**Table S3. Spectroscopic data for iglu #1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Position | iglu#1 δ 13C [ppm] | iglu#1 δ 1H [ppm] | iglu#21 δ 1H [ppm] | iglu#1 1H-1H-coupling  constants [Hz] | iglu#1 HMBC correlations |
| 1 | 86.5 | 5.46 | 5.55 | J1,2 = 9.0 | C-2, C-3, C-5,  C-2’, C-7a’ |
| 2 | 73.4 | 3.94 | 4.12 | J2,3 = 9.0, | C-1, C-3 |
| 3 | 78.9 | 3.60 | 4.24 (JH,P = 8Hz) | J3,4 = 9.0 | C-2, C-4 |
| 4 | 71.2 | 3.50 | 3.68 | J4,5 = 9.0 | C-3, C-5, C-6 |
| 5 | 80.4 | 3.58 |  | J5,6a = 5.8 | C-1, C-3, C-6 |
| 6a | 62.5 | 3.70 |  | J6a,6b = 12.1 | C-4, C-5 |
| 6b |  | 3.88 |  | J5,6b = 2.2 | C-4, C-5 |
| 2′ | 126.2 | 7.40 |  | J2’,3’ = 3.3 | C-1 (weak), C-3', C-3a’, C-7’ (weak), C-7a’ |
| 3′ | 103.2 | 6.49 |  |  | C-2’, C-3a’, C-4’ (weak),  C-7a’ (weak) |
| 3a′ | 130.3 |  |  |  |  |
| 4′ | 121.3 | 7.52 |  | J4’,5’ = 8.0, | C-3’, C-6’, C-7a’ |
| 5′ | 120.7 | 7.05 |  | J5’,6’ = 7.4, J3,5 = 1.1, | C-3a’, C-7’ |
| 6′ | 122.4 | 7.15 |  | J6’,7’ = 8.0, J4’,6’ = 1.0 | C-4’, C-7a’ |
| 7′ | 111.2 | 7.54 |  |  | C-3a’, C-5’ |
| 7a′ | 137.8 |  |  |  |  |

1Characteristic 1H NMR signals of iglu#2. 1H (600 MHz), 13C (151 MHz), and HMBC NMR spectroscopic data for iglu #1in methanol-*d*4. Chemical shifts were referenced to (CD2HOD) = 3.31 ppm and (CD2HOD) = 49.05 ppm.