



Supplementary Materials

Synthesis and Biological Evaluation of a Novel ^{18}F -Labeled Radiotracer for PET Imaging of the Adenosine $\text{A}_{2\text{A}}$ Receptor

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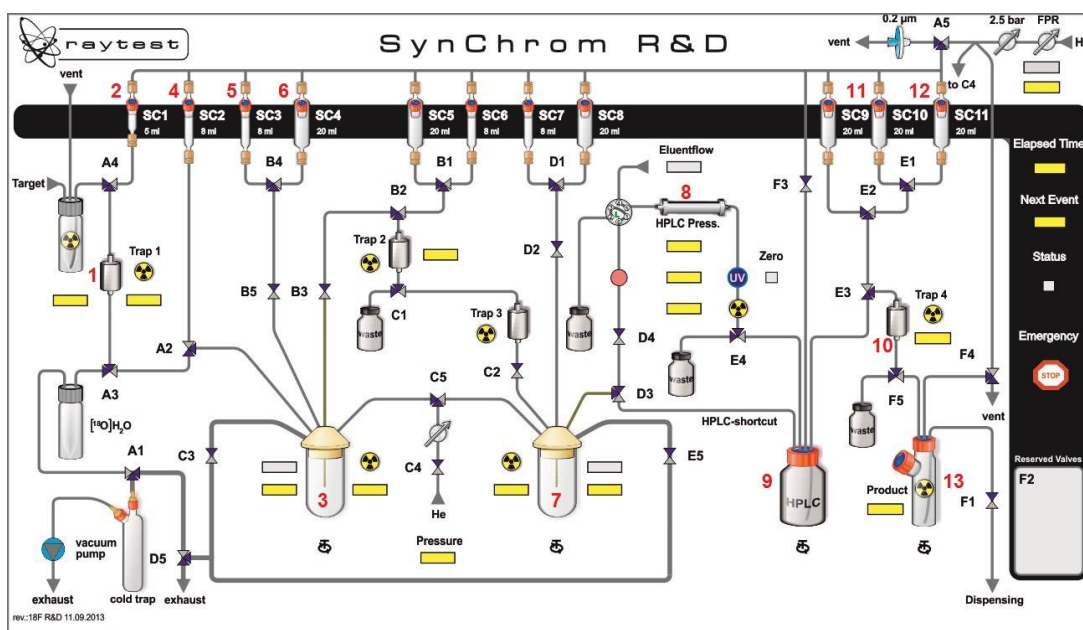


Figure S1: Scheme of the *raytest* *SynChrom* R&D synthesis module for the automated radiosynthesis of [^{18}F]TOZ1 with (1) Sep-Pak[®] Accell Plus QMA Plus Light cartridge, (2) K_2CO_3 (0.9 mg in 0.2 mL H_2O) and K_{222} (5.6 mg in 0.8 mL MeCN), (3) 1st reactor, (4) 1.5 mL MeCN, (5) precursor 9 (0.5 mg in 0.6 mL DMSO), (6) 0.4 mL MeCN and 3 mL H_2O , (7) 2nd reactor, (8) Reprisil-Pur C18-AQ column (36% MeCN/ H_2O /0.05% TFA, flow rate of 4 mL/min), (9) 30 mL water, (10) Sep-Pak[®] C18 light cartridge, (11) 2 mL H_2O , (12) 1.2 mL EtOH, (13) product vial.

6-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)nicotinamide (TOZ1)

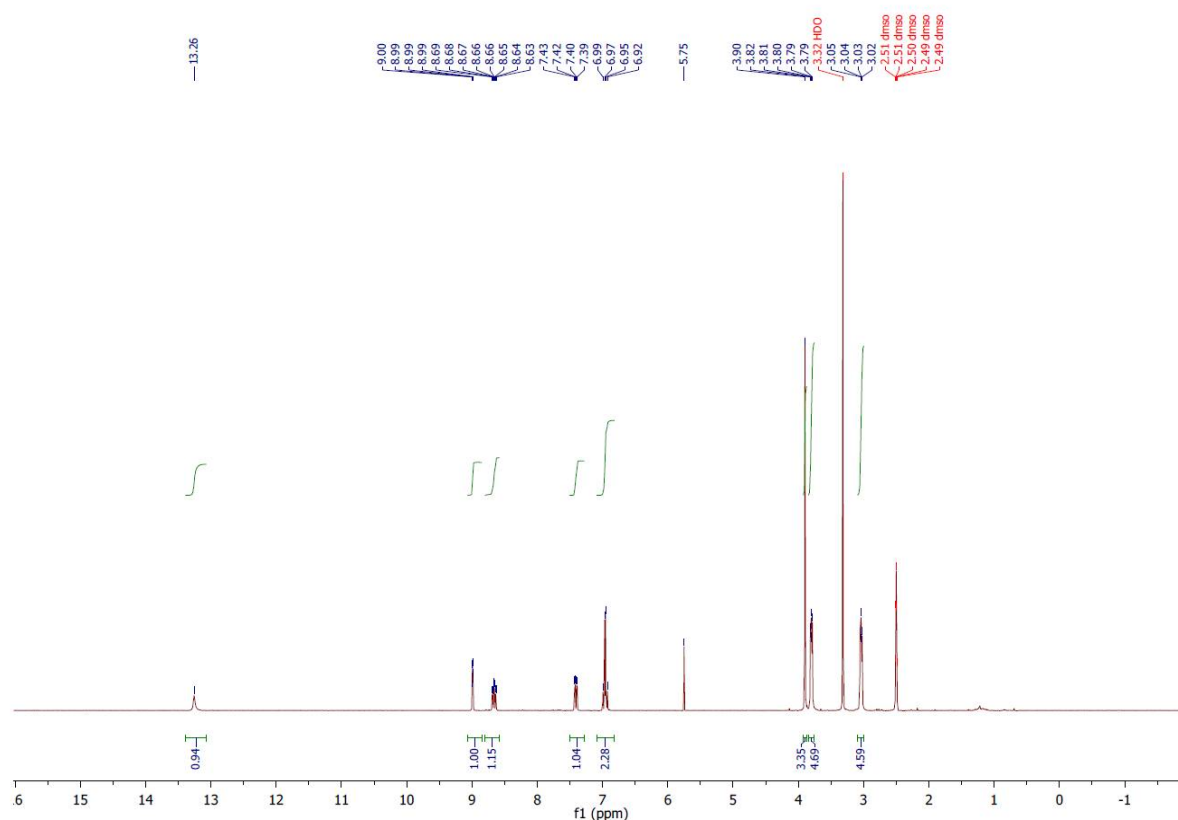


Figure S2: ¹H-NMR of TOZ1.

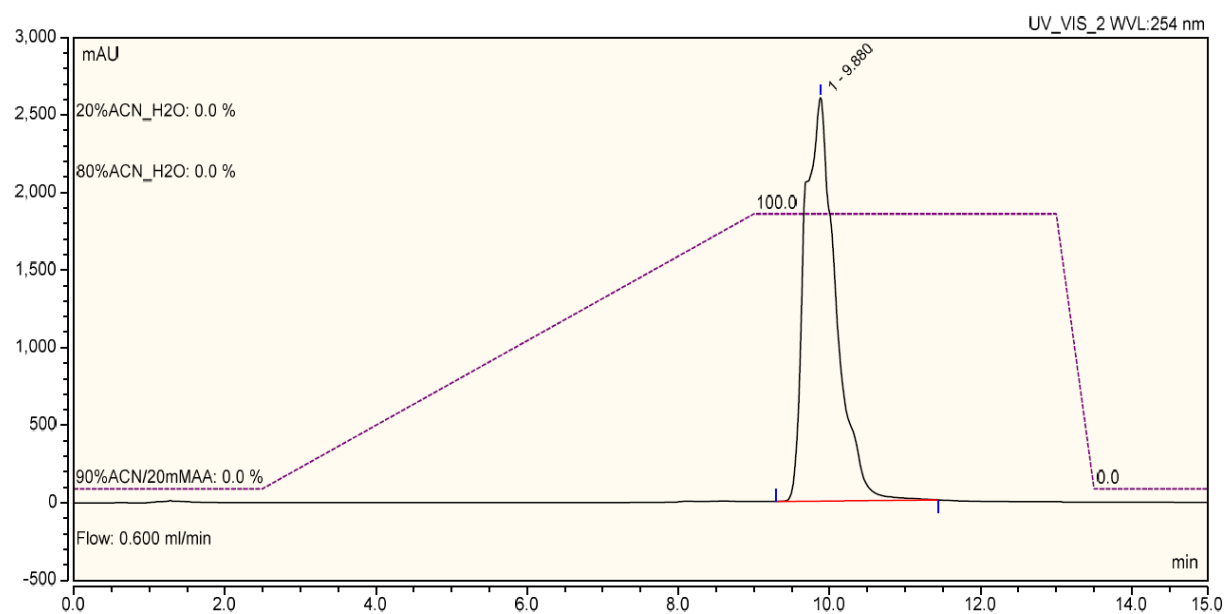


Figure S3: LC-MS chromatogram of TOZ1.

2-Fluoro-N-(4-methoxy-7-morpholinobenzo[d]thiazol-2-yl)nicotinamide (TOZ2)

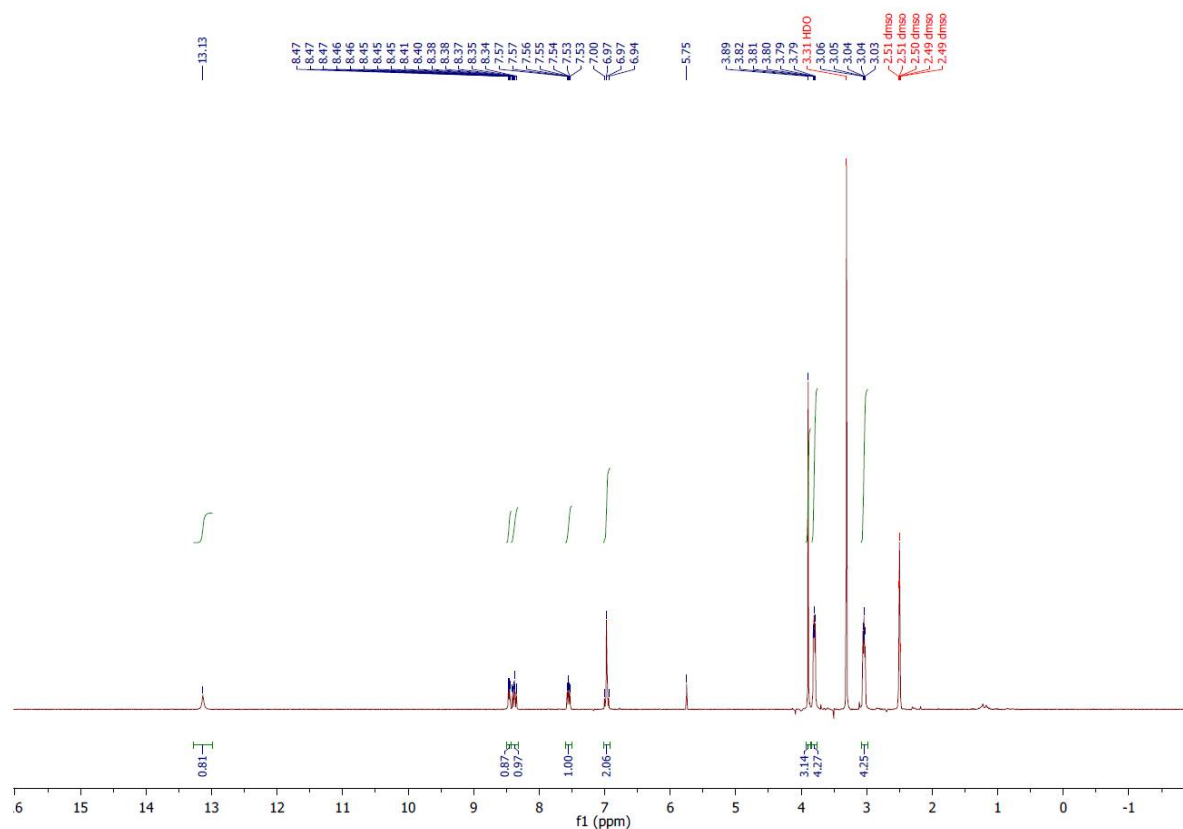


Figure S4: ¹H-NMR of TOZ2.

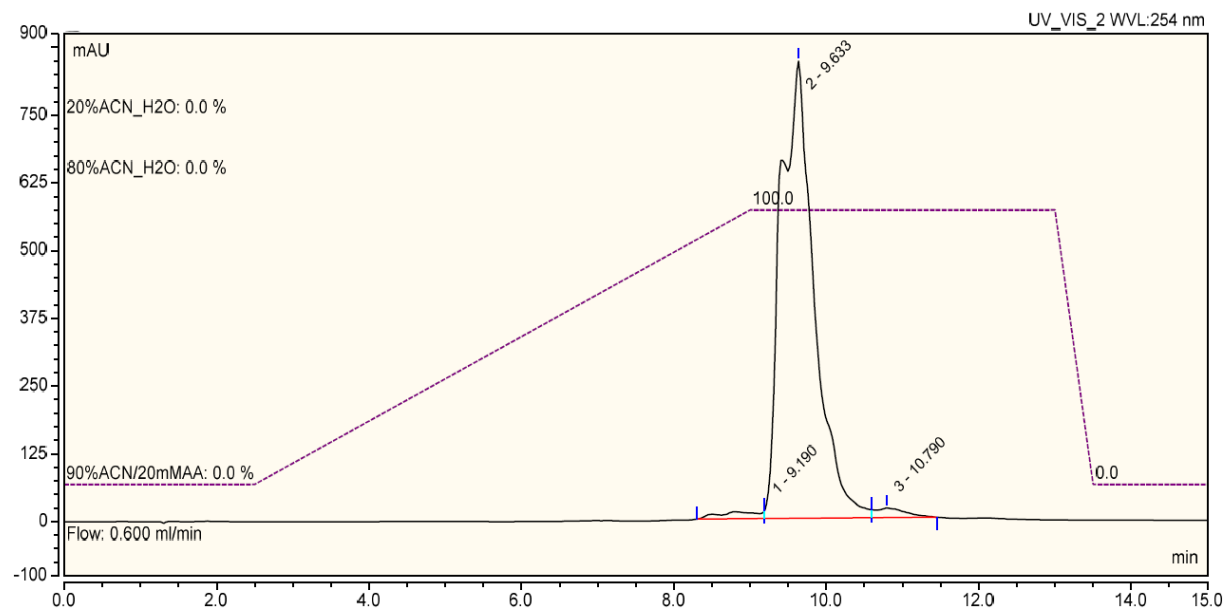


Figure S5: LC-MS chromatogram of TOZ2.

2-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)isonicotinamide (TOZ3)

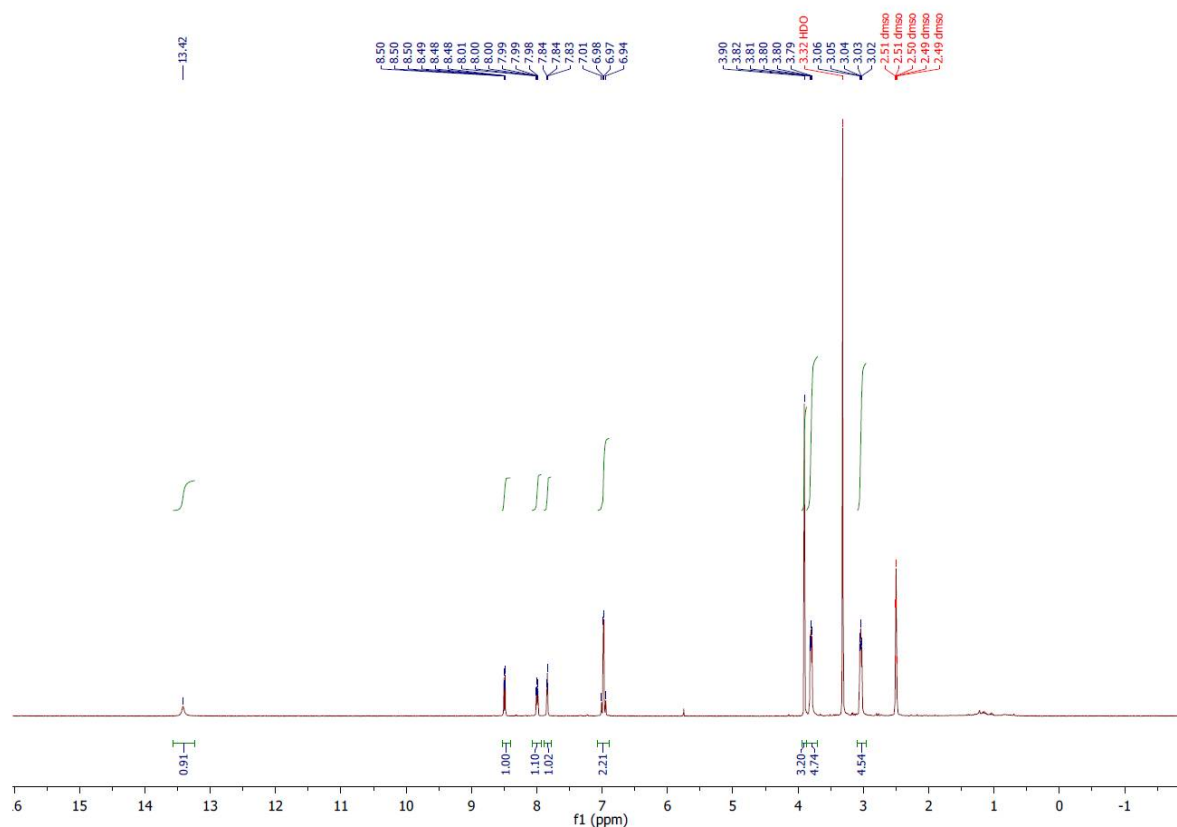


Figure S6: ¹H-NMR of TOZ3.

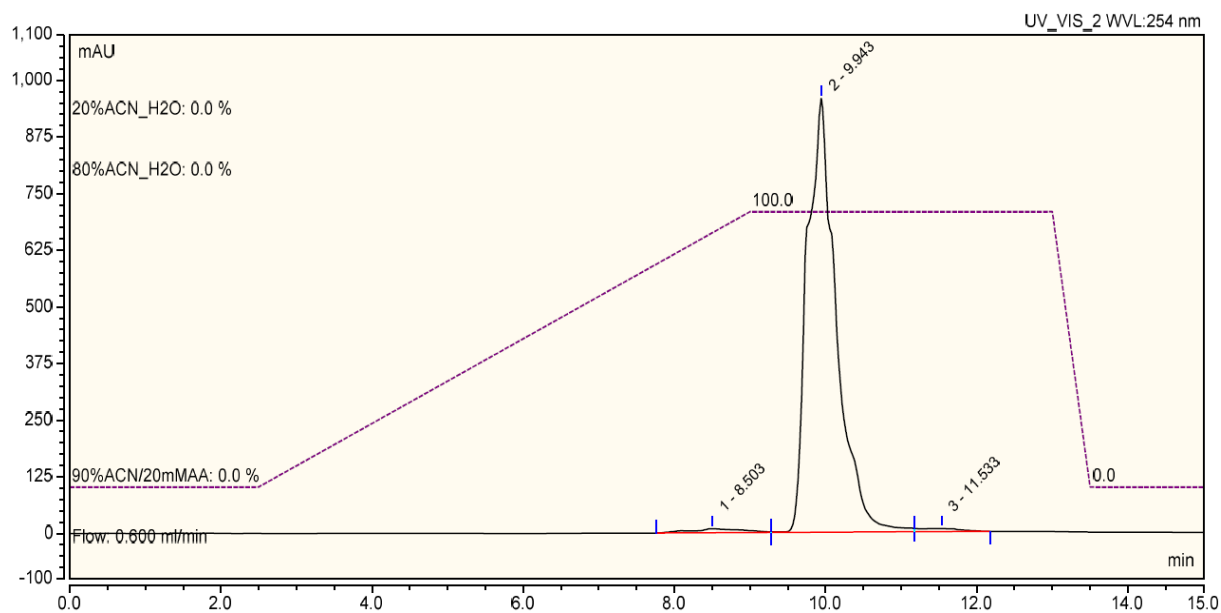


Figure S7: LC-MS chromatogram of TOZ3.

6-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)picolinamide (TOZ4)

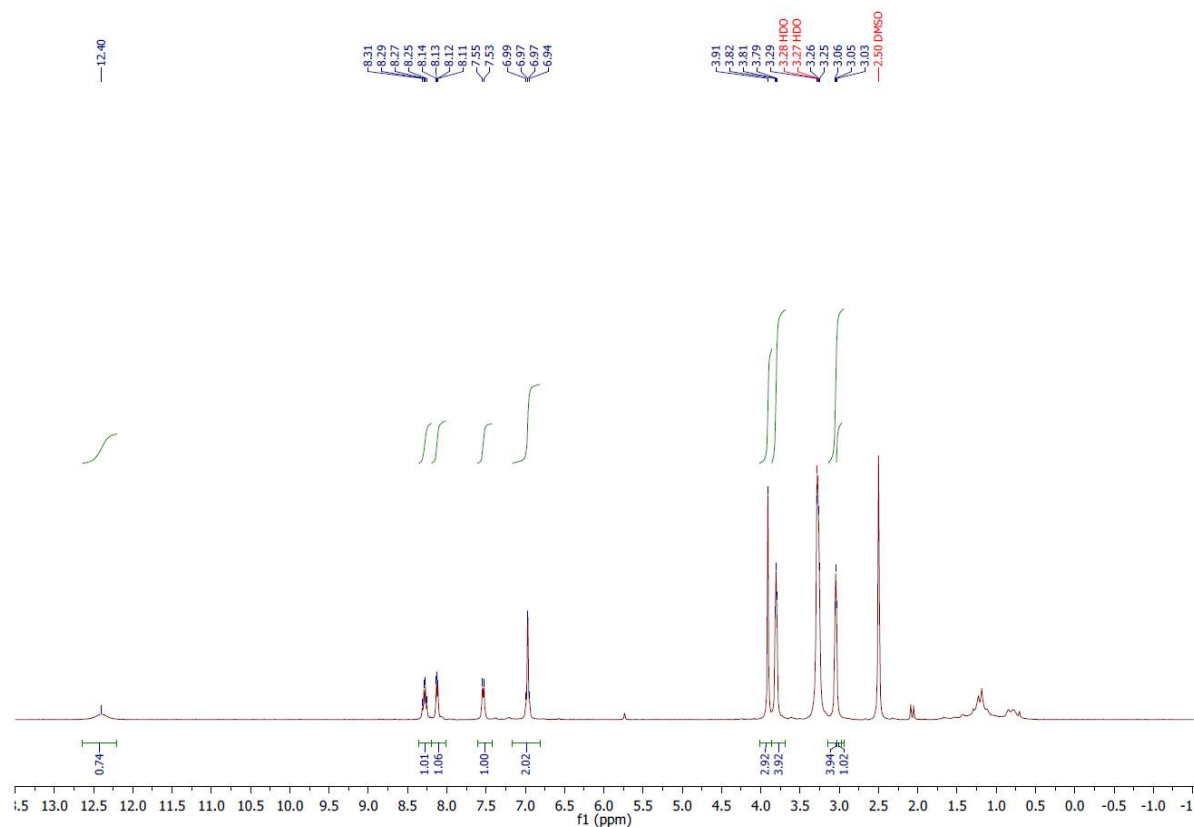


Figure S8: ¹H-NMR of TOZ4.

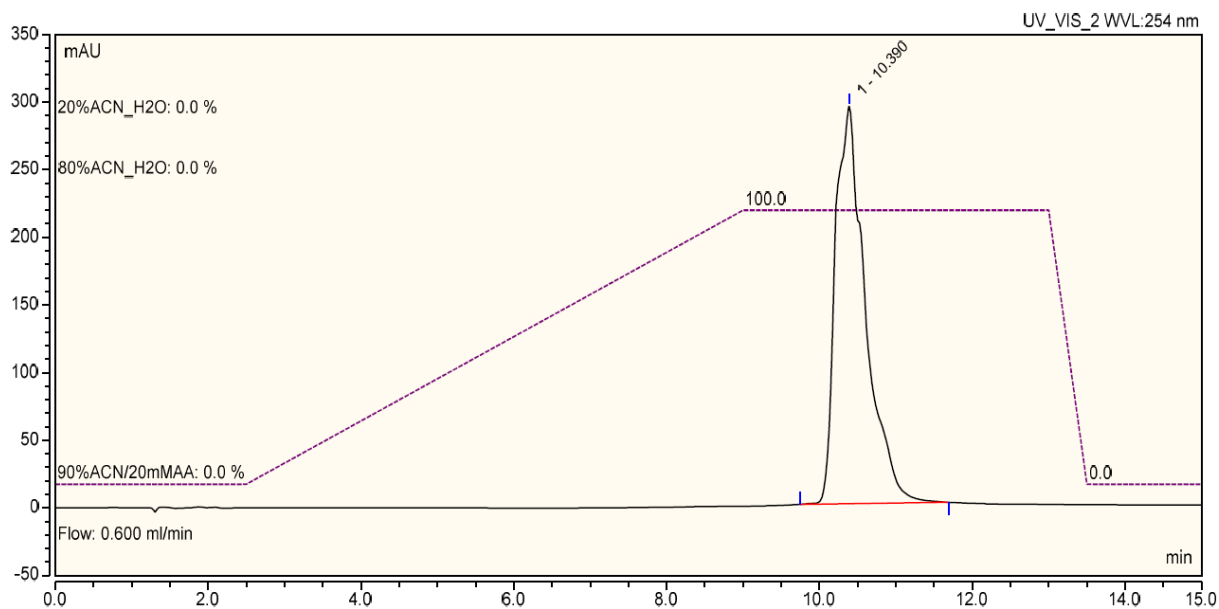


Figure S9: LC-MS chromatogram of TOZ4.

4-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)benzamide (TOZ5)

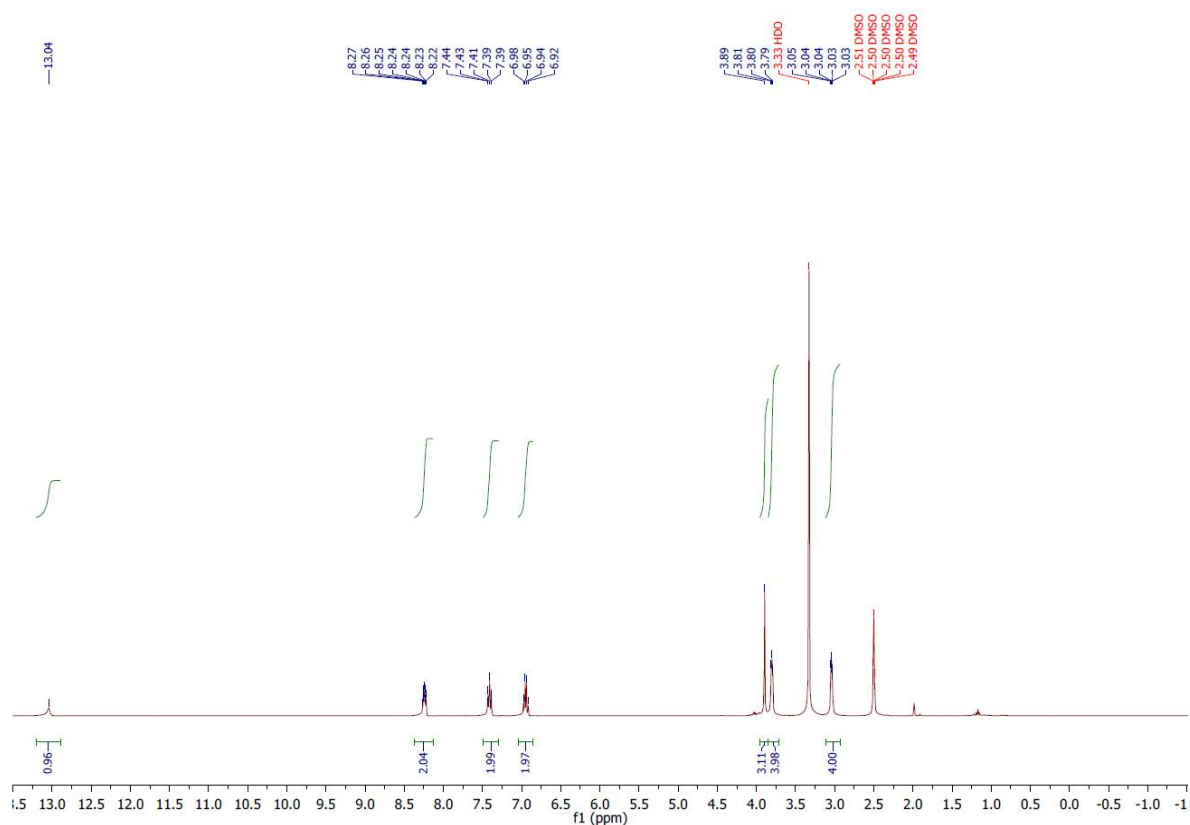


Figure S10: ¹H-NMR of TOZ5.

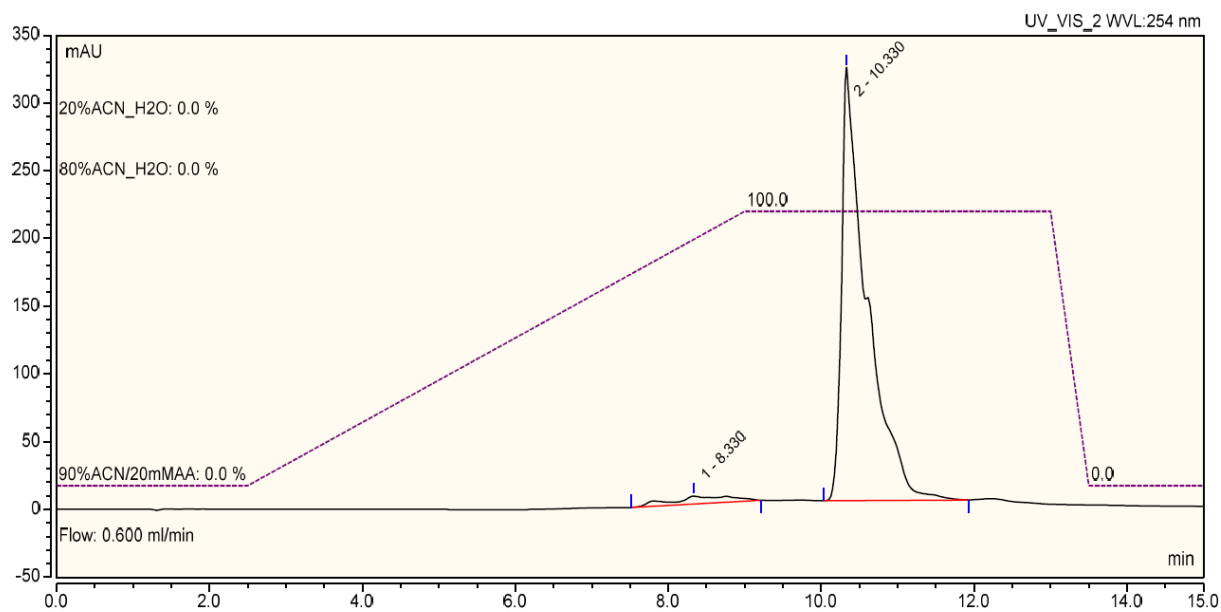


Figure S11: LC-MS chromatogram of TOZ5.

2-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)benzamide (TOZ6)

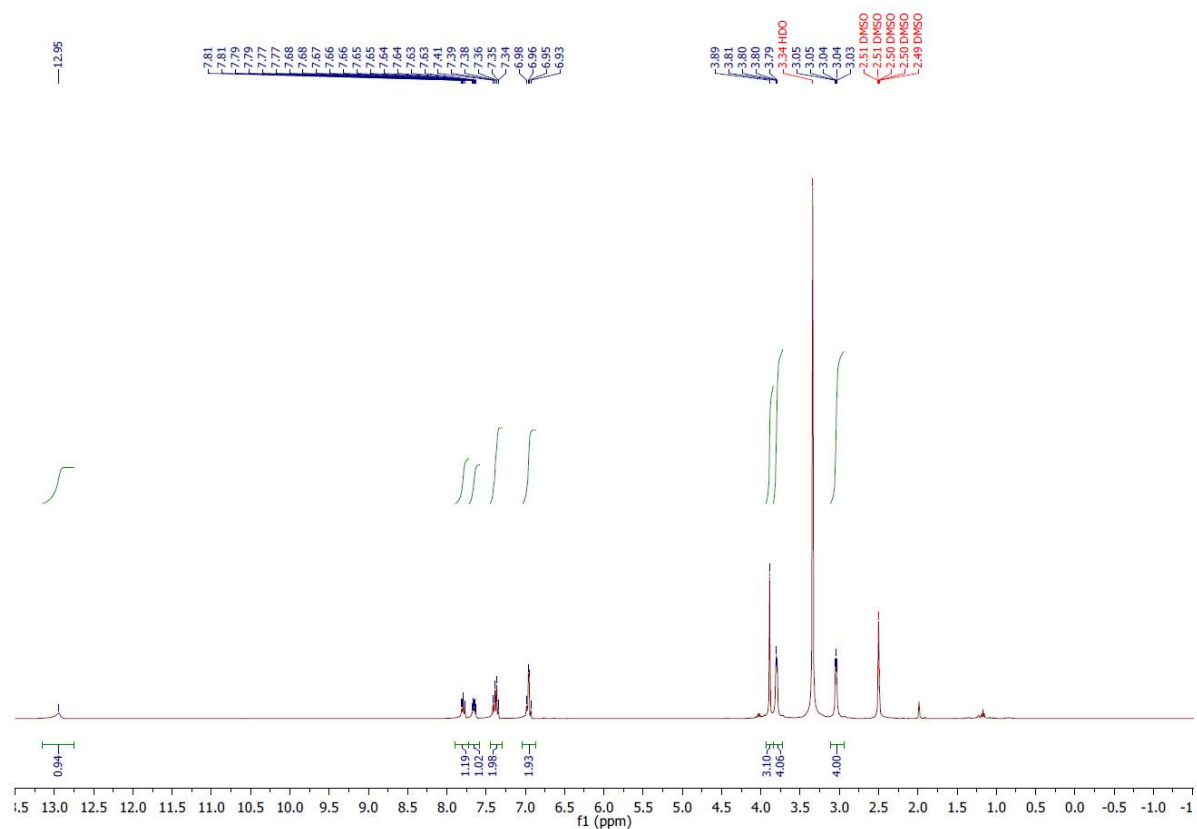


Figure S12: ¹H-NMR of TOZ6.

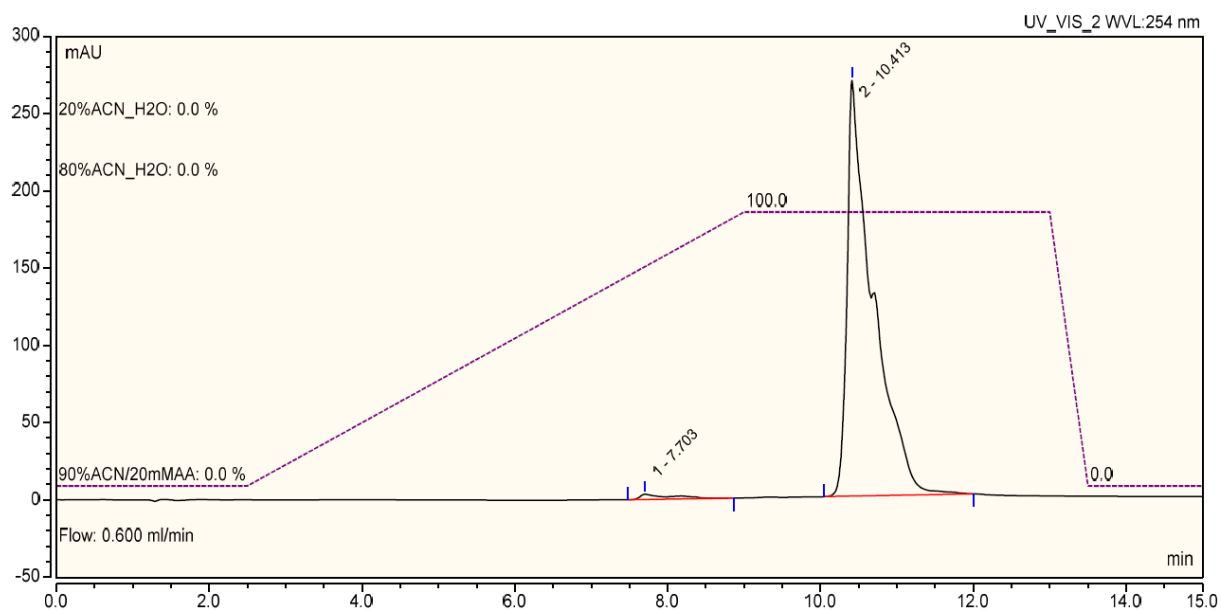


Figure S13: LC-MS chromatogram of TOZ6.

4-Fluoro-*N*-(4-methoxy-7-morpholinobenzo[*d*]thiazol-2-yl)-3-nitrobenzamide (TOZ7)

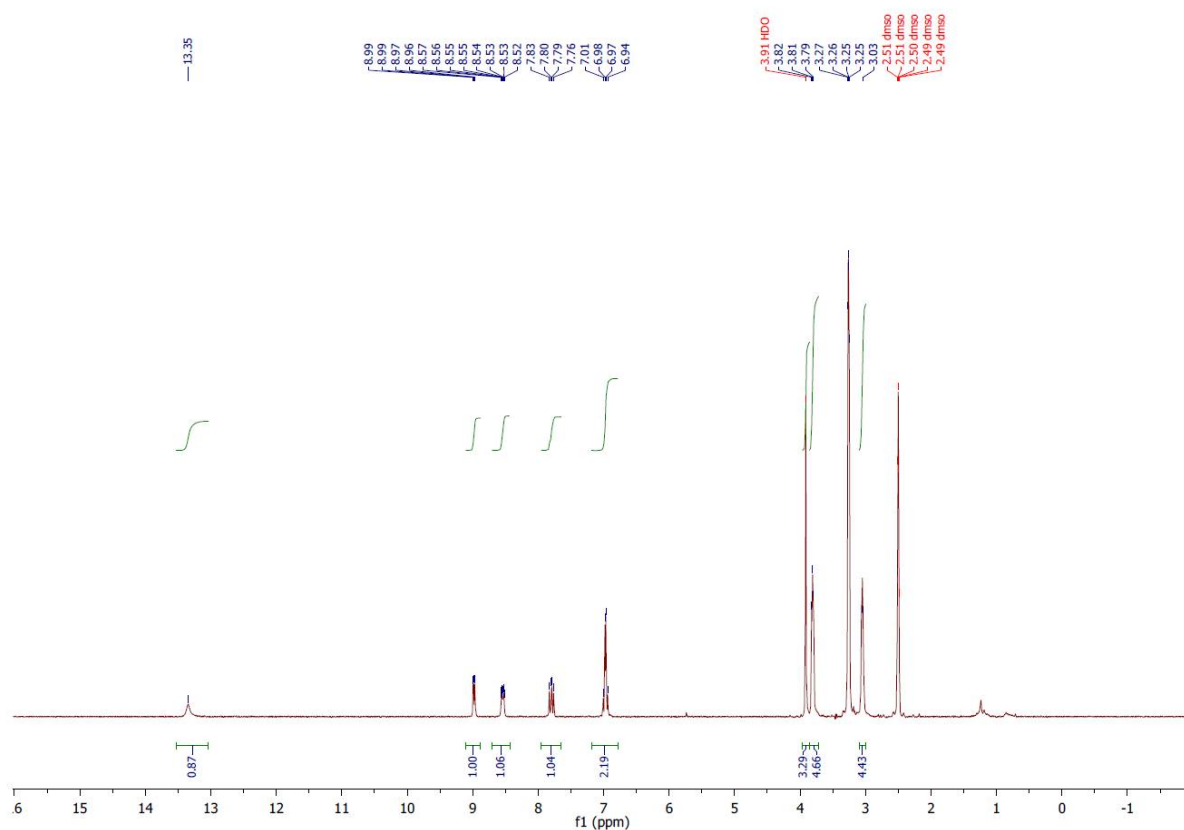


Figure S14: ¹H-NMR of TOZ7.

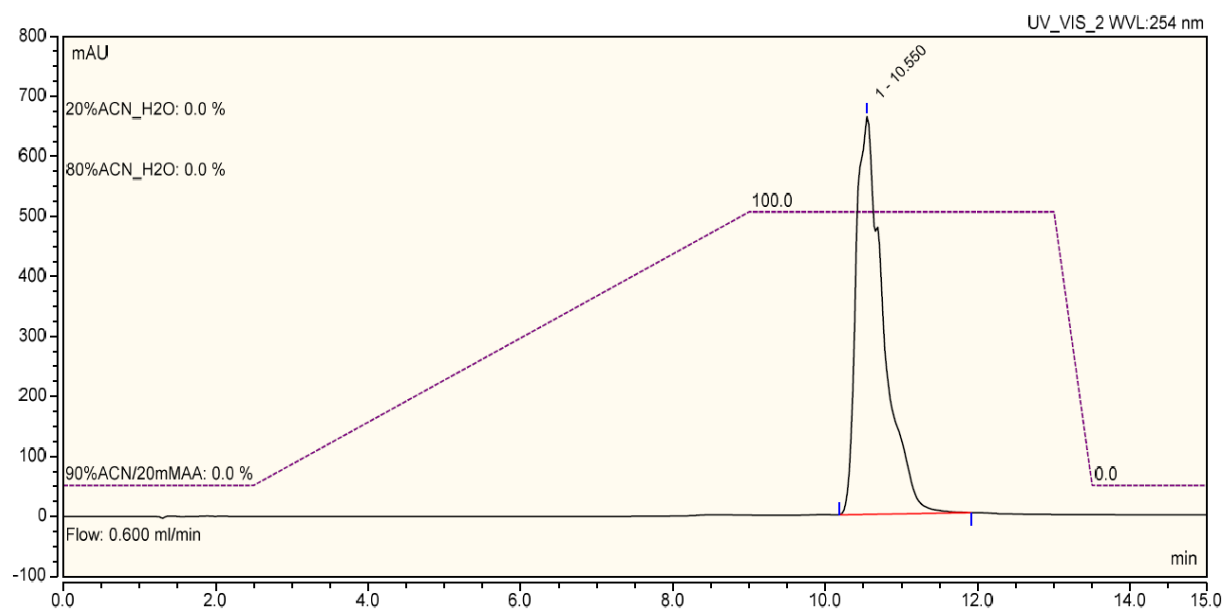


Figure S15: LC-MS chromatogram of TOZ7.