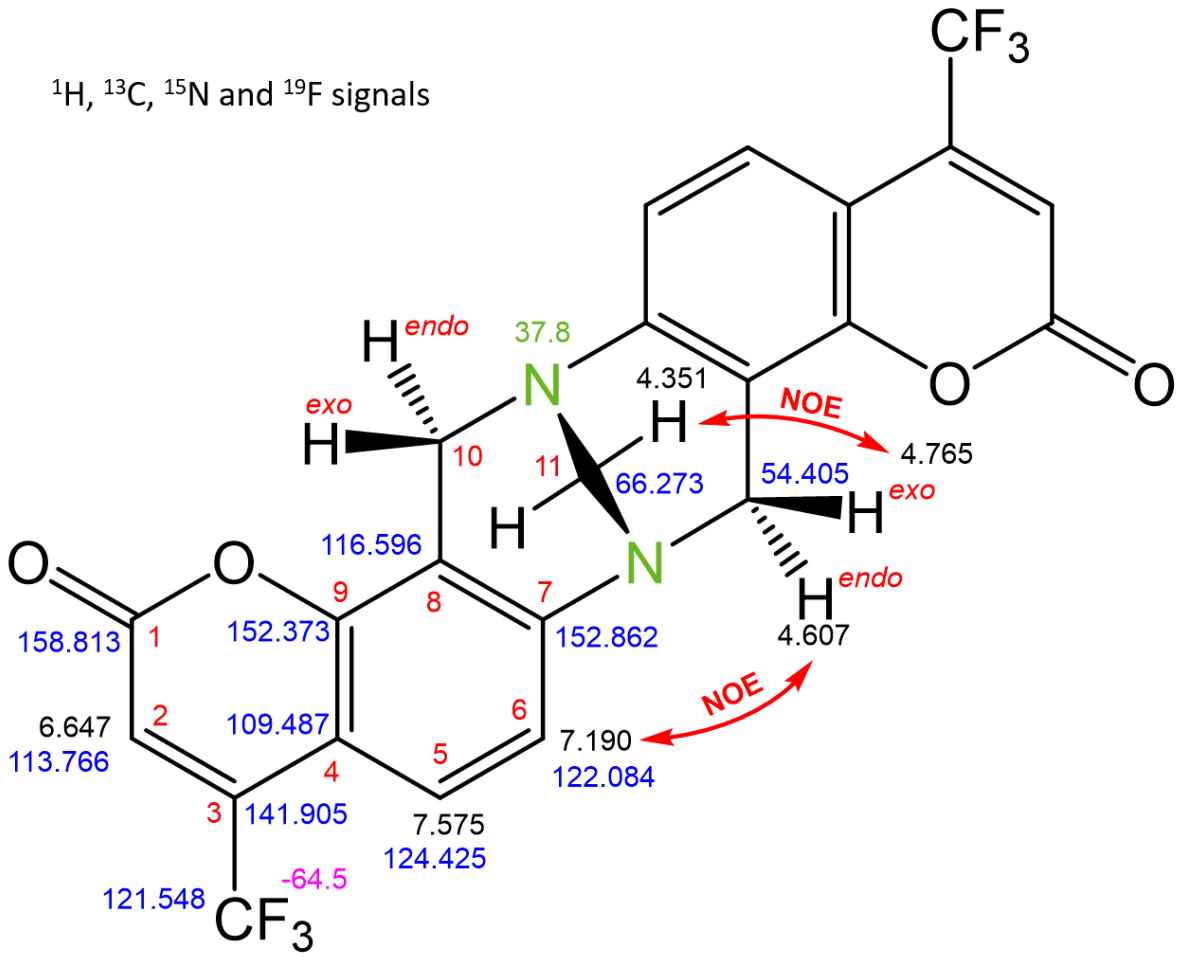

^{1}H NMR (500.16 MHz, $CDCl_3$): 7.58 (2H, br dq, 8.8, $^5J_{HF}$ 2.0, H5), 7.19 (2H, d, 8.8, H6), 6.65 (2H, q, $^4J_{HF}$ 0.9, H2), 4.77 (2H, dd, 17.4, 0.8, H10^{exo}), 4.61 (2H, dm, 17.4, H10^{endo}), 4.35 (2H, t, 1.4, H11). The observation of the coupling between H5 and H10^{exo} through six bonds is surprising. Such long range $^6J_{HH}$ coupling would be expected for a full-trans or at least a planar geometry between coupled nuclei, however, one dihedral angle between H5 and H10^{exo} are closed to perpendicular (approx. 179°, -176°, -71°, and 165° from XRD of the single-crystal). Nonetheless, the coupling was confirmed by LR-COSY (320 ms), and by selective homonuclear decoupling where irradiation of H5 removed the weak splitting of H10^{exo}. ^{13}C NMR (125.77 MHz, $CDCl_3$): 158.81 (C1), 152.86 (C7), 152.37 (C9), 141.91 (q, 32.6, C3), 141.51, 124.43 (q, 2.3, C5), 121.55 (q, 275.7, CF_3), 122.08 (C6), 116.60 (C8), 113.77 (q, 5.8, C2), 109.49 (C4), 66.27 (C11), 54.41 (C10). Surprisingly, the coupling between the fluorine nuclei and the C4 carbon nucleus through three bonds is negligible, while 5.8 Hz is on C2 carbon nucleus. ^{15}N NMR (50.68 MHz, via 6 Hz HMBC, $CDCl_3$): 37.8; as in the case of TB **(±)-HH**, the nitrogen nucleus is coupled only to the H11 and H10^{exo}, not to the H10^{endo} hydrogen nuclei. ^{19}F NMR (470.62 MHz, $CDCl_3$): -63.5 (dd, $^5J_{HF}$ 2.1, $^4J_{HF}$ 0.9, J_{FC} from satellites 275.7 and 32.6 (the isotope effect on the chemical shift is 129.4 and 11.4 ppb, respectively).