|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Guests** | **CB[8]** | | | | | **G2**: Methamphetamine Hydrochloride  **G3**: Fentanyl Citrate  **G4**: Morphine Hydrochloride  **G5**: Hydromorphone Hydrochloride  **G6**: Oxycodone Hydrochloride  **G7**: Ketamine Hydrochloride  **G8**: Phencyclidine Hydrochloride  **G9**: Cocaine Hydrochloride  **C1**: Cycloheptanamine Hydrochloride (competitor)  **C2**: Cyclooctanamine Hydrochloride (competitor) |
| ***Ka* (M-1)** | **∆Gº (kcal/mol)** | **∆Hº (kcal/mol)** | **–T∆S (kcal/mol**  **/K)** | ***n*** |
| **G2[a]** | (1.47 ± 0.09) × 105 | –7.05 | (–7.84 ± 0.1) | 0.788 | 1 |
| **G3[a]** | (1.9 ± 0.09) × 107 | –9.94 | (–10.8 ± 0.06) | 0.872 | 1 |
|  | (3.7 ± 0.04) × 105 | –7.60 | (–7.67 ± 0.04) | 0.073 | 2 |
| **G4[b]** | (3.41 ± 0.15) × 108 | –11.6 | (–13.6 ± 0.04) | 1.93 | 1 |
| **G5[b]** | (1.7 ± 0.11) × 108 | –11.2 | (–15.8 ± 0.1) | 4.54 | 1 |
| **G6[b]** | (3.42 ± 0.05) × 107 | –10.3 | (–19.6 ± 0.04) | 9.30 | 1 |
| **G7[c]** | (1.09 ± 0.07) × 109 | –12.3 | (–17.3 ± 0.16) | 5.01 | 1 |
| **G8[c]** | (2.1 ± 0.2) × 1010 | ­–14.1 | (–14.9 ± 0.04) | 0.797 | 1 |
| **G9[a]** | (6.45 ± 0.43) × 105 | –7.93 | (–8.26 ± 0.15) | 0.337 | 1 |
| **C1** | (5.35 ± 0.22) × 106 | –9.18 | (–7.62 ± 0.03) | –1.55 | 1 |
| **C2** | (3.18 ± 0.24) × 107 | –10.2 | (–8.26 ± 0.04) | –1.98 | 1 |

***Table 1.***Isothermal titration calorimetry data for CB[8] towards guests **G2** – **G9**. [a] Direct ITC titration, [b] competitive ITC titration with **C1**, and [c] competitive ITC titration with **C2**.

