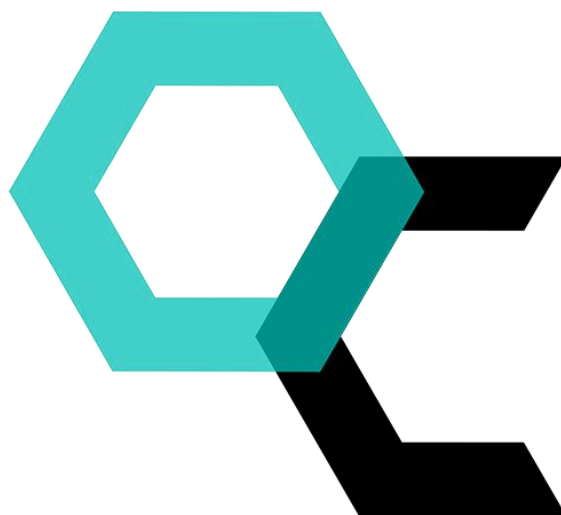


UNIVERZITA PALACKÉHO V OLOMOUCI
PŘÍRODOVĚDĚCKÁ FAKULTA

Katedra organické chemie



Jozef PECHA

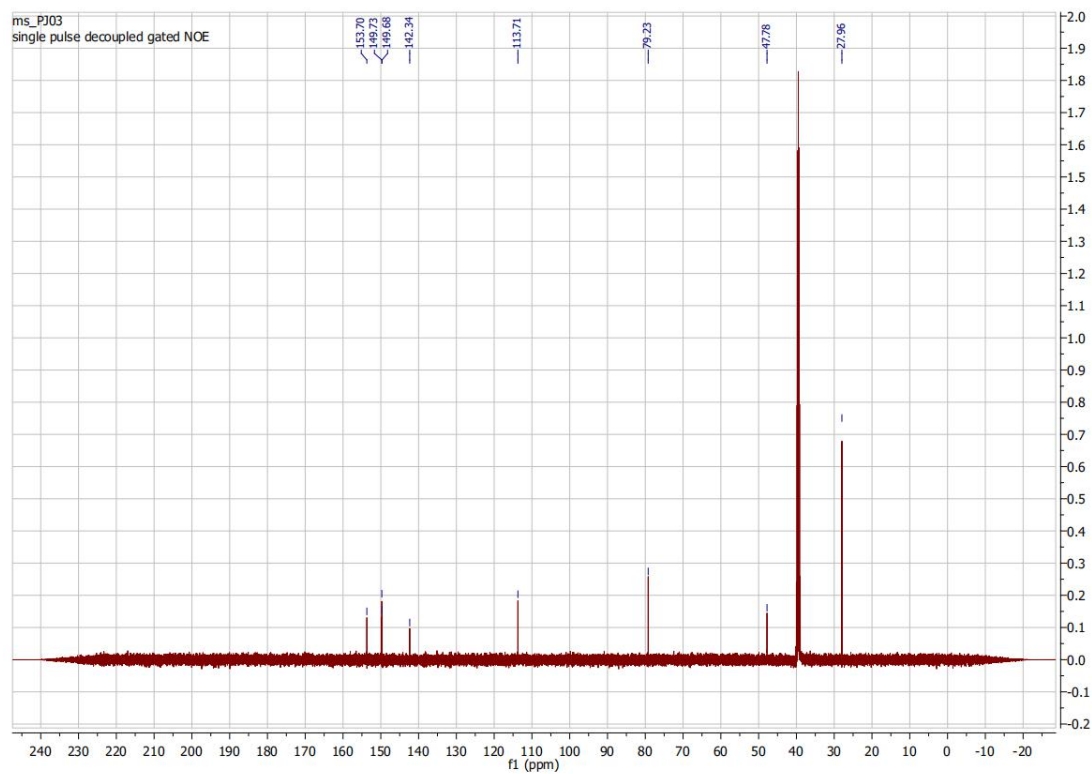
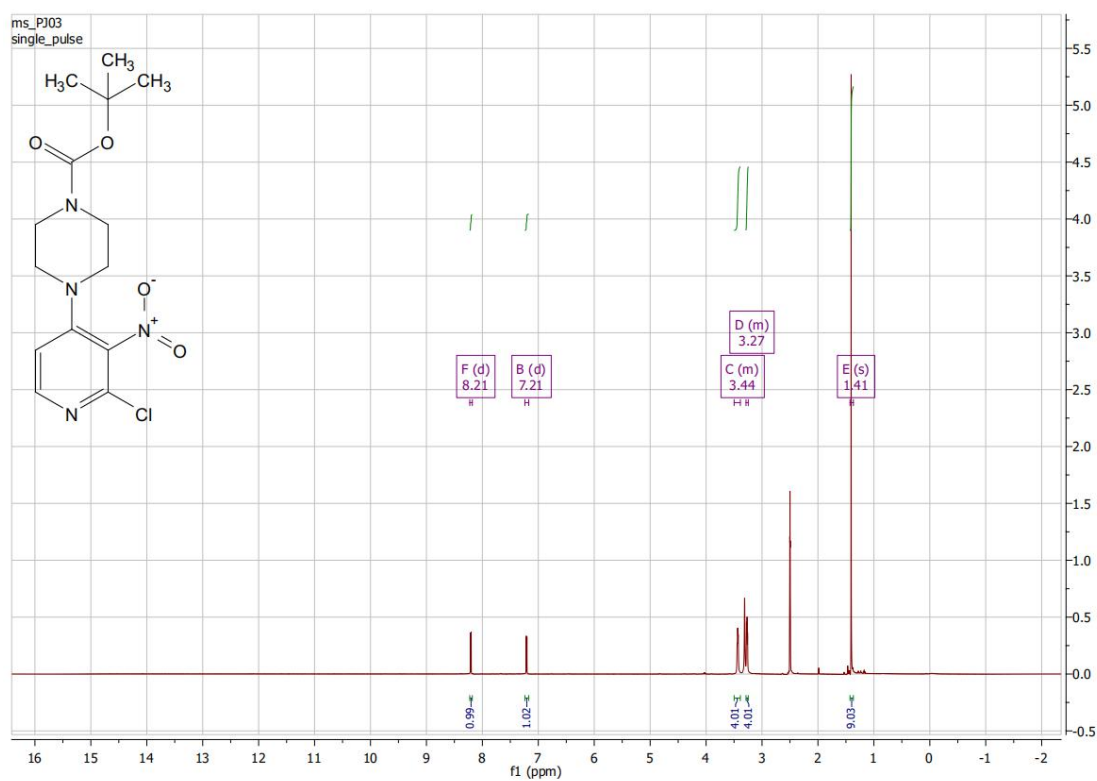
Syntéza nových ligandů serotoninových receptorů

Příloha k bakalářské práci

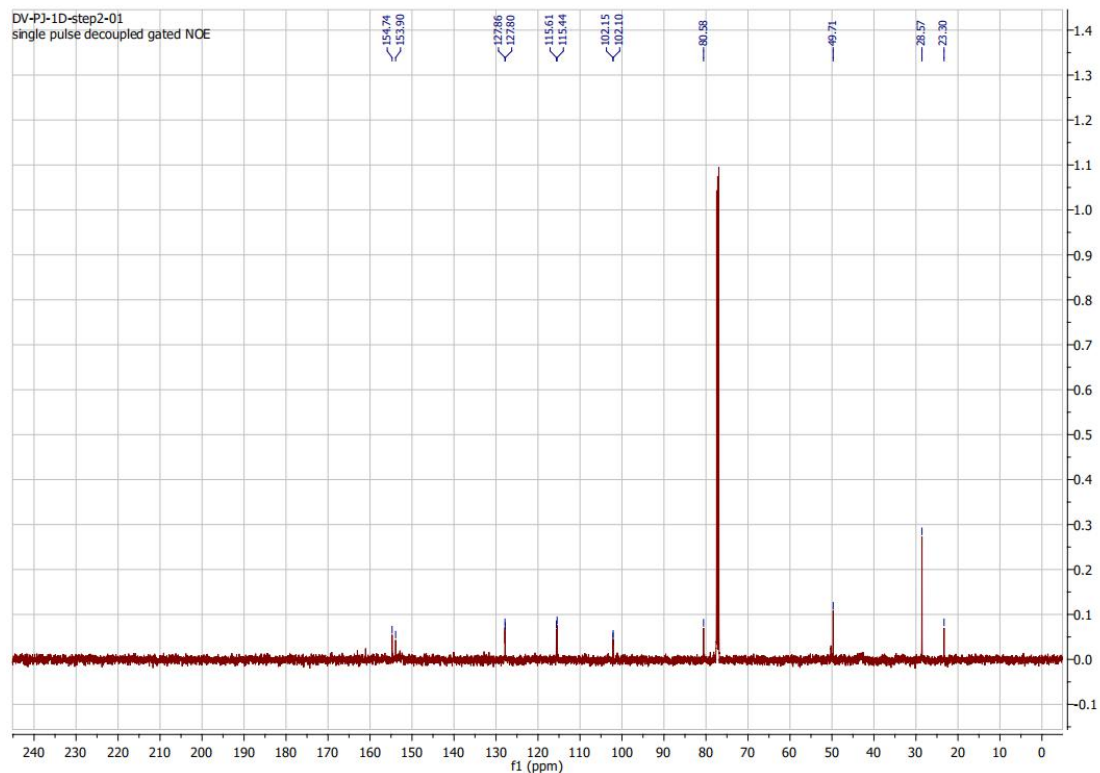
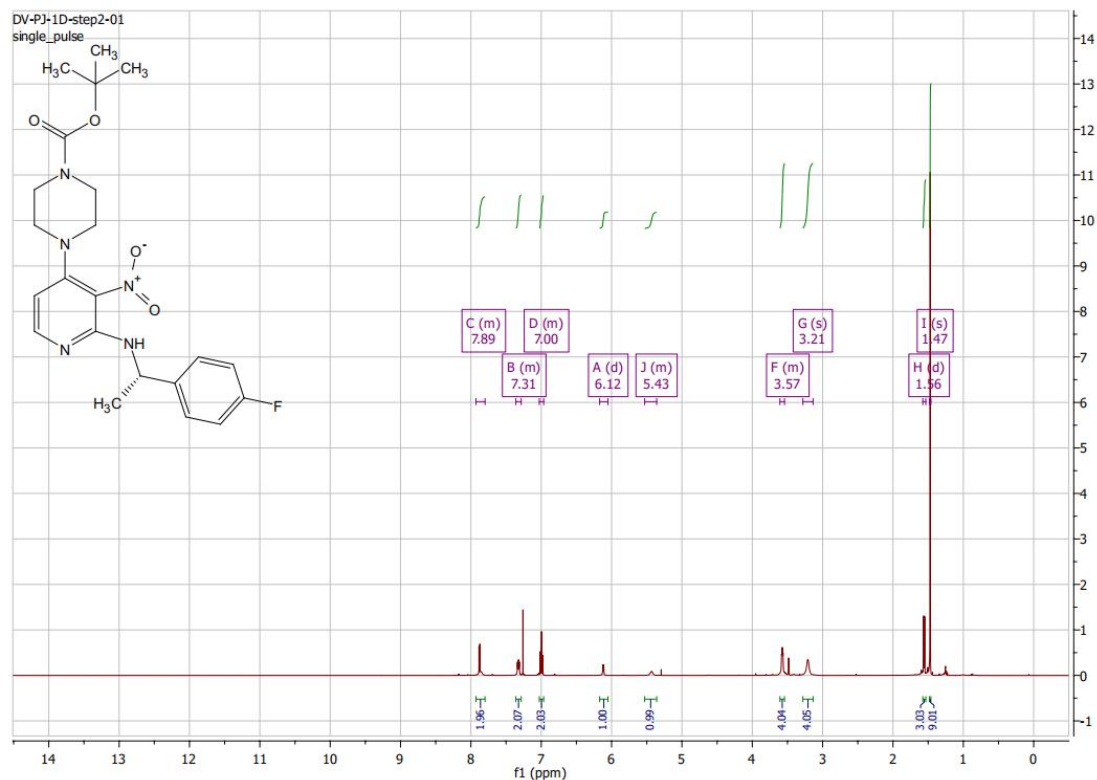
Studijní obor: Bioorganická chemie a chemická biologie B1407

Vedoucí práce: Mgr. David Vanda
Olomouc 2020

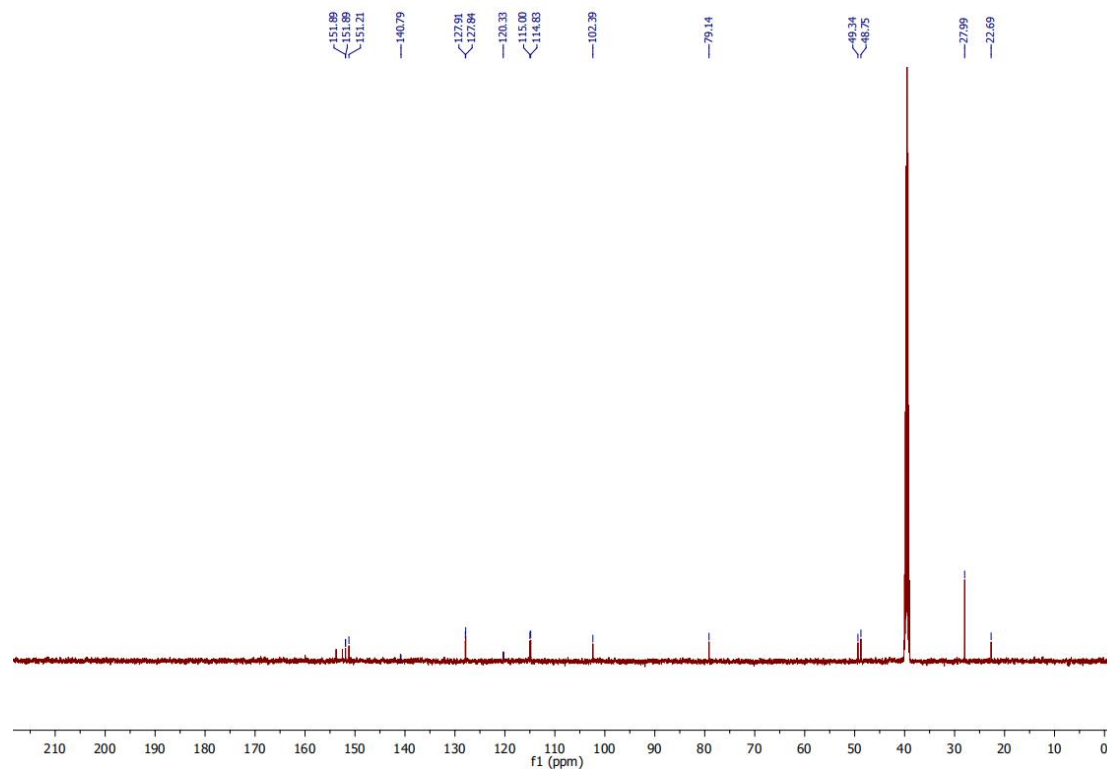
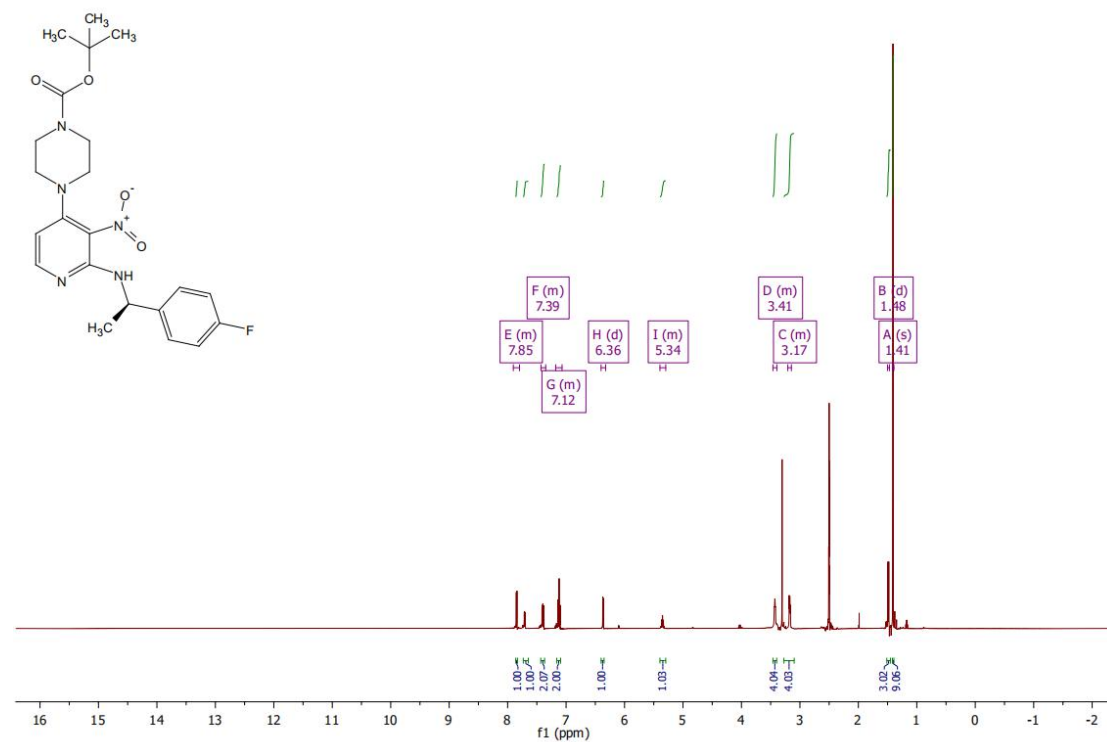
^1H a ^{13}C NMR spektrum látky 2:
tert-butyl-4-(2-chloro-3-nitropyridin-4-yl)piperazin-1-karboxylát



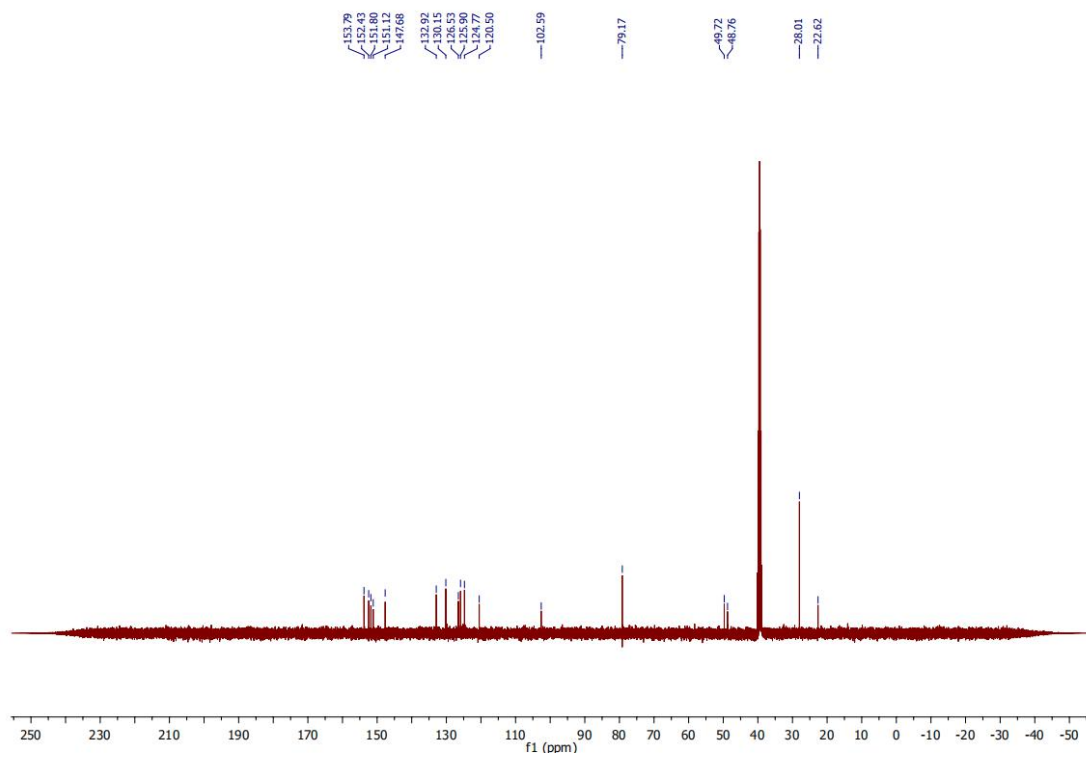
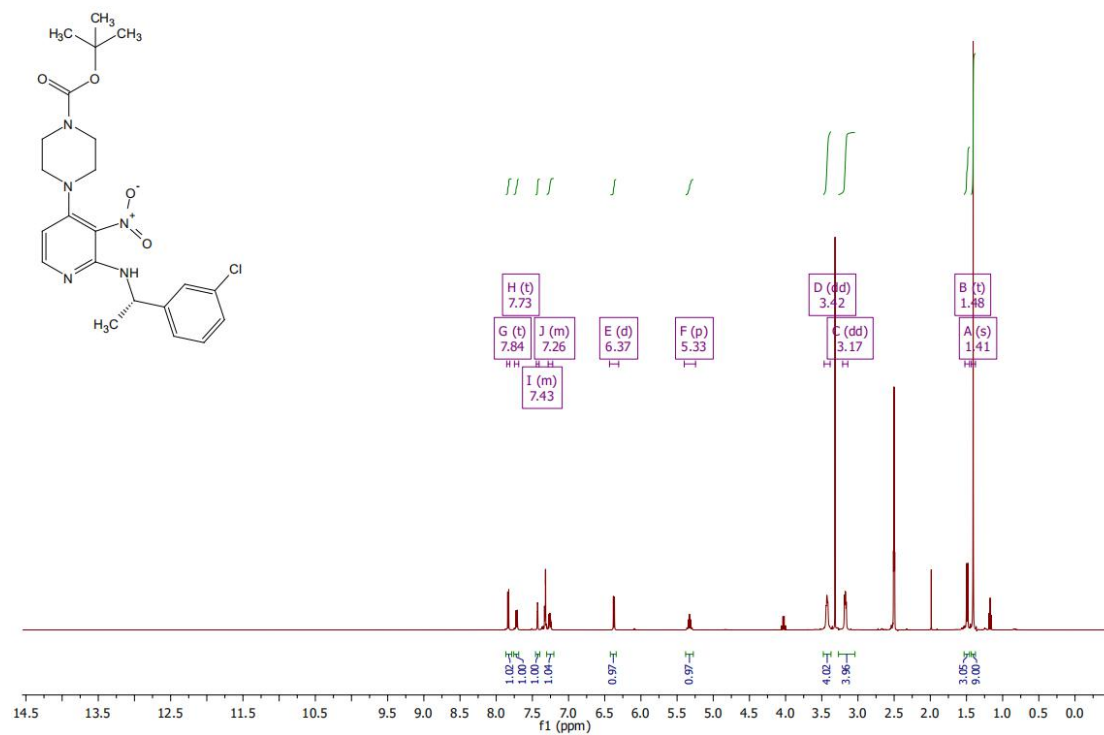
^1H a ^{13}C NMR spektrum látky 3(I):
tert-butyl 4-(2-{[(1S)-1-(4-fluorophenyl)ethyl]amino}-3-nitropyridin-4-yl)piperazine-1-karboxylát



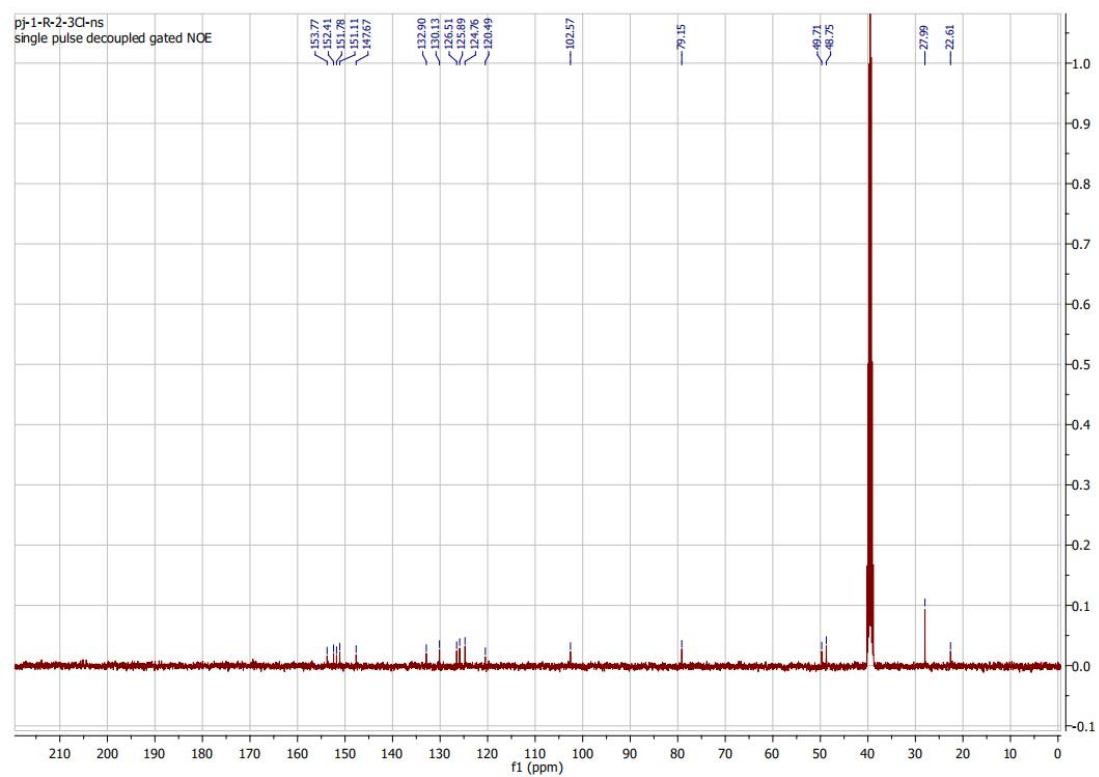
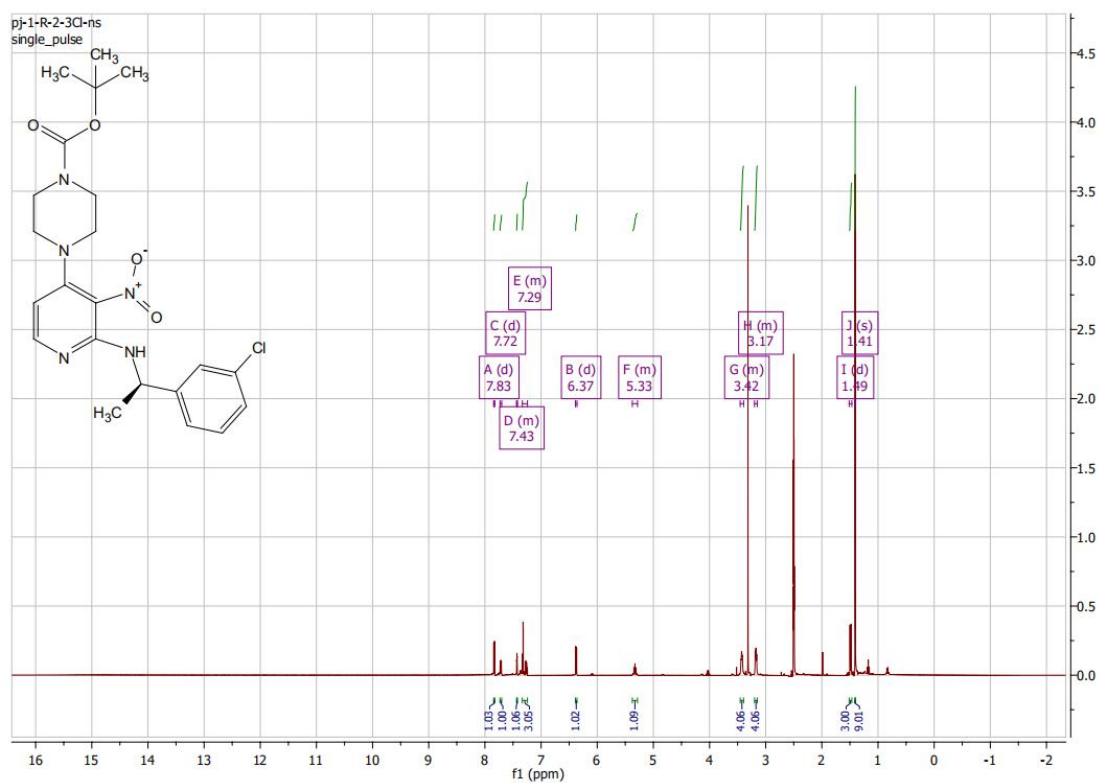
**^1H a ^{13}C NMR spektrum látky 3(2):
tert-butyl-4-(2-{\[(1R)-1-(4-fluorofenyl)ethyl]amino}-3-nitropyridin-4-yl)piperazin-1-karboxylát**



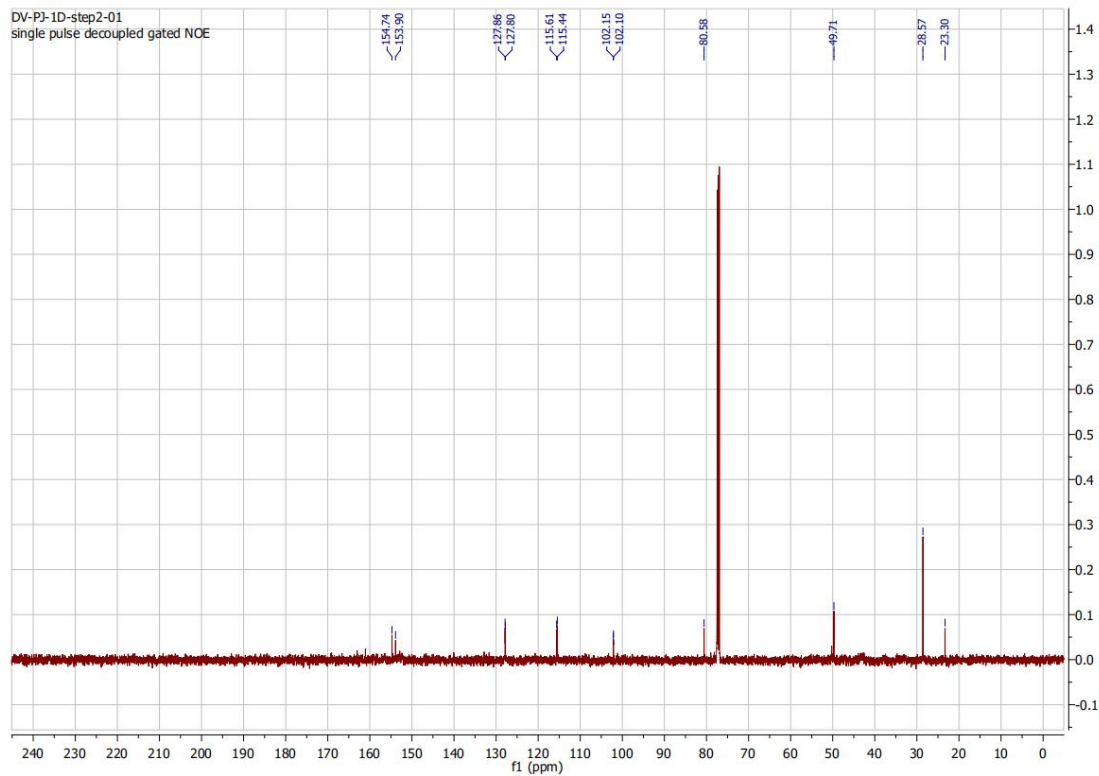
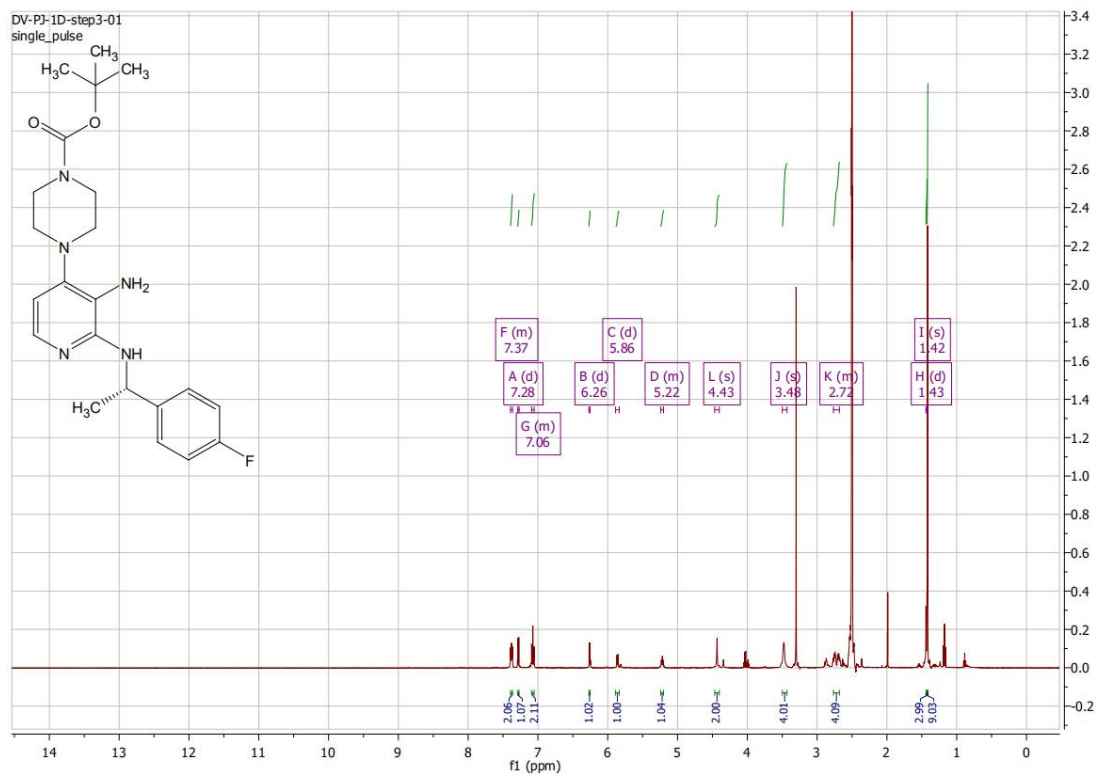
**^1H a ^{13}C NMR spektrum látky 3(3):
tert-butyl-4-(2-{[(1S)-1-(3-chlorofenyl)ethyl]amino}-3-nitropyridin-4-yl)piperazin-1-karboxylát**



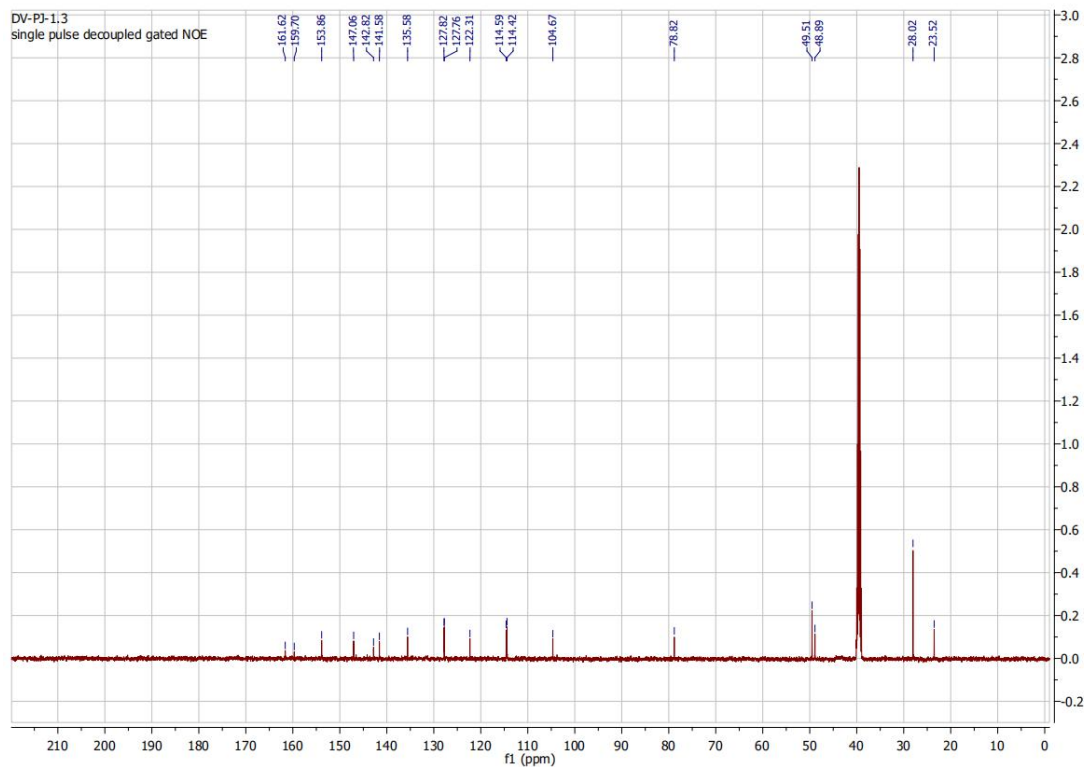
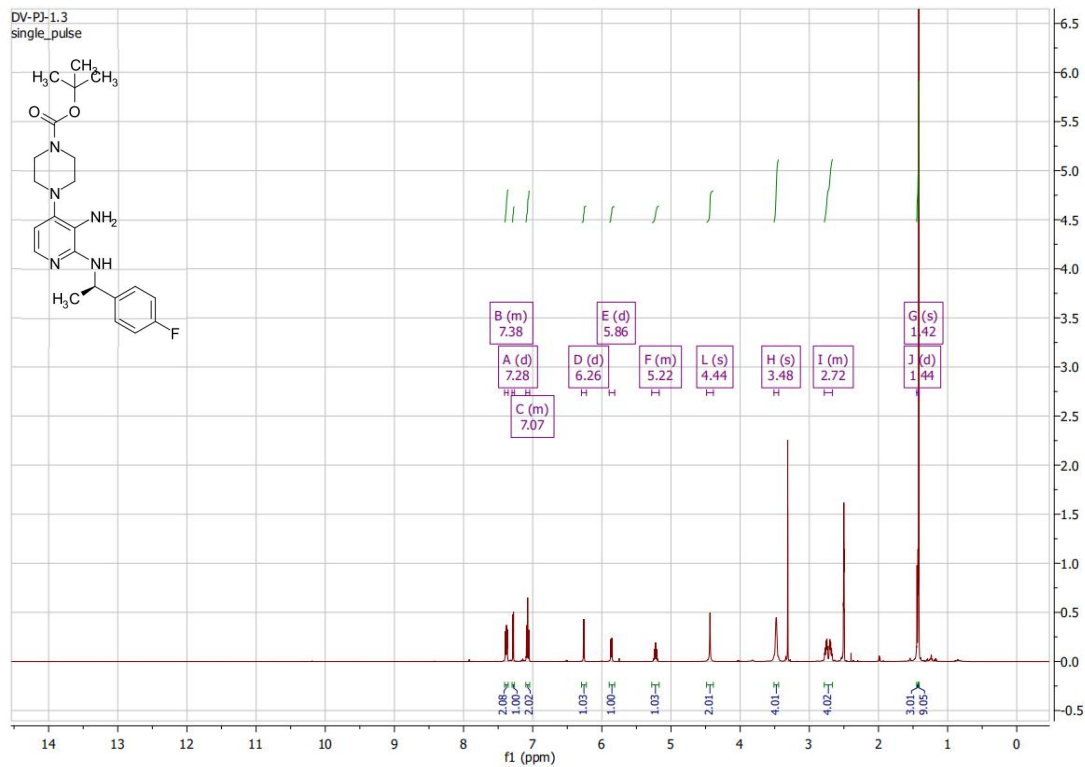
**^1H a ^{13}C NMR spektrum látky 3(4):
tert-butyl-4-(2-[[[(1R)-1-(3-chlorofenyl)ethyl]amino]-3-nitropyridin-4-yl]piperazin-1-karboxylát**



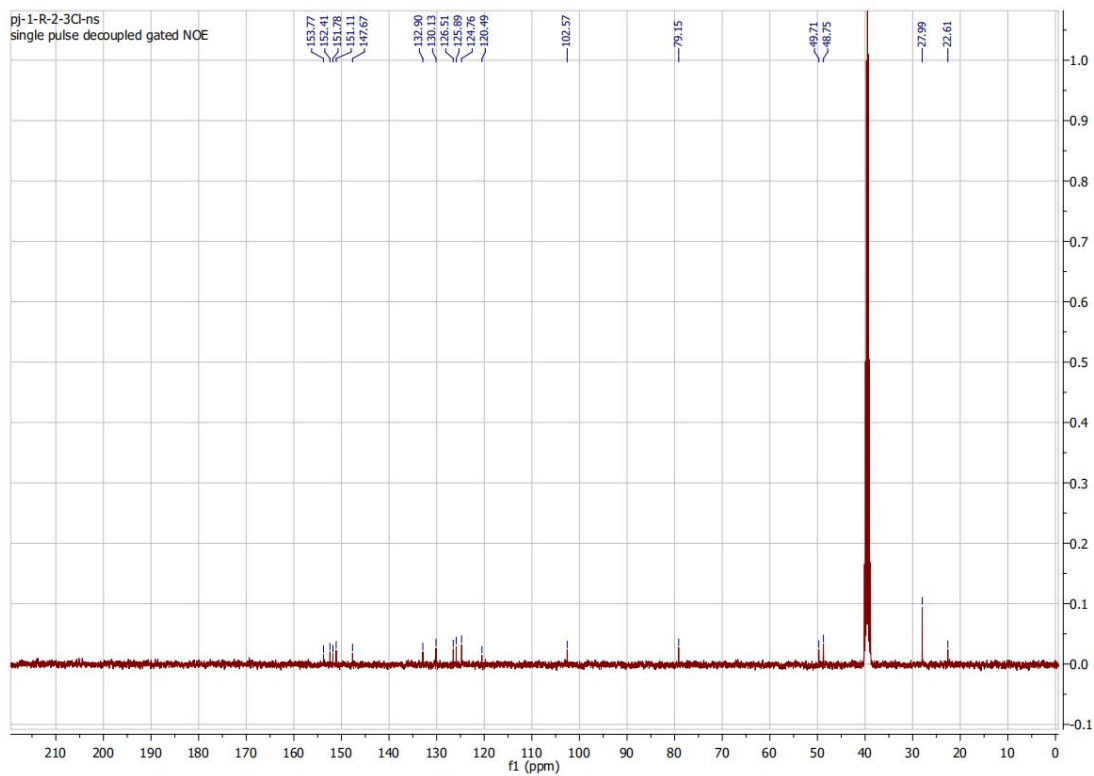
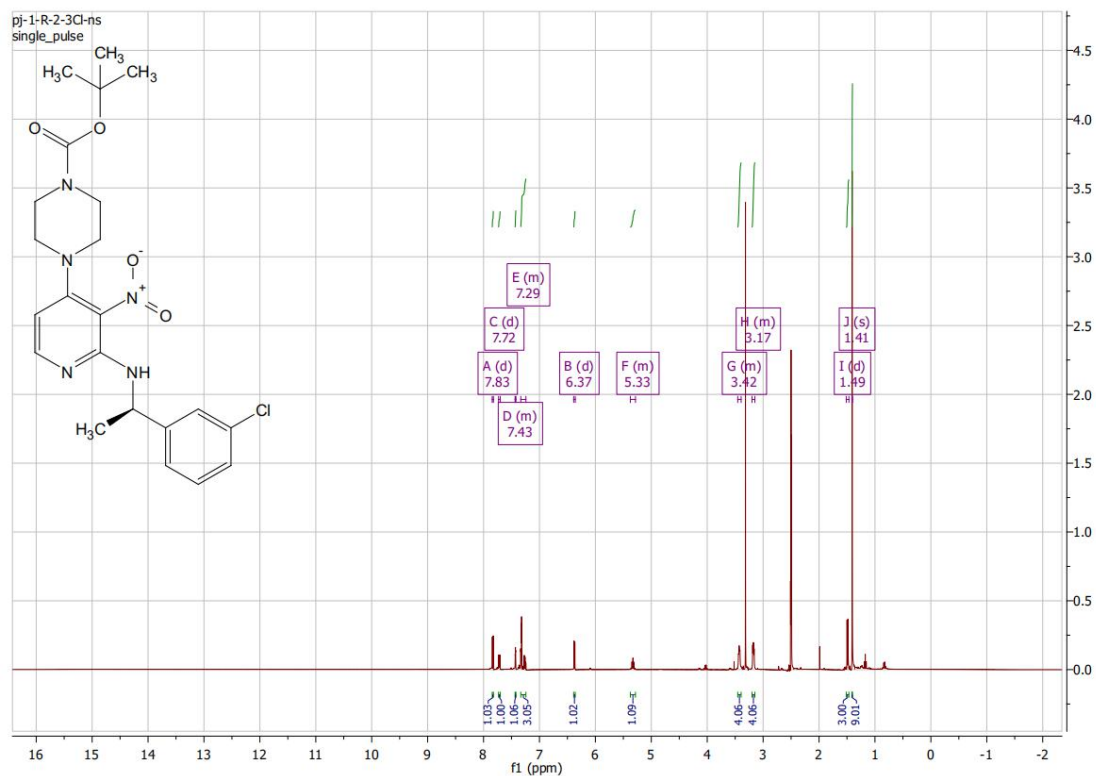
**^1H a ^{13}C NMR spektrum látky 4(I):
tert-butyl-4-(3-amino-2-[[$(1S)$ -1-(4-fluorofenyl)ethyl]amino]pyridin-4-yl)piperazin-1-karboxylát**



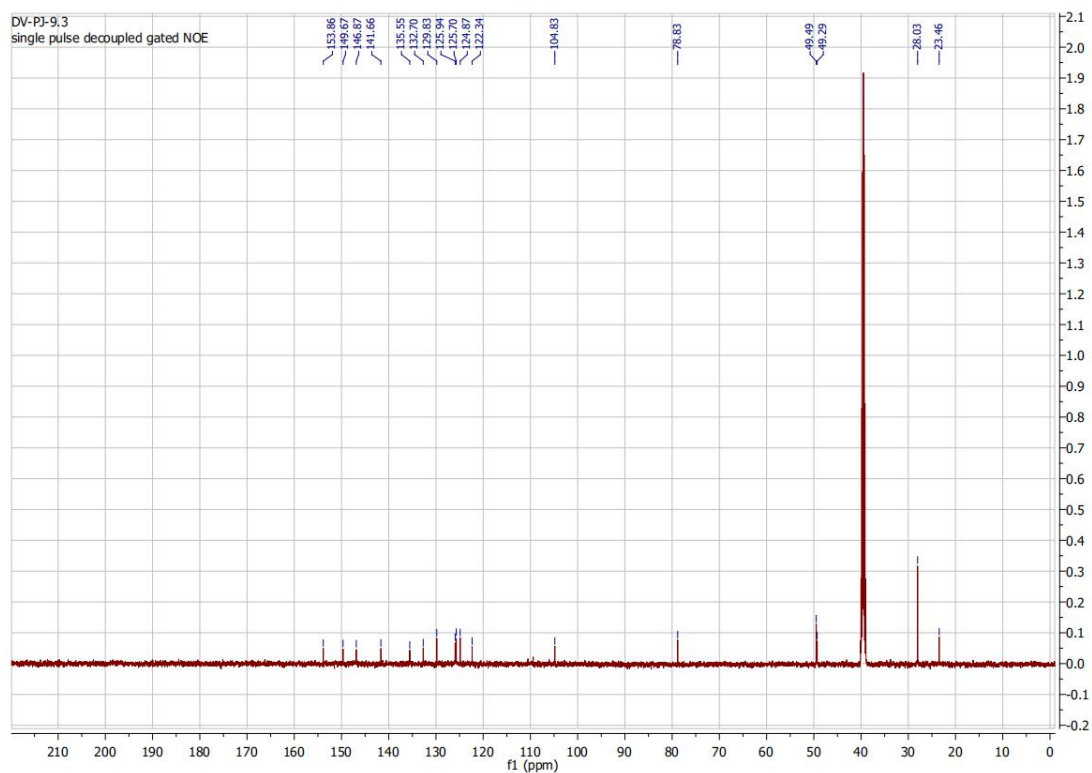
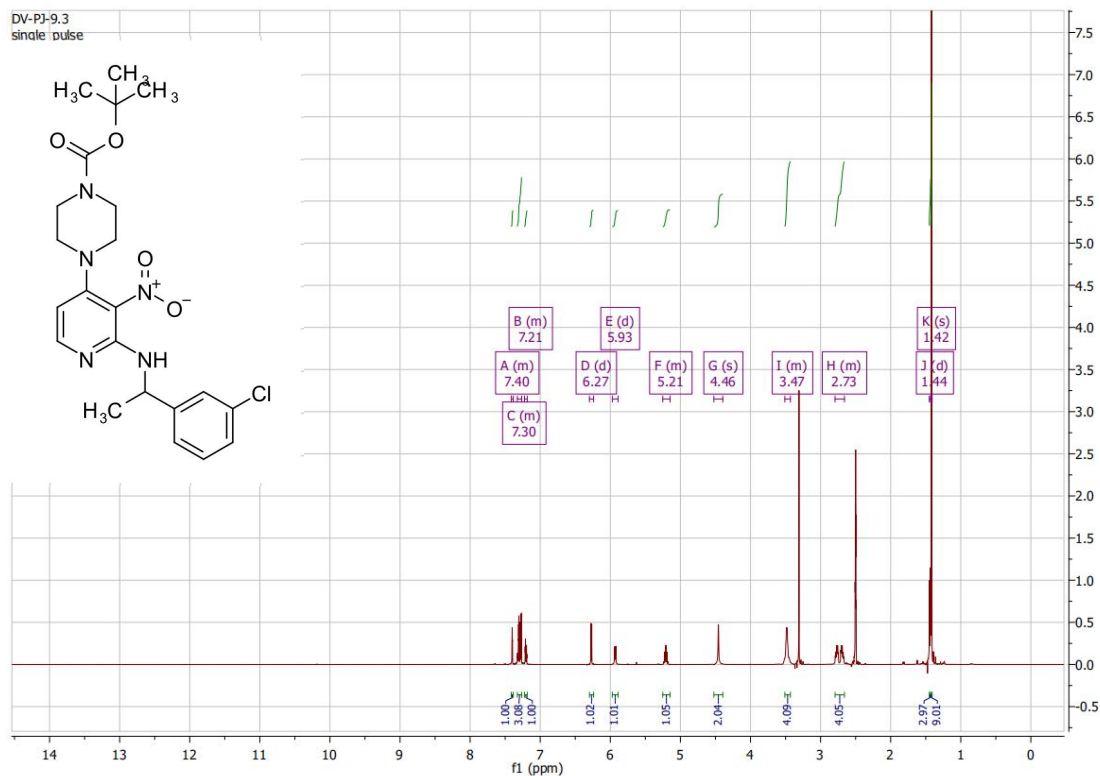
**^1H a ^{13}C NMR spektrum látky 4(2):
tert-butyl-4-(3-amino-2-[[[(1R)-1-(4-fluorofenyl)ethyl]amino}pyridin-4-yl)piperazin-1-karboxylát**



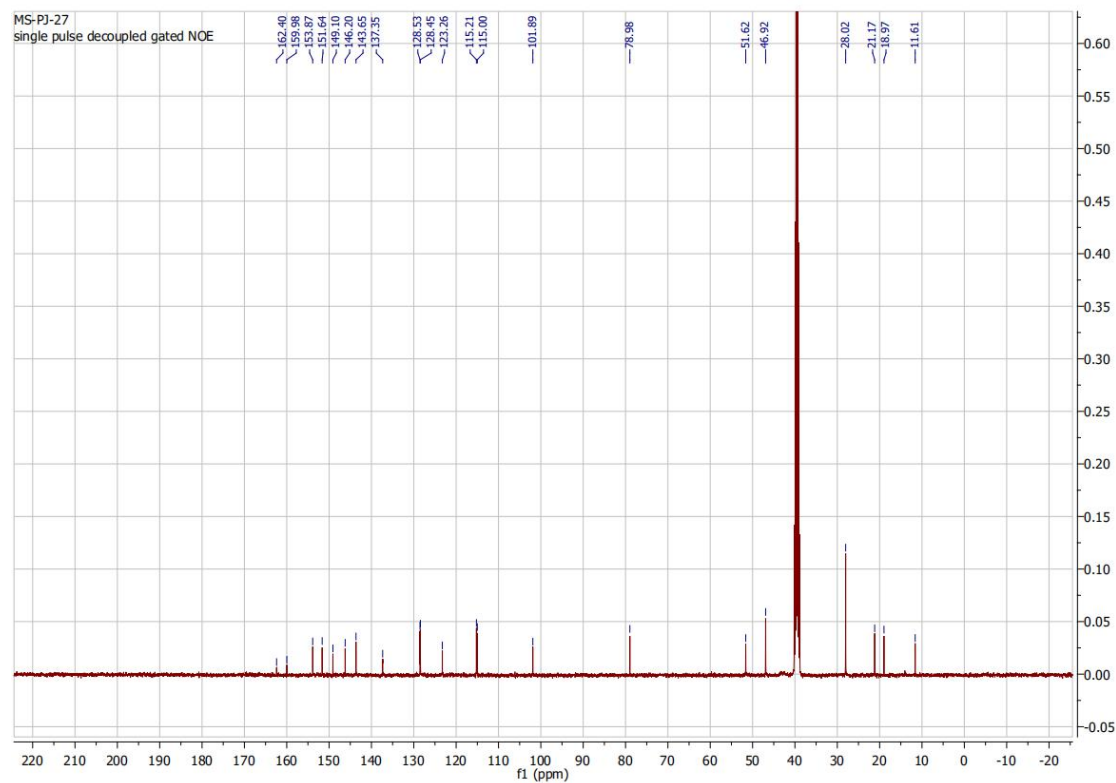
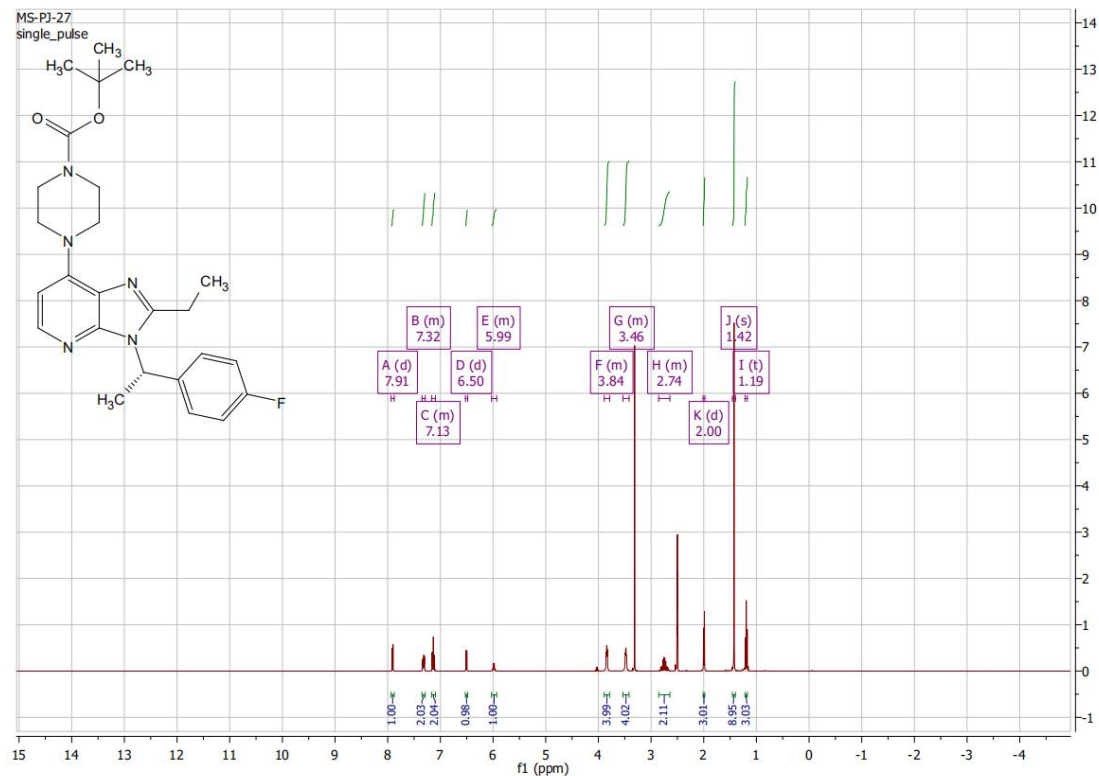
^1H a ^{13}C NMR spektrum látky 4(4):
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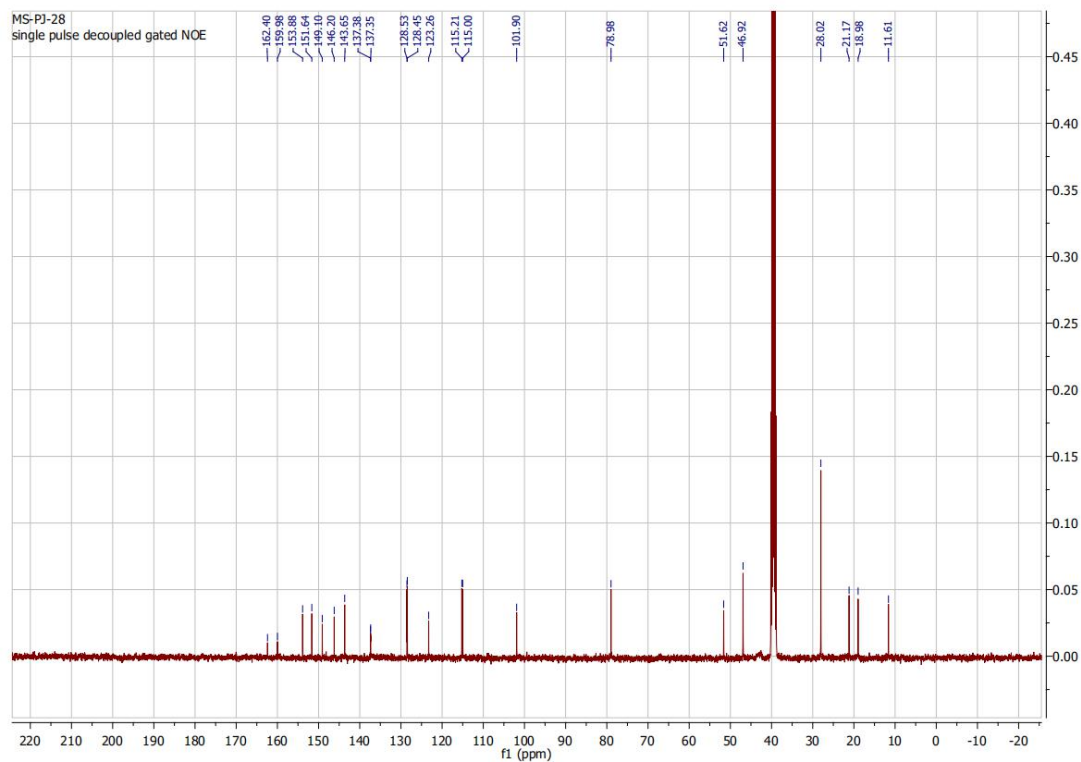
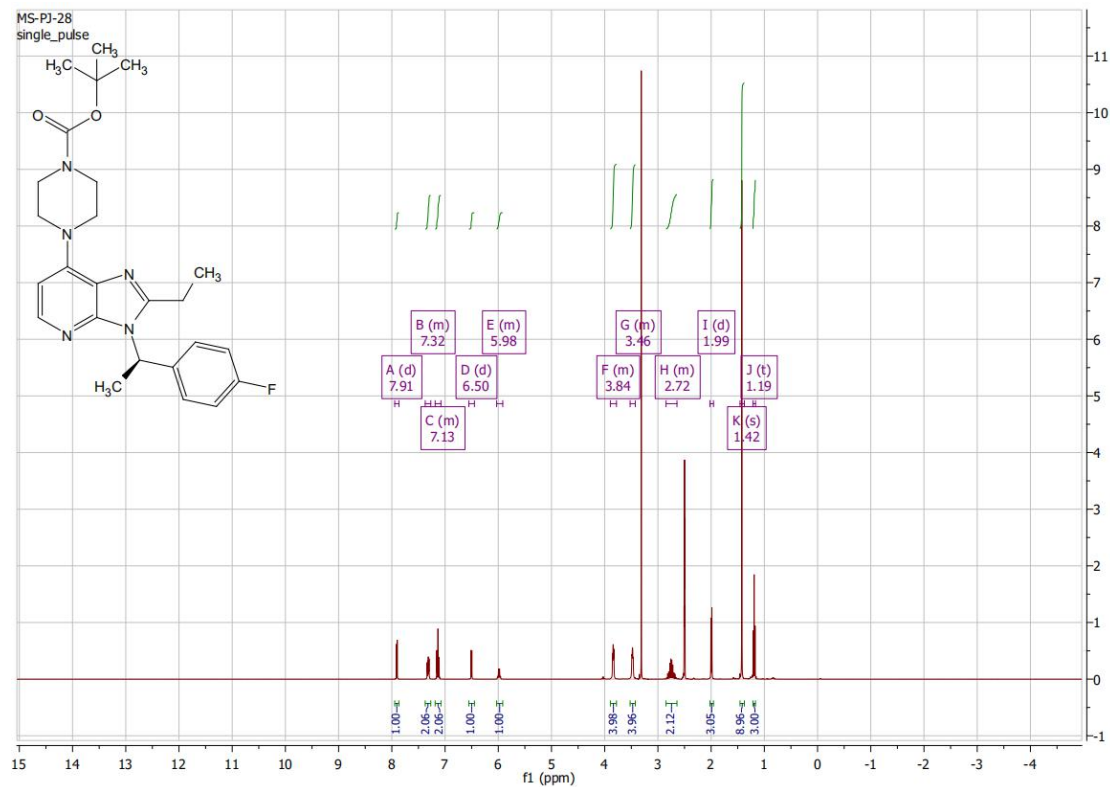
**^1H a ^{13}C NMR spektrum látky 4(5):
tert-butyl-4-(3-amino-2-[[1-(3-chlorofenyl)ethyl]amino]pyridin-4-yl)piperazin-1-karboxylát**



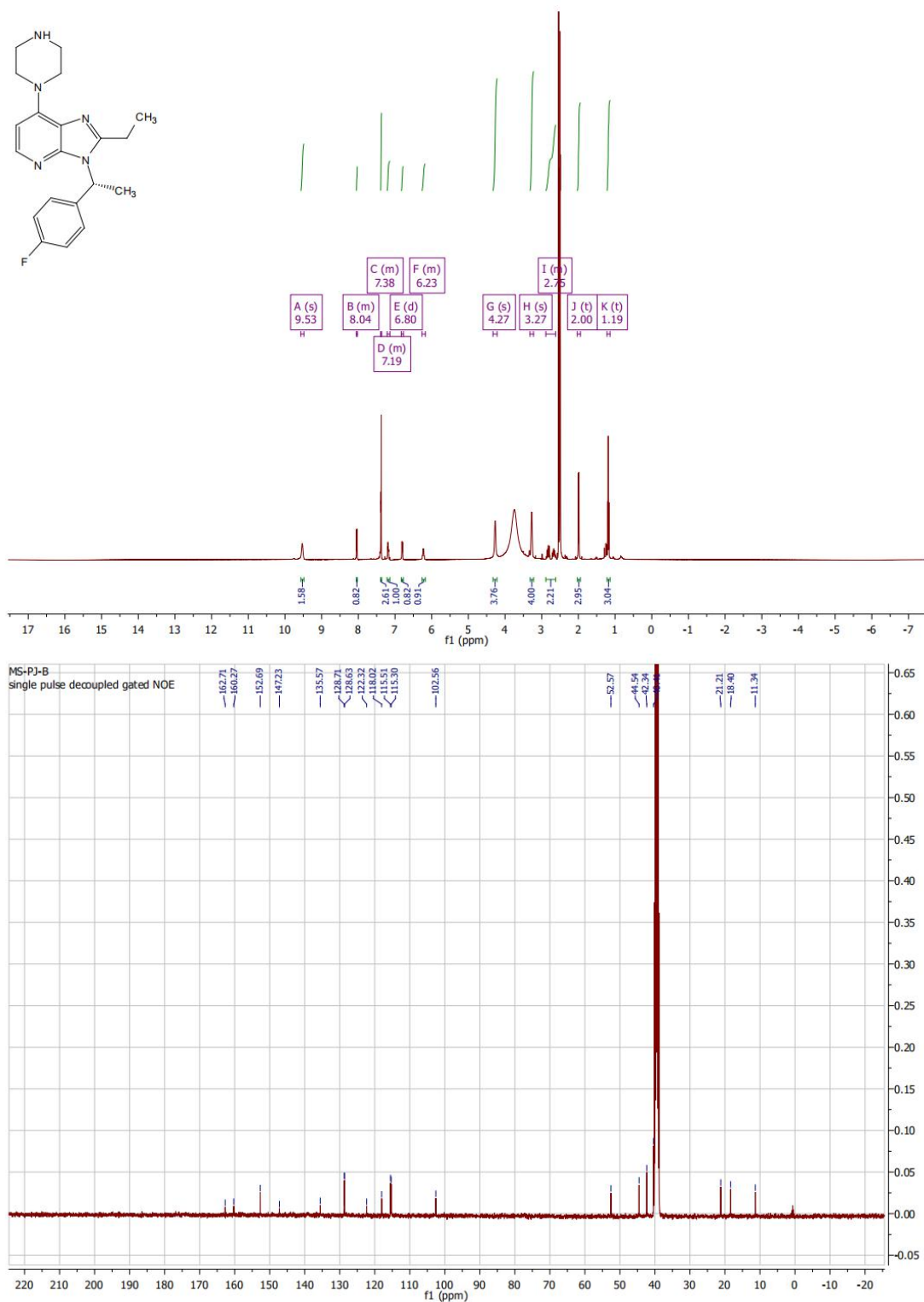
^1H a ^{13}C NMR spektrum látky 5(1,1):
tert-butyl-4-{2-ethyl-3-[(1S)-1-(4-fluorofenyl)ethyl]-3H-imidazo[4,5-b]pyridin-7-yl}piperazin-1-karboxylát

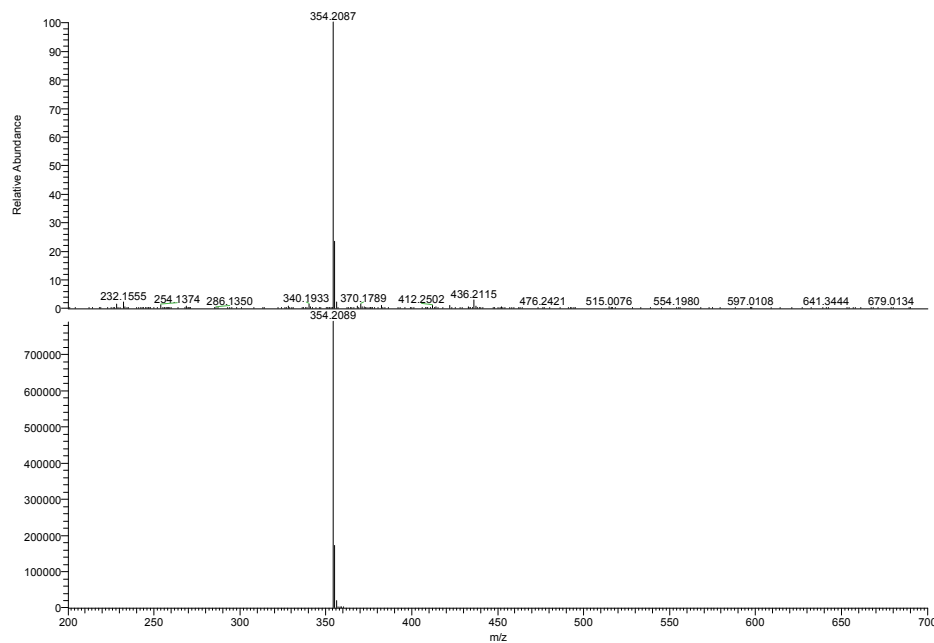


^1H a ^{13}C NMR spektrum látky 5(2,I):
tert-butyl-4-{2-ethyl-3-[(1R)-1-(4-fluorofenyl)ethyl]-3H-imidazo[4,5-b]pyridin-7-yl}piperazin-1-karboxylát



^1H a ^{13}C NMR a HRMS spektrum látky 6(1,1):
1-{2-ethyl-3-[(1S)-1-(4-fluorofenyl)ethyl]-3H-imidazo[4,5-b]pyridin-7-yl}piperazine
-zin

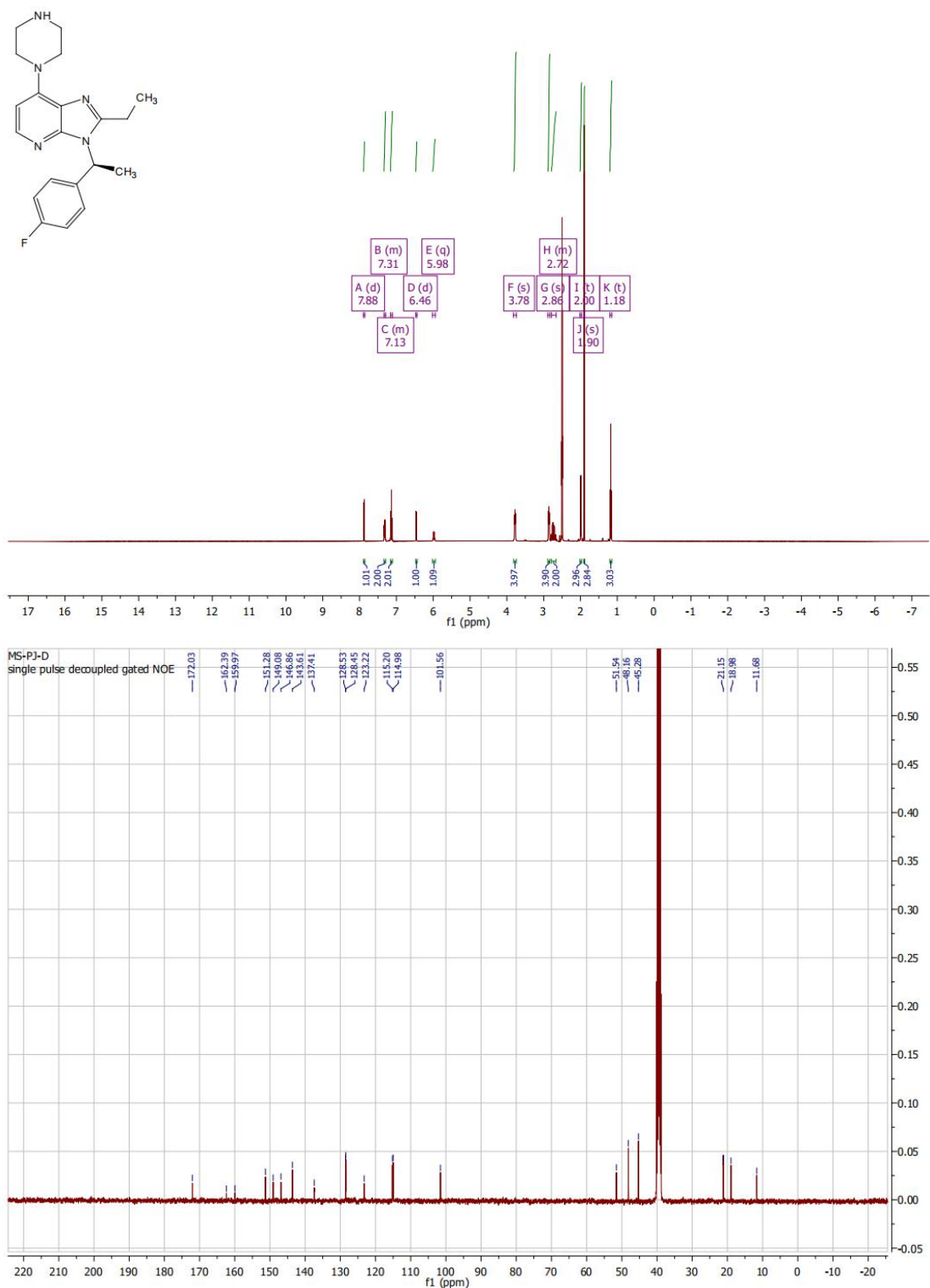


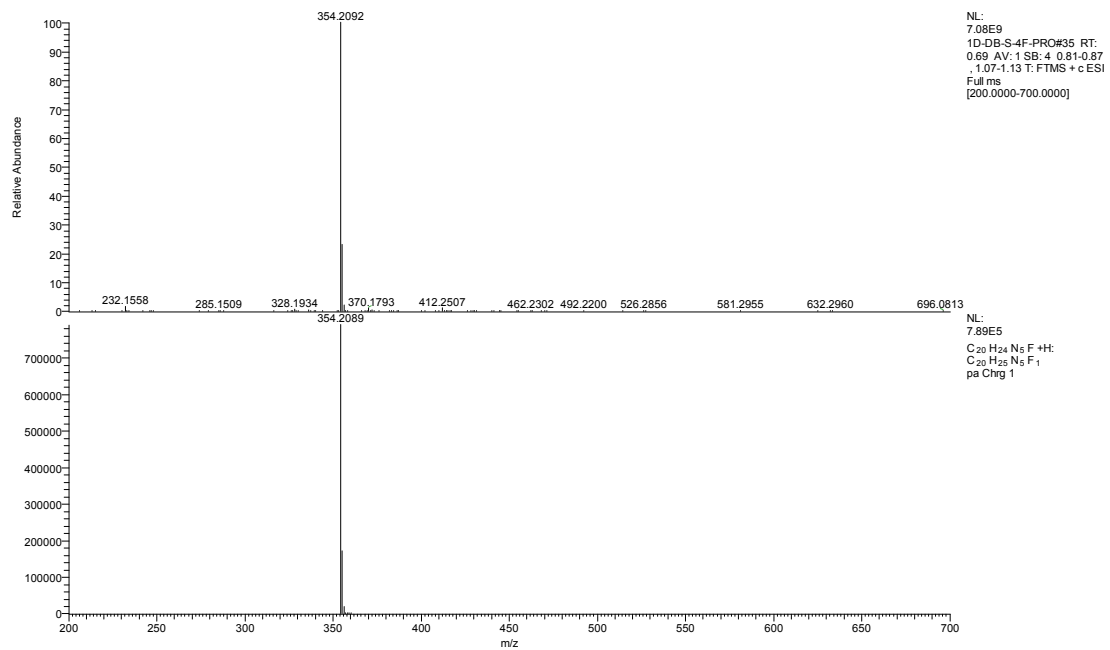


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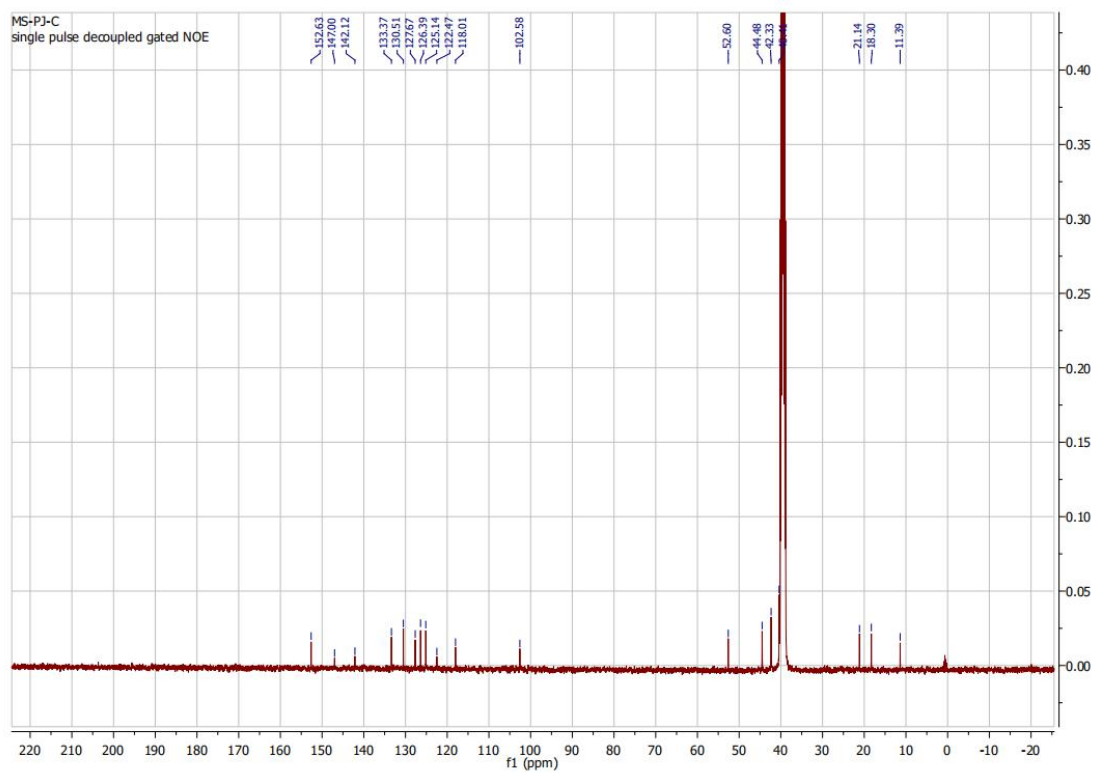
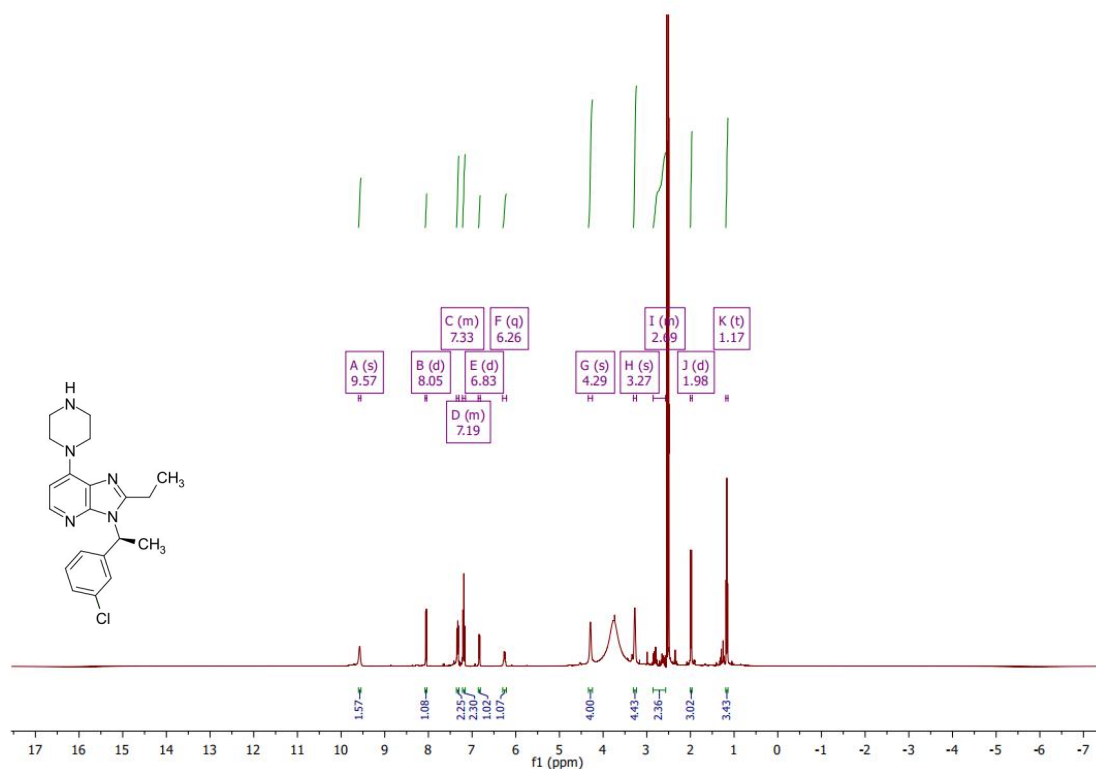
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pa Chrg 1

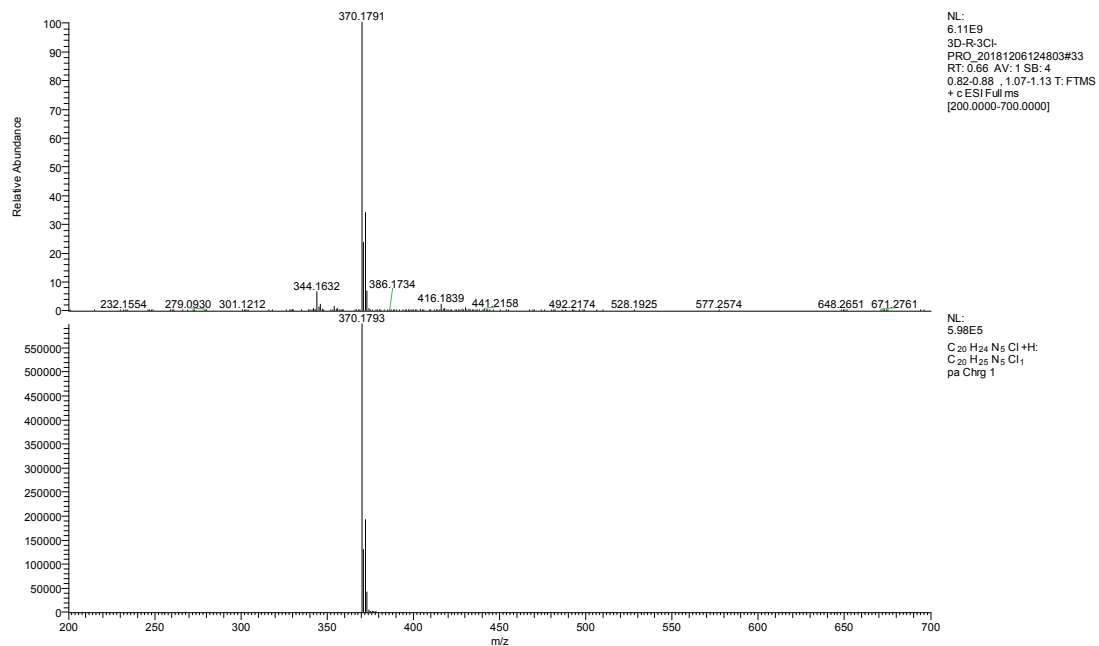
^1H a ^{13}C NMR a HRMS spektrum látky 6(2,I):
1-{2-ethyl-3-[(1R)-1-(4-fluorofenyl)ethyl]-3H-imidazo[4,5-b]pyridin-7-yl}piperazin



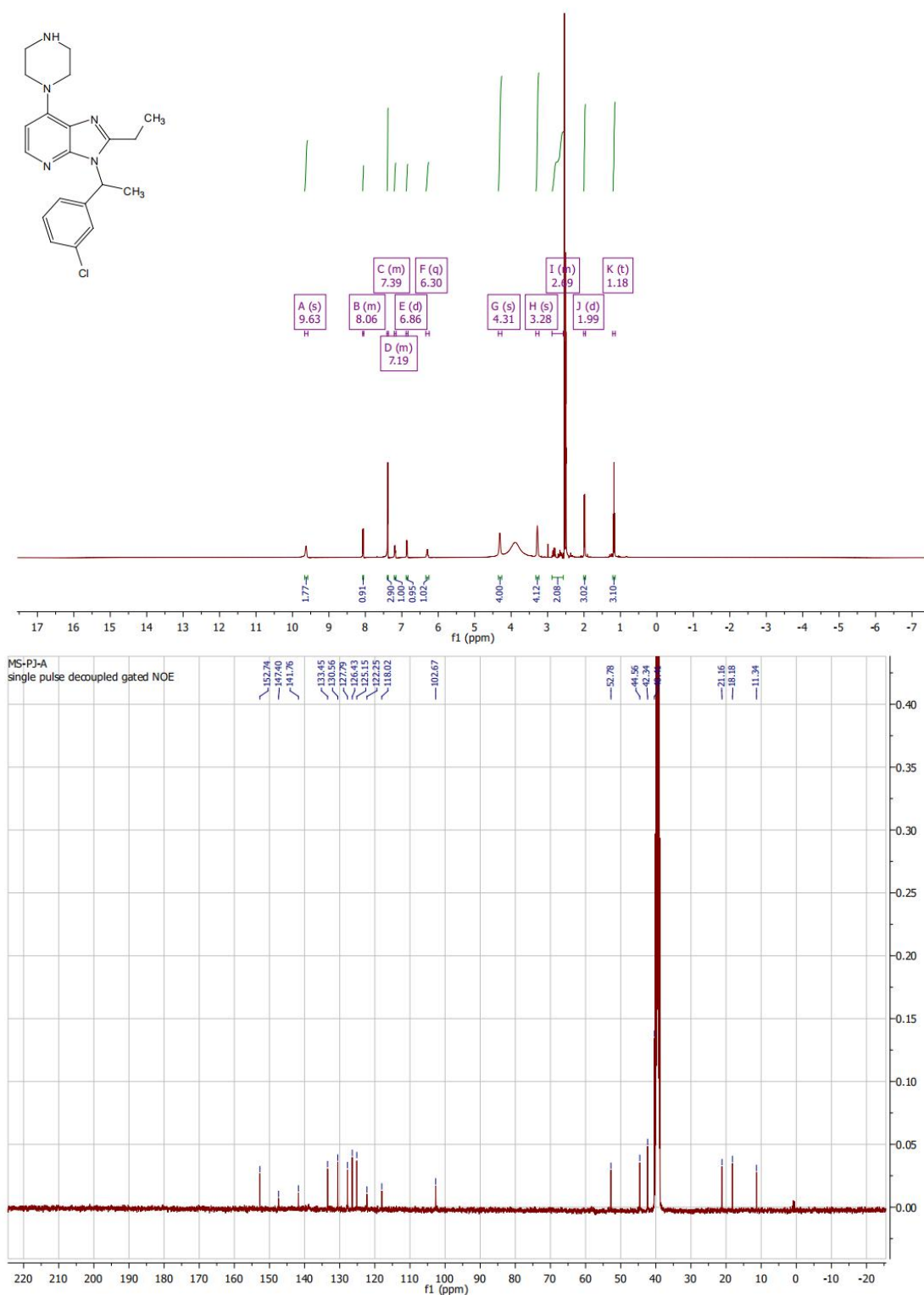


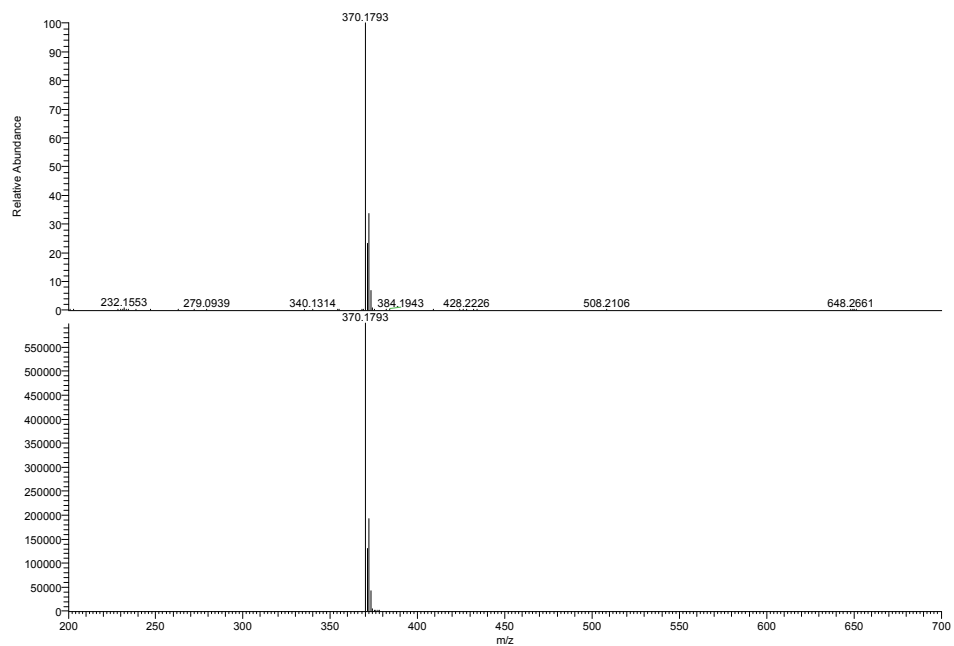
^1H a ^{13}C NMR a HRMS spektrum látky 6(4,I):
1-{3-[(1R)-1-(3-chlorofenyl)ethyl]-2-ethyl-3H-imidazo[4,5-b]pyridin-7-yl}piperazin





^1H a ^{13}C NMR a HRMS spektrum látky 6(5,I):
1-{3-[1-(3-chlorofenyl)ethyl]-2-ethyl-3H-imidazo[4,5-b]pyridin-7-yl}piperazin

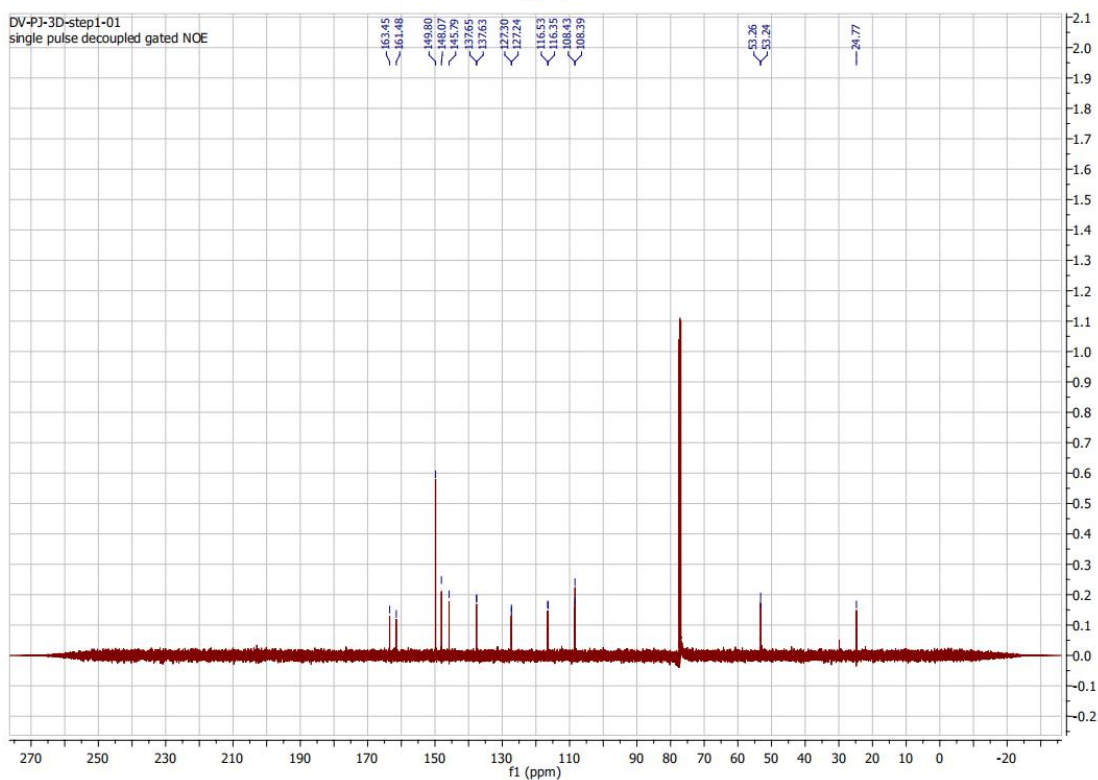
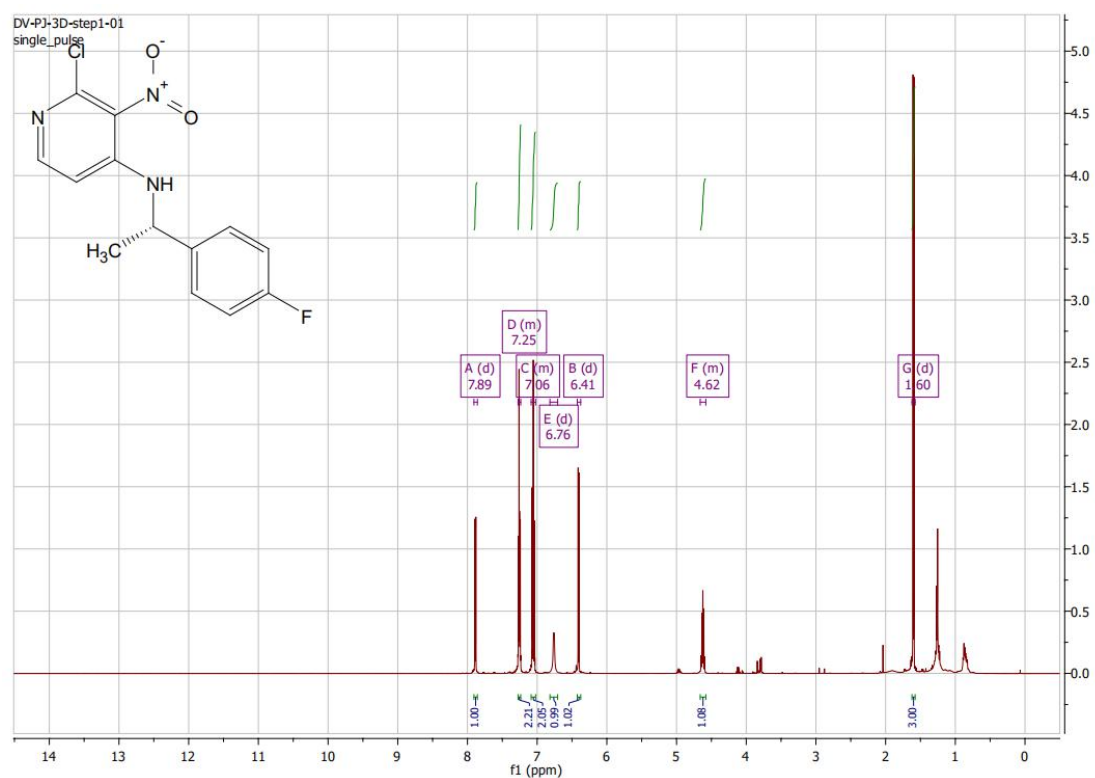




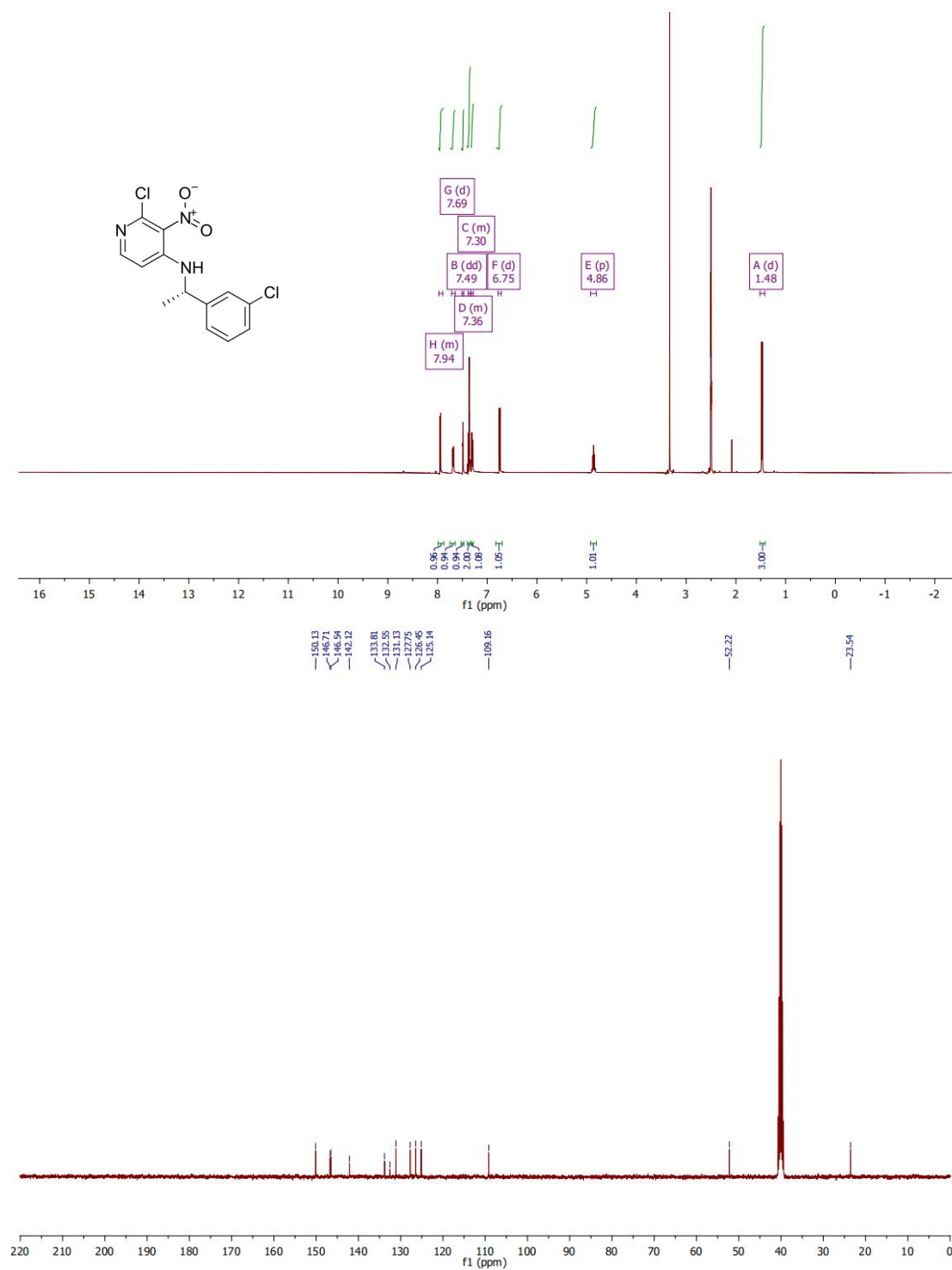
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FTMS + c ESI Full.ms
[200.0000-700.0000]

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pa Chrg 1

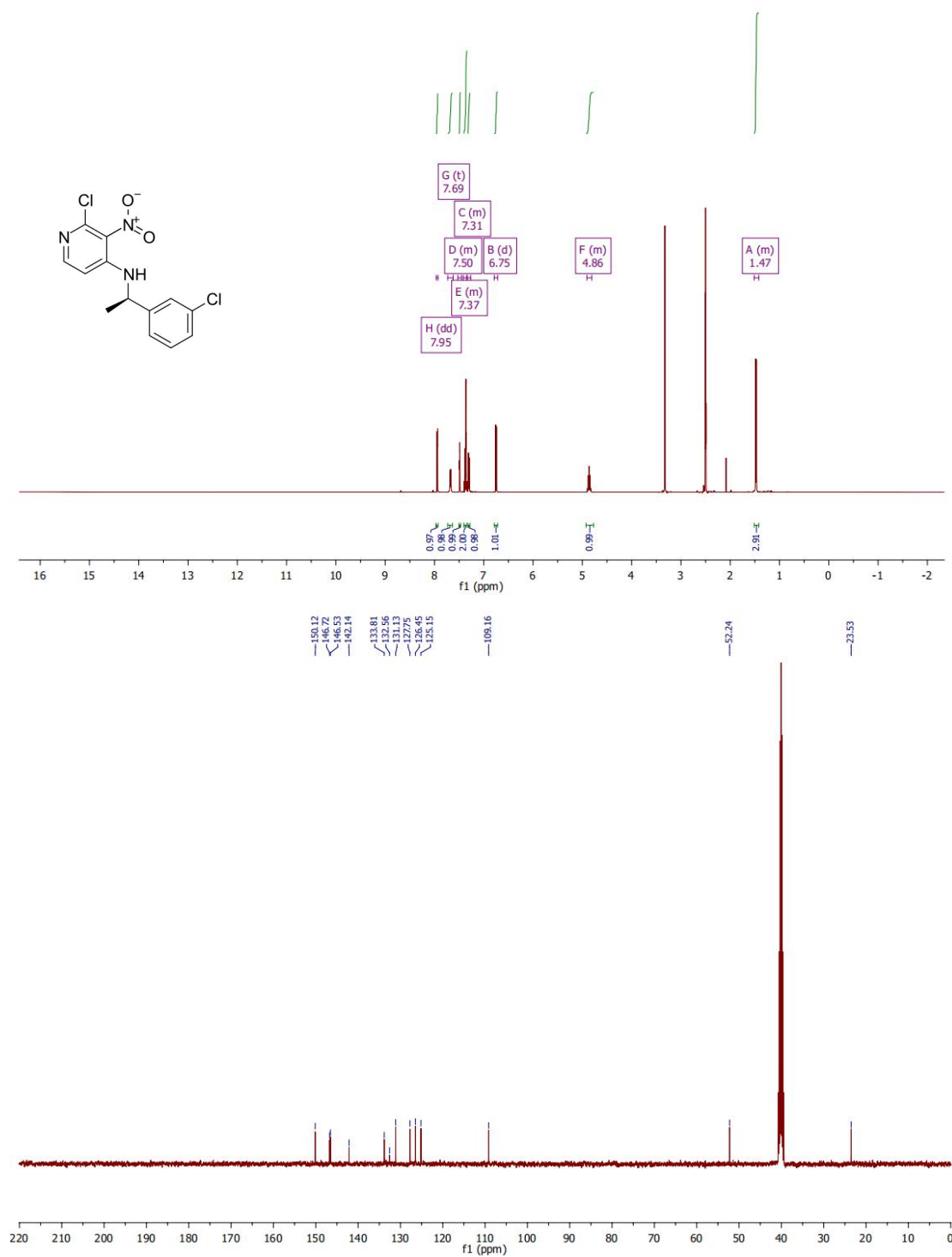
^1H a ^{13}C NMR spektrum látky 7(I):
4-chloro-N-[(1S)-1-(4-fluorofenyl)ethyl]-3-nitropyridin-2-amin



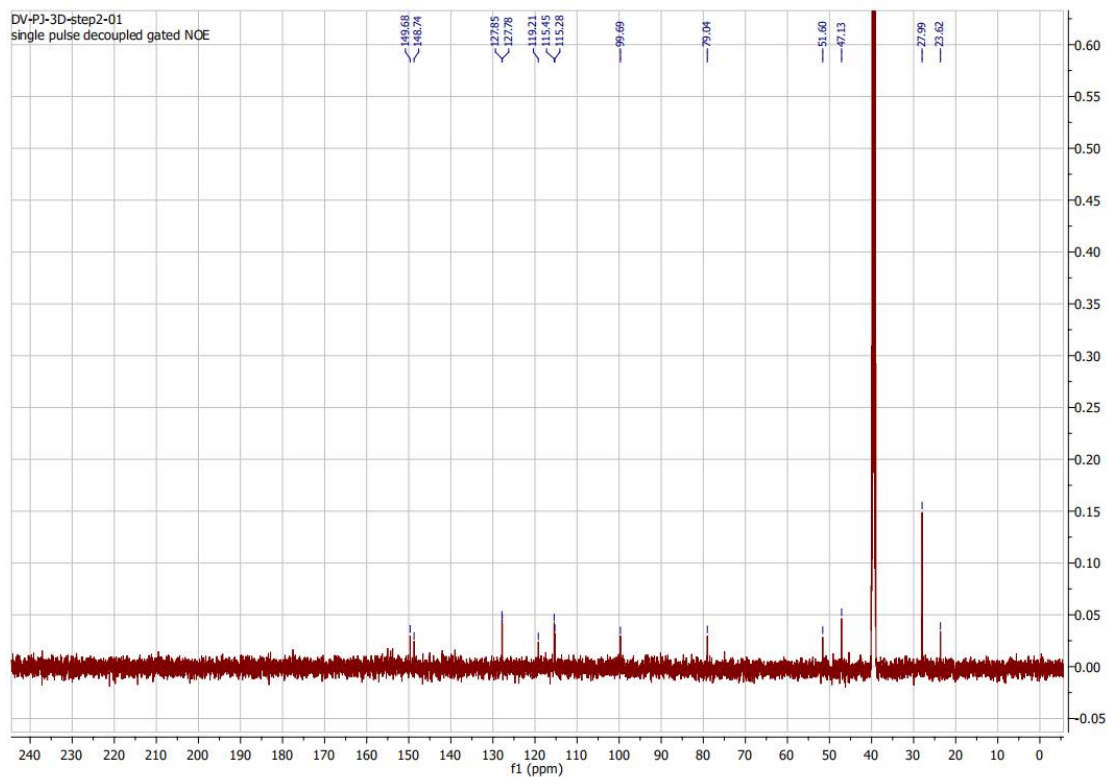
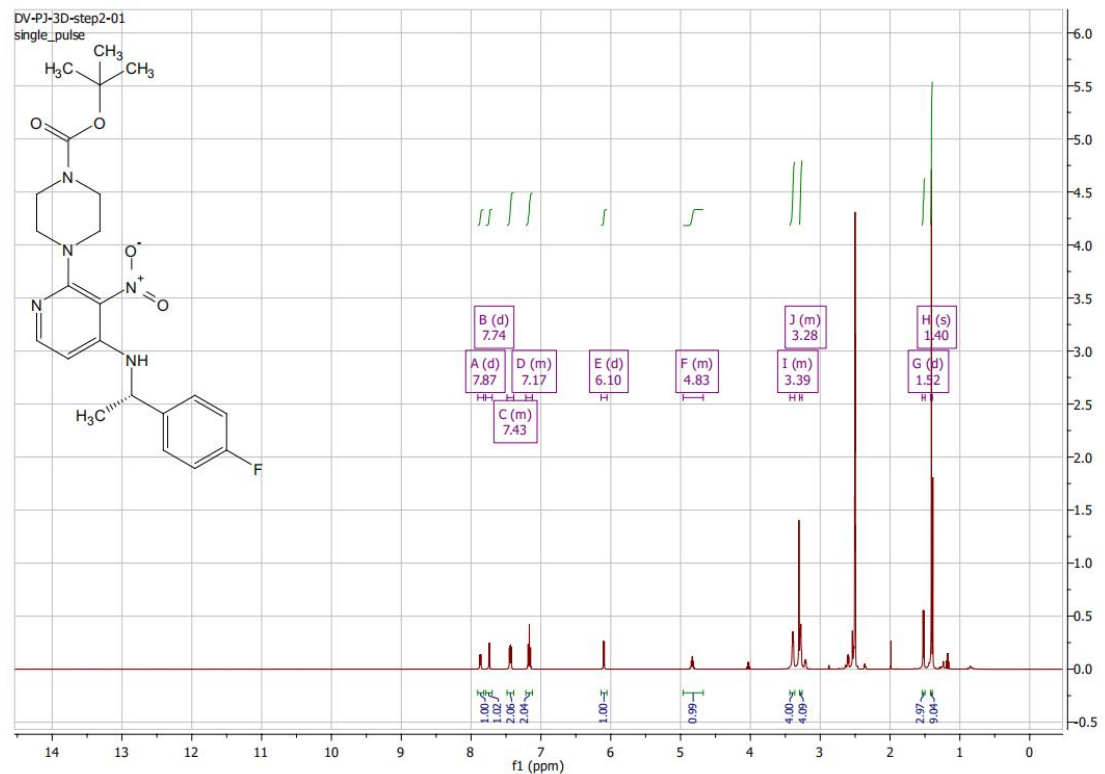
^1H a ^{13}C NMR spektrum látky 7(3):
2-chloro-N-[(1S)-1-(3-chlorofenyl)ethyl]-3-nitropyridin-4-amin



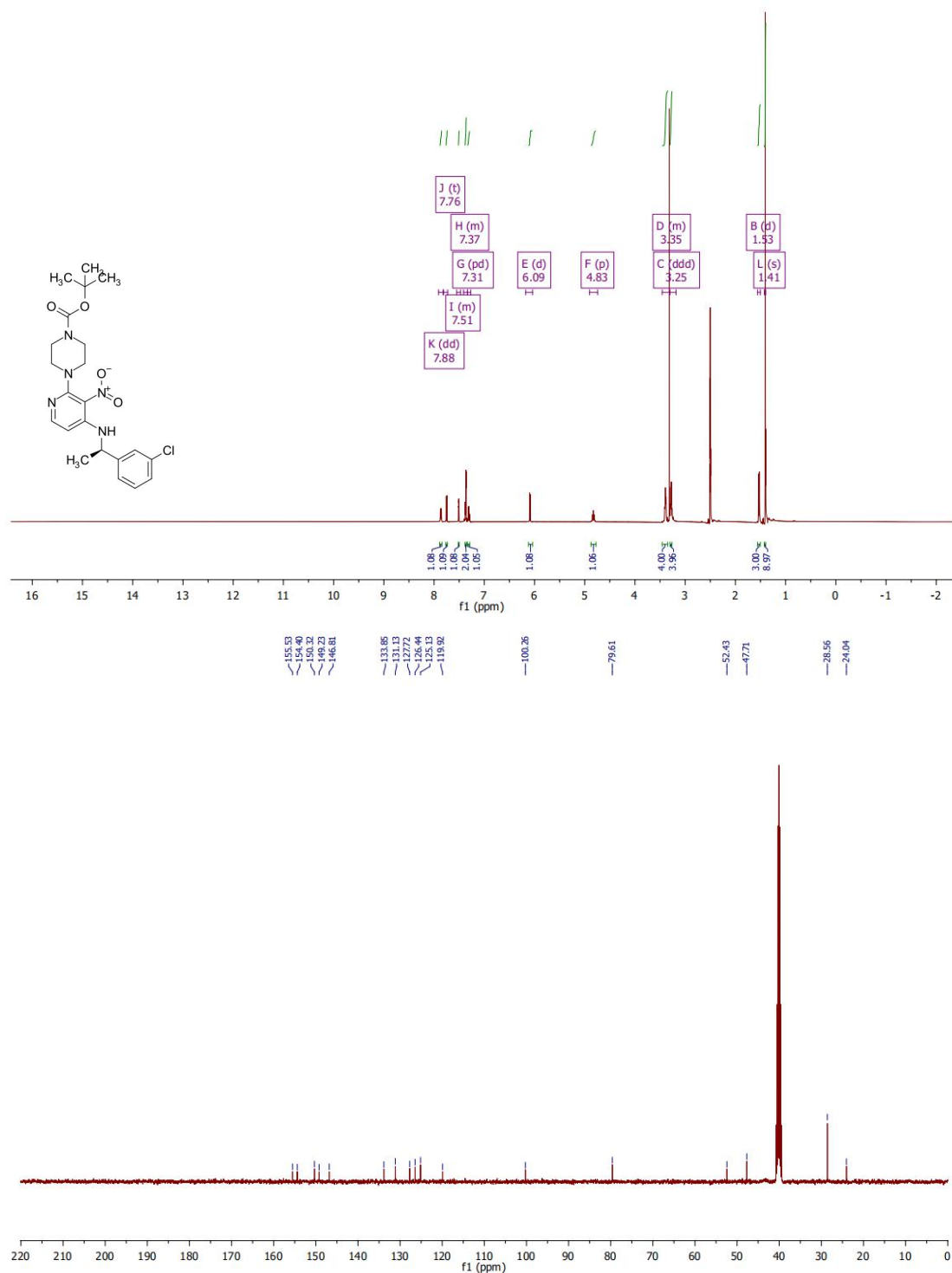
**^1H a ^{13}C NMR spektrum látky 7(4):
2-chloro-N-[(1R)-1-(3-chlorofenyl)ethyl]-3-nitropyridin-4-amin**



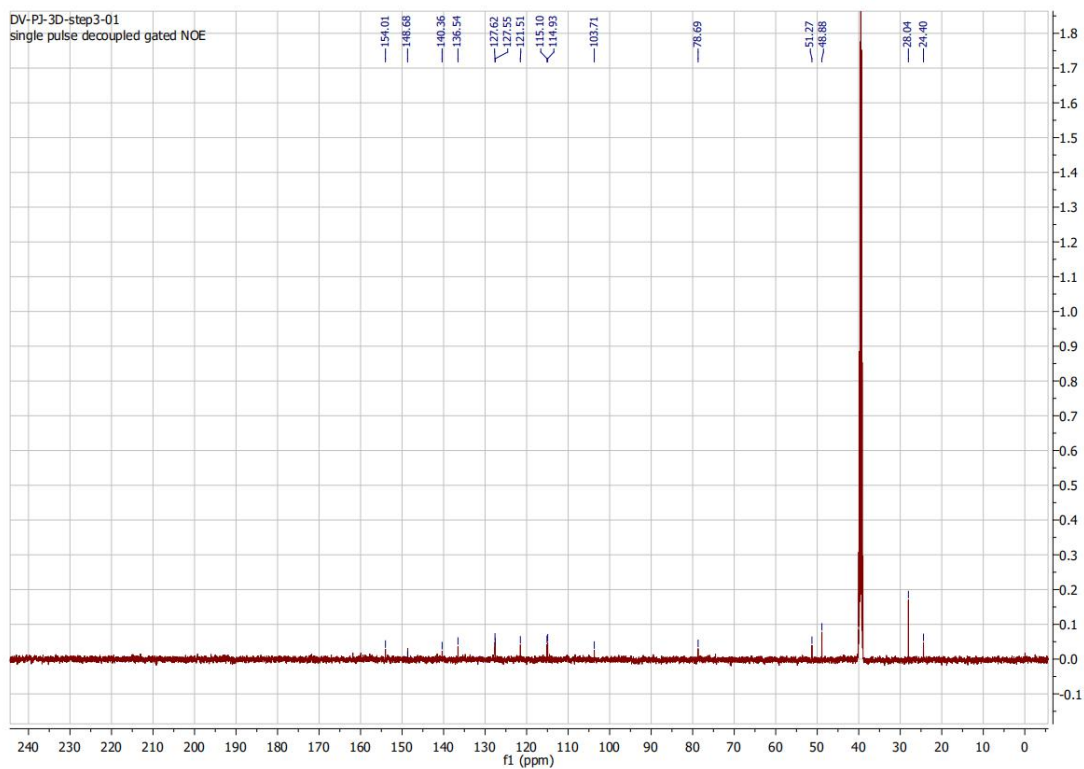
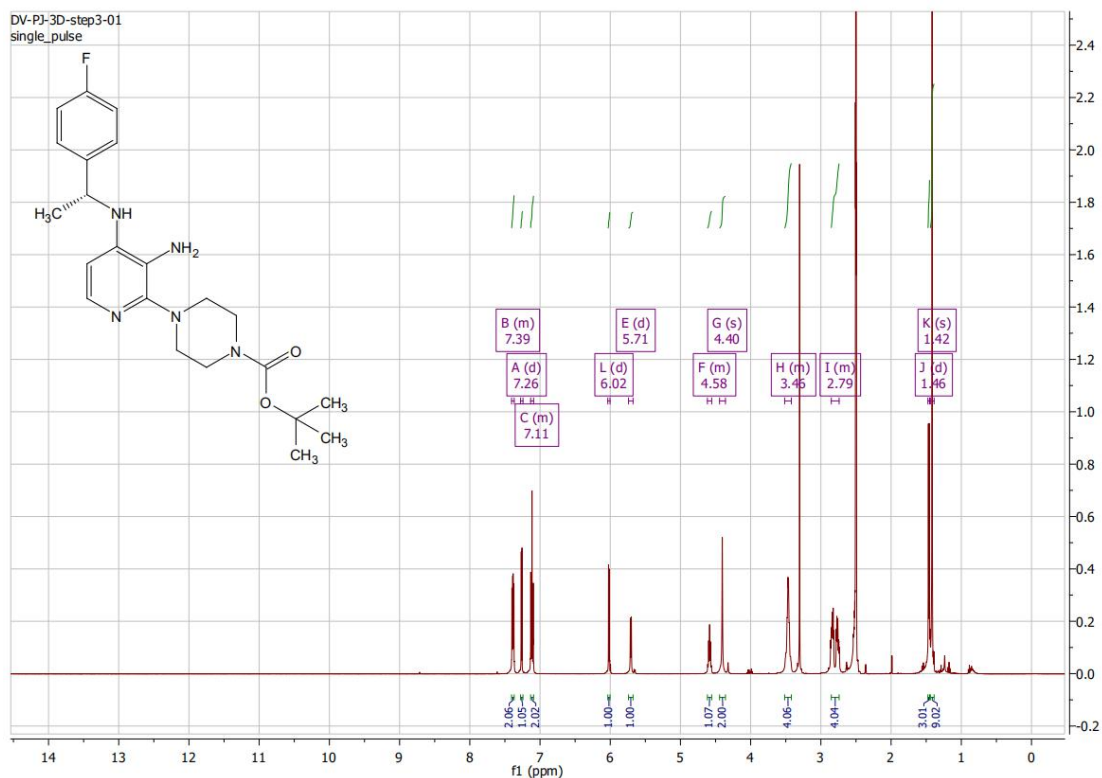
**^1H a ^{13}C NMR spektrum látky 8(I):
tert-butyl-4-(4-{[(1S)-1-(4-fluorofenyl)ethyl]amino}-3-nitropyridin-2-yl)piperazin-1-karboxylát**



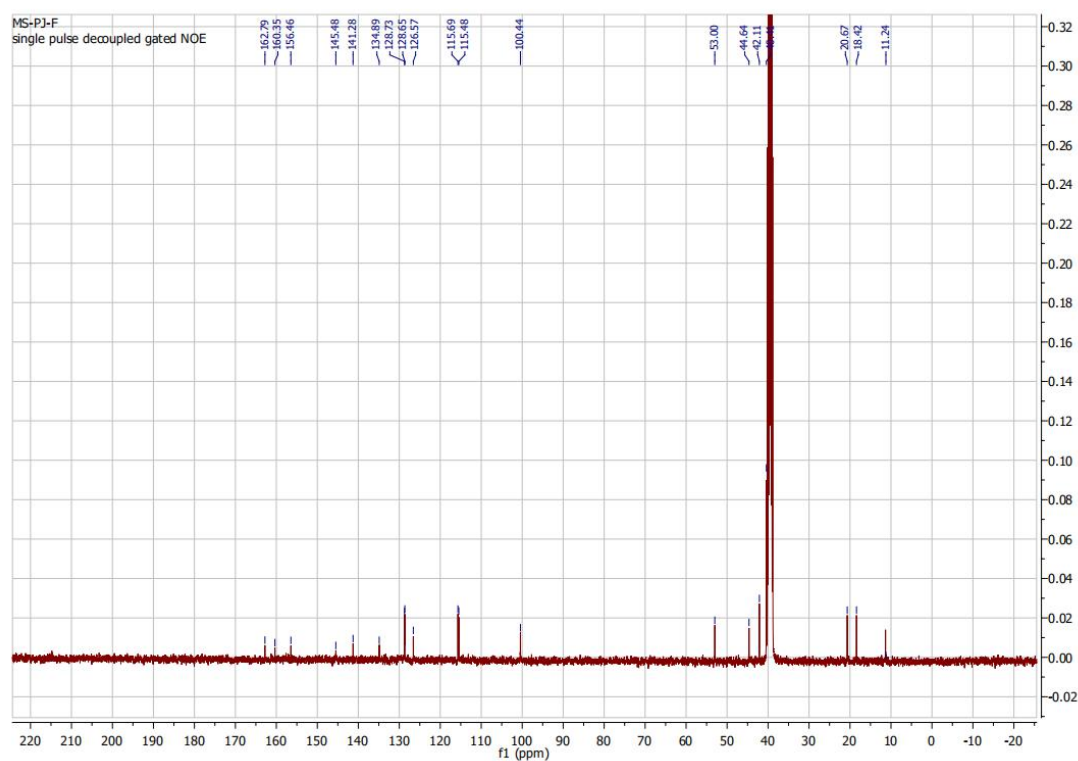
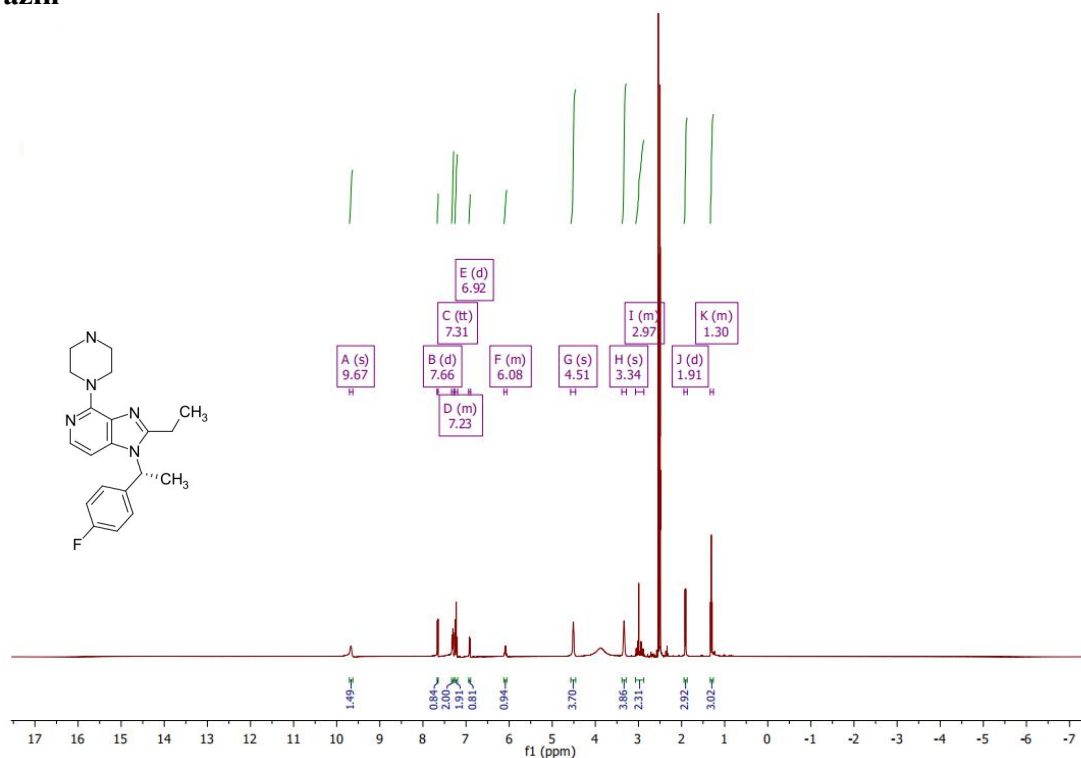
**^1H a ^{13}C NMR spektrum látky 8(4):
tert-butyl-4-(4-{{[(1R)-1-(3-chlorofenyl)ethyl]amino}-3-nitropyridin-2-yl}piperazin-1-karboxylát**

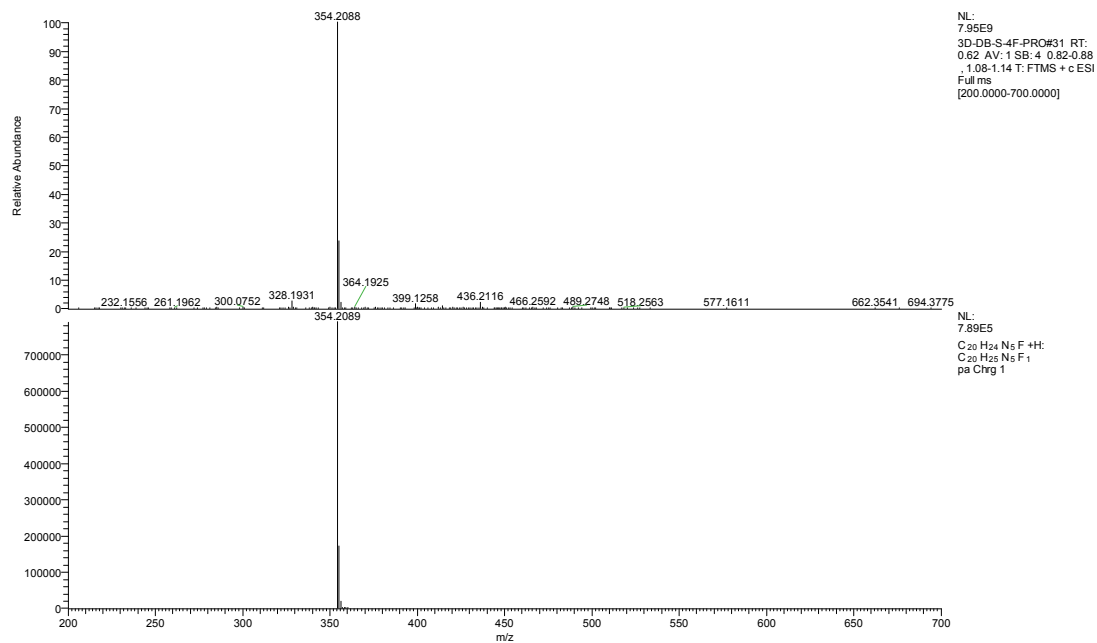


**^1H a ^{13}C NMR spektrum látky 9(I):
tert-butyl-4-(3-amino-4-{[(1S)-1-(4-fluorofenyl)ethyl]amino}pyridin-2-yl)piperazine-1-karboxylát**



^1H a ^{13}C NMR a HRMS spektrum látky 11(I,I):
1-{2-ethyl-1-[(1S)-1-(4-fluorophenyl)ethyl]-1H-imidazo[4,5-c]pyridin-4-yl}piperazin





^1H a ^{13}C NMR a HRMS spektrum látky 11(1,2):
1-{1-[(1S)-1-(4-fluorofenyl)ethyl]-1H-imidazo[4,5-c]pyridin-4-yl}piperazin

