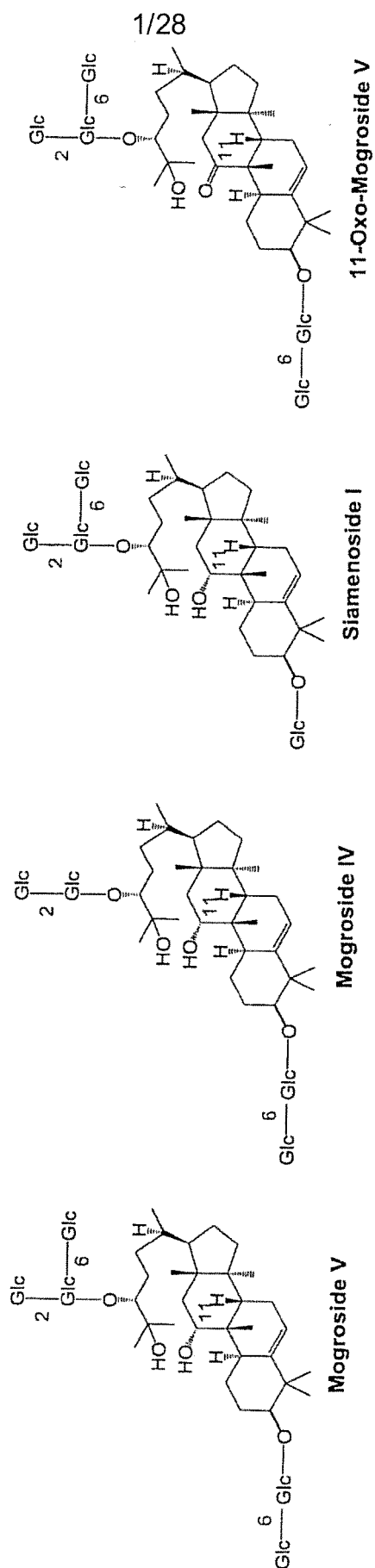
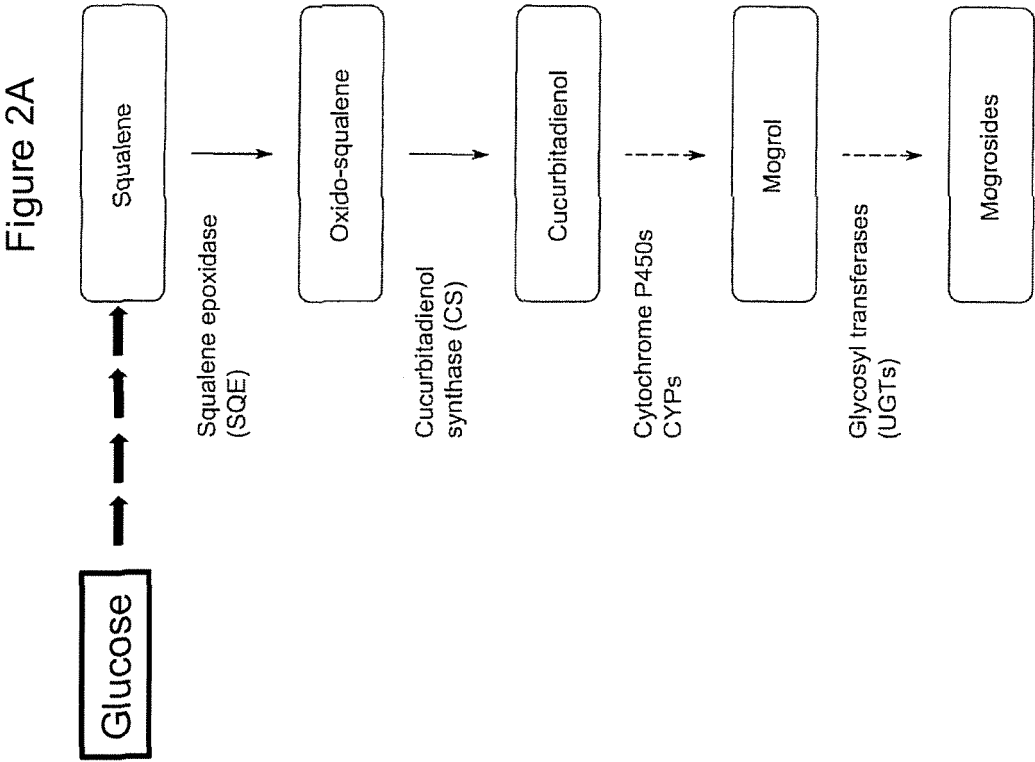


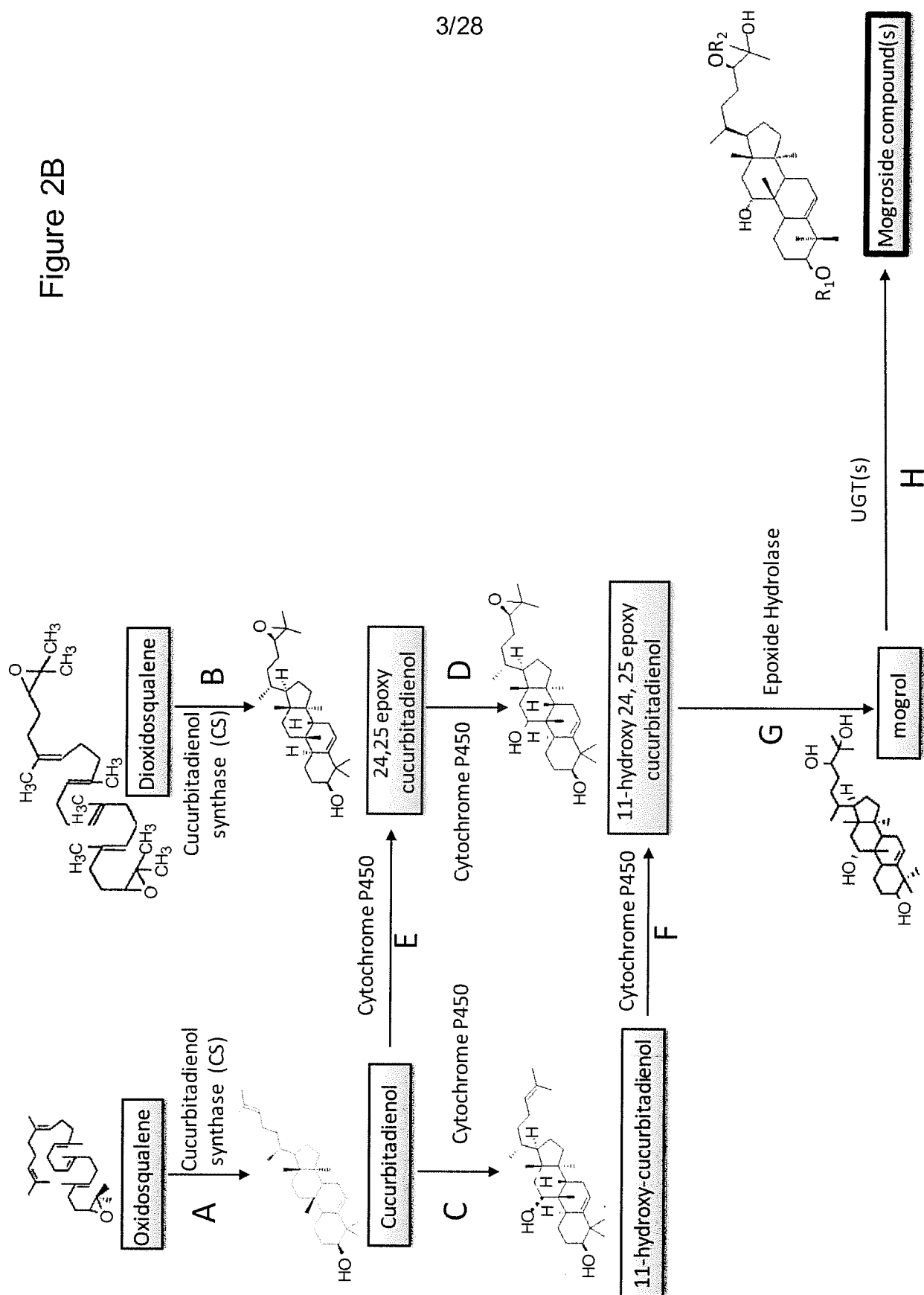
Figure 1





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Figure 2B



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Figure 2C

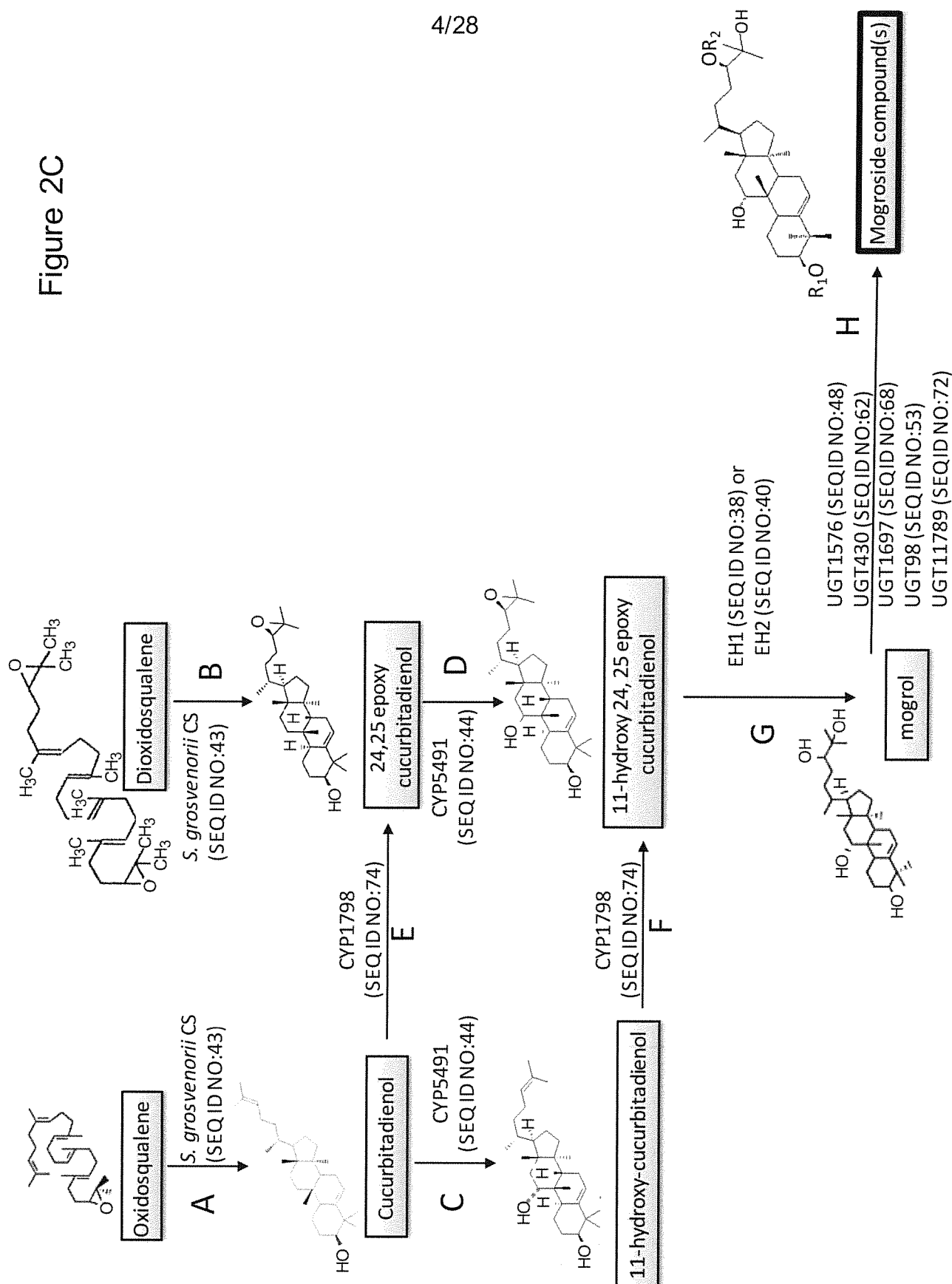
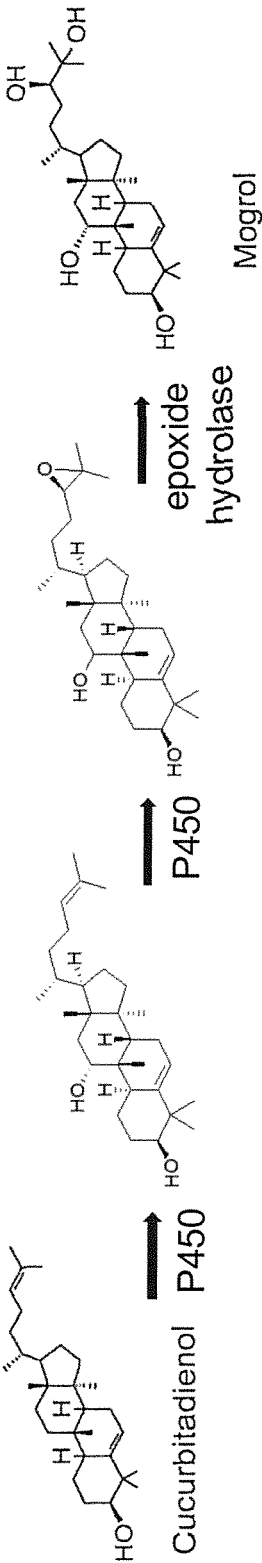
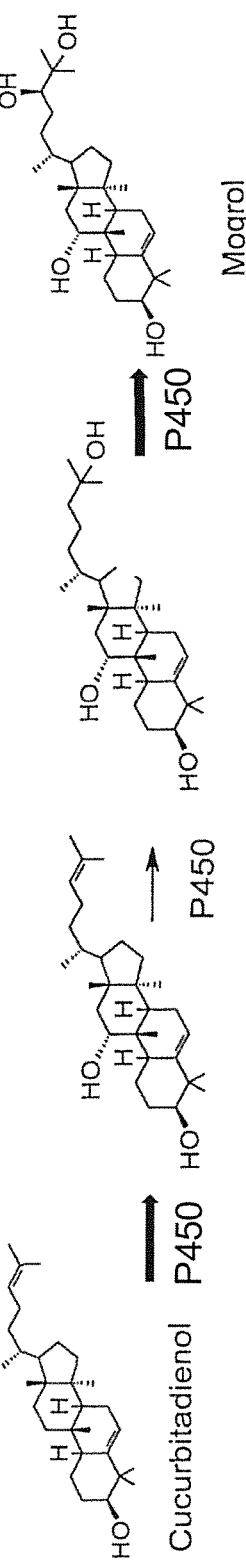


Figure 3A



(Disclosed herein)

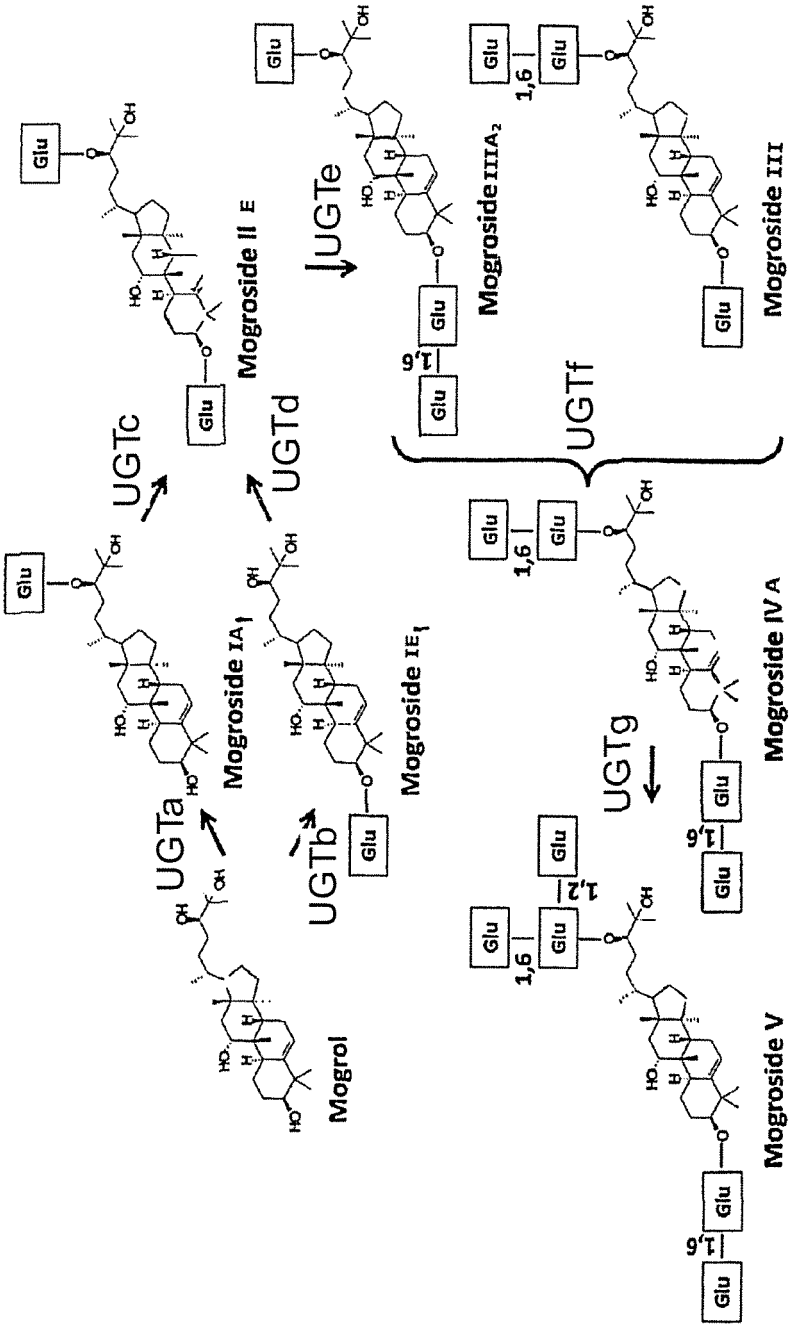
Figure 3B



(Tang *et al.*, 2011, BMC Genomics 12:343)

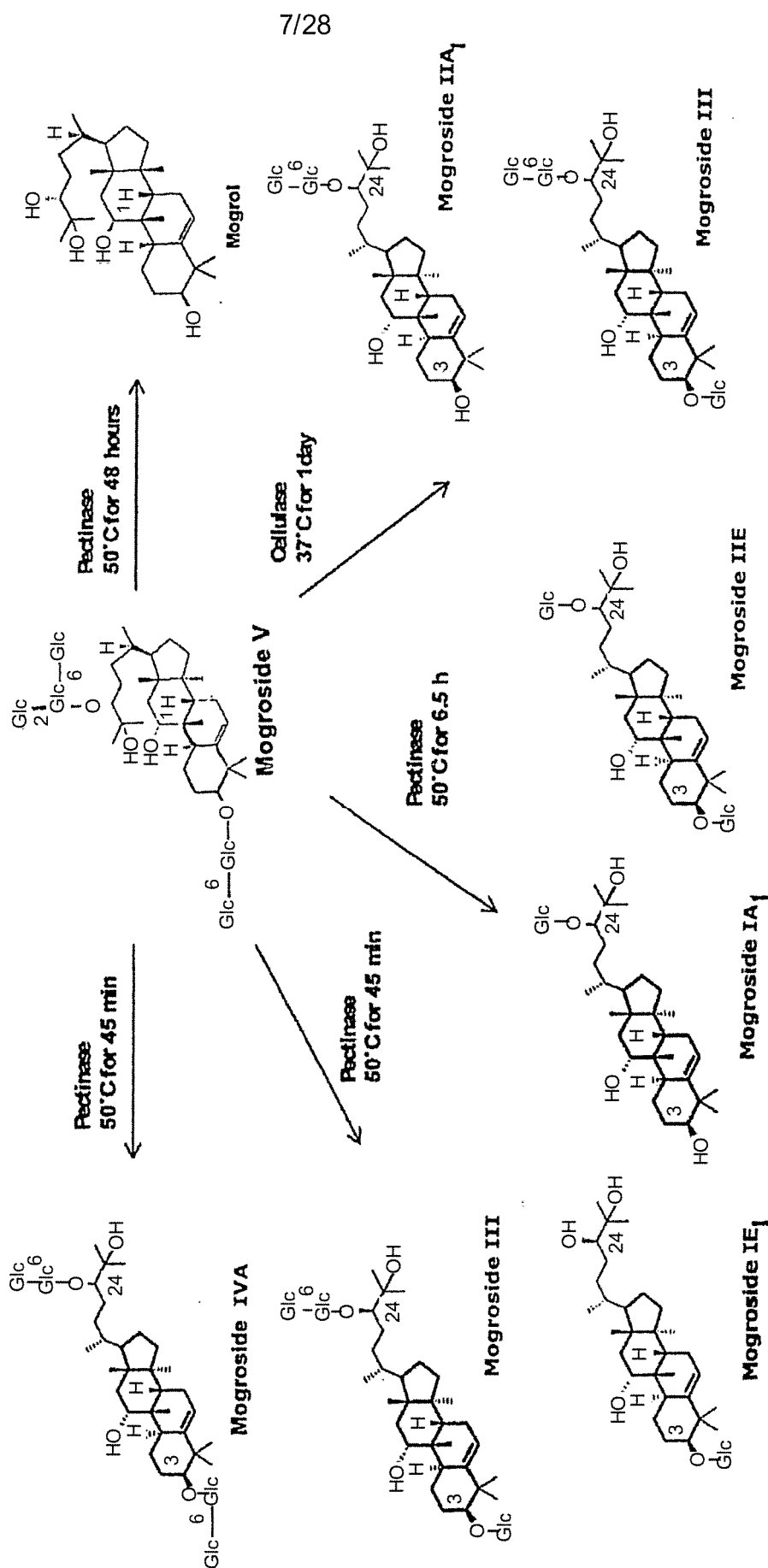
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Figure 4



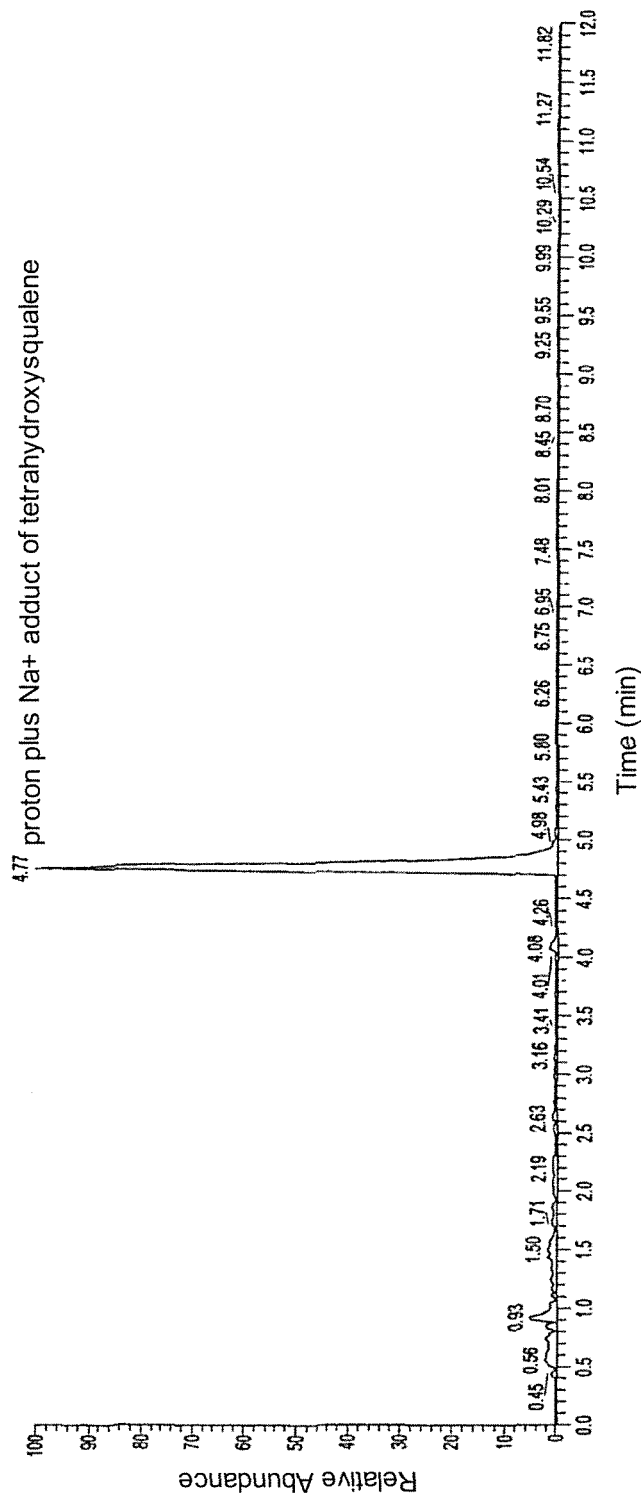
*See Figure 4 description for non-limiting examples of UGTa-g.

Figure 5



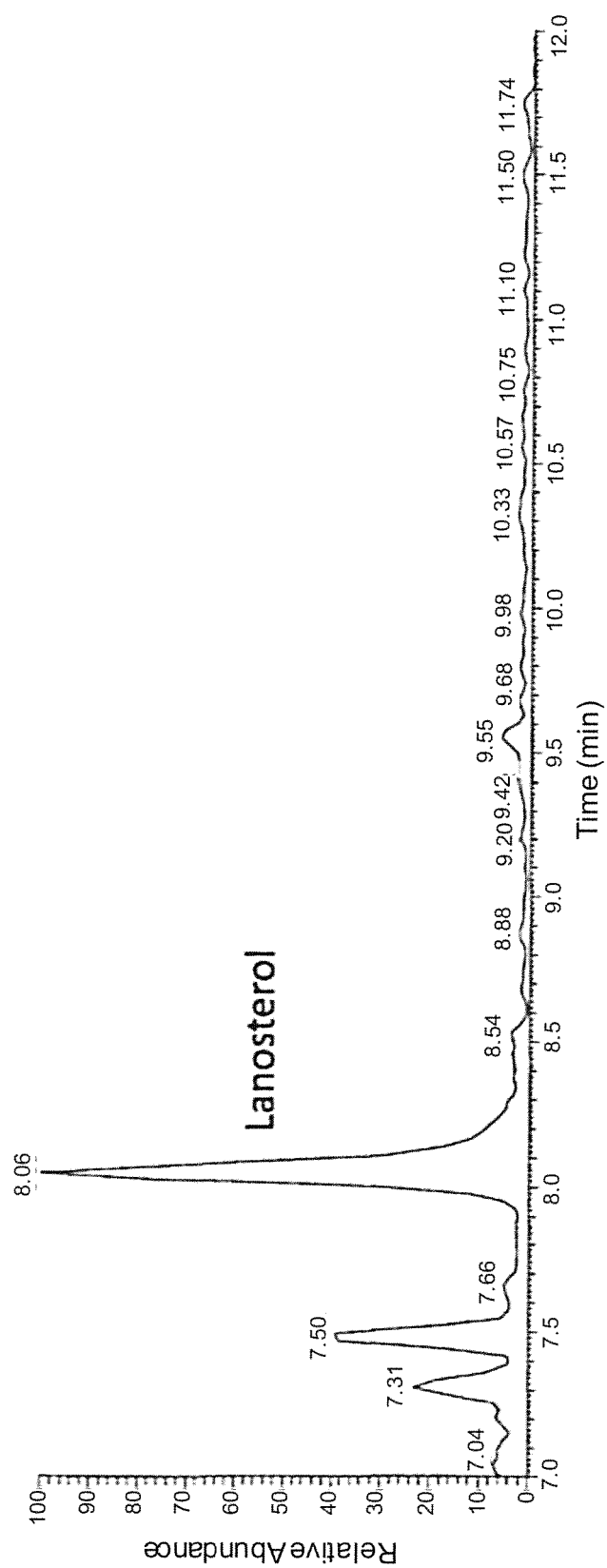
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Figure 6



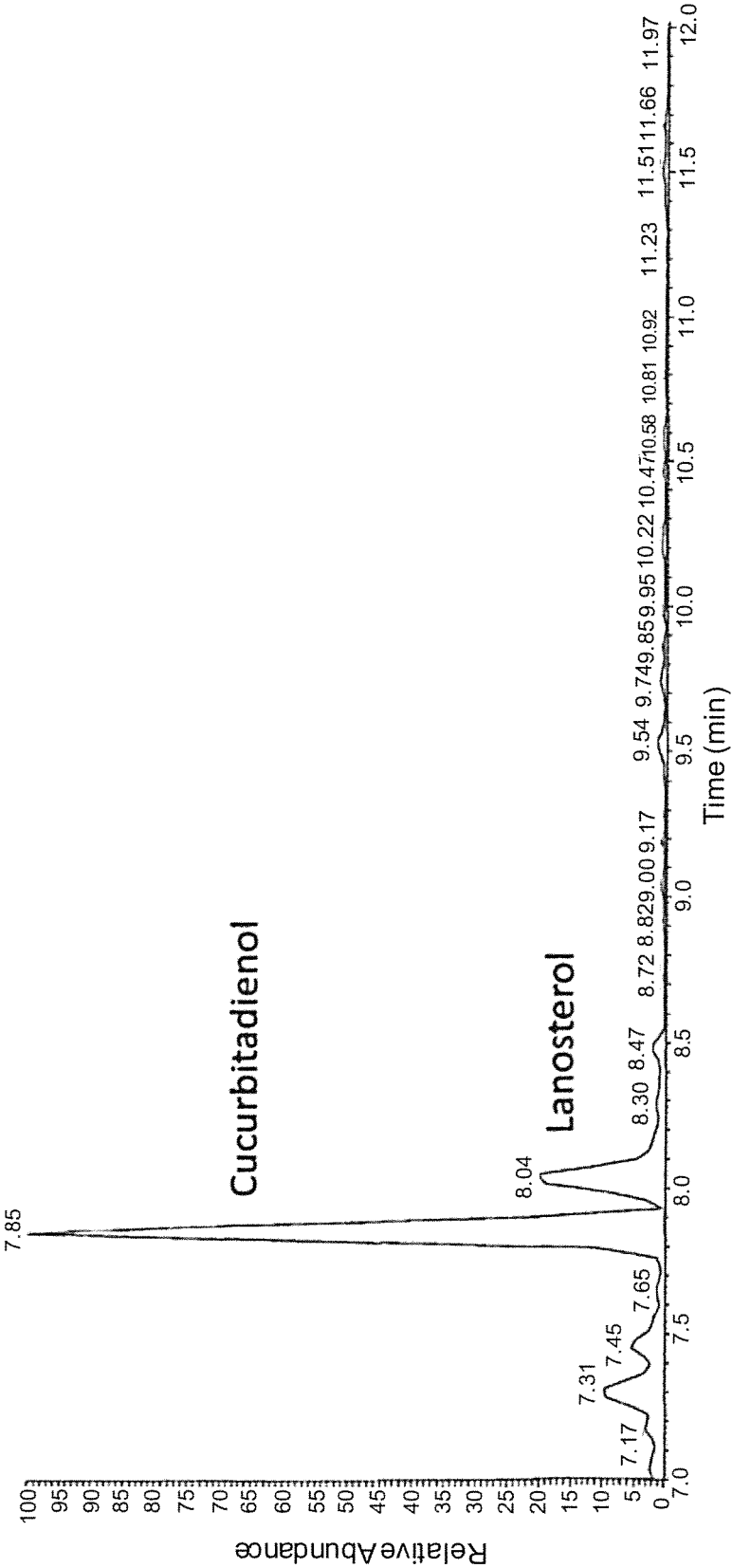
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Figure 7A



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Figure 7B



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Figure 8

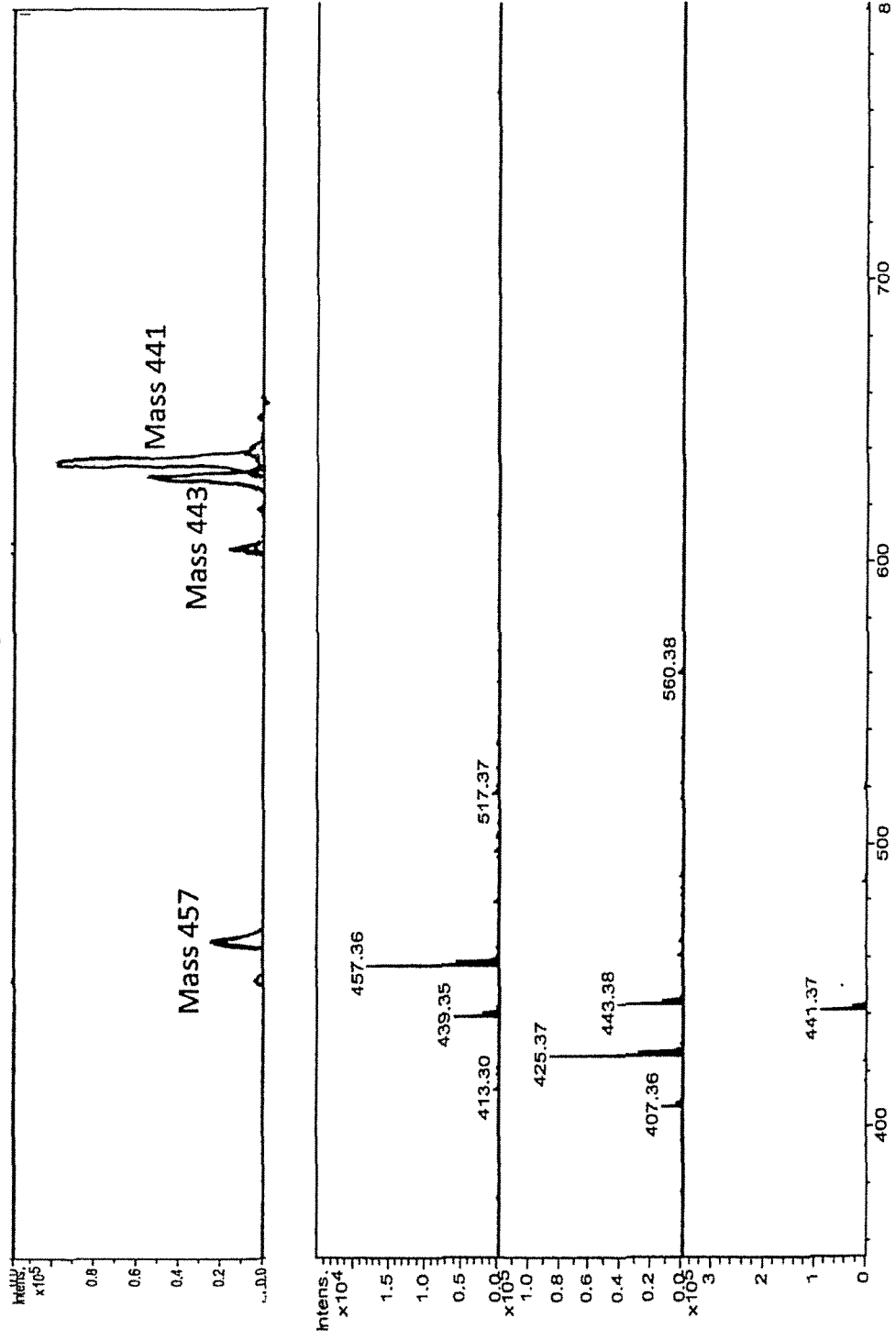


Figure 9A

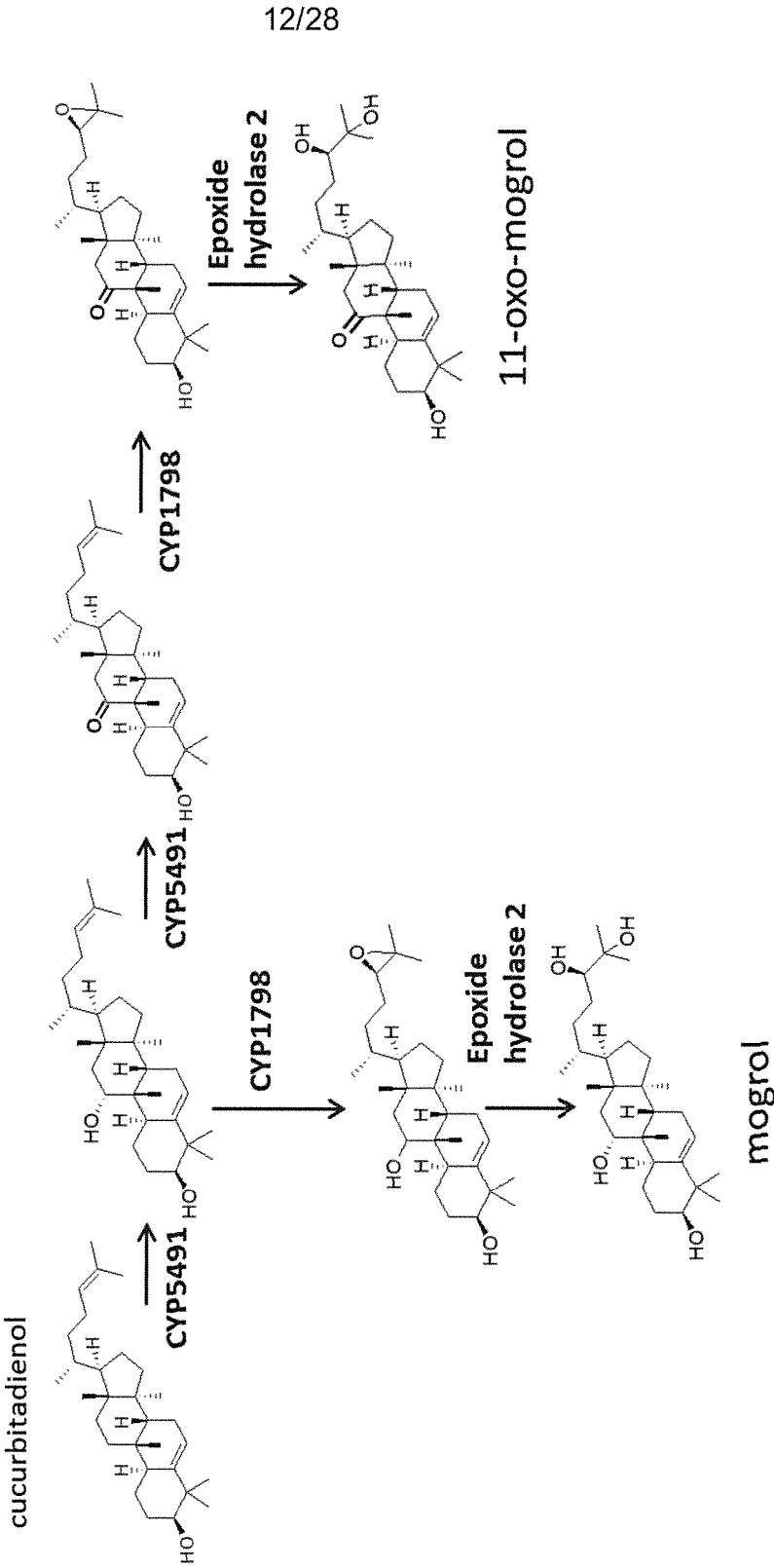
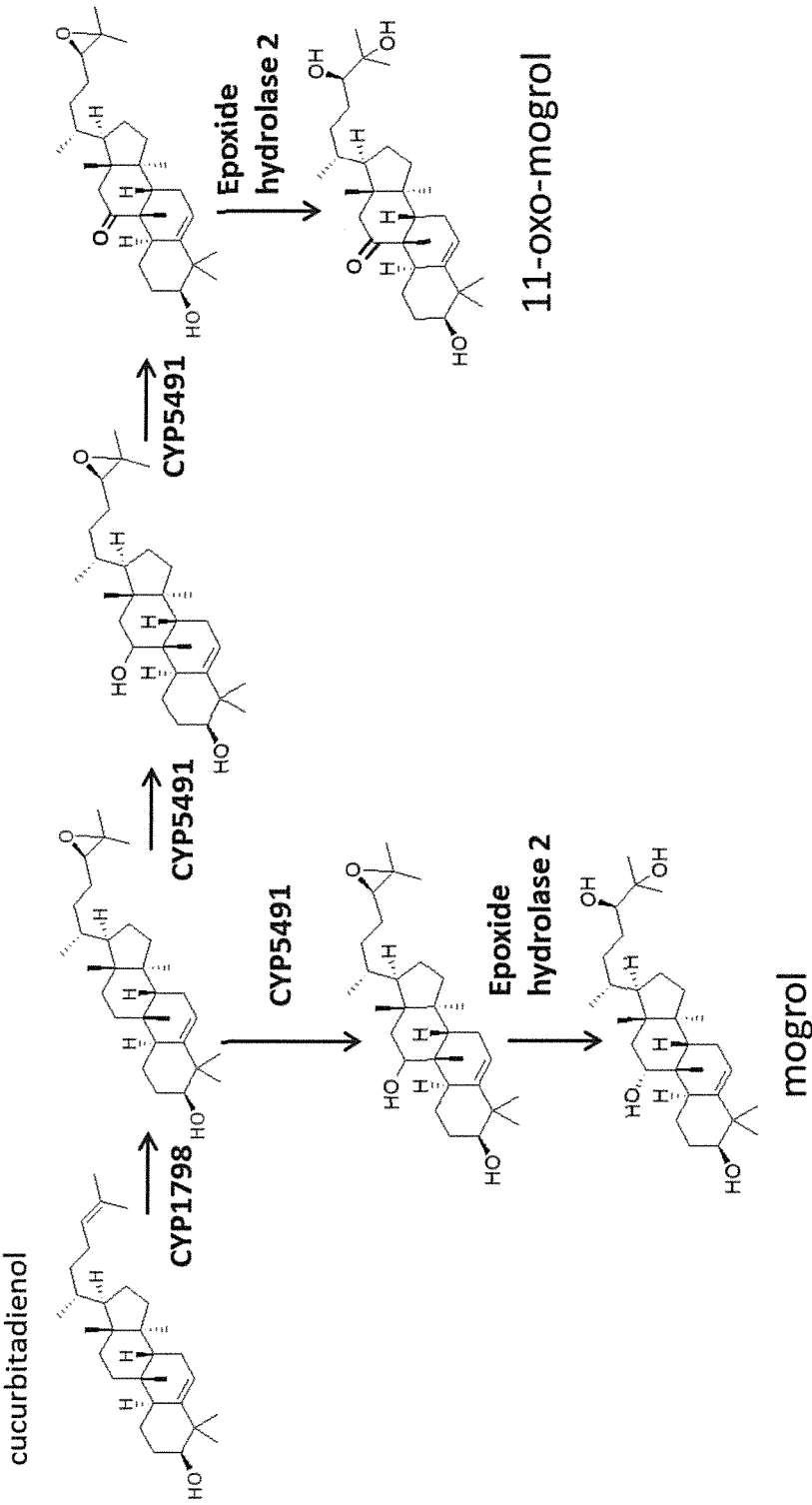
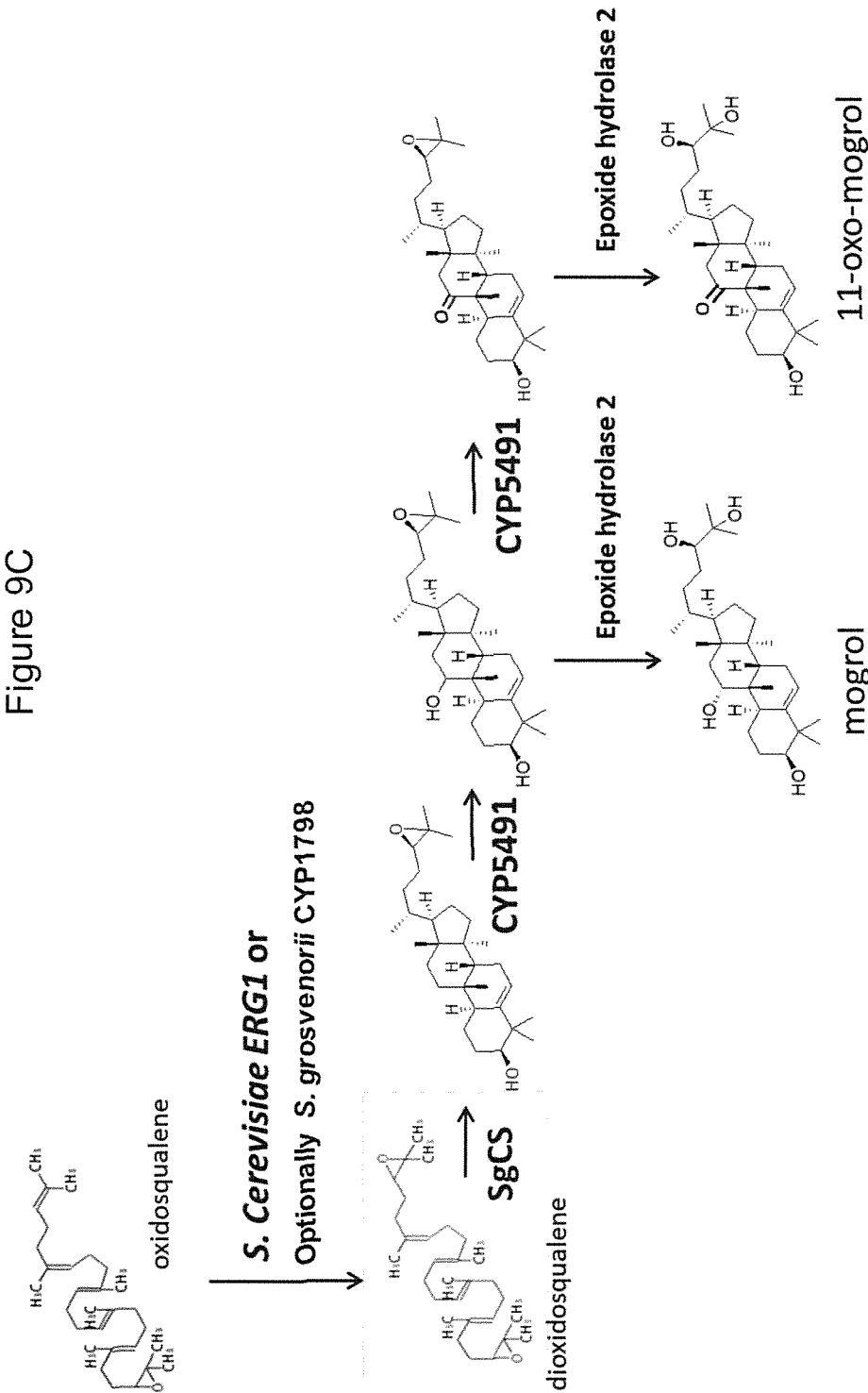


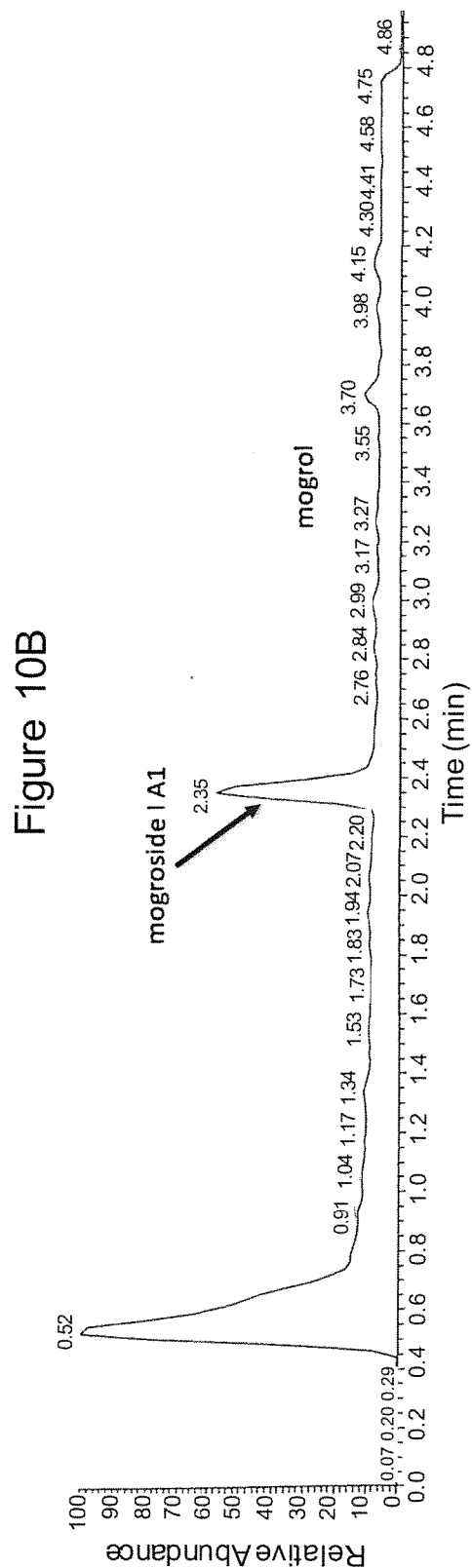
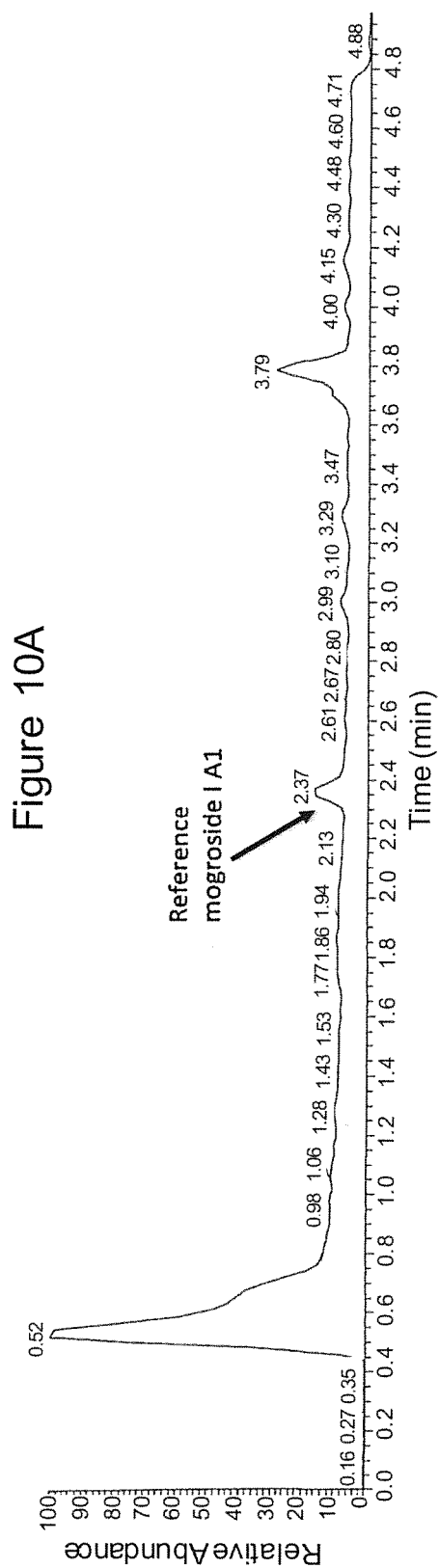
Figure 9B



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Figure 11A

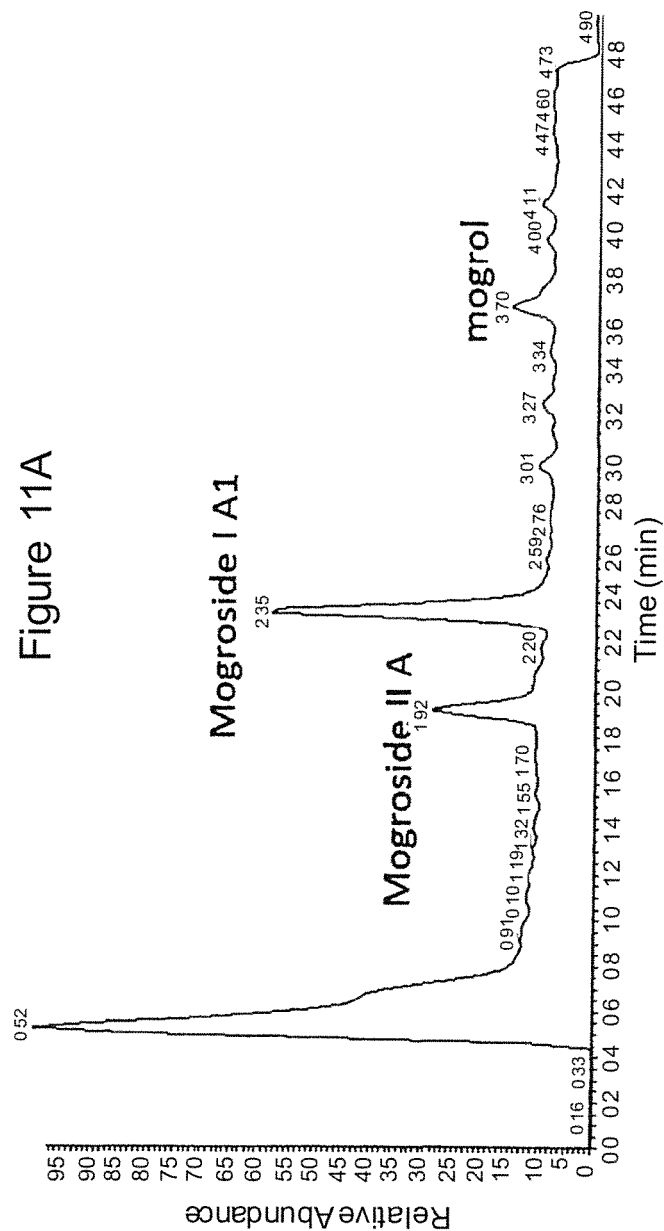


Figure 11B

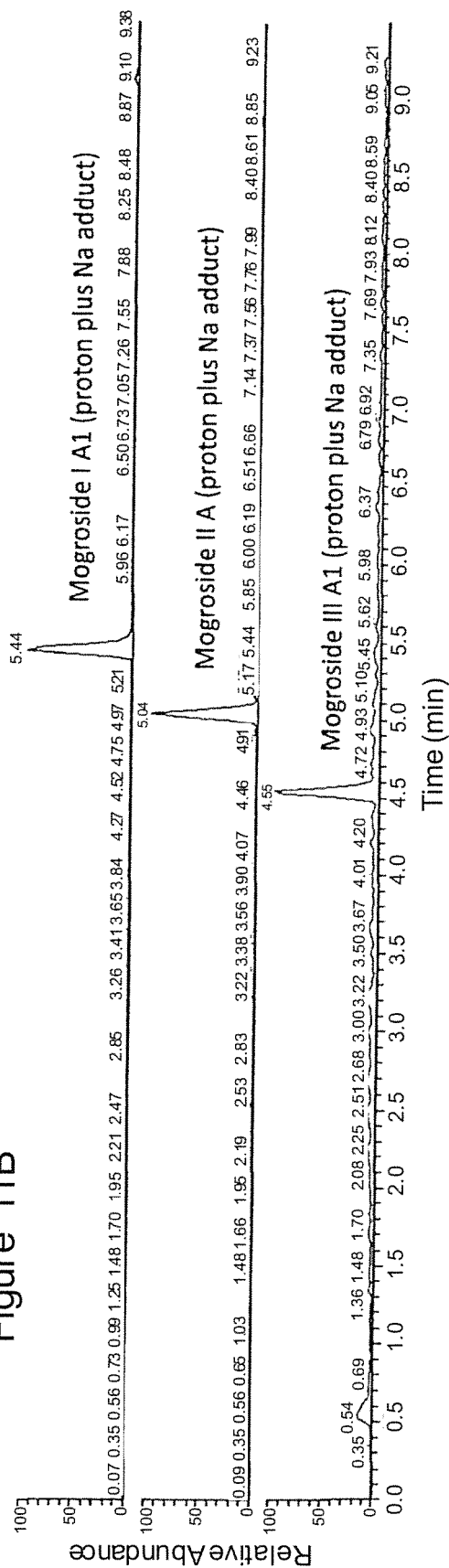


Figure 12

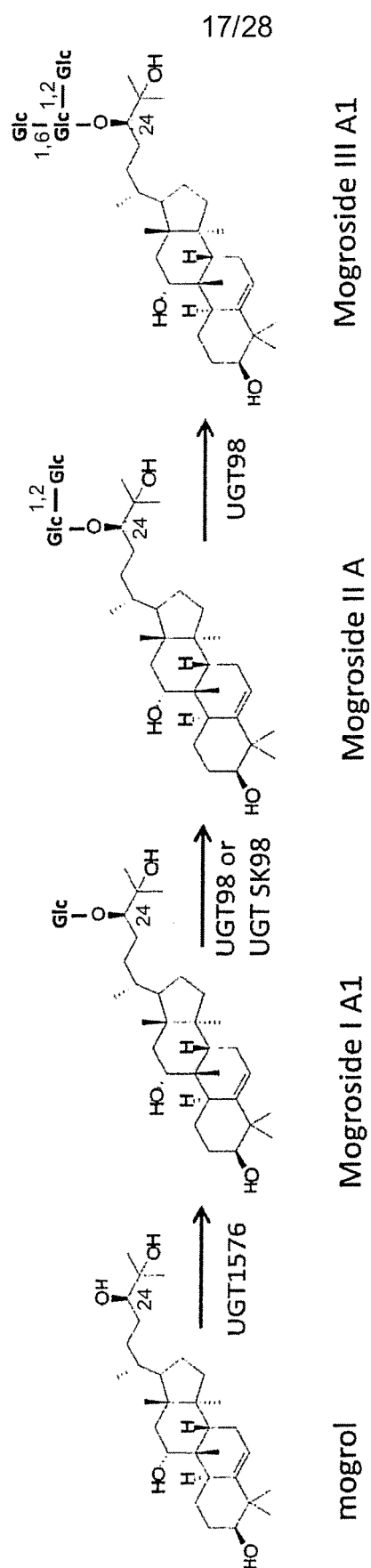
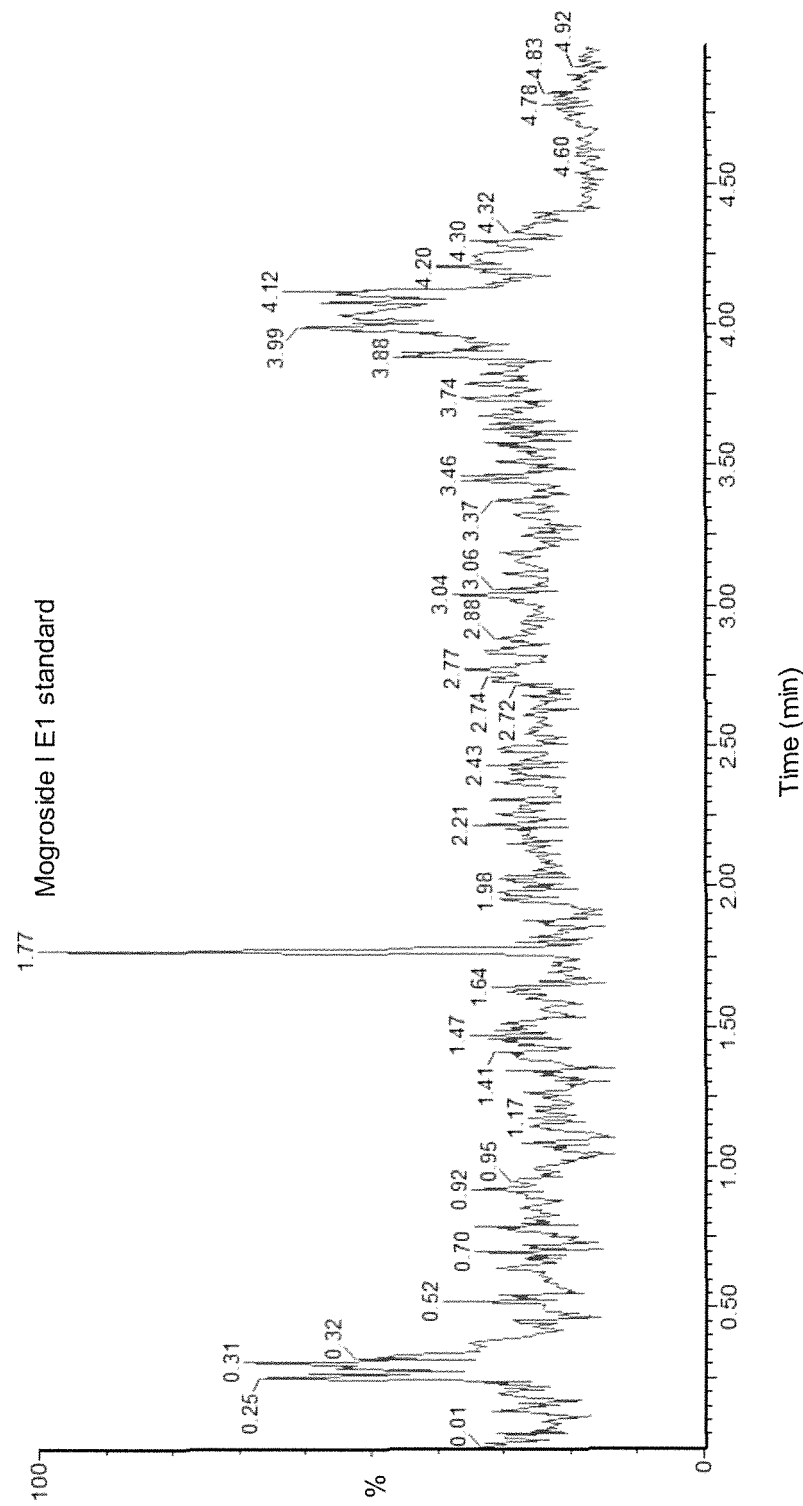


Figure 13A



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Figure 13B

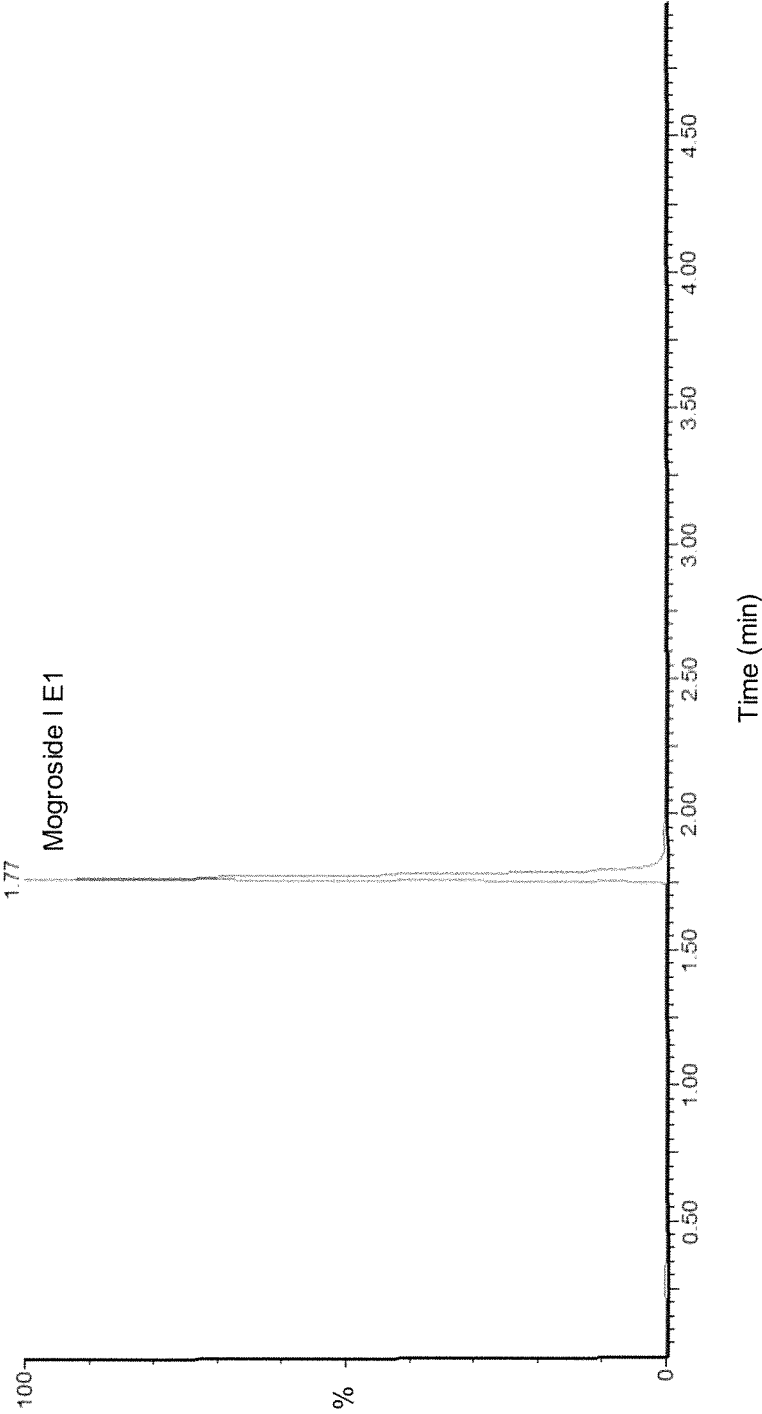


Figure 14A

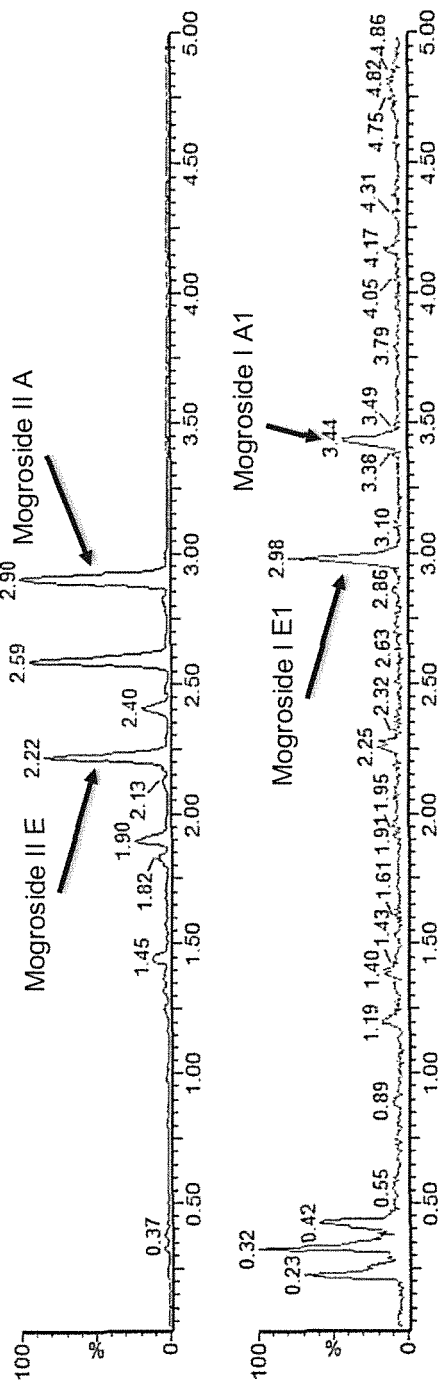


Figure 14B

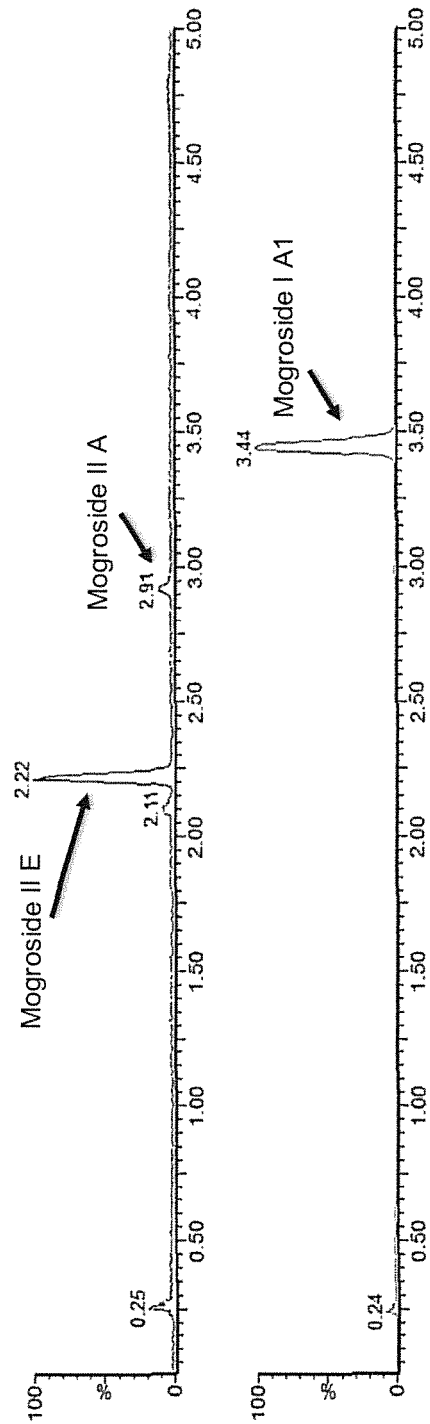


Figure 15A

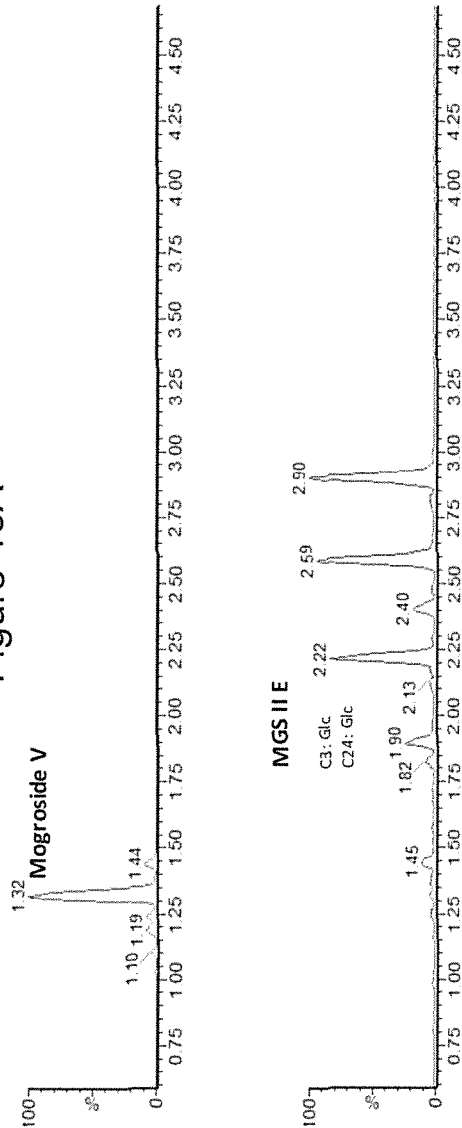


Figure 15B

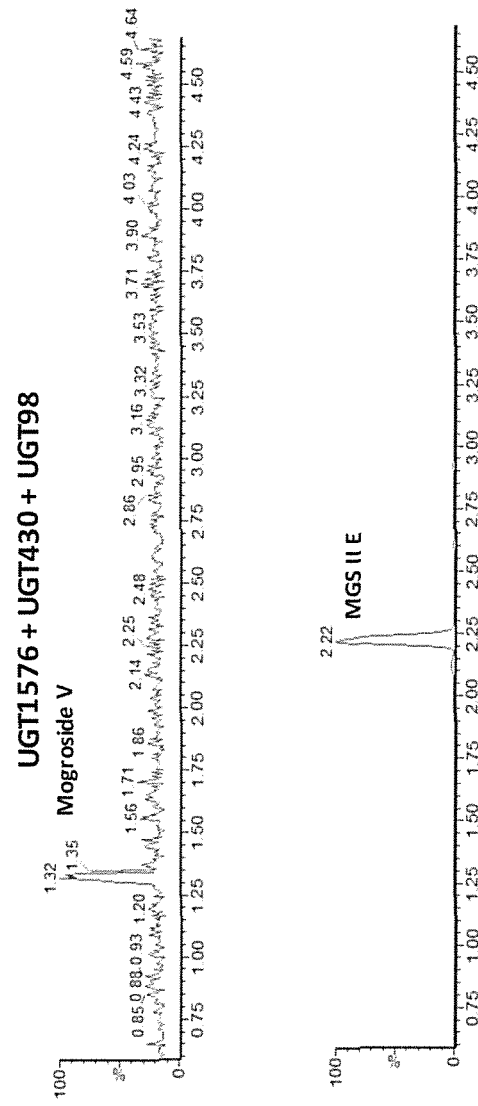


Figure 15C
UGT1576 + UGT430 + UGT98 + UGT11789

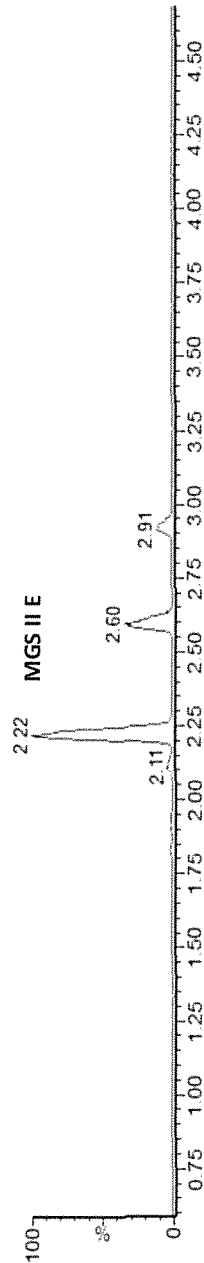
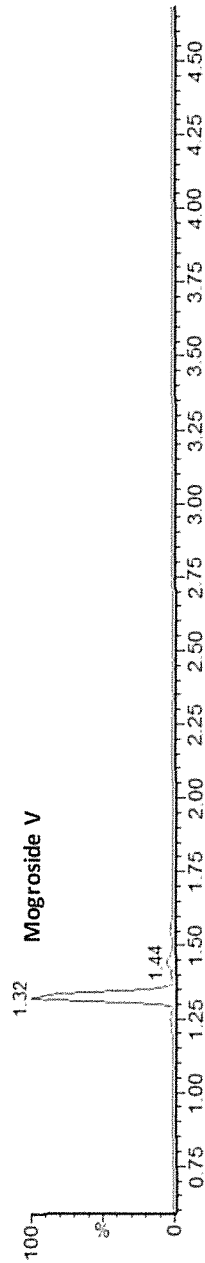


Figure 15D
UGT1576 + UGT430 + UGT11789

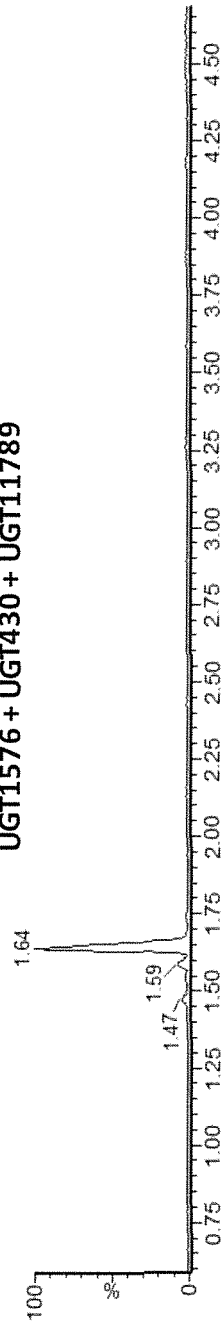


Figure 16A

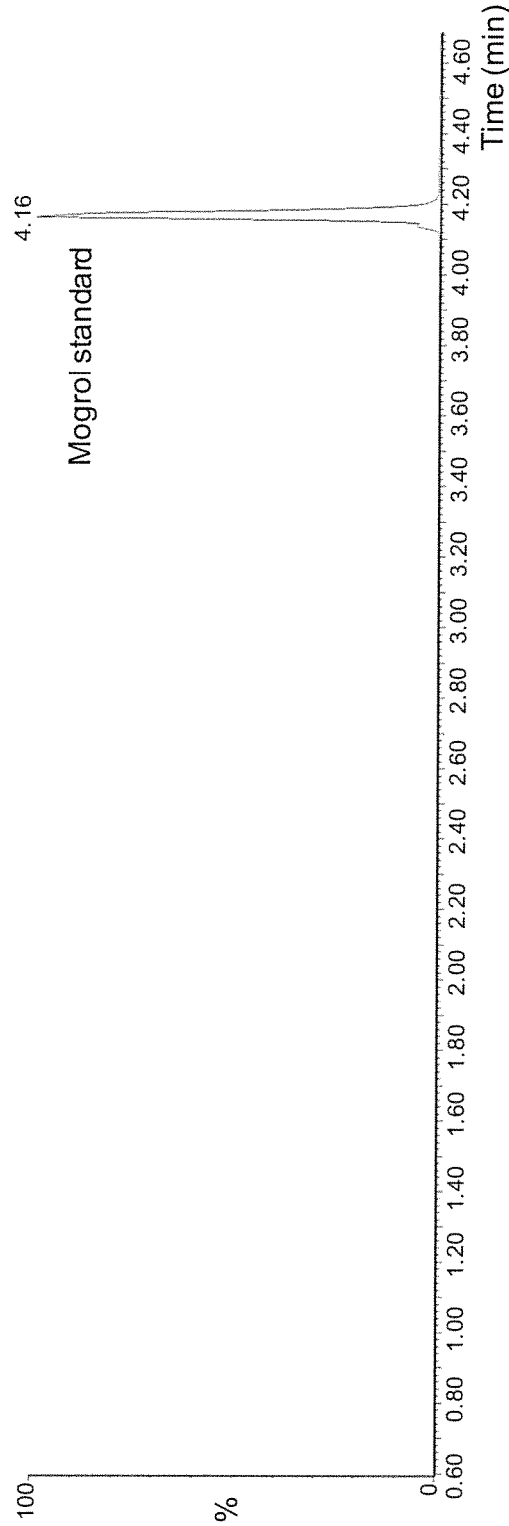


Figure 16B

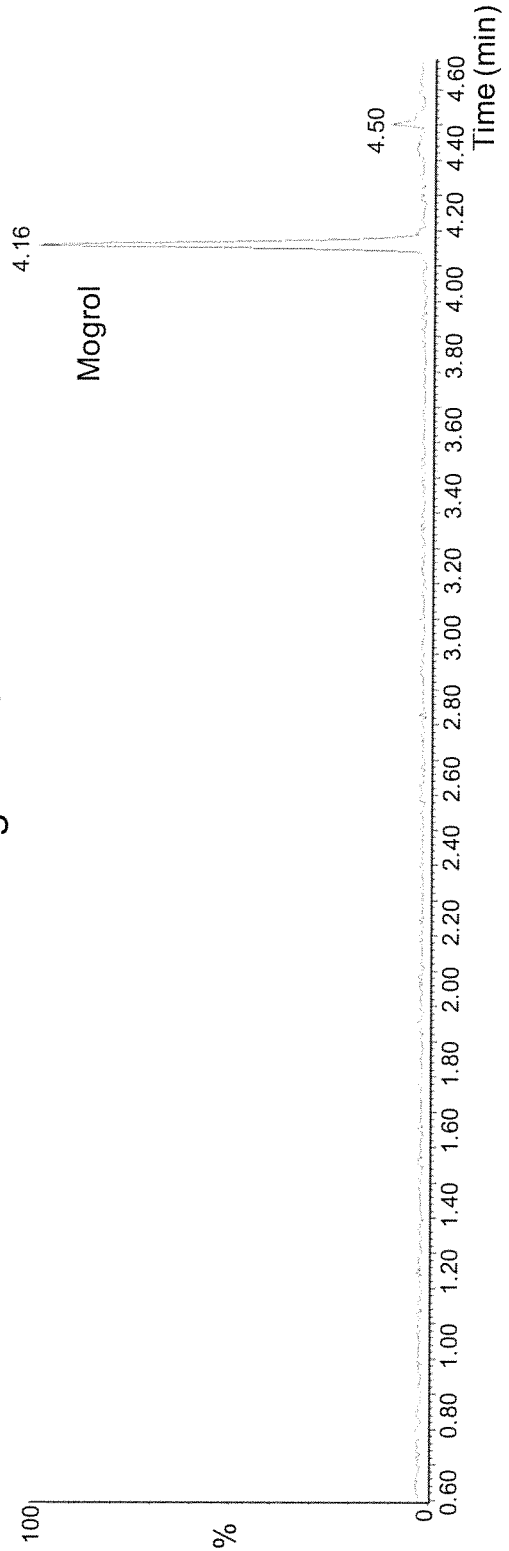


Figure 17

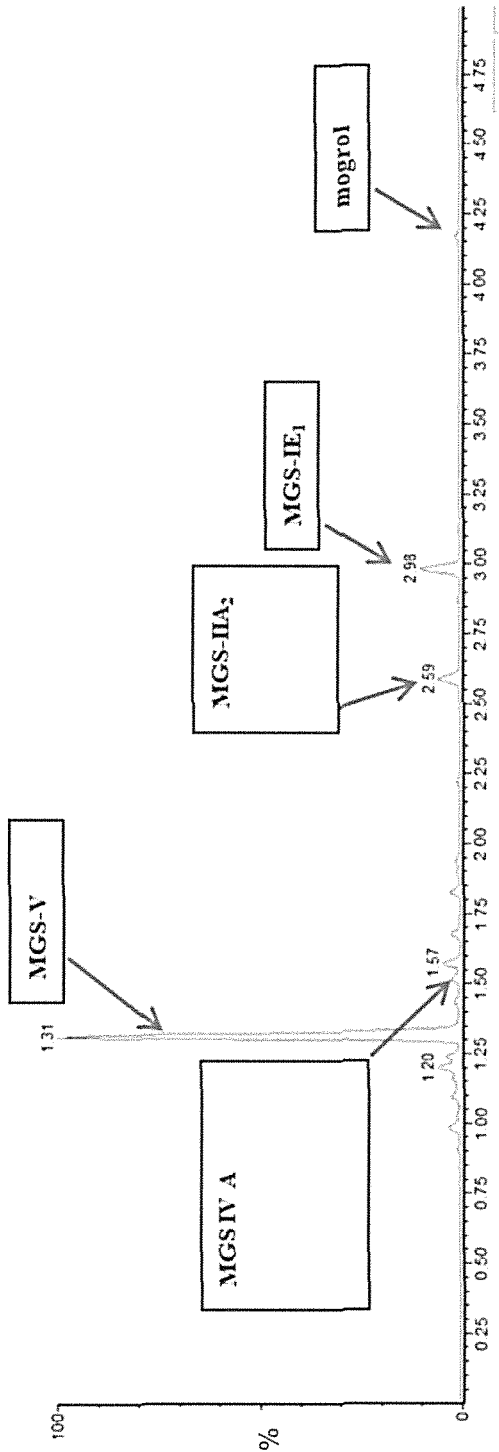


Figure 18A

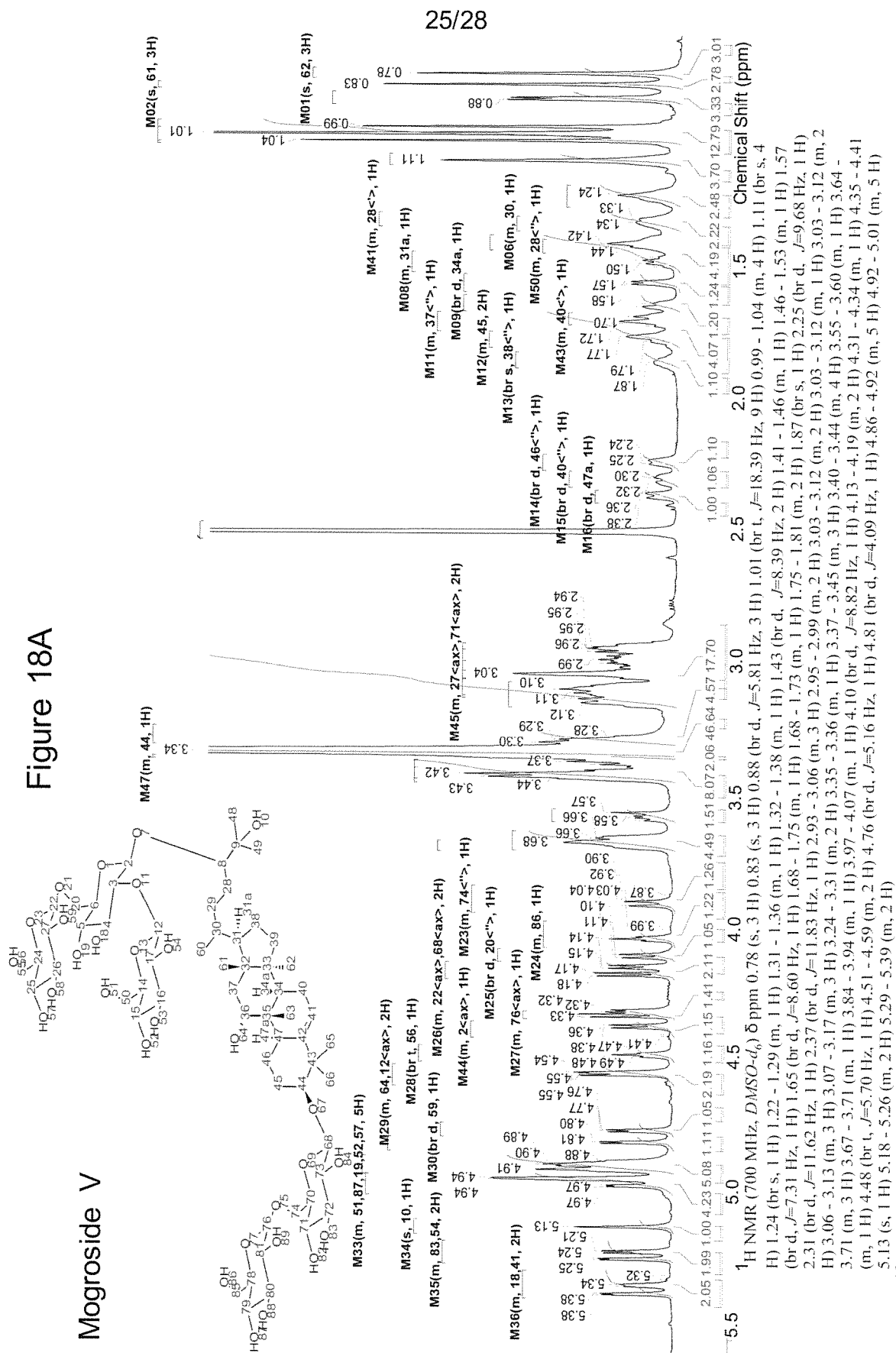
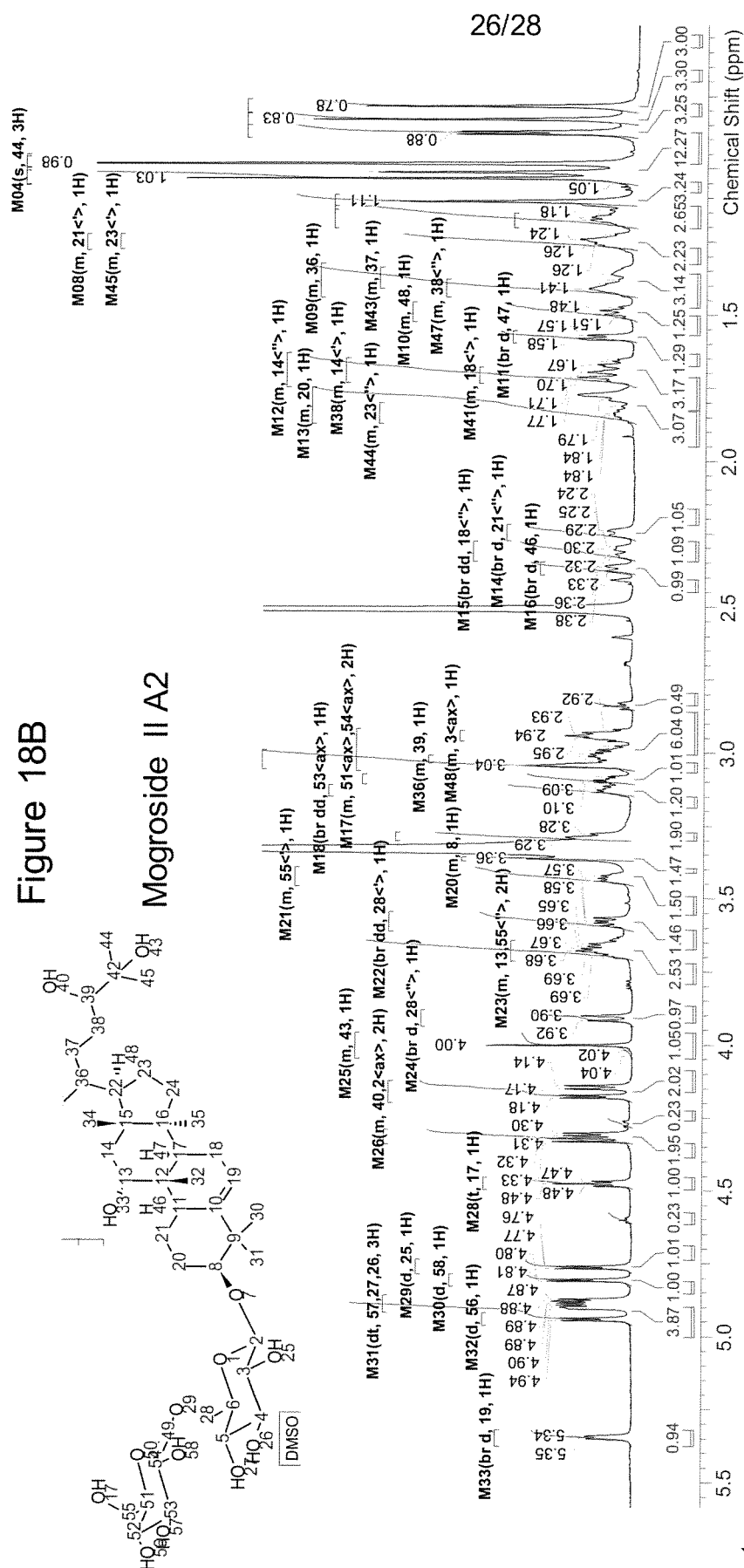


Figure 18B

Mogroside II A2



¹H NMR (700 MHz, DMSO-*d*₆) δ ppm 0.78 (s, 3 H) 0.83 (s, 3 H) 0.88 (br d, *J*=6.24 Hz, 3 H) 0.95 - 1.00 (m, 3 H) 0.98 (s, 3 H) 1.00 - 1.06 (m, 6 H) 1.05 (br s, 1 H) 1.11 (s, 3 H) 1.13 - 1.20 (m, 1 H) 1.14 - 1.20 (m, 2 H) 1.15 - 1.20 (m, 1 H) 1.22 - 1.28 (m, 1 H) 1.23 - 1.28 (m, 1 H) 1.32 - 1.44 (m, 1 H) 1.34 - 1.41 (m, 1 H) 1.38 - 1.44 (m, 1 H) 1.46 - 1.52 (m, 1 H) 1.58 (br d, *J*=7.74 Hz, 1 H) 1.63 - 1.75 (m, 1 H) 1.65 - 1.73 (m, 1 H) 1.68 - 1.74 (m, 1 H) 1.75 - 1.87 (m, 1 H) 1.80 - 1.87 (m, 1 H) 2.25 (br d, *J*=9.90 Hz, 1 H) 2.31 (br dd, *J*=18.28, 6.67 Hz, 1 H) 2.37 (br d, *J*=11.62 Hz, 1 H) 2.92 - 3.06 (m, 2 H) 2.92 - 2.96 (m, 1 H) 2.99 - 3.06 (m, 2 H) 3.01 - 3.03 (m, 1 H) 3.07 - 3.11 (m, 1 H) 3.12 (br dd, *J*=9.03, 4.95 Hz, 1 H) 3.27 - 3.30 (m, 1 H) 3.36 - 3.37 (m, 1 H) 3.39 - 3.46 (m, 1 H) 3.58 (br dd, *J*=12.15, 6.99 Hz, 1 H) 3.64 - 3.71 (m, 2 H) 3.91 (br d, *J*=11.40 Hz, 1 H) 3.96 - 4.05 (m, 1 H) 4.12 - 4.20 (m, 2 H) 4.29 - 4.34 (m, 2 H) 4.48 (t, *J*=5.81 Hz, 1 H) 4.76 (d, *J*=5.16 Hz, 1 H) 4.81 (d, *J*=4.30 Hz, 1 H) 4.89 (dt, *J*=9.47, 4.73 Hz, 3 H) 4.94 (d, *J*=5.38 Hz, 1 H) 5.35 (br d, *J*=5.81 Hz, 1 H)

¹³C NMR (176 MHz, DMSO-*d*₆) δ ppm 143.9 (1C), 117.6 (1C), 105.3 (1C), 103.3 (1C), 86.1 (1C), 77.8 (1C), 77.4 (1C), 77.1 (1C), 77.0 (2C), 76.5 (1C), 74.1 (1C), 73.9 (1C), 72.0 (1C), 70.4 (1C), 70.3 (1C), 68.4 (1C), 61.4 (1C), 50.4 (1C), 49.3 (1C), 46.8 (1C), 43.0 (1C), 41.8 (1C), 40.5 (1C), 39.3 (1C), 35.8 (1C), 35.4 (1C), 34.2 (1C), 33.4 (1C), 28.7 (1C), 28.0 (1C), 27.7 (1C), 27.6 (1C), 26.6 (1C), 26.0 (2C), 25.7 (1C), 25.0 (1C), 24.2 (1C), 18.9 (1C), 18.8 (1C), 16.7 (1C).

Figure 18C
Mogroside IV A

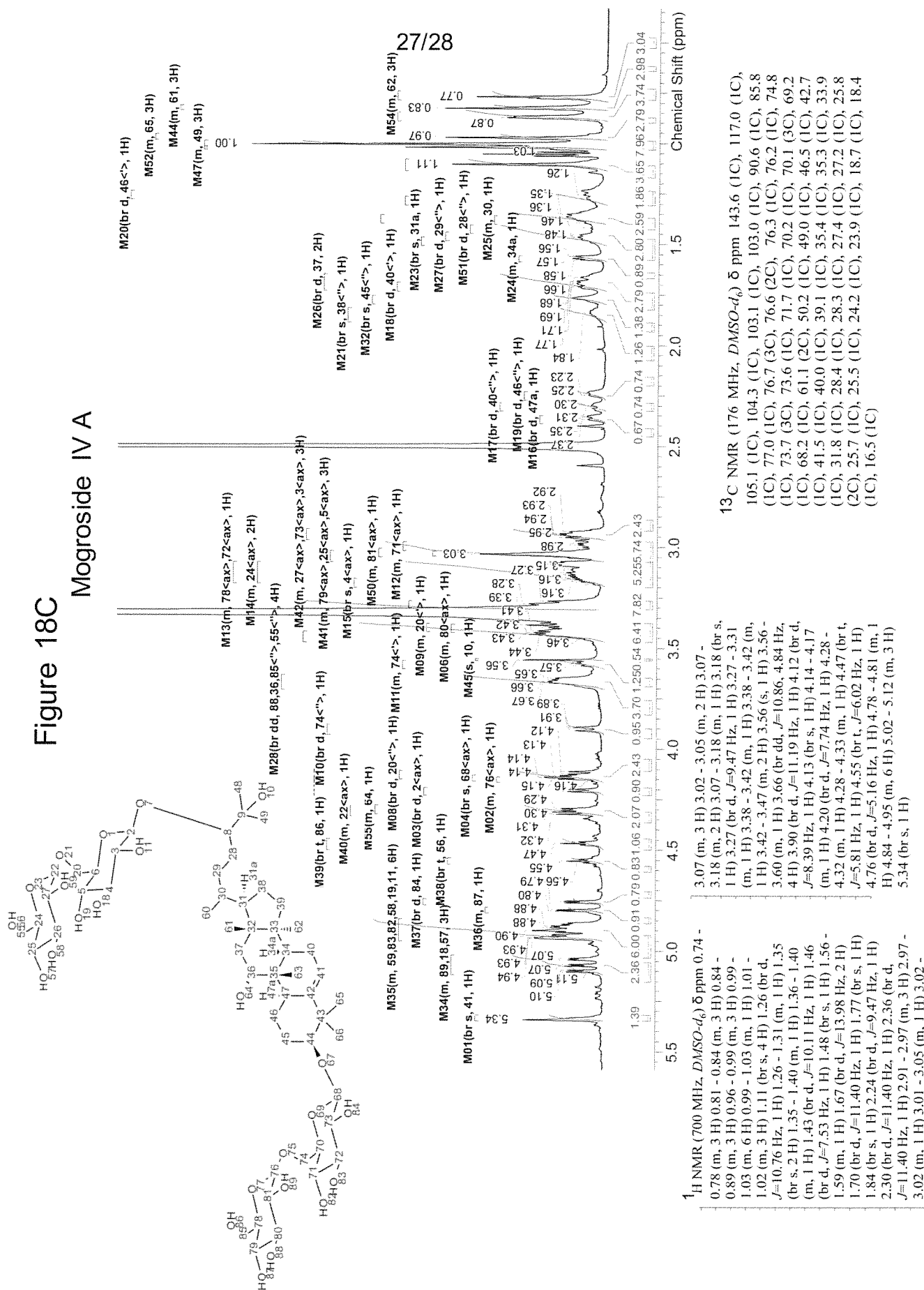
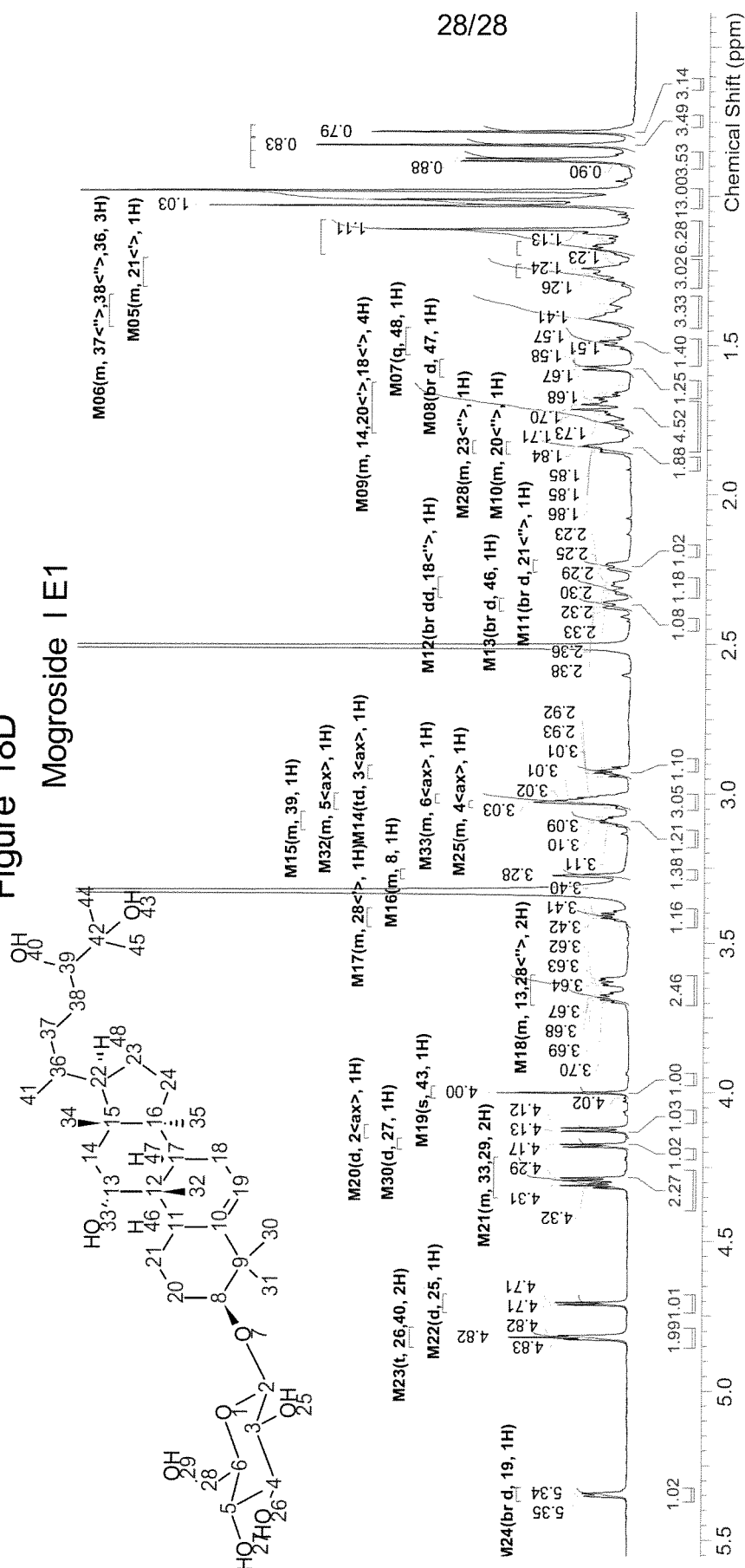


Figure 18D

Mogroside IE1



^1H NMR (700 MHz, $\text{DMSO}-d_6$) δ ppm 0.79 (s, 3 H) 0.83 (s, 3 H) 0.88 (br d, $J=6.24$ Hz, 3 H) 0.97 - 1.04 (m, 13 H) 1.08 - 1.20 (m, 2 H) 1.10 - 1.12 (m, 3 H) 1.15 - 1.20 (m, 1 H) 1.21 - 1.31 (m, 1 H) 1.23 - 1.27 (m, 1 H) 1.33 - 1.44 (m, 3 H) 1.49 (q, $J=8.89$ Hz, 1 H) 1.58 (br d, $J=7.31$ Hz, 1 H) 1.63 - 1.79 (m, 4 H) 1.82 - 1.86 (m, 1 H) 1.82 - 1.86 (m, 1 H) 2.24 (br d, $J=9.68$ Hz, 1 H) 2.31 (br dd, $J=18.50, 6.88$ Hz, 1 H) 2.37 (br d, $J=12.05$ Hz, 1 H) 2.93 (td, $J=8.28, 5.38$ Hz, 1 H) 3.00 - 3.05 (m, 1 H) 3.00 - 3.03 (m, 1 H) 3.02 - 3.05 (m, 1 H) 3.06 - 3.12 (m, 1 H) 3.26 - 3.29 (m, 1 H) 3.39 - 3.45 (m, 1 H) 3.61 - 3.71 (m, 2 H) 4.00 (s, 1 H) 4.12 (d, $J=7.74$ Hz, 1 H) 4.18 (d, $J=5.81$ Hz, 1 H) 4.22 - 4.35 (m, 2 H) 4.71 (d, $J=5.38$ Hz, 1 H) 4.82 (t, $J=4.41$ Hz, 2 H) 5.35 (br d, $J=6.02$ Hz, 1 H)