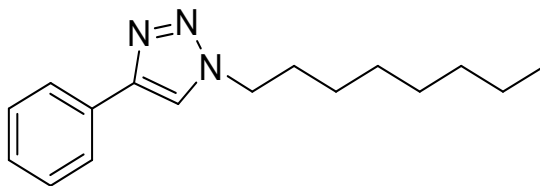
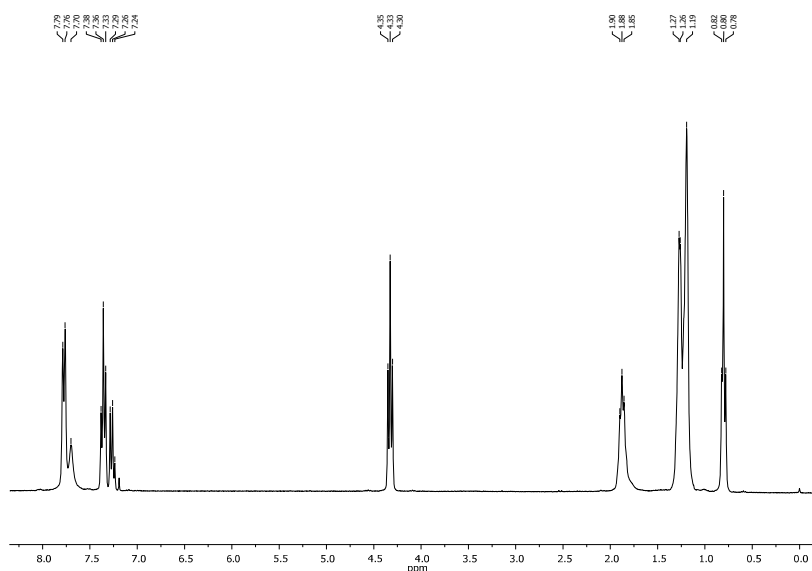


# Supplementary Information

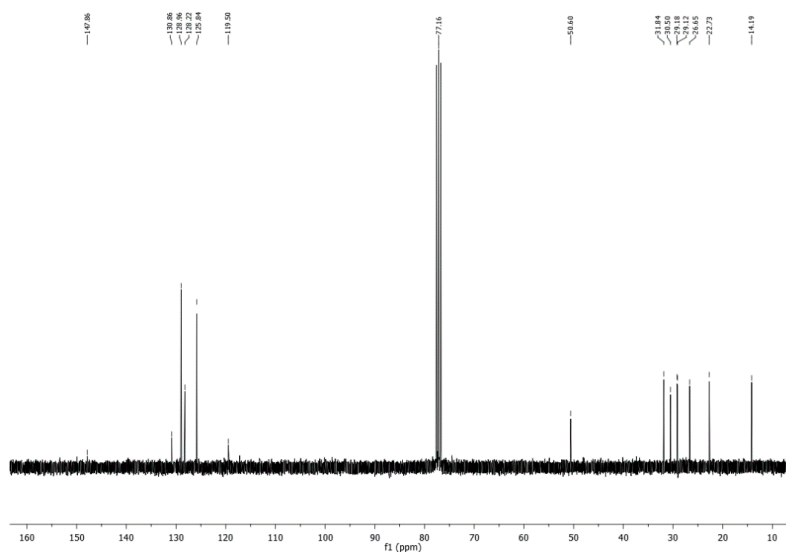
## Analytical Data of the Products



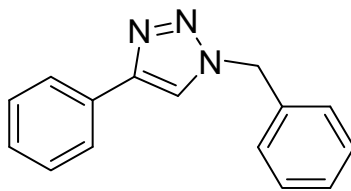
*1-Octyl-4-phenyl-1H-1,2,3-triazole (3a)* [1]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.75 (2 H, d,  $J = 9$  Hz), 7.70 (1 H, s), 7.38–7.24 (3 H, m), 4.33 (2 H, t,  $J = 7.5$  Hz), 1.90–1.85 (2 H, m), 1.35–1.12 (10 H, m), 0.80 (3 H, t,  $J = 6$  Hz) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  147.8, 130.9, 128.9, 128.2, 125.8, 119.5, 50.6, 31.8, 30.5, 29.2, 29.1, 26.6, 22.7, 14.2 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{16}\text{H}_{23}\text{N}_3$   $[\text{M}+\text{H}]^+$ : 258.1891, found: 258.1893.



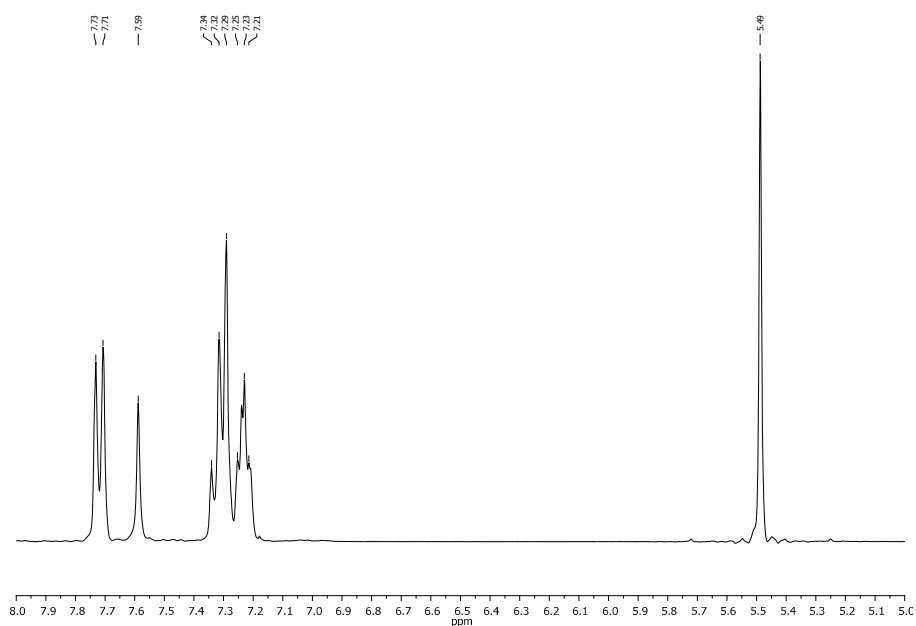
**Figure S1.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3a**.



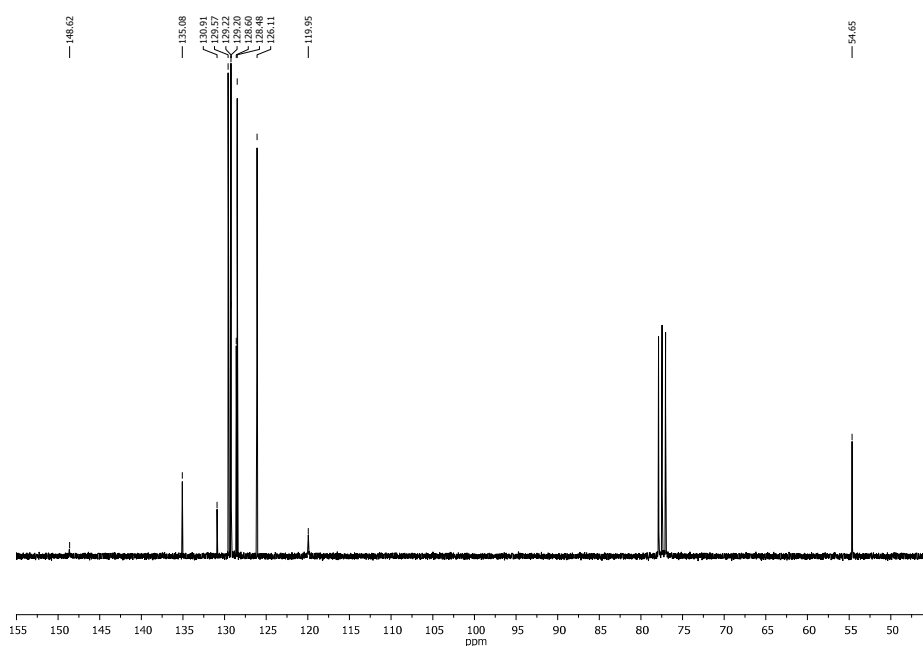
**Figure S2.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3a**.



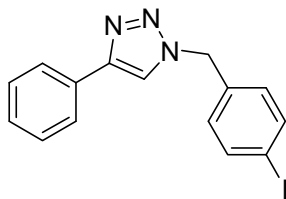
*1-Benzyl-4-phenyl-1H-1,2,3-triazole (3b)* [2]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.72 (2 H, d,  $J = 6$  Hz), 7.59 (1 H, s), 7.34–7.21 (8 H, m), 5.49 (2 H, s) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.6, 135.1, 130.9, 129.6, 129.2, 129.2, 128.6, 128.5, 126.1, 120.0, 54.7 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{15}\text{H}_{13}\text{N}_3$   $[\text{M}+\text{H}]^+$ : 236.1109, found: 236.1105.



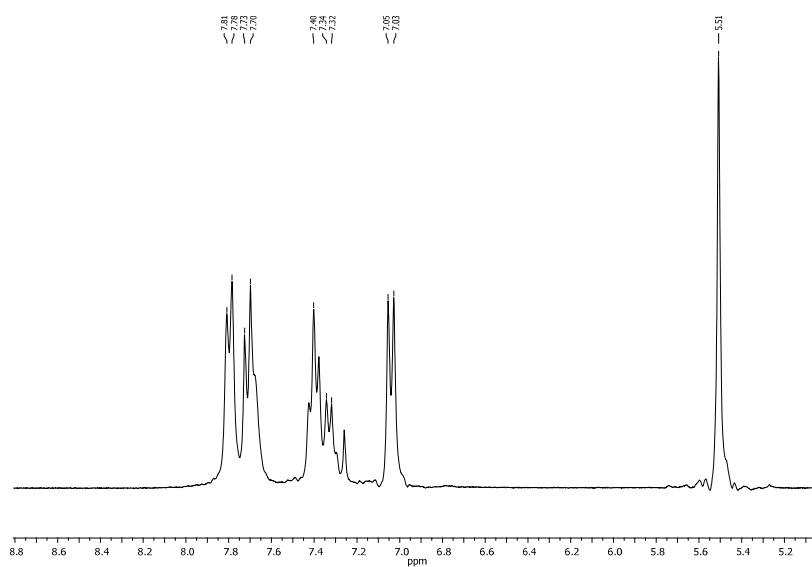
**Figure S3.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3b**.



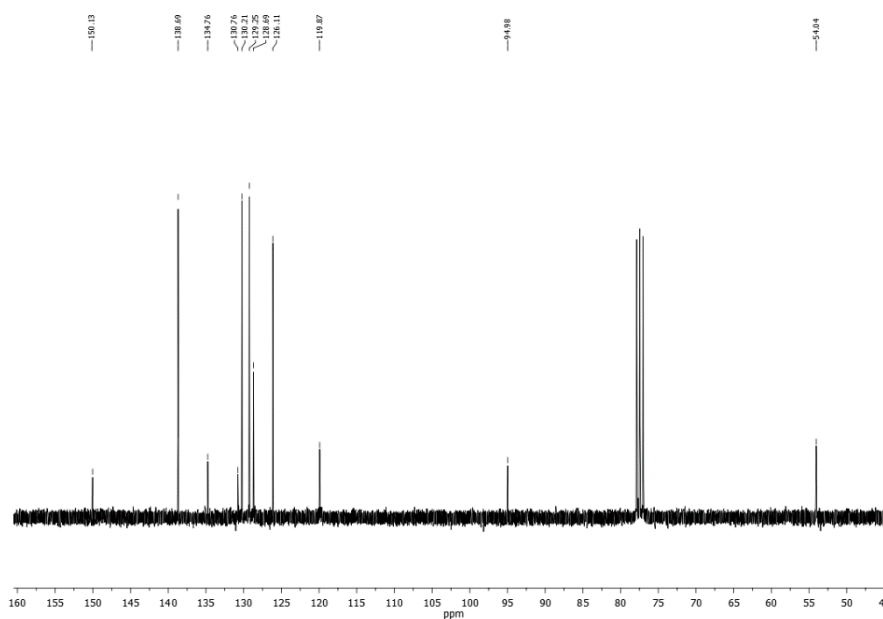
**Figure S4.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3b**.



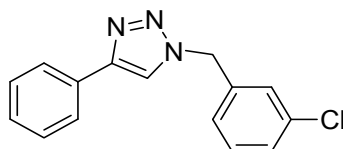
*1-(4-Iodobenzyl)-4-phenyl-1H-1,2,3-triazole (3c)* [3]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.79 (2 H, d,  $J=4.5$  Hz), 7.76–7.63 (3 H, m), 7.4–7.29 (3 H, m), 7.04 (2 H, d,  $J=6$  Hz), 5.51 (2 H, s) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  150.1, 138.7, 134.8, 130.8, 130.2, 129.3, 128.7, 126.1, 119.9, 95.0, 54.0 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{15}\text{H}_{12}\text{IN}_3$   $[\text{M}+\text{H}]^+$ : 362.0075, found: 362.0074.



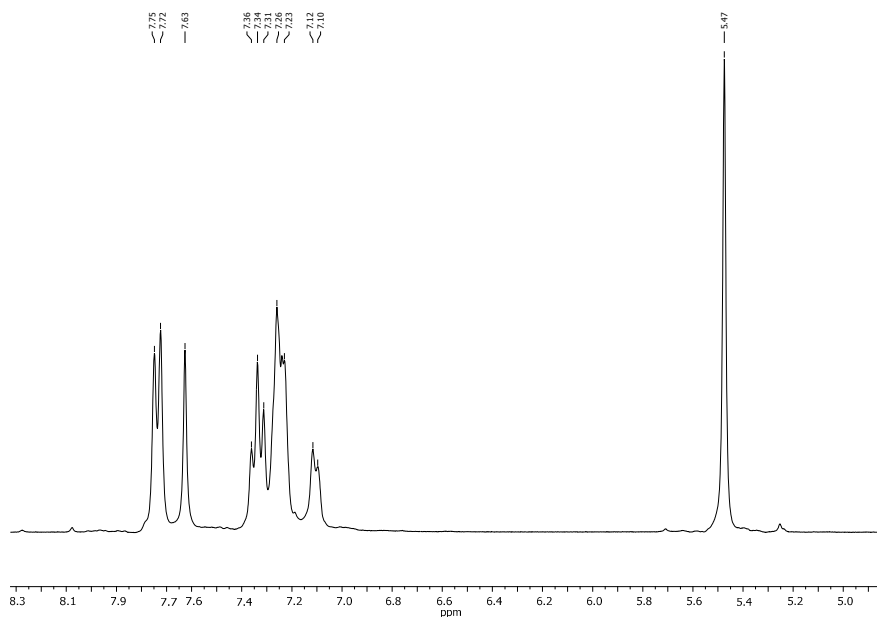
**Figure S5.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3c**.



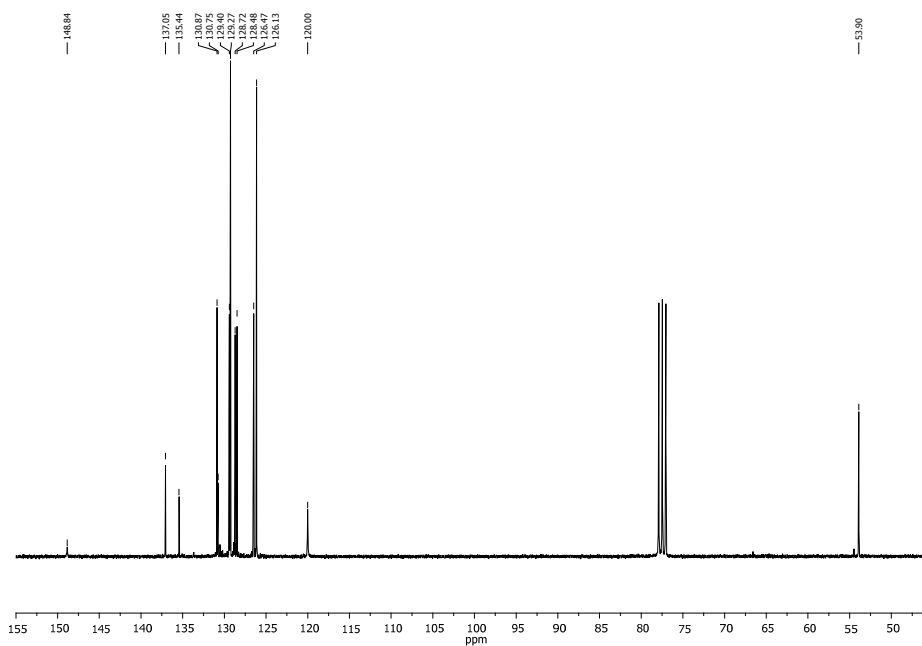
**Figure S6.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3c**.



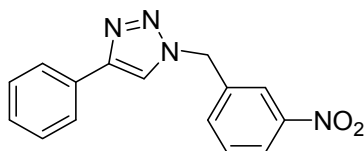
*1-(3-Chlorobenzyl)-4-phenyl-1H-1,2,3-triazole (3d)* [4]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.73 (2 H, d,  $J = 9$  Hz), 7.63 (1 H, s), 7.41–7.10 (7 H, m), 5.47 (2 H, s) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.8, 137.1, 135.4, 130.9, 130.8, 129.4, 129.3, 128.7, 128.5, 126.5, 126.1, 120.0, 53.9 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{15}\text{H}_{12}\text{ClN}_3$   $[\text{M}+\text{H}]^+$ : 270.0719, found: 270.0724.



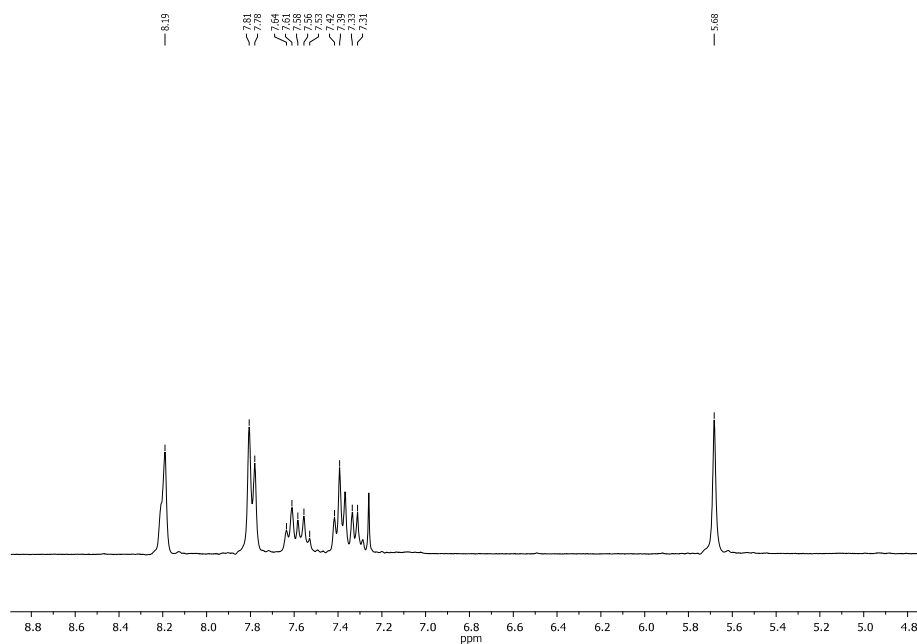
**Figure S7.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3d**.



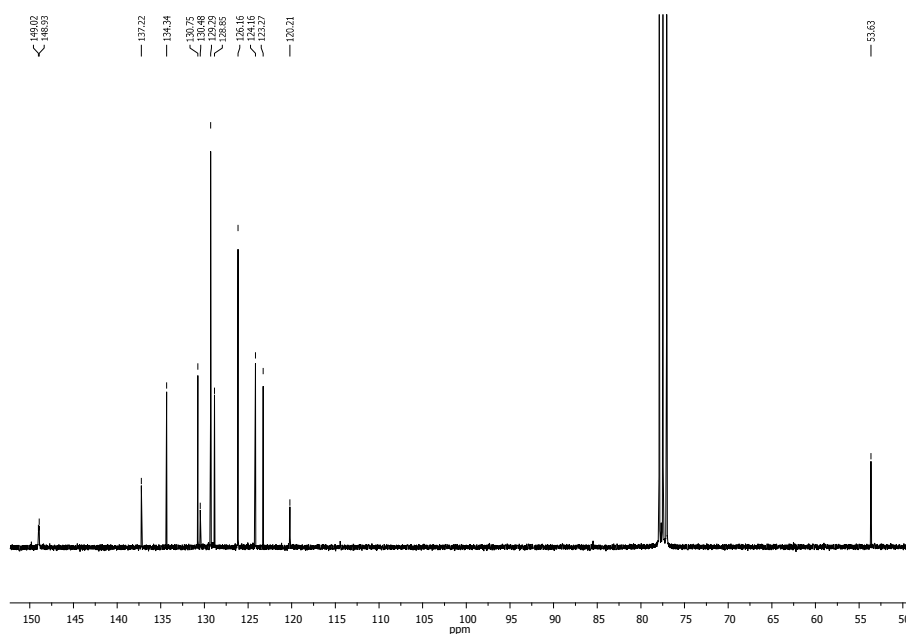
**Figure S8.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3d**.



*1-(3-Nitrobenzyl)-4-phenyl-1H-1,2,3-triazole (3e)* [5]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  8.19 (2 H, b s), 7.79 (2 H, d,  $J = 3$  Hz), 7.64–7.53 (3 H, s), 7.42–7.31 (3 H, m), 5.68 (2 H, s) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.0, 148.9, 137.2, 134.3, 130.8, 130.5, 129.3, 128.9, 126.2, 124.2, 123.3, 120.2, 53.6 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{15}\text{H}_{12}\text{N}_4\text{O}_2$   $[\text{M}+\text{H}]^+$ : 281.0960, found: 281.0964.

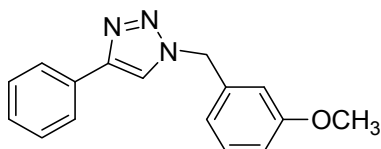


**Figure S9.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3e**.

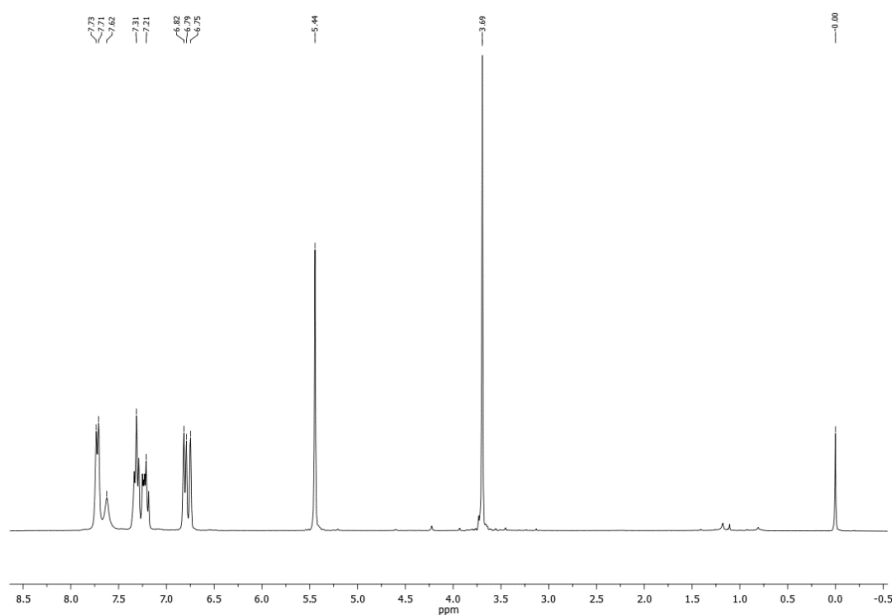


**Figure S10.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3e**.

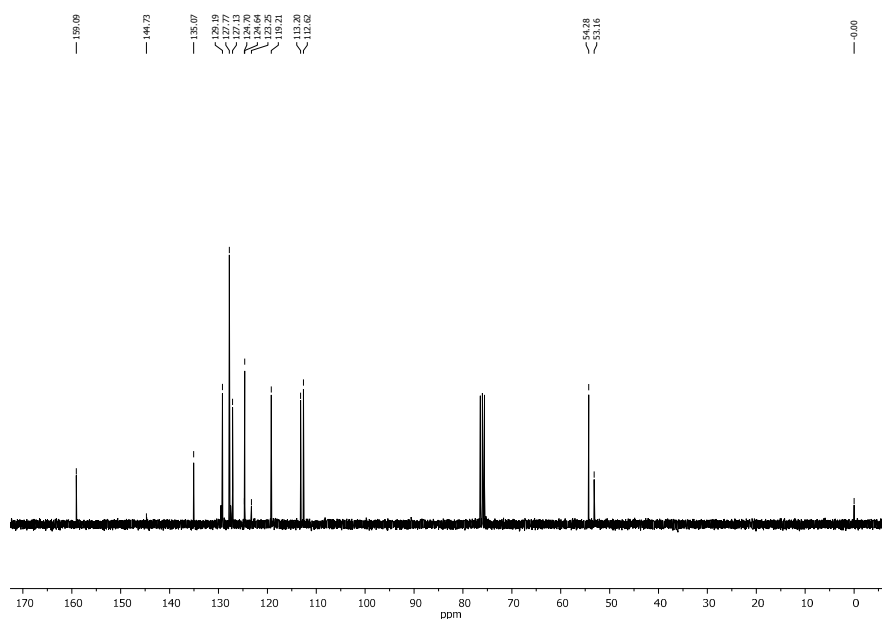




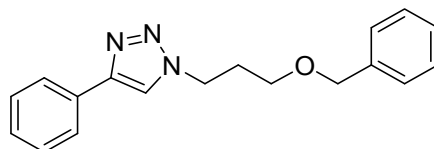
*1-(3-Methoxybenzyl)-4-phenyl-1H-1,2,3-triazole (3g)* [4]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.72 (2 H, d,  $J = 3$  Hz), 7.62 (1 H, s), 7.34–7.19 (4 H, m), 6.82–6.75 (3 H, m), 5.44 (2 H, s), 3.69 (3 H, s) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  159.1, 144.7, 135.1, 129.2, 127.8, 127.1, 124.7, 124.6, 123.3, 119.2, 113.2, 112.6, 54.3, 53.2 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{16}\text{H}_{15}\text{N}_3\text{O}$   $[\text{M}+\text{H}]^+$ : 266.1215, found: 266.1211.



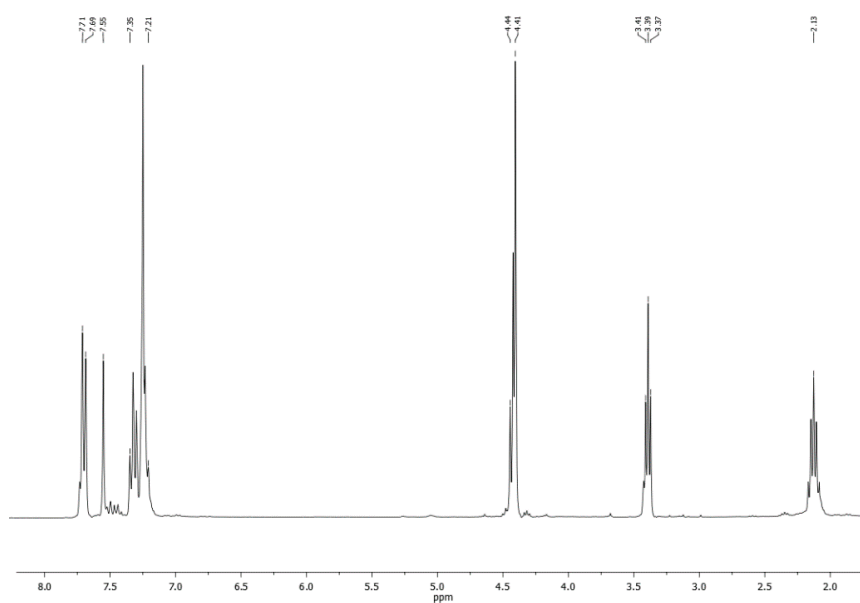
**Figure S13.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3g**.



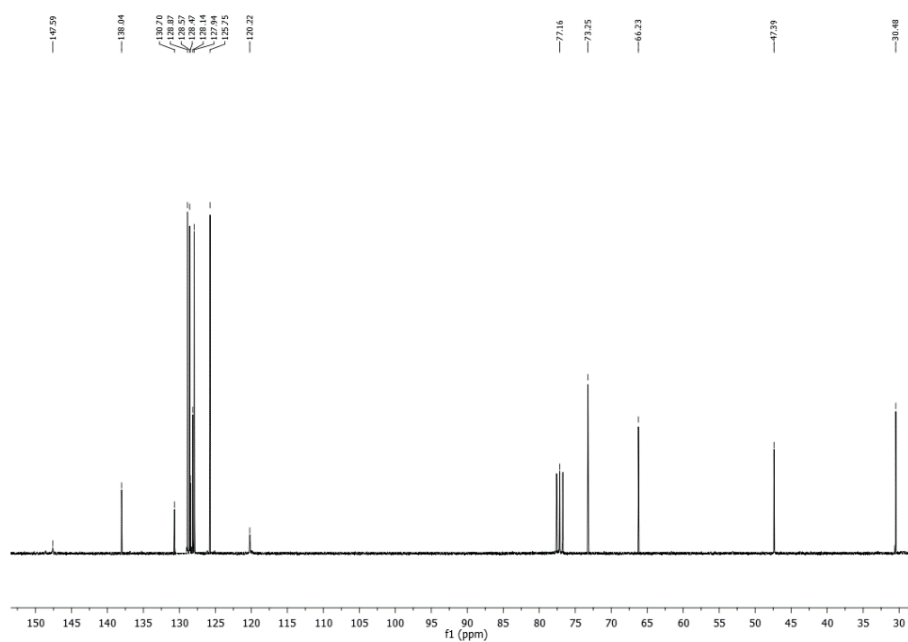
**Figure S14.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3g**.



*1-(3-(Benzyloxy)propyl)-4-phenyl-1H-1,2,3-triazole (3h)*:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  = 7.70 (2 H, d,  $J$  = 6 Hz), 7.55 (1 H, s), 7.35–7.21 (8 H, m), 4.44–4.41 ppm (4 H, m), 4.39 (2 H, t,  $J$  = 6 Hz), 2.13 (2 H, m) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  = 147.6, 138.0, 130.7, 128.9, 128.6, 128.5, 128.1, 127.9, 125.7, 120.2, 73.25, 66.2, 47.4, 30.5 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{18}\text{H}_{19}\text{N}_3\text{O}$   $[\text{M}+\text{H}]^+$ : 294.1528, found: 294.1525.

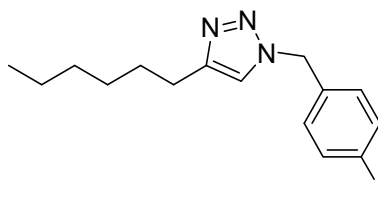


**Figure S15.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3h**.

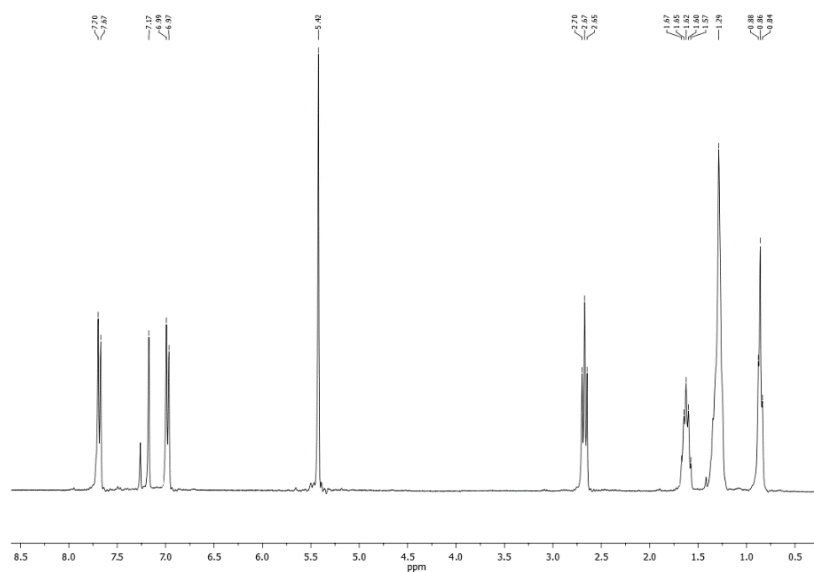


**Figure S16.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3h**.

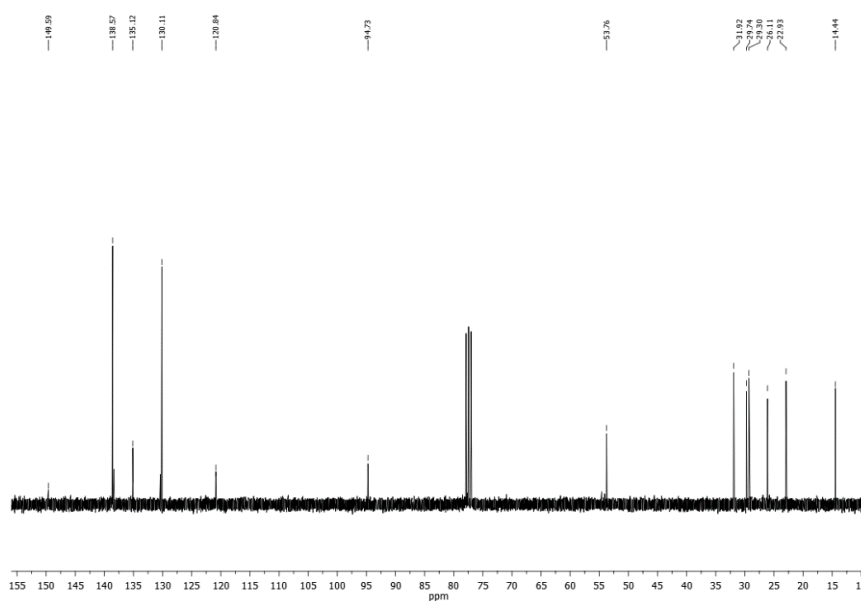




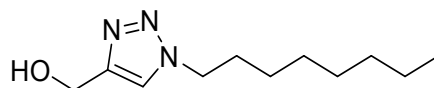
*1-(4-Iodobenzyl)-4-hexyl-1H-1,2,3-triazole (3i)*:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.68 (2 H, d,  $J = 8.2$  Hz), 7.17 (1 H, s), 6.98 (2 H, d,  $J = 8.0$  Hz), 5.42 (2 H, s), 2.67 (2 H, t,  $J = 7.7$  Hz), 1.62 (2 H, quint,  $J = 6.1$  Hz), 1.29 (6 H, m), 0.86 (3 H, t,  $J = 6.3$  Hz) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  149.6, 138.6, 135.1, 130.1, 120.8, 94.8, 53.8, 31.9, 29.7, 29.3, 26.1, 22.9, 14.4 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{15}\text{H}_{20}\text{IN}_3$   $[\text{M}+\text{H}]^+$ : 370.0701, found: 370.0702.



**Figure S17.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3i**.



**Figure S18.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3i**.



(1-Octyl-1H-1,2,3-triazol-4-yl)methanol (**3j**) [Error! Bookmark not defined.]:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.48 (1 H, s), 4.71 (2 H, s), 4.26 (2 H, t,  $J = 9$  Hz), 3.38 (1 H, b s), 1.82 (2H, m), 1.32–1.11 (10 H, m), 0.80 (3 H, t,  $J = 8$  Hz) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.2, 122.2, 56.5, 50.8, 32.1, 30.7, 29.4, 29.3, 26.7, 23.0, 14.4 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{11}\text{H}_{21}\text{N}_3\text{O}$   $[\text{M}+\text{H}]^+$ : 212.1684, found: 212.1685.

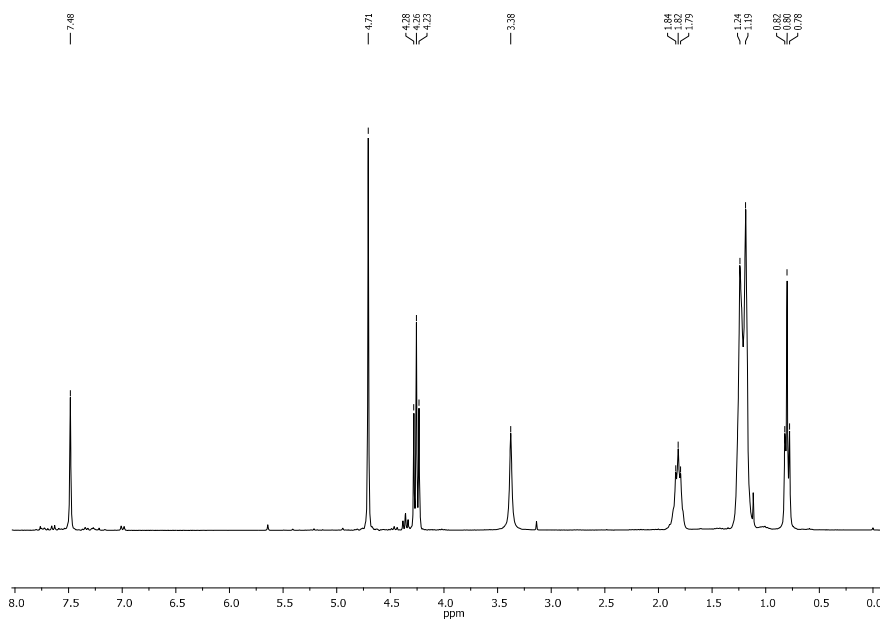


Figure S19.  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3j**.

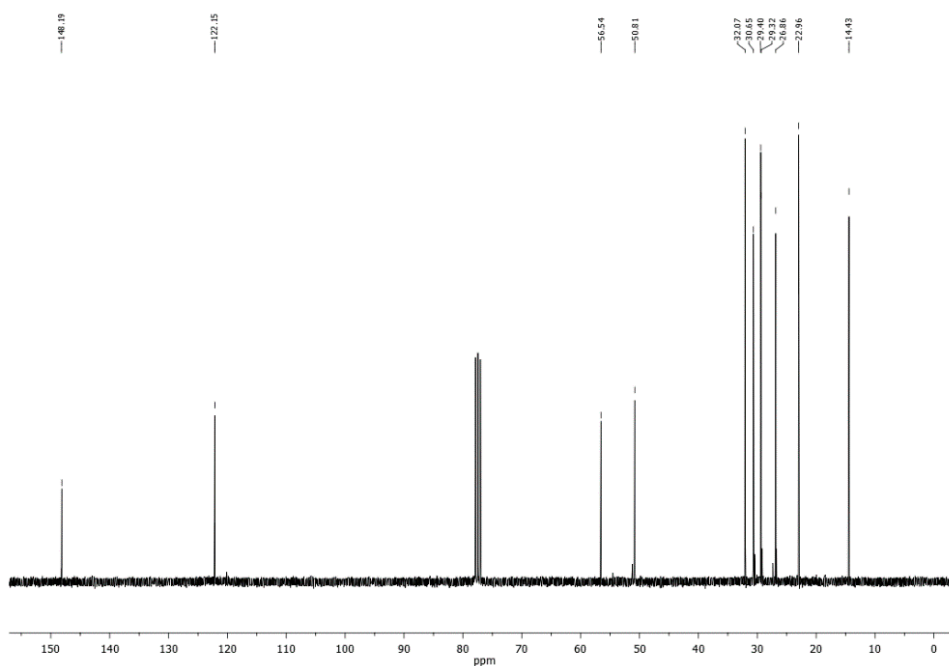
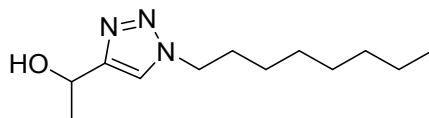
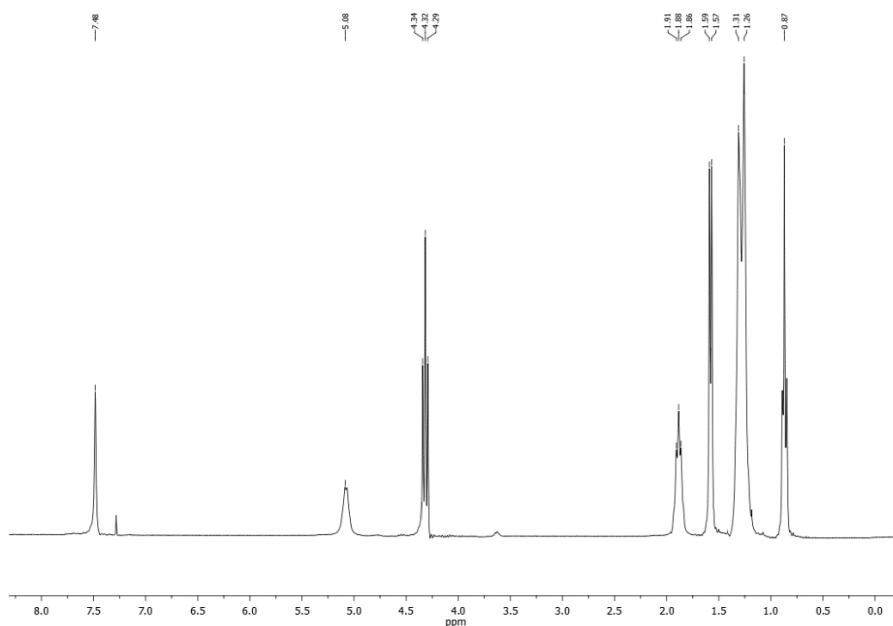


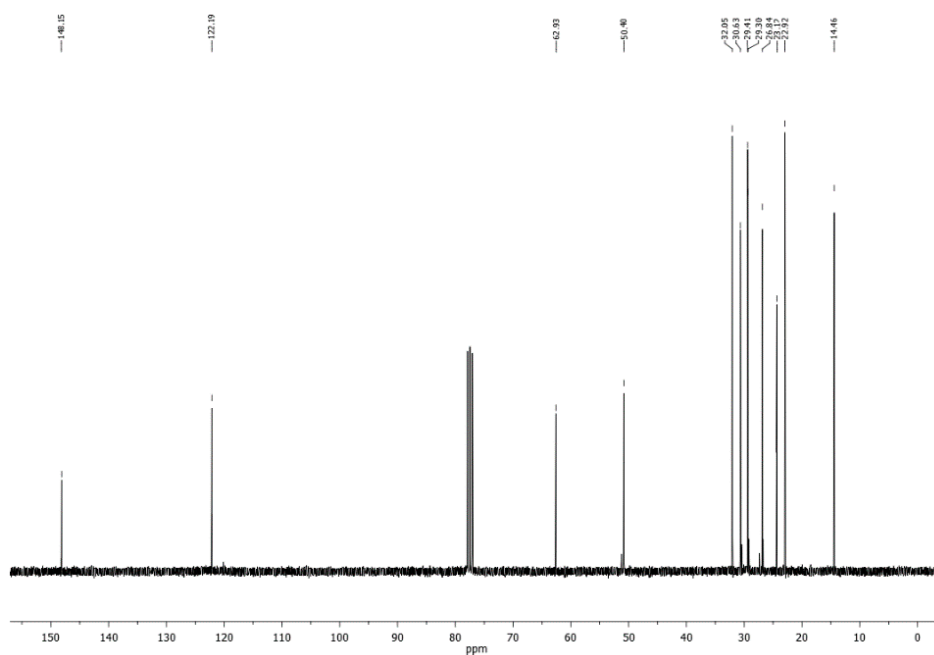
Figure S20.  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3j**.



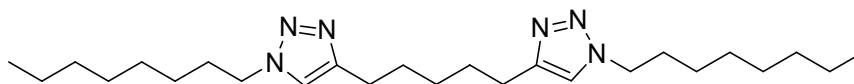
*1-(1-octyl-1H-1,2,3-triazol-4-yl)ethanol (3k)*:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.48 (1 H, s), 5.08 (1 H, b s), 4.32 (2 H, t,  $J = 9$  Hz), 1.88 (2 H, m), 1.58 (3 H, d,  $J = 6$  Hz), 1.35–1.14 (10 H, m), 0.87 (3 H, t,  $J = 8$  Hz) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.2, 122.2, 63.0, 50.4, 32.1, 30.6, 29.4, 29.3, 26.8, 23.1, 22.9, 14.5 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{12}\text{H}_{23}\text{N}_3\text{O}$   $[\text{M}+\text{H}]^+$ : 226.1841, found: 226.1839.



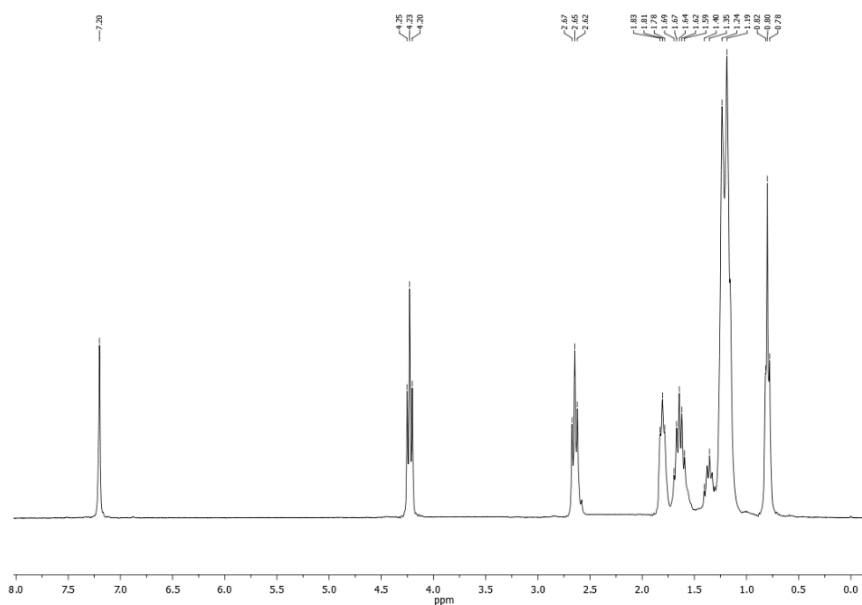
**Figure S21.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **3k**.



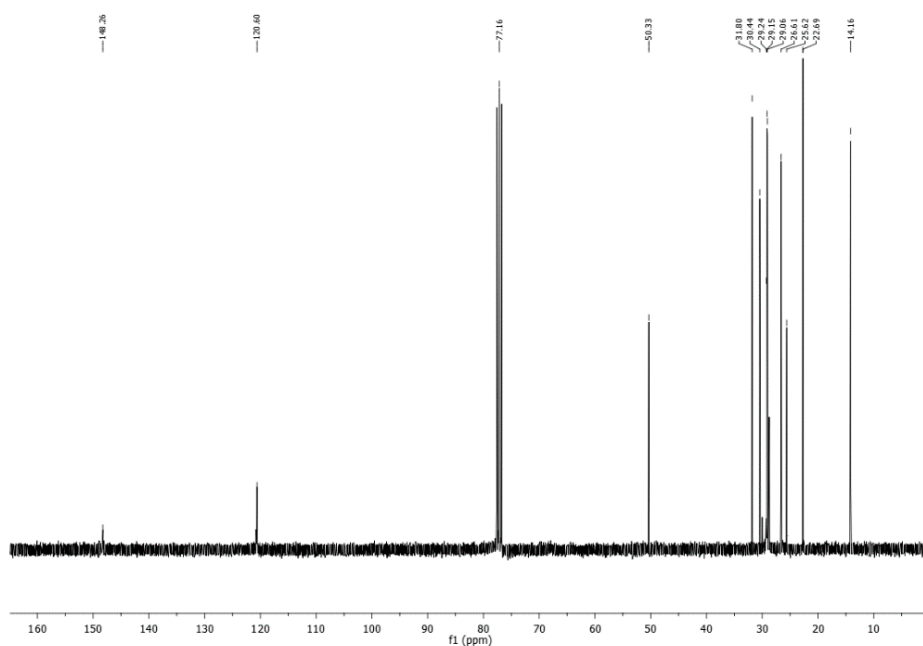
**Figure S22.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **3k**.



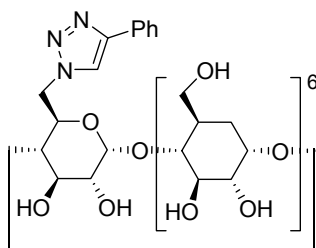
*1-Octyl-4-(5-(1-octyl-1H-1,2,3-triazol-4-yl)pentyl)-1H-1,2,3-triazole (31)*:  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  7.20 (2 H, s), 4.23 (4 H, t,  $J = 6$  Hz), 2.77 (4 H, t,  $J = 6$  Hz), 1.81 (4 H, m), 1.64 (4 H, m), 1.40–1.15 (22 H, m), 0.80 (6 H, t,  $J = 6$  Hz) ppm;  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ):  $\delta$  148.3, 120.6, 50.3, 31.8, 30.4, 29.2, 29.1, 29.0, 26.6, 25.6, 22.7, 14.2 ppm.  $m/z$  (MALDI-TOF MS): calcd for  $\text{C}_{25}\text{H}_{46}\text{N}_6$   $[\text{M}+\text{H}]^+$ : 431.3783, found: 431.3782.



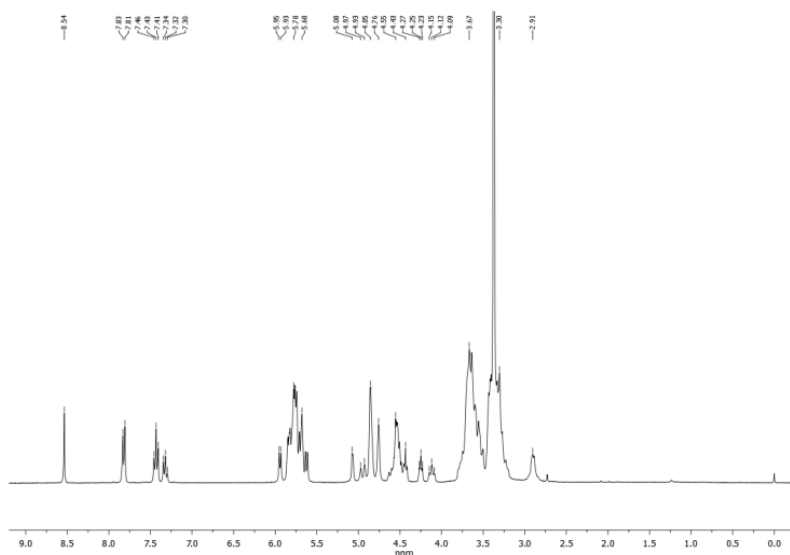
**Figure S23.**  $^1\text{H-NMR}$  (300 MHz,  $\text{CDCl}_3$ ) product **31**.



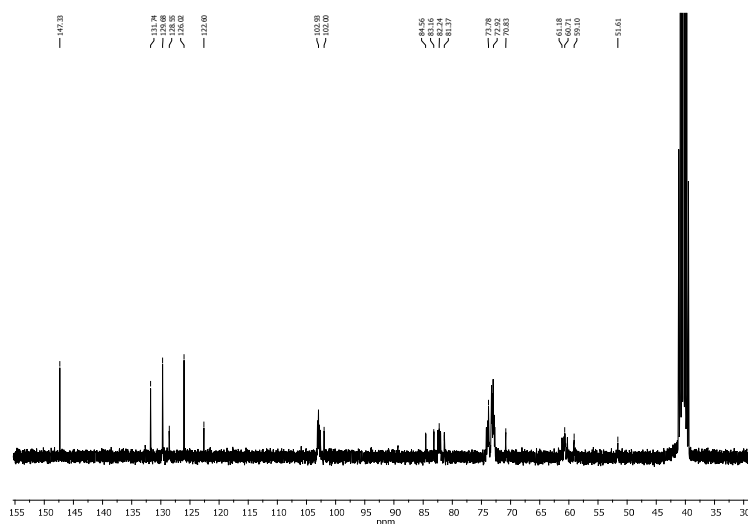
**Figure S24.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{CDCl}_3$ ) product **31**.



*6-Monodeoxy-6-mono(4-phenyl-1H-1,2,3-triazol-1-yl)-β-CD (3m)* [6]:  $^1\text{H-NMR}$  (300 MHz,  $\text{DMSO-}d_6$ ):  $\delta$  8.54 (1 H, s) 7.82 (2 H, d,  $J = 3$  Hz), 7.43 (2 H, t,  $J = 9$ , 6.9 Hz), 7.32 (1 H, t,  $J = 6$  Hz), 5.95–5.60 (14 H, overlapped signals), 5.08 (1 H, d,  $J = 3.3$  Hz), 4.97 (1 H, m), 4.85 (1 H, m), 4.75 (1 H, m), 4.6–4.41 (5 H, overlapped signals), 4.25 (1 H, t,  $J = 6$  Hz), 4.12 (1 H, t,  $J = 9$  Hz), 3.75–3.44 (23 H, overlapped signals), 3.43–3.10 (14 H, overlapped signals), 2.91 (2 H, br).  $^{13}\text{C-NMR}$  ( $\text{DMSO-}d_6$ , 75 MHz):  $\delta$  147.3, 131.7, 129.7, 128.6, 126.0, 122.6, 102.9, 102.0, 84.6, 83.2, 82.2, 81.4, 74–71, 70.8, 61.2, 60.7, 59.1, 51.2. ESI-MS: Calculated for  $\text{C}_{50}\text{H}_{75}\text{N}_3\text{NaO}_{34}$   $[\text{M}+\text{Na}]^+$  1284.41, found 1284.30.



**Figure S25.**  $^1\text{H-NMR}$  (300 MHz,  $\text{DMSO-}d_6$ ) product **3m**.



**Figure S26.**  $^{13}\text{C-NMR}$  (75 MHz,  $\text{DMSO-}d_6$ ) product **3m**.

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1. Özçubukçu, S.; Ozkal, E.; Jimeno, C.; Pericàs, M.A. A Highly Active Catalyst for Huisgen 1,3-Dipolar Cycloadditions Based on the Tris(triazolyl)methanol-Cu(I) Structure. *Org. Lett.* **2009**, *11*, 4680–4683.
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