

NMR Measurement Report

Sample name: AC-26

8-3-2024

Spectrometer: Bruker 600 MHz

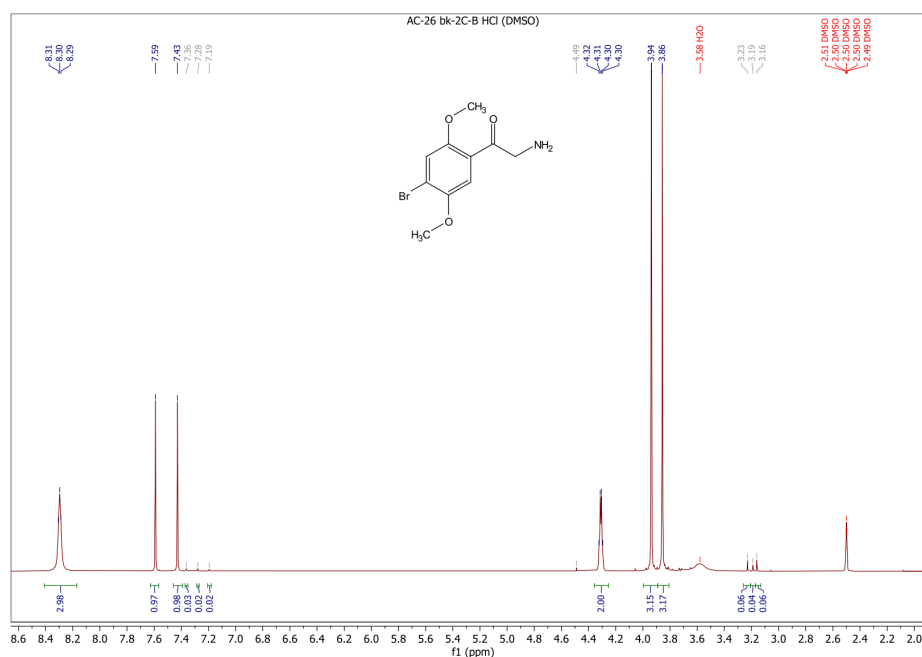
Solvent: DMSO-*d*6

Expected compound: bk-2C-B HCl

Identified compound: bk-2C-B HCl

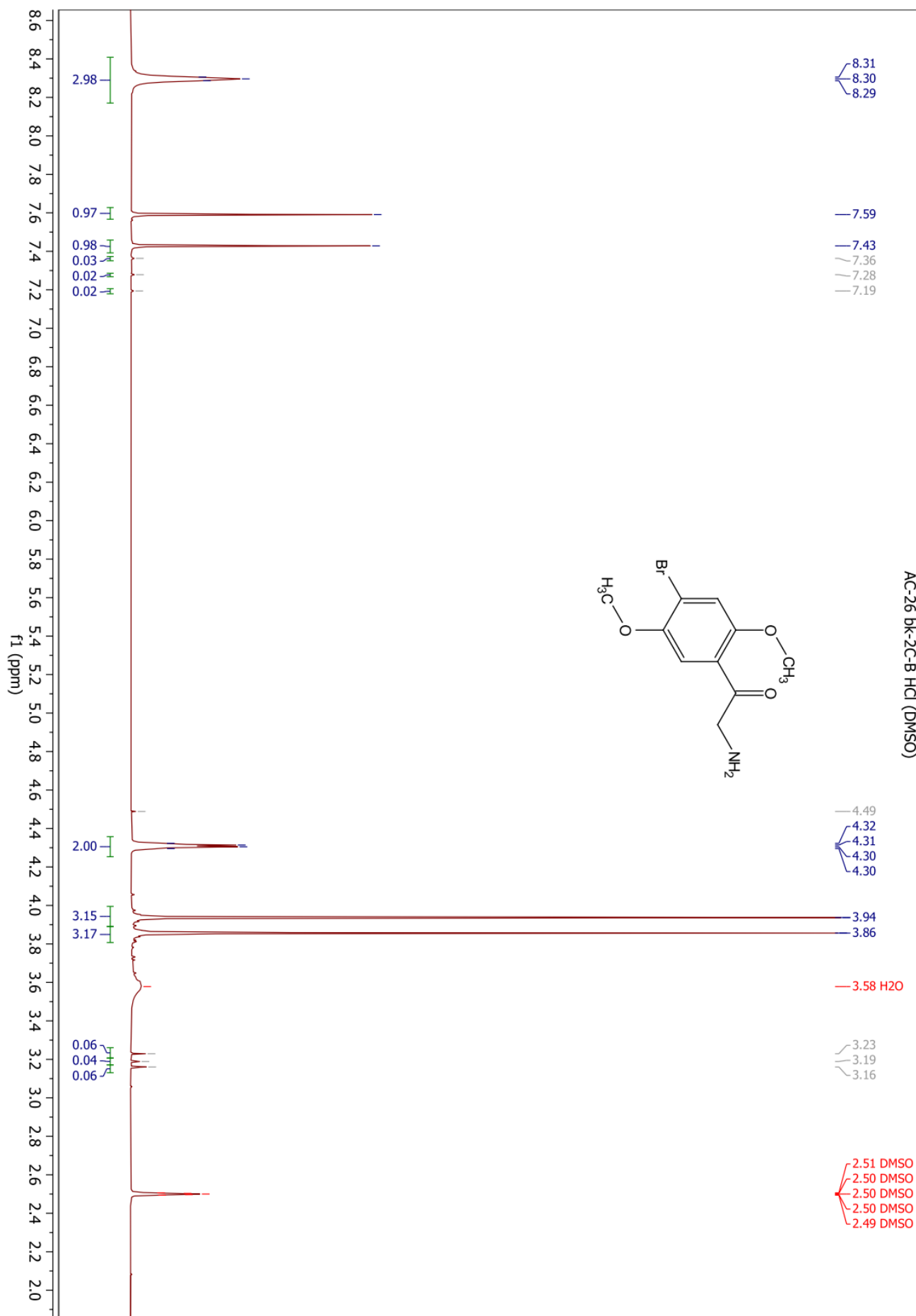
2-Amino-1-(4-bromo-2,5-dimethoxyphenyl)ethan-1-one

Estimated purity: 95-99%



Lab Notes: The sample contained the expected product. Judging from the spectrum, the purity seemed to be a little above 95%. However, the detected impurities might have been the result of decomposition caused by heating the sample during preparation. The solid and thereafter the solution instantly turned yellow when it was heated. DMSO-*d*6 has been chosen over D₂O to prevent possible pH dependent reactions and gather information over the acidic protons. However, the sample didn't dissolve completely without extensive heating, which might have facilitated condensation reactions (dimerization, formation of oligomers) under the aprotic and dry conditions. Additional measurements in a different solvent and/or at a lower concentration without strong heating are required to determine the purity of the solid with a higher degree of confidence.

¹H NMR: full non-empty spectrum



¹H NMR: cut and zoomed spectrum

