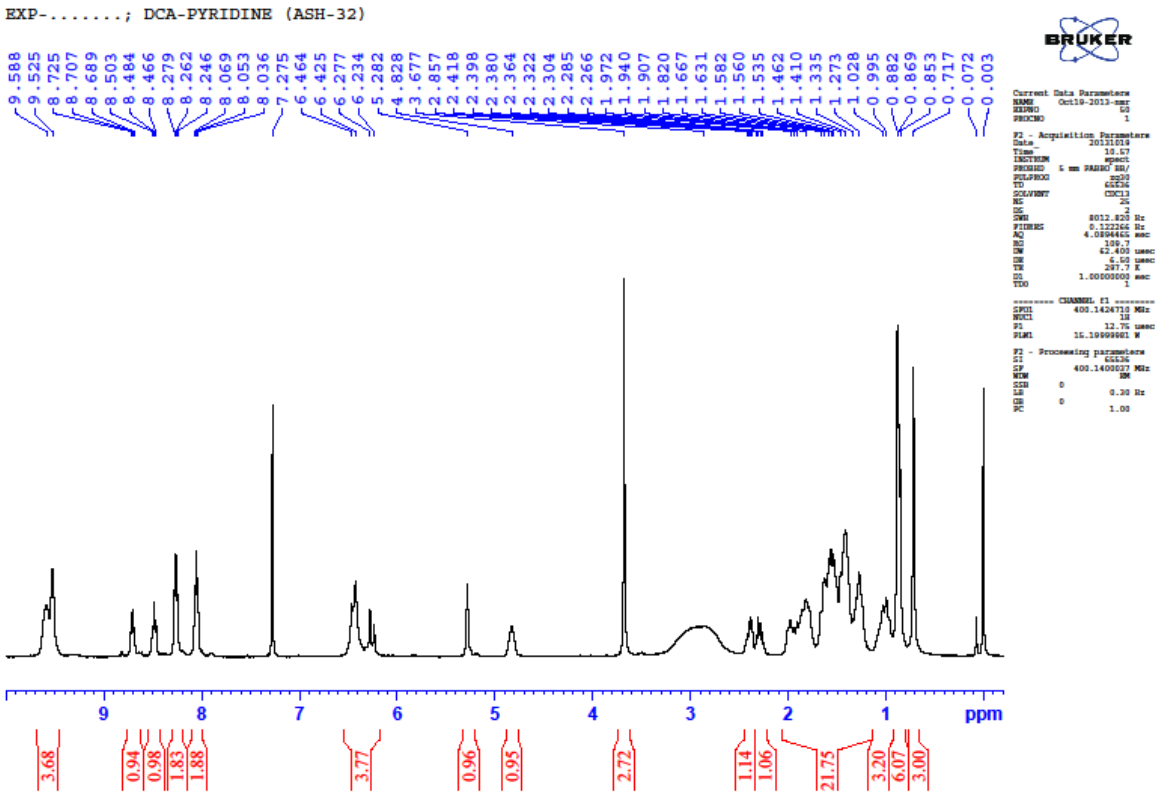
^{1}H, DCA-TMA$_2$


Exp-209, DCA-TMA, (Ash -32)
BRUKER
7.266
5.644
5.601
5.554
5.511
5.282
5.188
5.146
4.809
4.657
4.613
3.765
3.731
3.688
3.662
3.604
3.552
3.495
3.445
3.359
3.031
2.855
2.331
2.314
2.250
2.232
1.996
1.865
1.686
1.592
1.563
1.527
1.465
1.295
1.259
1.173
1.144
1.114
1.101
1.073
1.032
0.925
0.884
0.857
0.827
0.812
0.750
0.218
0.072
0.003
-0.077
-0.146
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.02
1.09
1.01
1.23
1.07
1.36
4.56
3.19
4.55
9.24
43.80
2.69
3.34
3.20

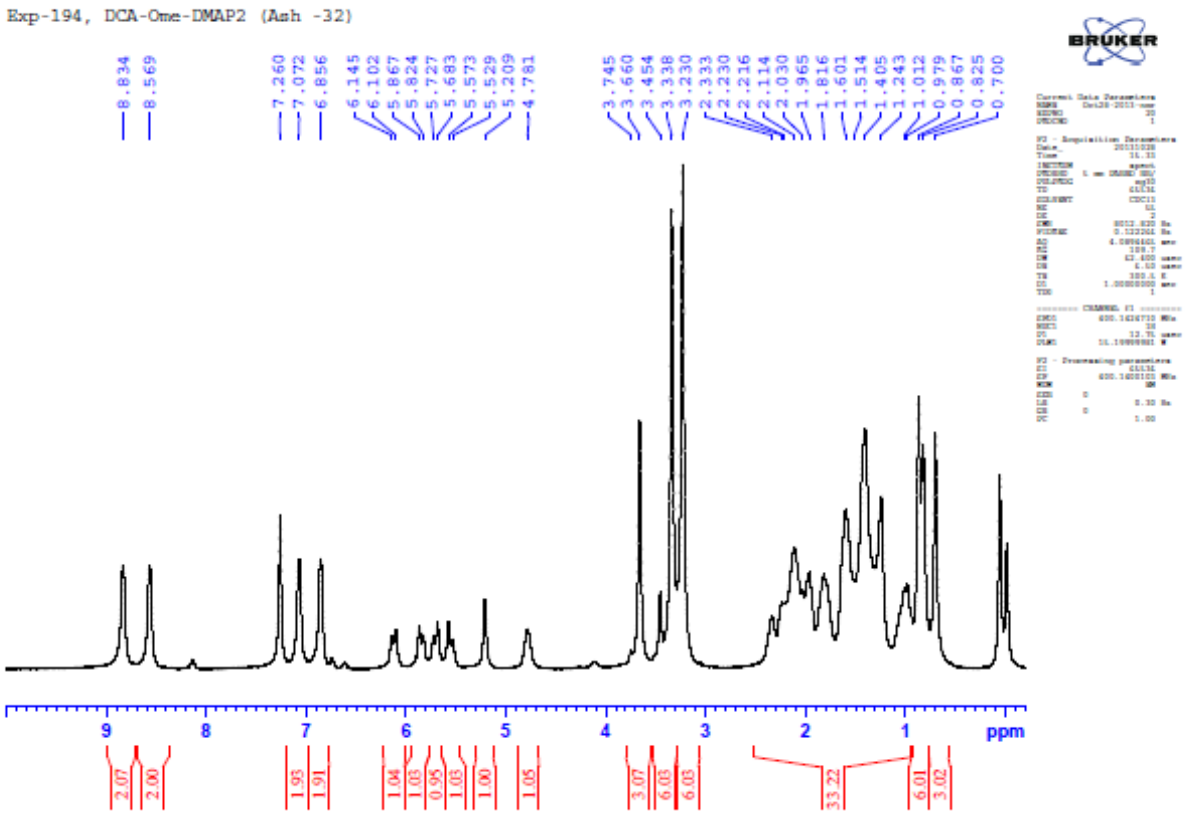
^{1}H, DCA-PIP$_2$


EXP;..... DCA-OME-PIP-2
BRUKER
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.06
1.88
1.08
1.05
0.98
8.34
5.55
3.21
1.63
6.63
36.78
3.01
2.73
3.00

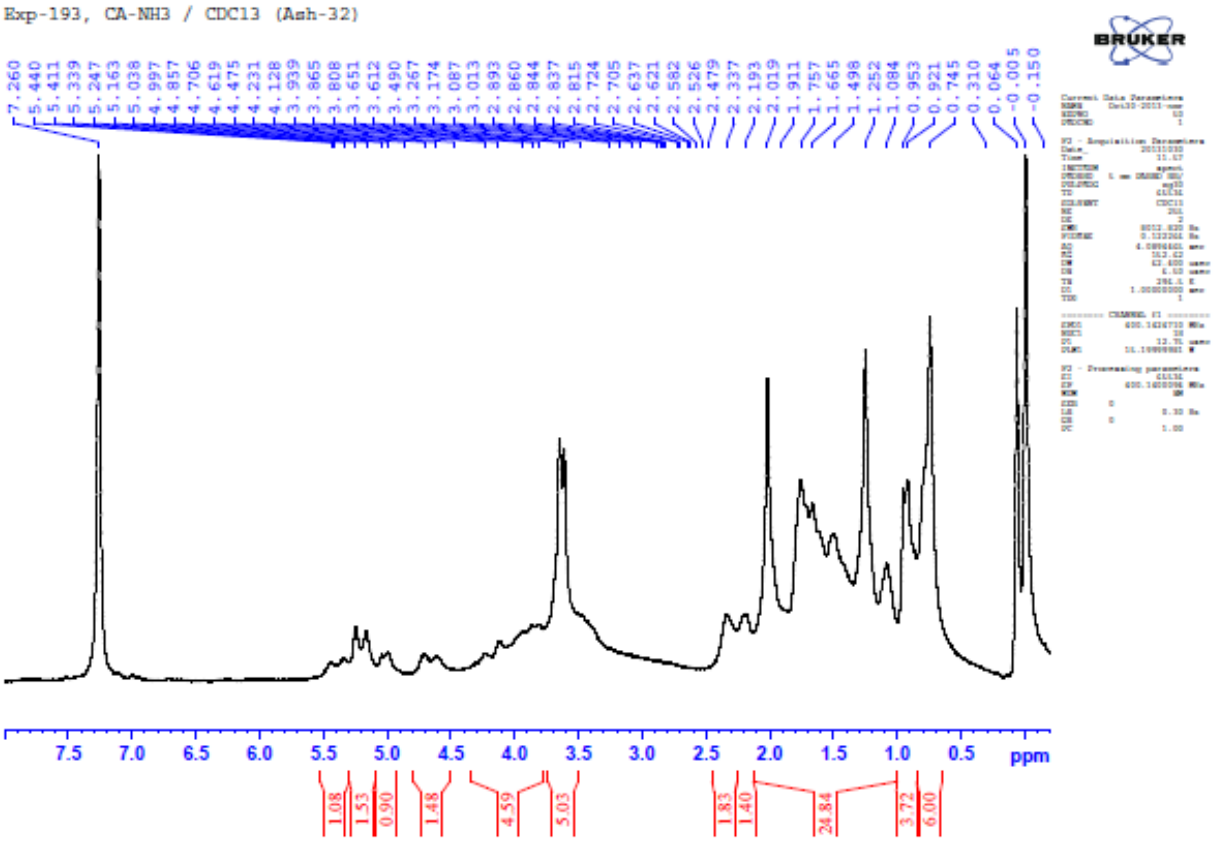
^{1}H, DCA-PYR$_2$


EXP-.....; DCA-PYRIDINE (ASH-32)
9.588 9.525 8.725 8.707 8.689 8.503 8.484 8.466 8.279 8.262 8.246 8.069 8.053 8.036 7.275 6.464 6.425 6.277 6.234 5.282 4.828 3.677 2.857 2.418 2.398 2.380 2.364 2.322 2.304 2.285 2.266 1.972 1.940 1.907 1.820 1.667 1.631 1.582 1.560 1.535 1.462 1.410 1.335 1.273 1.028 0.995 0.882 0.869 0.853 0.717 0.072 0.003
BRUKER
9 8 7 6 5 4 3 2 1 ppm
3.68 0.94 0.98 1.83 1.88 3.77 0.96 0.95 2.72 1.14 1.06 21.75 3.20 6.07 3.00

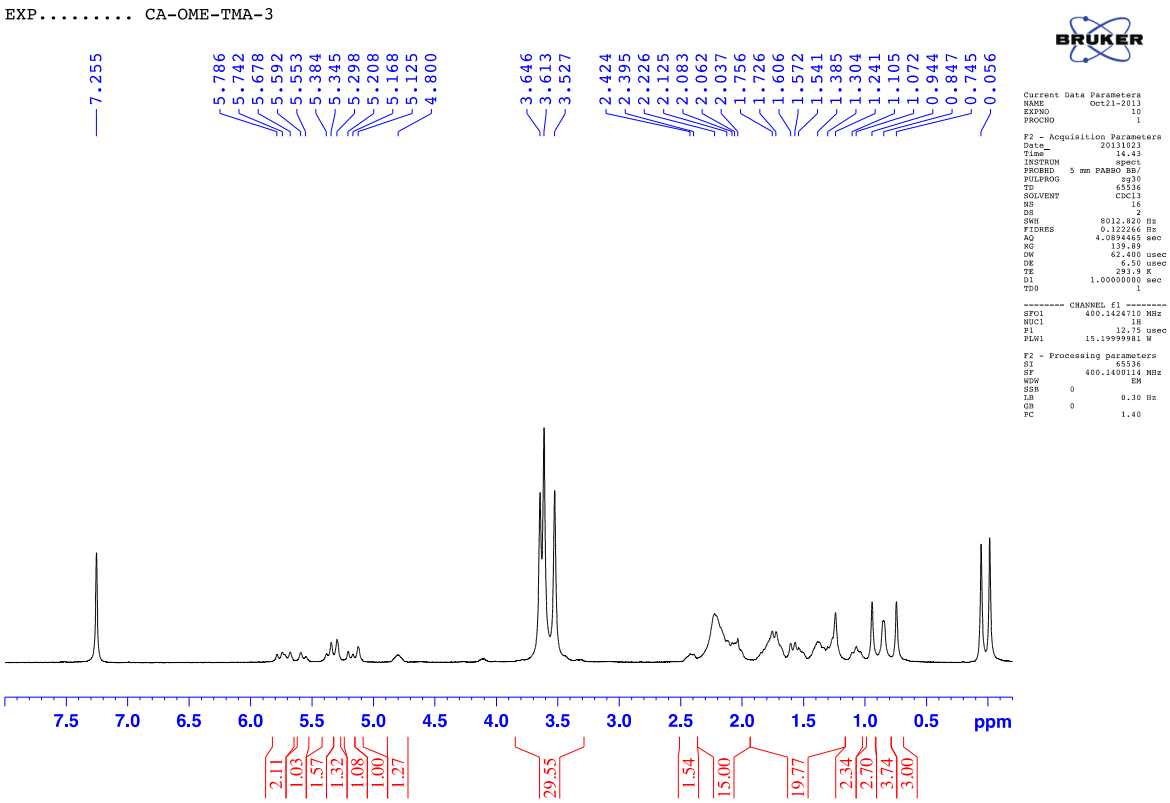
^{1}H, DCA-DMAP$_2$


Exp-194, DCA-Ome-DMAP2 (Ash -32)
8.834
8.569
7.260
7.072
6.856
6.145
6.102
5.867
5.824
5.727
5.683
5.573
5.529
5.209
4.781
3.745
3.660
3.454
3.338
3.230
2.333
2.230
2.216
2.114
2.030
1.965
1.816
1.601
1.514
1.405
1.243
1.012
0.979
0.867
0.825
0.700
BRUKER
9
8
7
6
5
4
3
2
1
ppm
2.07
2.00
1.93
1.91
1.04
1.03
0.95
1.03
1.00
1.05
3.07
6.08
6.08
33.22
6.01
3.02

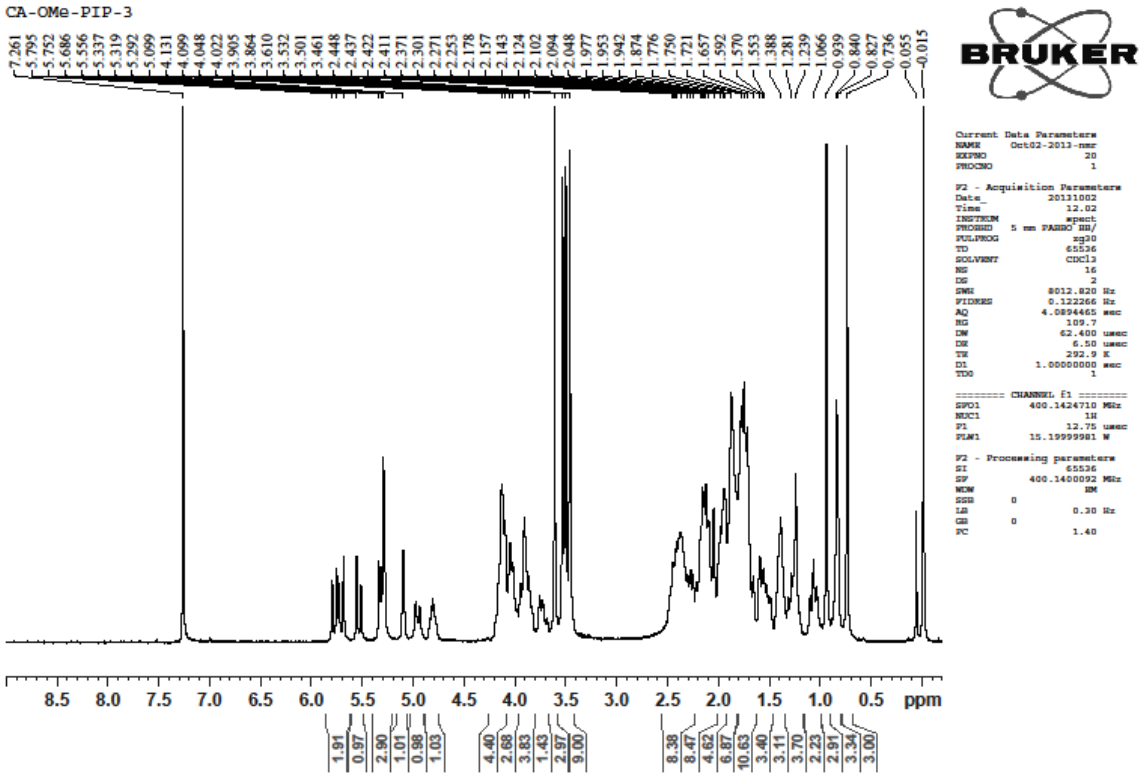
^{1}H, CA-AMM$_3$


Exp-193, CA-NH3 / CDCl3 (Ash-32)
BRUKER
7.260
5.440
5.411
5.339
5.247
5.163
5.038
4.997
4.857
4.706
4.619
4.475
4.231
4.128
3.939
3.865
3.808
3.651
3.612
3.490
3.267
3.174
3.087
3.013
2.893
2.860
2.844
2.837
2.815
2.724
2.705
2.637
2.621
2.582
2.526
2.479
2.337
2.193
2.019
1.911
1.757
1.665
1.498
1.252
1.084
0.953
0.921
0.745
0.310
0.064
-0.005
-0.150
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.08
1.53
0.90
1.48
4.59
5.03
1.83
1.40
24.84
3.72
6.00

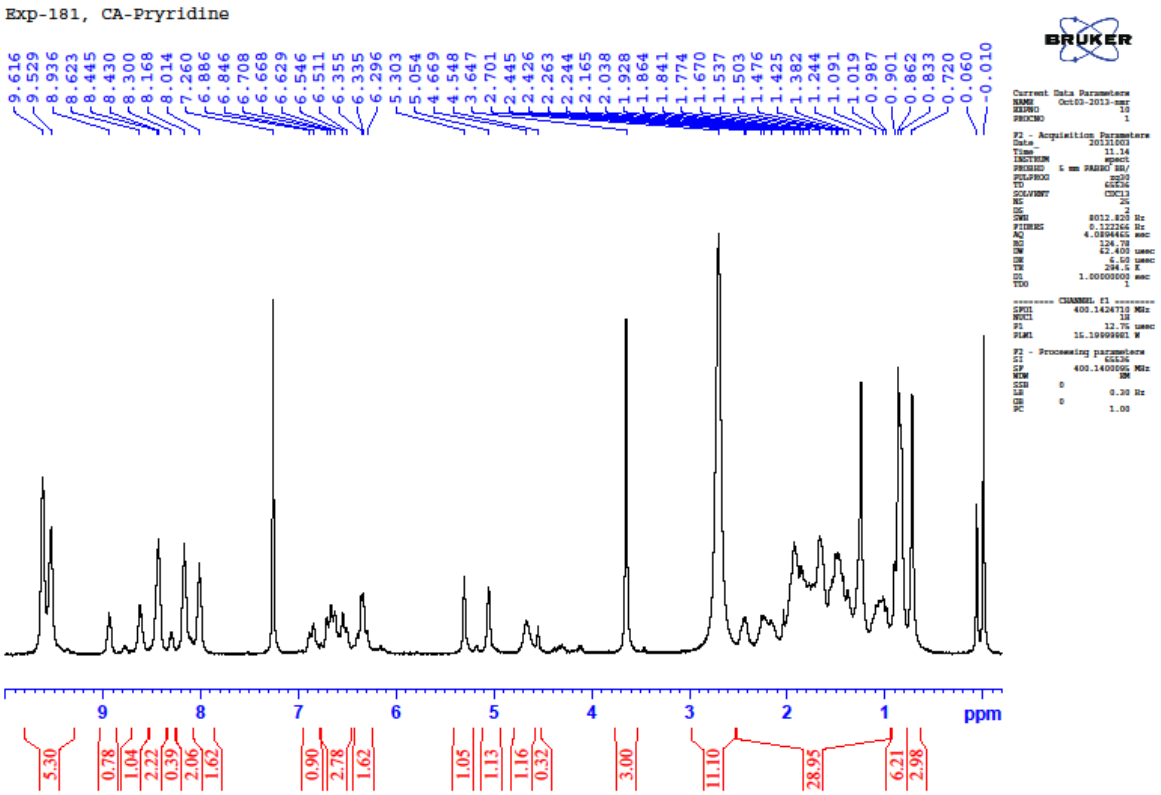
^{1}H, CA-TMA_3


EXP..... CA-OME-TMA-3
7.255
5.786
5.742
5.678
5.592
5.553
5.384
5.345
5.298
5.208
5.168
5.125
4.800
3.646
3.613
3.527
2.424
2.395
2.226
2.125
2.083
2.062
2.037
1.756
1.726
1.606
1.572
1.541
1.385
1.304
1.241
1.105
1.072
0.944
0.847
0.745
0.056
BRUKER
Current Data Parameters
NAME Oct21-2013
EXPNO 10
PROCNO 1
F2 - Acquisition Parameters
Date_ 20131023
Time 14.43
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 139.89
DW 62.400 usec
DE 6.50 usec
TE 293.9 K
D1 1.00000000 sec
TD0 1
-------- CHANNEL f1 --------
SFO1 400.1424710 MHz
NUC1 1H
P1 12.75 usec
PLW1 15.19999981 W
F2 - Processing parameters
SI 65536
SF 400.1400114 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.40
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
2.11
1.03
1.57
1.32
1.08
1.00
1.27
29.55
1.54
15.00
19.77
2.34
2.70
3.74
3.00

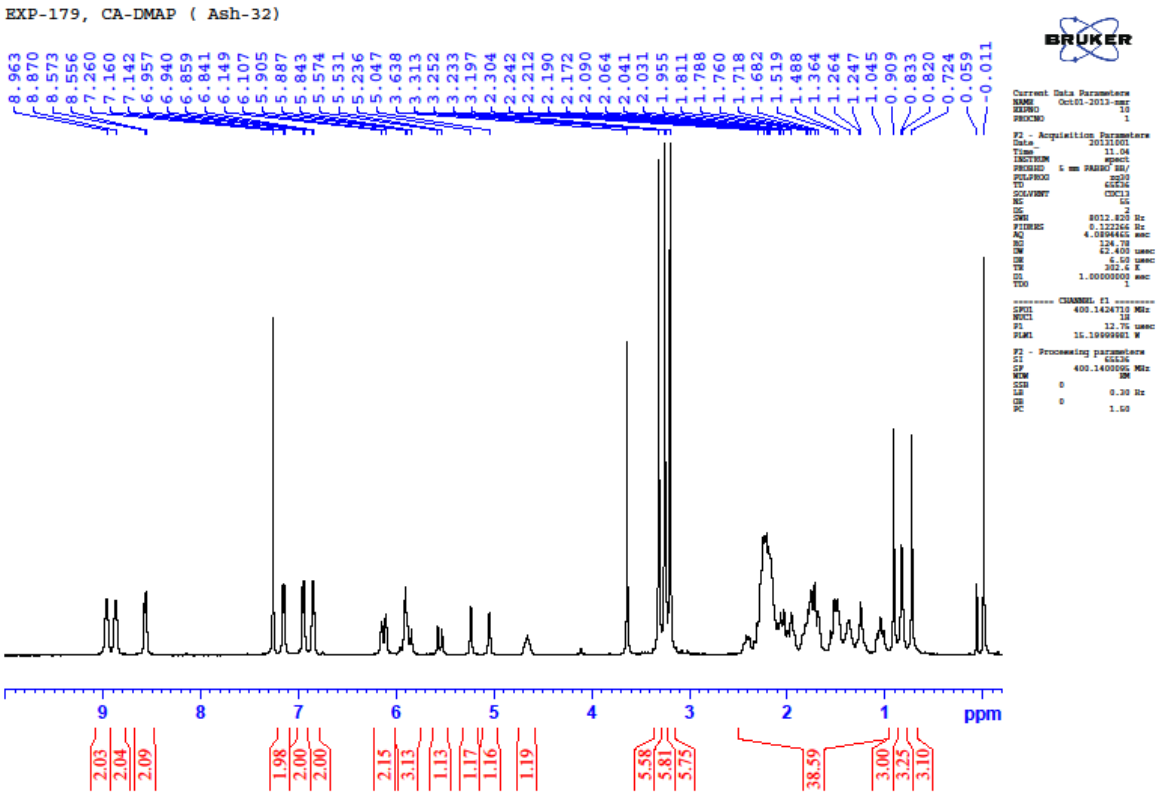
^{1}H, CA-PIP$_3$


CA-OMe-PIP-3
BRUKER
Current Data Parameters
NAME Oct02-2013-nmr
EXPNO 20
PROCNO 1
F2 - Acquisition Parameters
Date_ 20131002
Time 12.02
INSTRUM spect
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 16
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894465 sec
RG 109.7
DW 62.400 usec
DE 6.50 usec
TE 292.9 K
D1 1.00000000 sec
TD0 1
======== CHANNEL f1 ========
SFO1 400.1424710 MHz
NUC1 1H
P1 12.75 usec
PLW1 15.19999981 W
F2 - Processing parameters
SI 65536
SF 400.1400092 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.40
8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 ppm
1.91 0.97 2.90 1.01 0.98 1.03 4.40 2.68 3.83 1.43 2.97 9.00 8.38 8.47 4.62 6.87 10.63 3.40 3.11 3.70 2.23 2.91 3.34 3.00

^{1}H, CA-PYR$_3$


Exp-181, CA-Pryridine
9.616
9.529
8.936
8.623
8.445
8.430
8.300
8.168
8.014
7.260
6.886
6.846
6.708
6.668
6.629
6.546
6.511
6.355
6.335
6.296
5.303
5.054
4.669
4.548
3.647
2.701
2.445
2.426
2.263
2.244
2.165
2.038
1.928
1.864
1.841
1.774
1.670
1.537
1.503
1.476
1.425
1.382
1.244
1.091
1.019
0.987
0.901
0.862
0.833
0.720
0.060
-0.010
9
8
7
6
5
4
3
2
1
ppm
5.30
0.78
1.04
2.22
0.39
2.06
1.62
0.90
2.78
1.62
1.05
1.13
1.16
0.32
3.00
11.10
28.95
6.21
2.98

^{1}H, CA-DMAP$_3$


EXP-179, CA-DMAP (Ash-32)
8.963
8.870
8.573
8.556
7.260
7.160
7.142
6.957
6.940
6.859
6.841
6.149
6.107
5.905
5.887
5.843
5.574
5.531
5.236
5.047
3.638
3.313
3.252
3.233
3.197
2.304
2.242
2.212
2.190
2.172
2.090
2.064
2.041
2.031
1.955
1.811
1.788
1.760
1.718
1.682
1.519
1.488
1.364
1.264
1.247
1.045
0.909
0.833
0.820
0.724
0.059
-0.011
9
8
7
6
5
4
3
2
1
ppm
2.03
2.04
2.09
1.98
2.00
2.00
2.15
3.13
1.13
1.17
1.16
1.19
5.58
5.81
5.75
38.59
3.00
3.25
3.10