

# <sup>1</sup>H NMR analysis report

Batch No.: 4PRM-01

Date: 12/2/2026

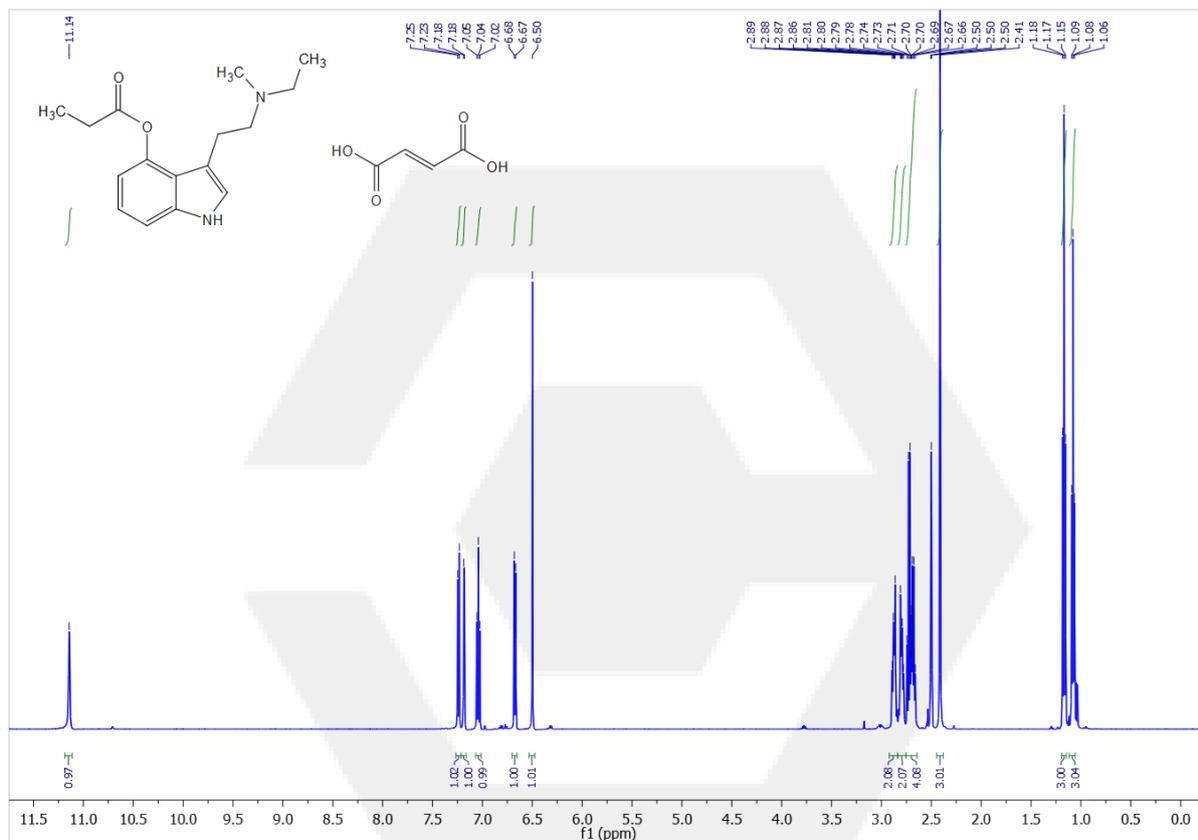
Instrument: Bruker 500 MHz

Solvent: dimethylsulfoxide-*d*<sub>6</sub> (DMSO-*d*<sub>6</sub>; spectra cal. to residual solvent peak,  $\delta = 2.50$  ppm)

## Results:

Data consistent with the proposed structure: Yes

Estimated purity: 98%

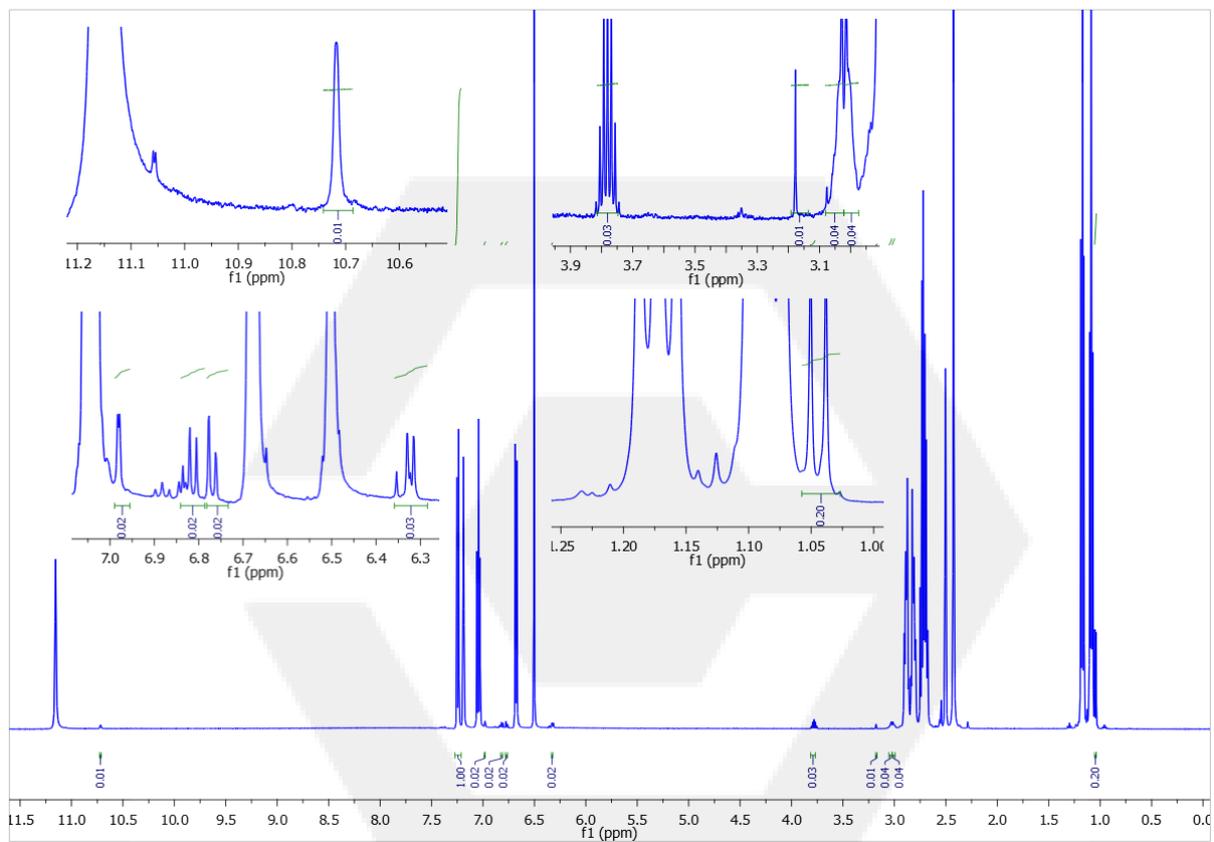


**<sup>1</sup>H NMR (500 MHz, DMSO-*d*<sub>6</sub>)  $\delta$  (ppm):** 11.14 (bs, 1H), 7.24 (d,  $J = 8.0$  Hz, 1H), 7.19 (d,  $J = 2.1$  Hz, 1H), 7.04 (t,  $J = 7.9$  Hz, 1H), 6.68 (d,  $J = 7.5$  Hz, 1H), 6.50 (s, 1H), 2.93 – 2.84 (m, 2H), 2.84 – 2.77 (m, 2H), 2.76 – 2.65 (m, 4H), 2.41 (s, 3H), 1.17 (t,  $J = 7.5$  Hz, 3H), 1.08 (t,  $J = 7.2$  Hz, 3H).

**Notes:**

The NMR spectrum corresponds to the expected structure – 4-PrO-MET [IUPAC: 3-(2-(ethyl(methyl)amino)ethyl)-1*H*-indol-4-yl propionate]. The compound is present as fumarate (hemifumarate, 4-PrO-MET:fumaric acid 2:1); confirmed by signal integration (Ar-H vs. fumarate CH=CH at  $\delta = 6.50$  ppm).

The sample contains approximately 1–2% of an unidentified impurity with a structure closely related to 4-PrO-MET. In addition, residual solvents were detected: isopropyl alcohol (0.52% w/w) and methyl tert-butyl ether (0.09% w/w).



<sup>1</sup>H NMR (DMSO-d<sub>6</sub>), impurities integrated (+ insets).