NMR Measurement Report

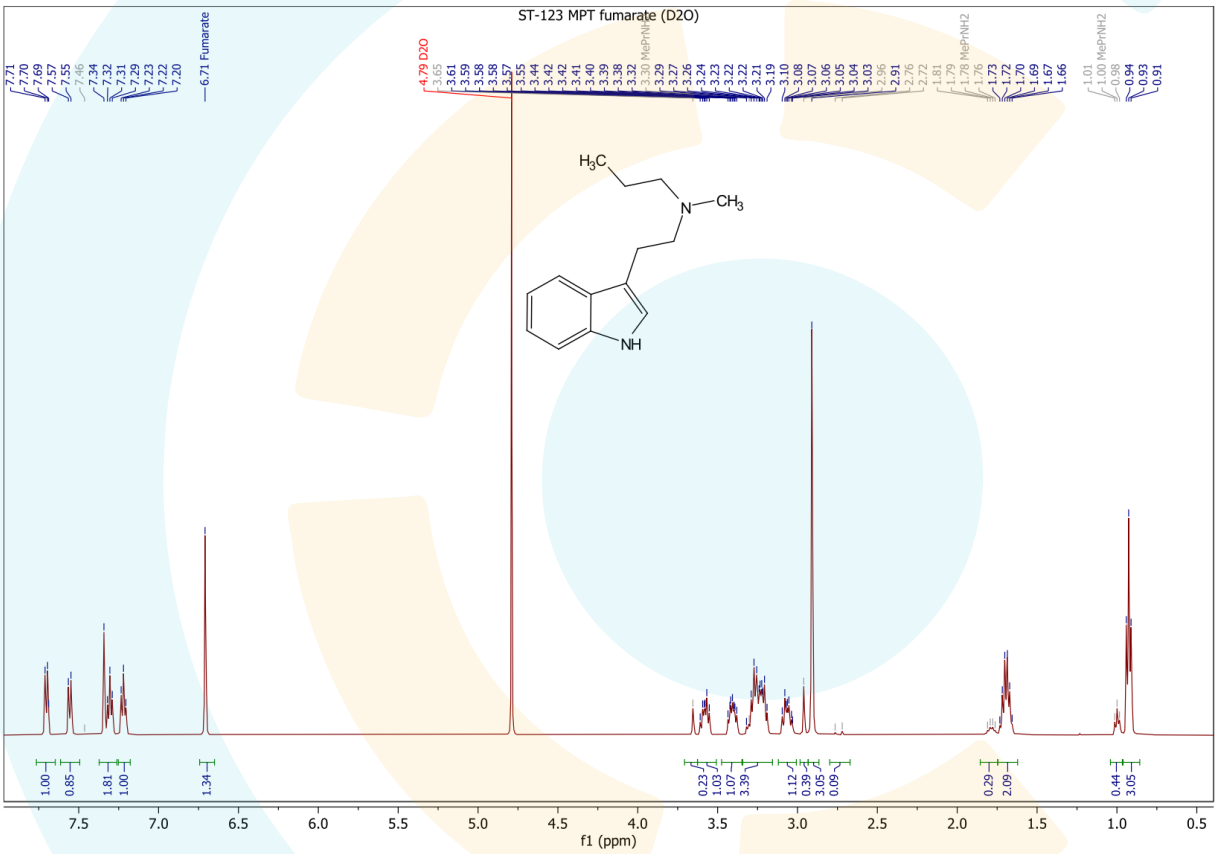
Sample name: ST-123 13-3-2021

Spectrometer: Bruker 500 MHz **Solvent**: D_2O

Expected compound: MPT fumarate

Identified compound: MPT fumarate

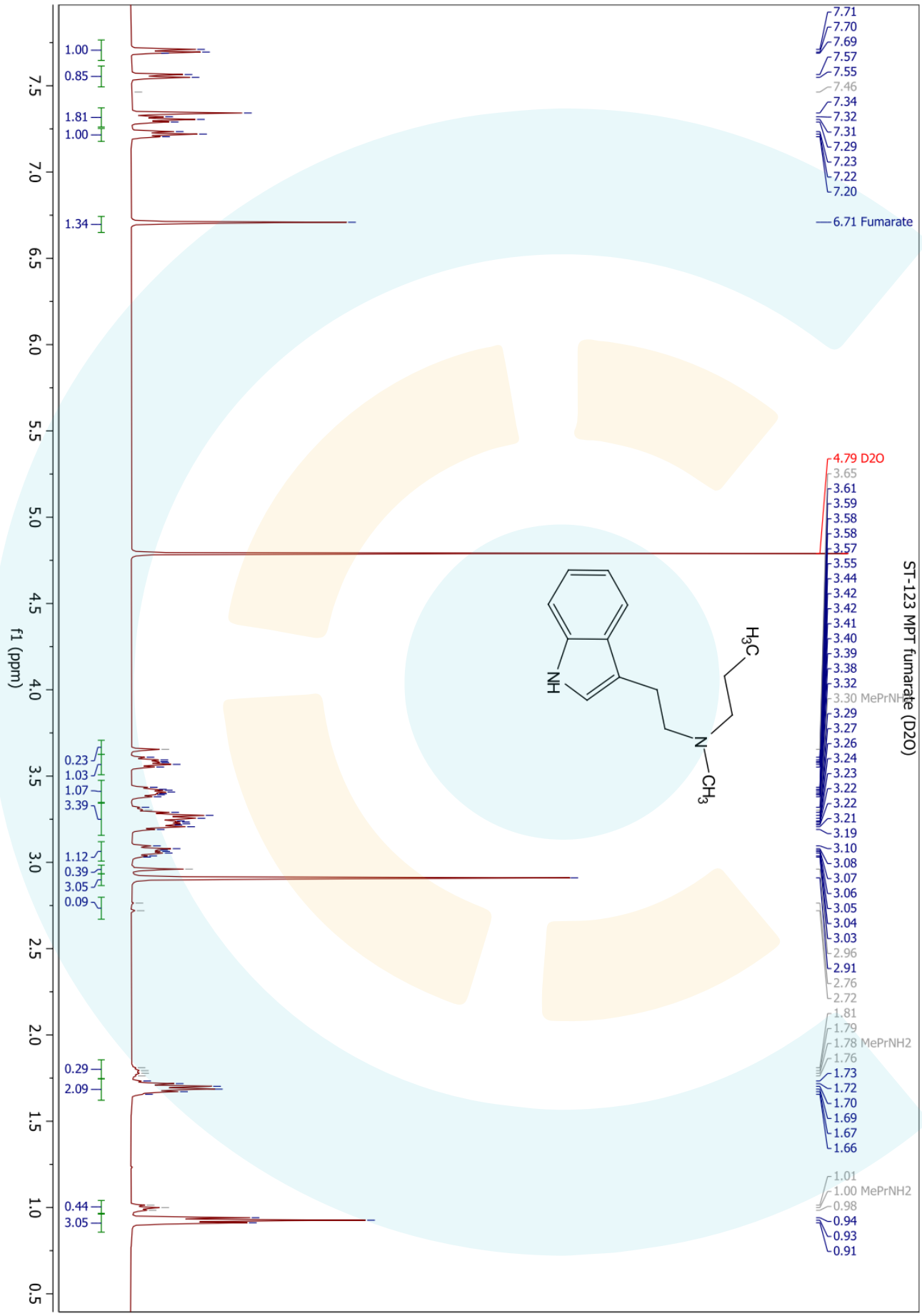
Estimated purity: 93%



Lab Notes: Right identity of the main product. The solution was opaque, indicating that something (probably an impurity) was not fully dissolved. The small peaks at 2.96, 1.78 and 1.00 ppm have similar fine structures and relative integrals to their neighboring peaks at 2.91, 1.69 and 0.93 ppm, which belong to the methyl-propyl-amino moiety. This makes it very likely that those additional peaks are caused by residual *N*-methylpropylamine that has also been co-crystallized as the fumarate salt, in which case it would amount to about 6% of the total weight. Other unidentified minor impurities/solvent residues were present as well. An additional measurement in DMSO-*d*6 is recommended to obtain more information.

Analysis performed by Dr. Leonid Pevzner

^{1}H NMR: full non-empty spectrum



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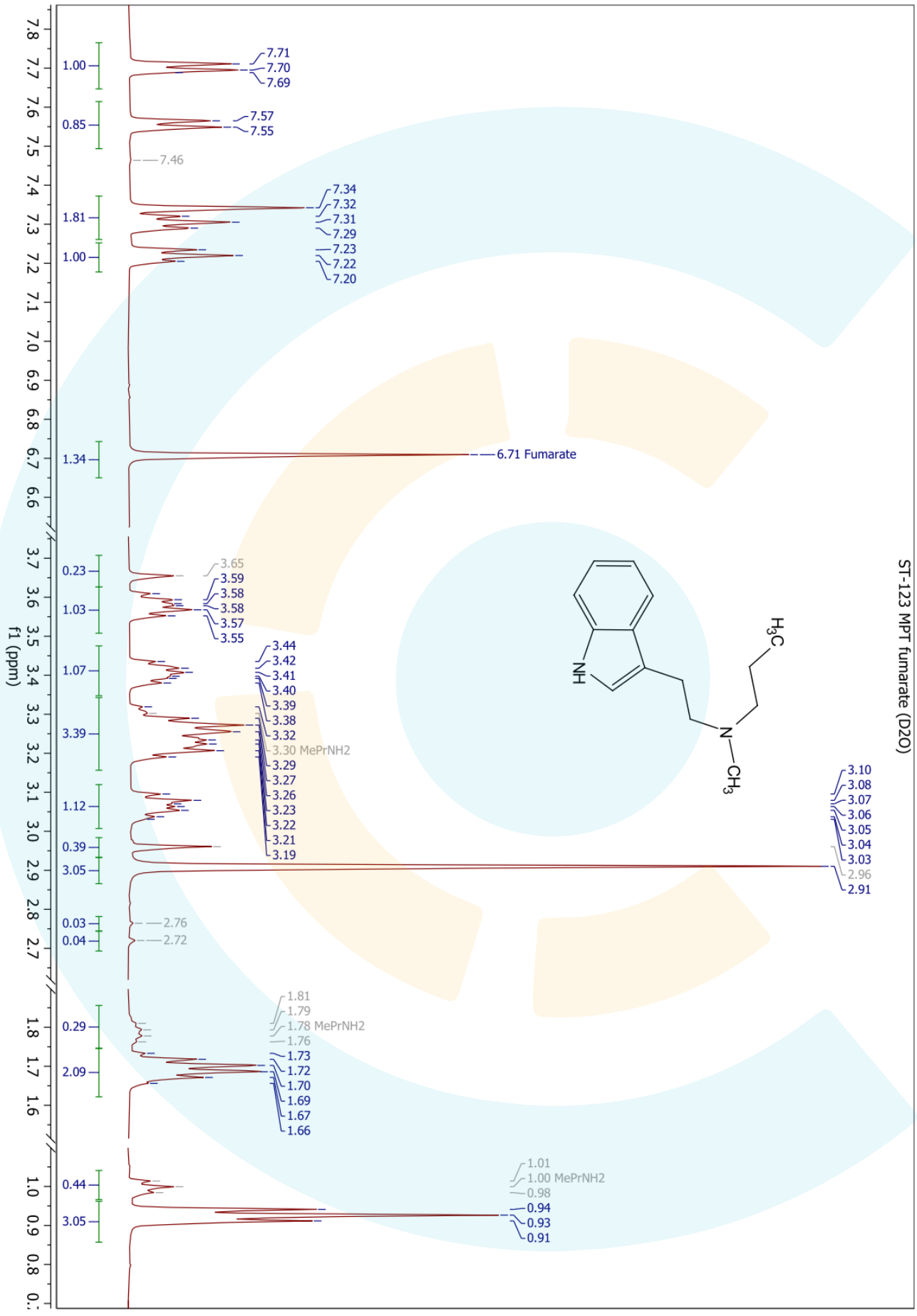
^{1}H NMR: cut and zoomed spectrum



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