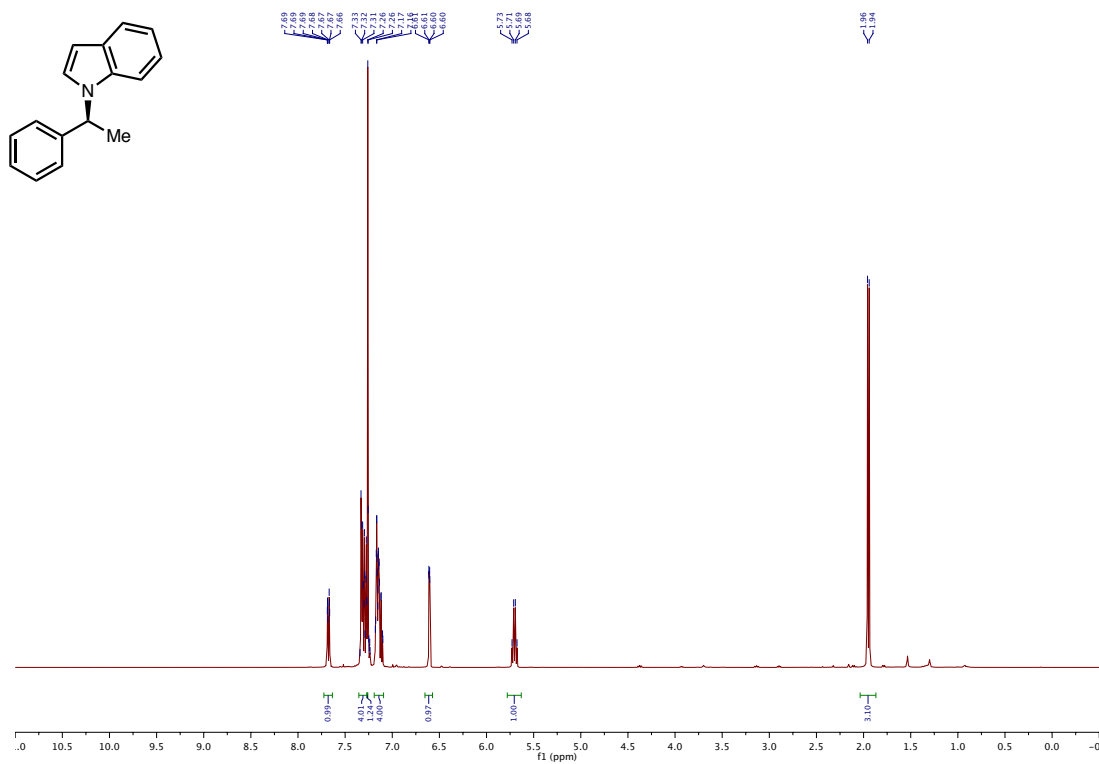


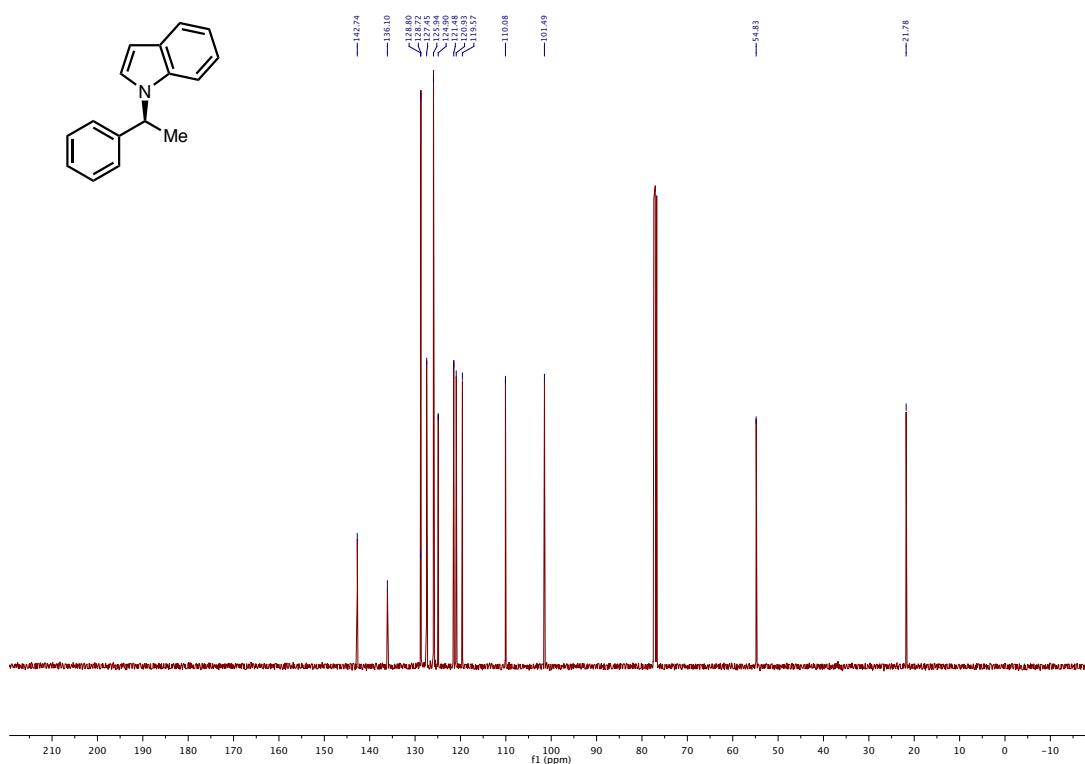
VIII. Spectroscopic Data

(*S*)-1-(1-phenylethyl)-1*H*-indole (3a)

¹H NMR, 400 MHz, CDCl₃

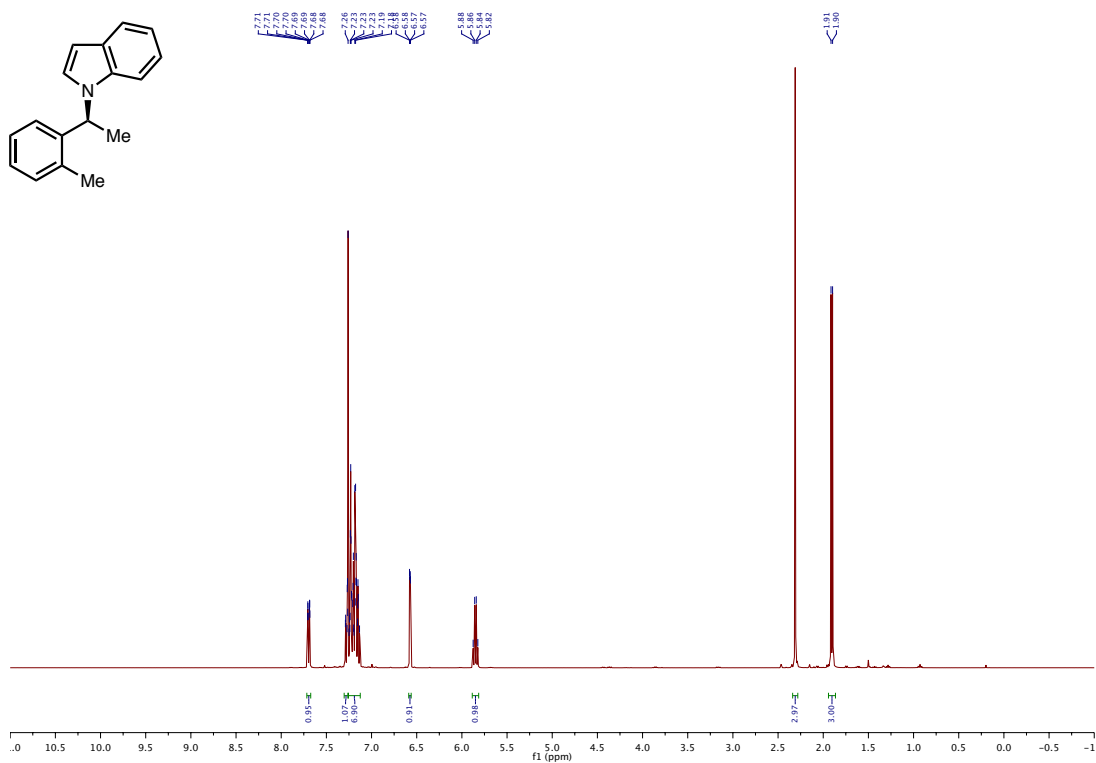


¹³C NMR, 101 MHz, CDCl₃

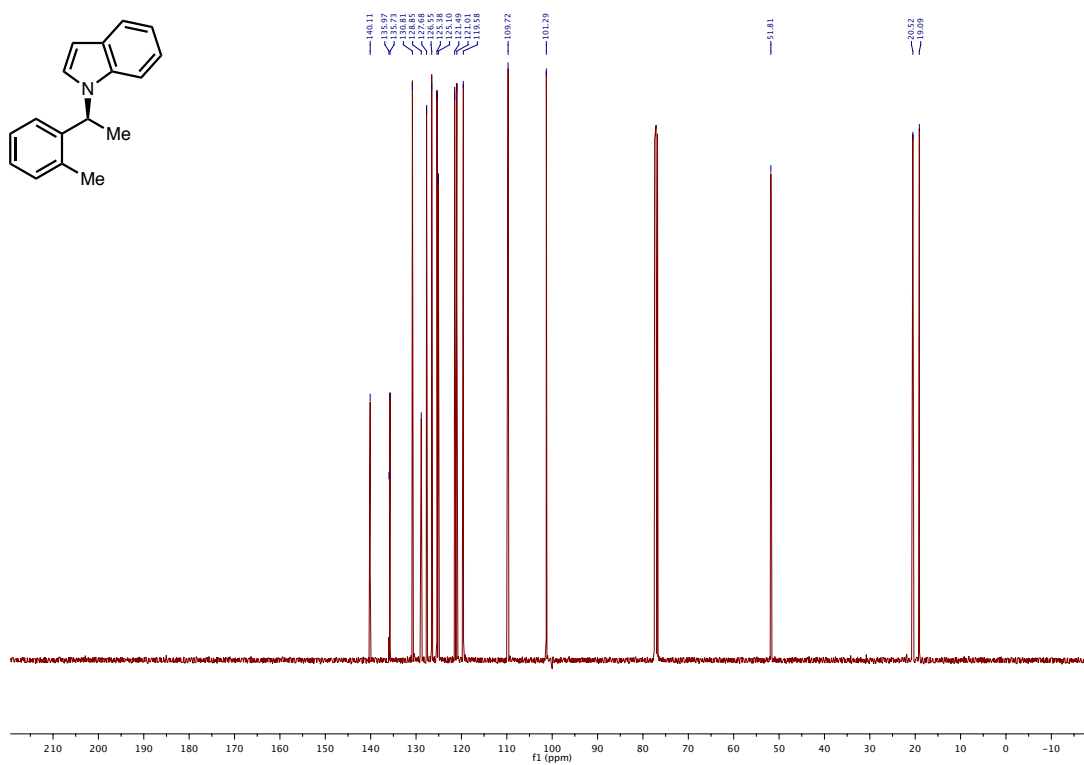


(S)-1-(1-(*o*-tolyl)ethyl)-1*H*-indole (3b)

¹H NMR, 400 MHz, CDCl₃

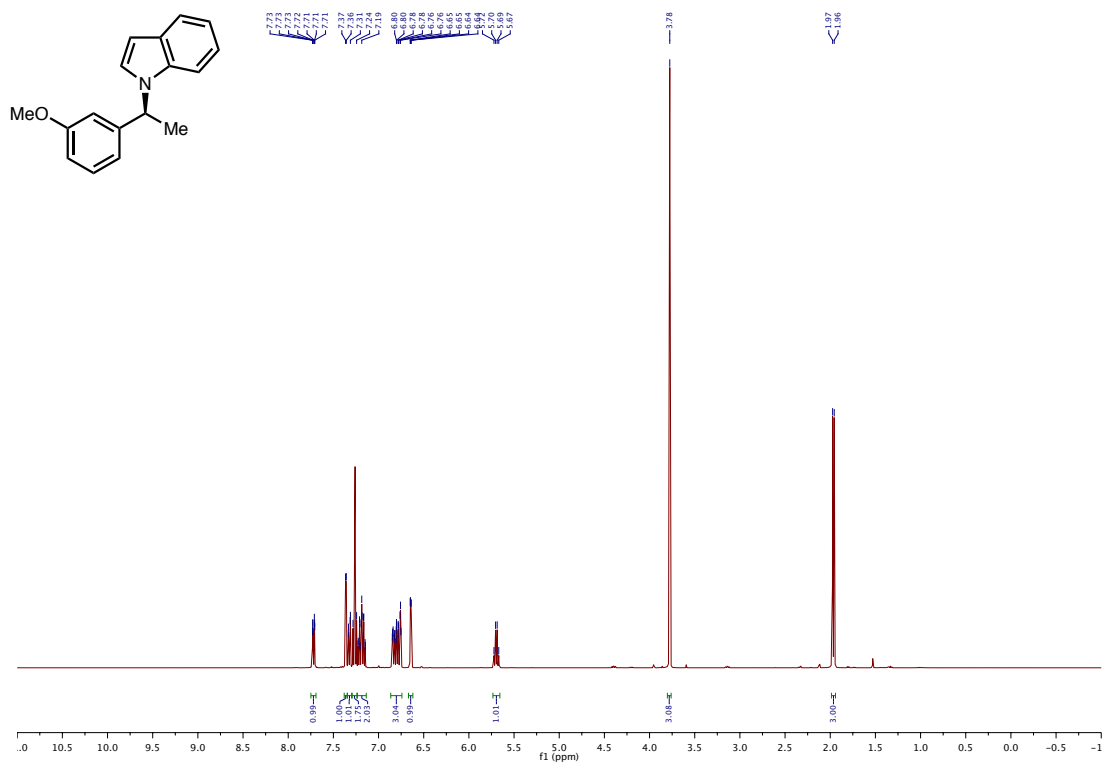


¹³C NMR, 101 MHz, CDCl₃

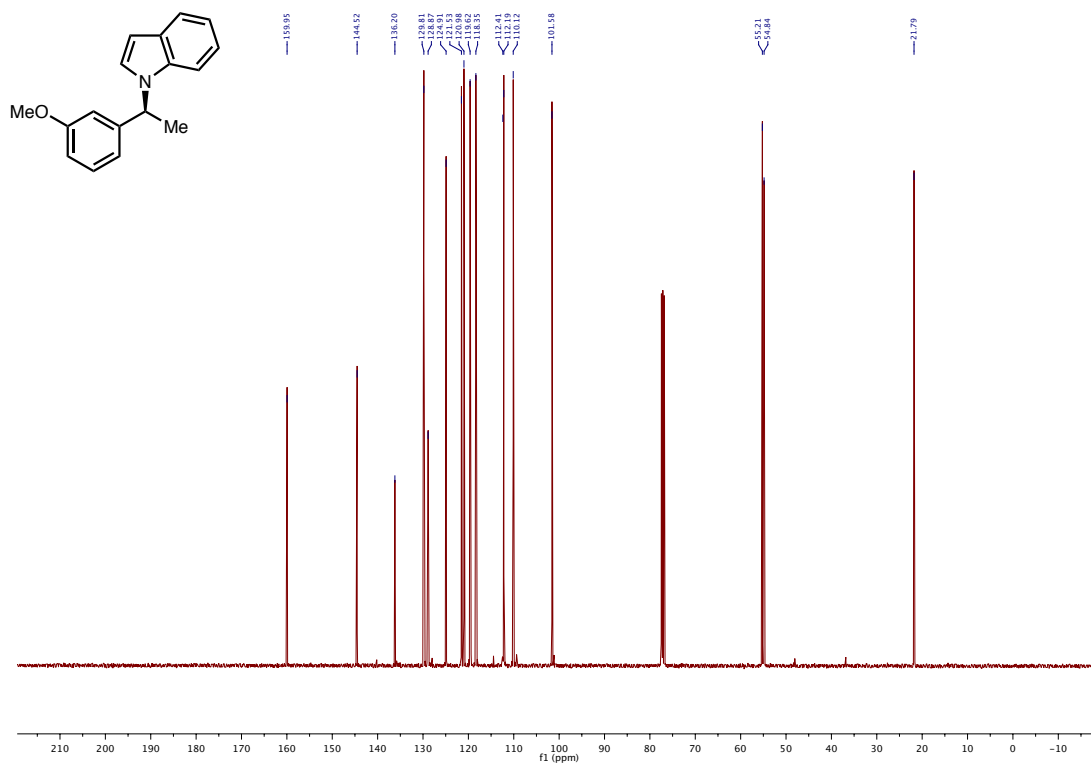


(S)-1-(1-(3-methoxyphenyl)ethyl)-1H-indole (3c)

^1H NMR, 400 MHz, CDCl_3

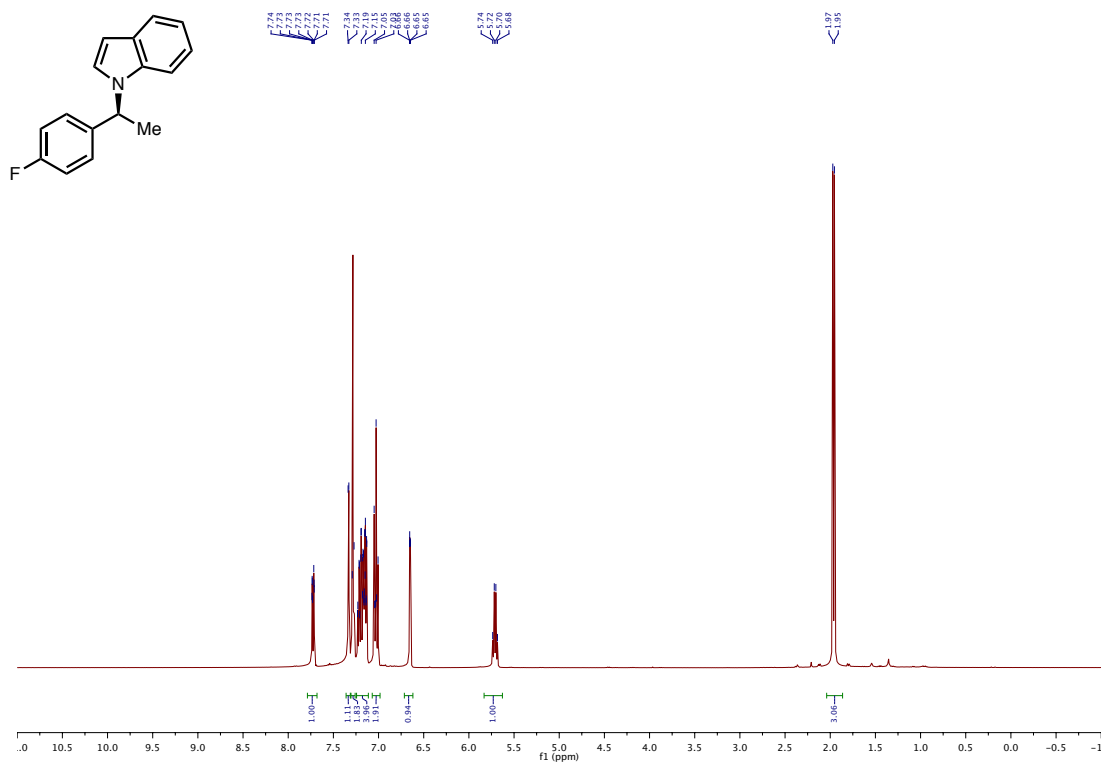


^{13}C NMR, 101 MHz, CDCl_3

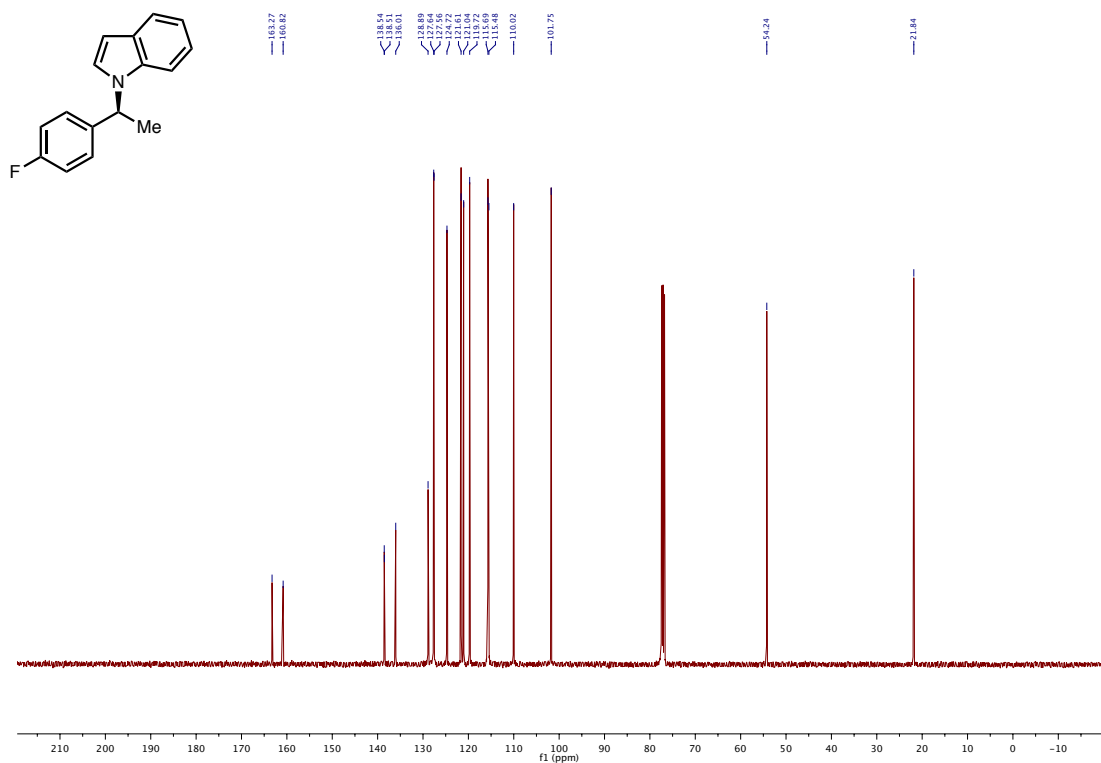


(S)-1-(1-(4-fluorophenyl)ethyl)-1H-indole (3e)

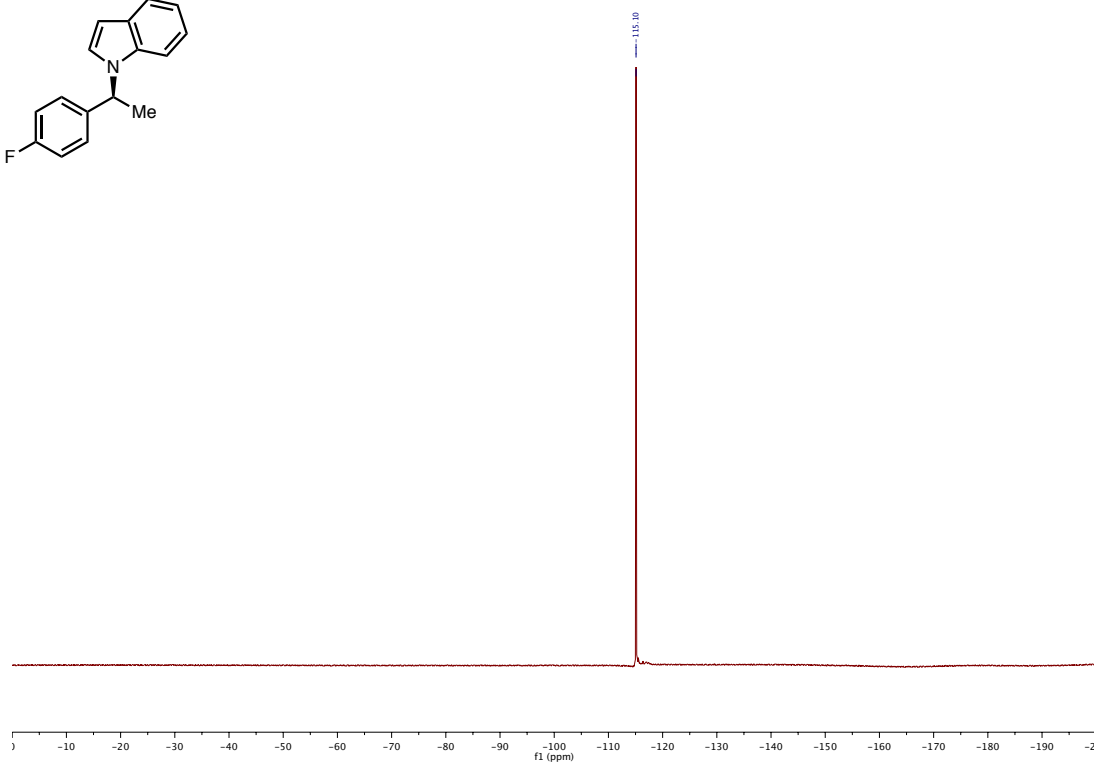
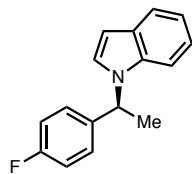
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

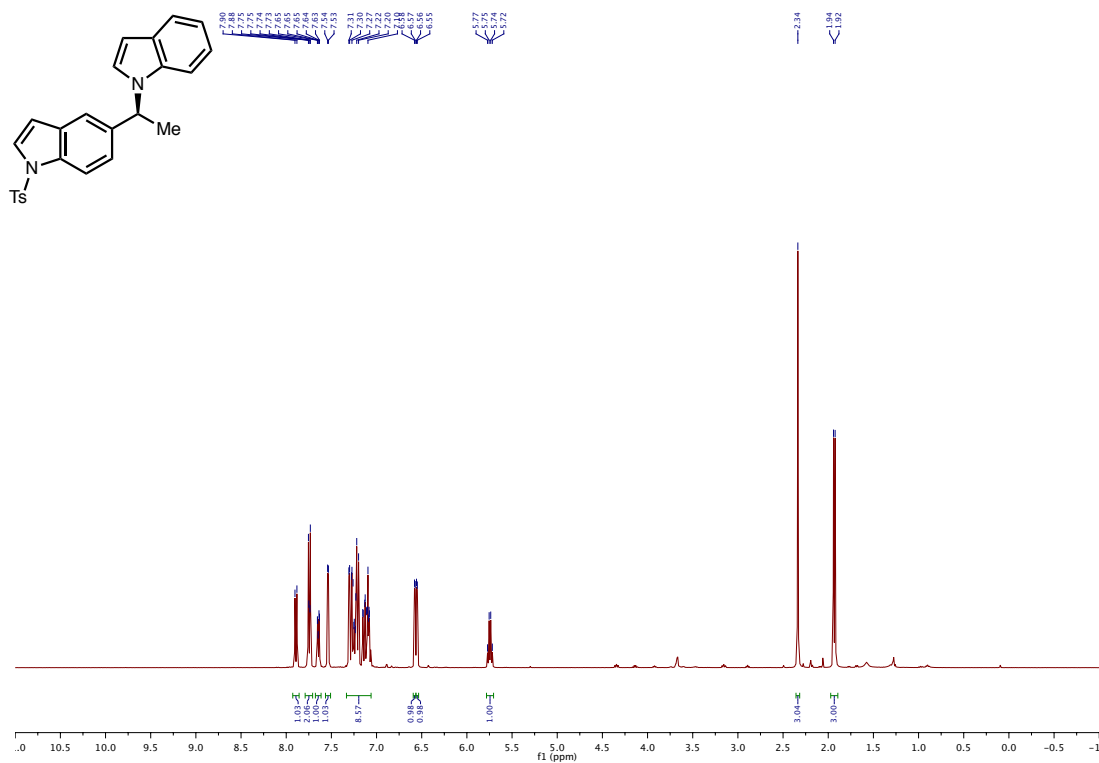


^{19}F NMR, 376 MHz, CDCl_3

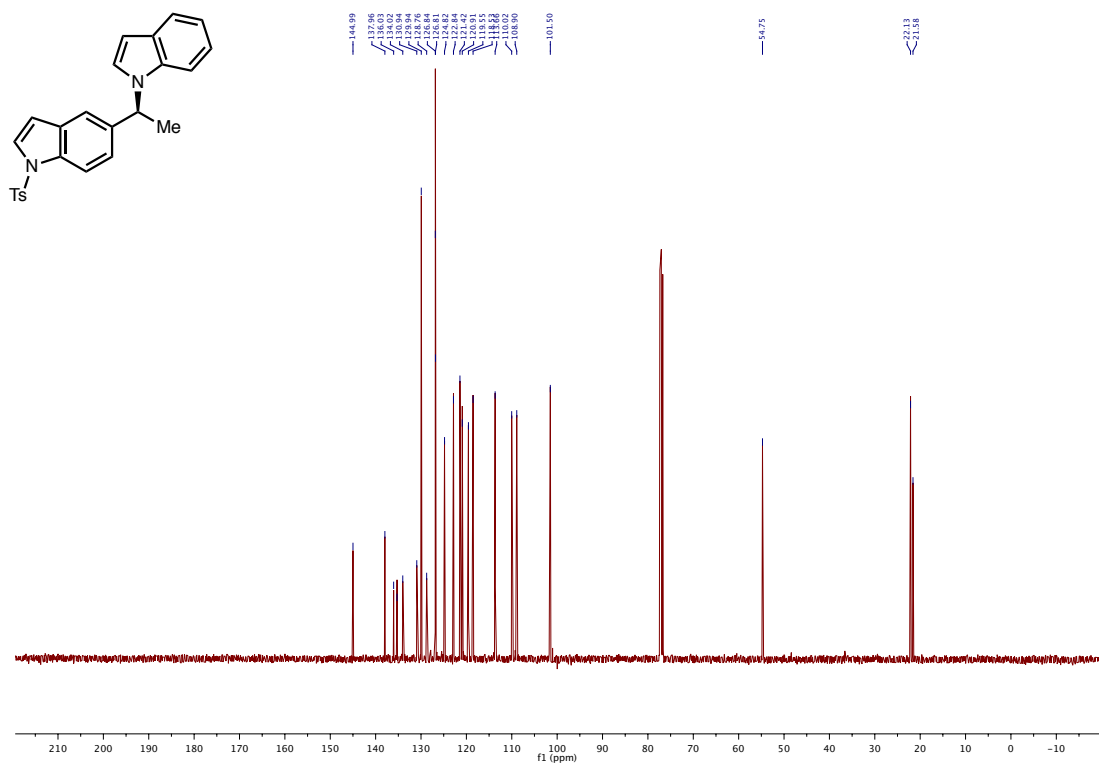


(S)-5-(1-(1*H*-indol-1-yl)ethyl)-1-tosyl-1*H*-indole (3f)

¹H NMR, 400 MHz, CDCl₃

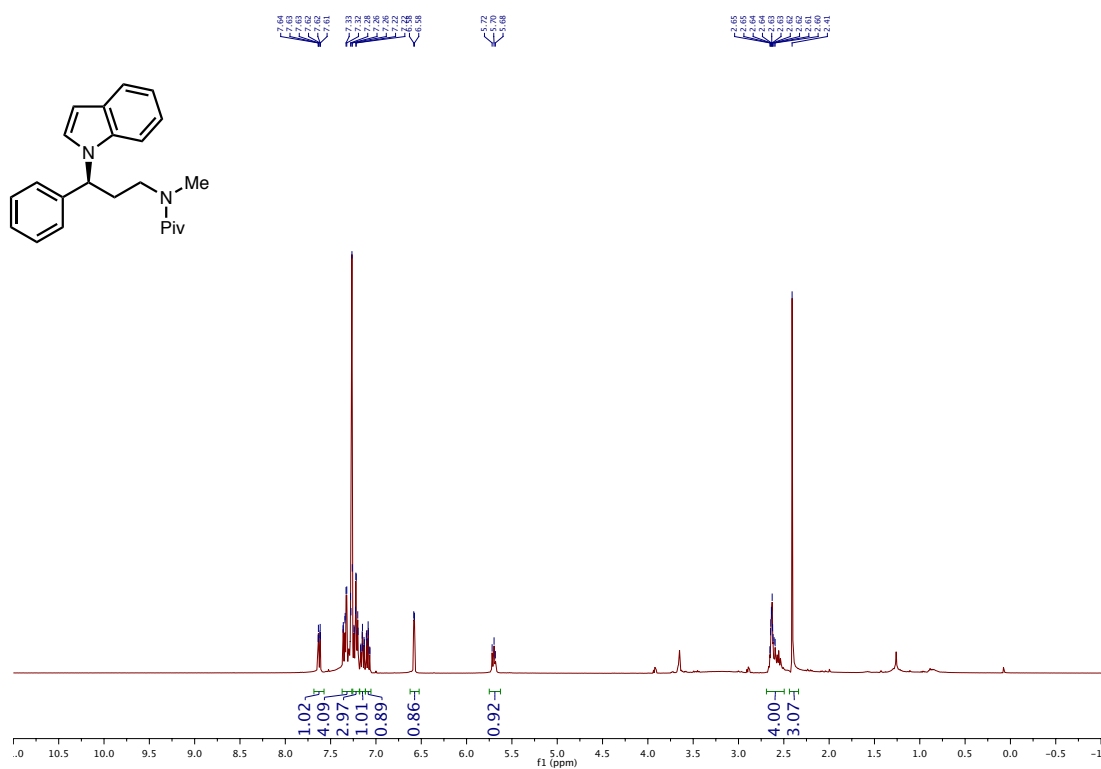


¹³C NMR, 101 MHz, CDCl₃

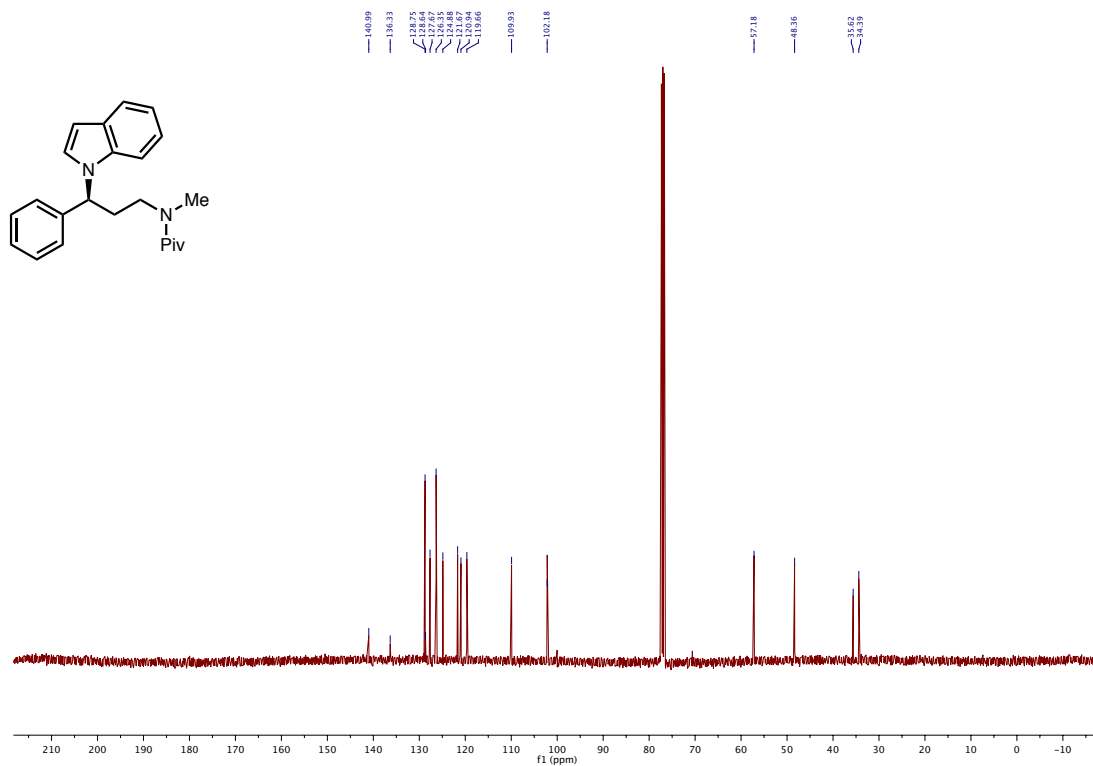


(S)-N-(3-(1*H*-indol-1-yl)-3-phenylpropyl)-*N*-methylpivalamide (3h)

¹H NMR, 400 MHz, CDCl₃



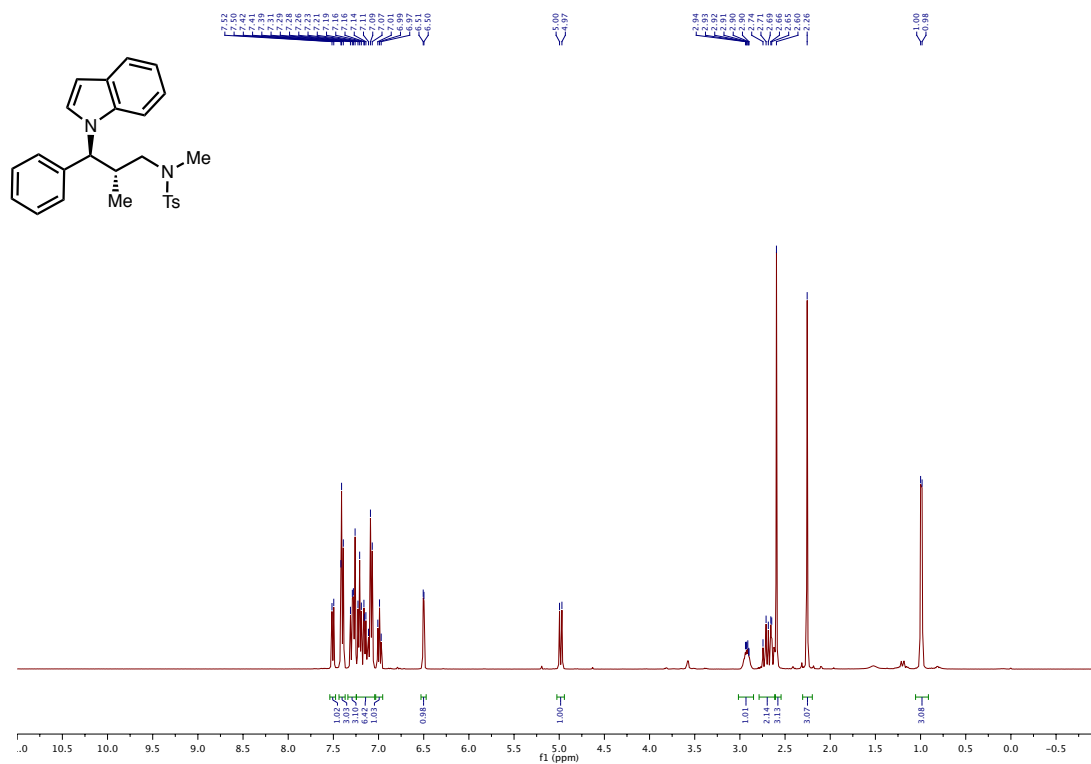
¹³C NMR, 101 MHz, CDCl₃



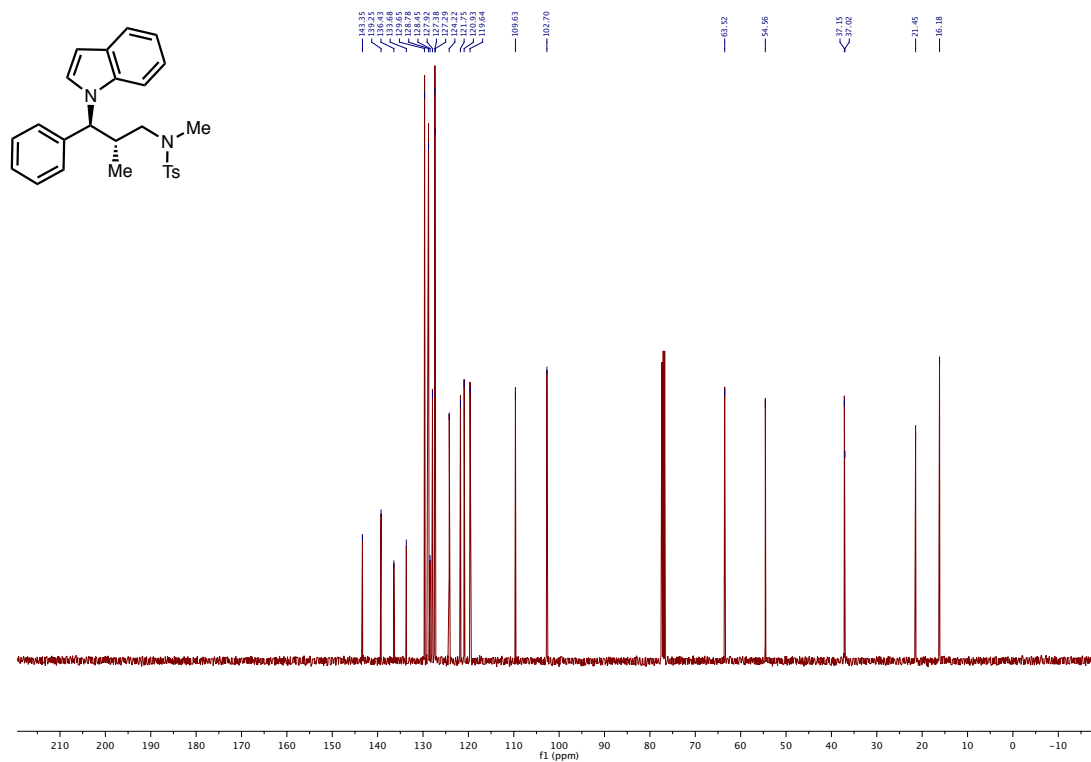
***N*-((2*S*,3*S*)-3-(1*H*-indol-1-yl)-2-methyl-3-phenylpropyl)-*N*,4-dimethylbenzenesulfonamide**

(3i)

¹H NMR, 400 MHz, CDCl₃

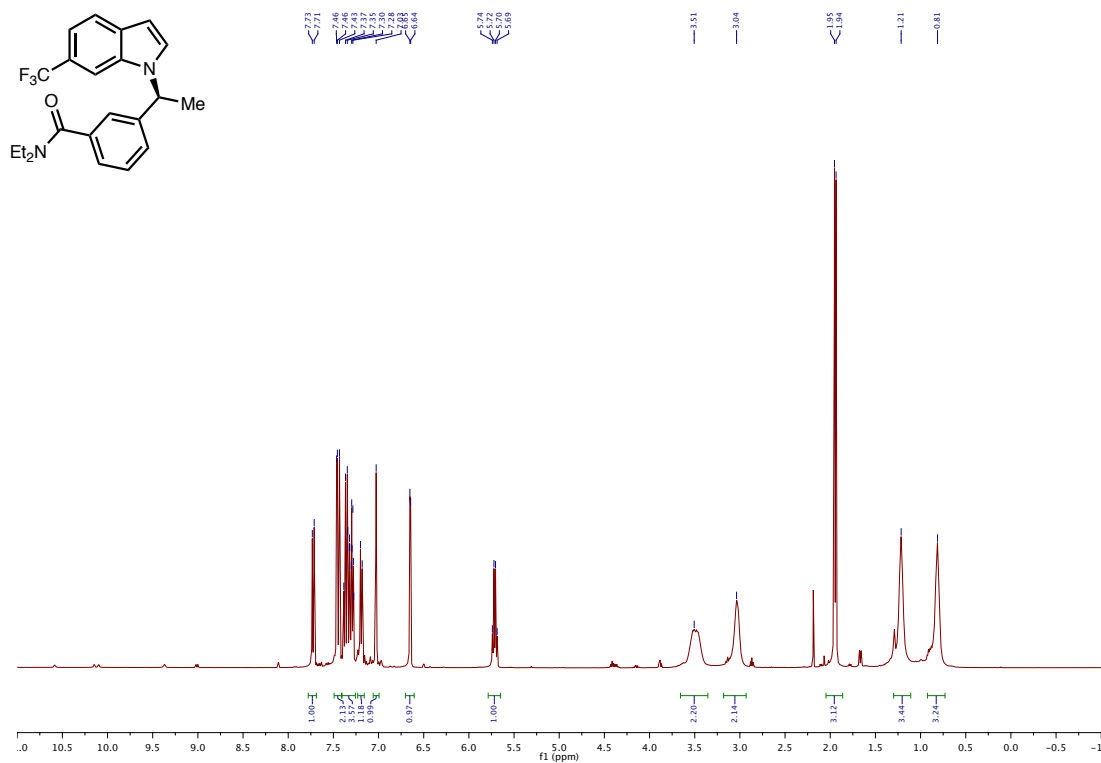


¹³C NMR, 101 MHz, CDCl₃

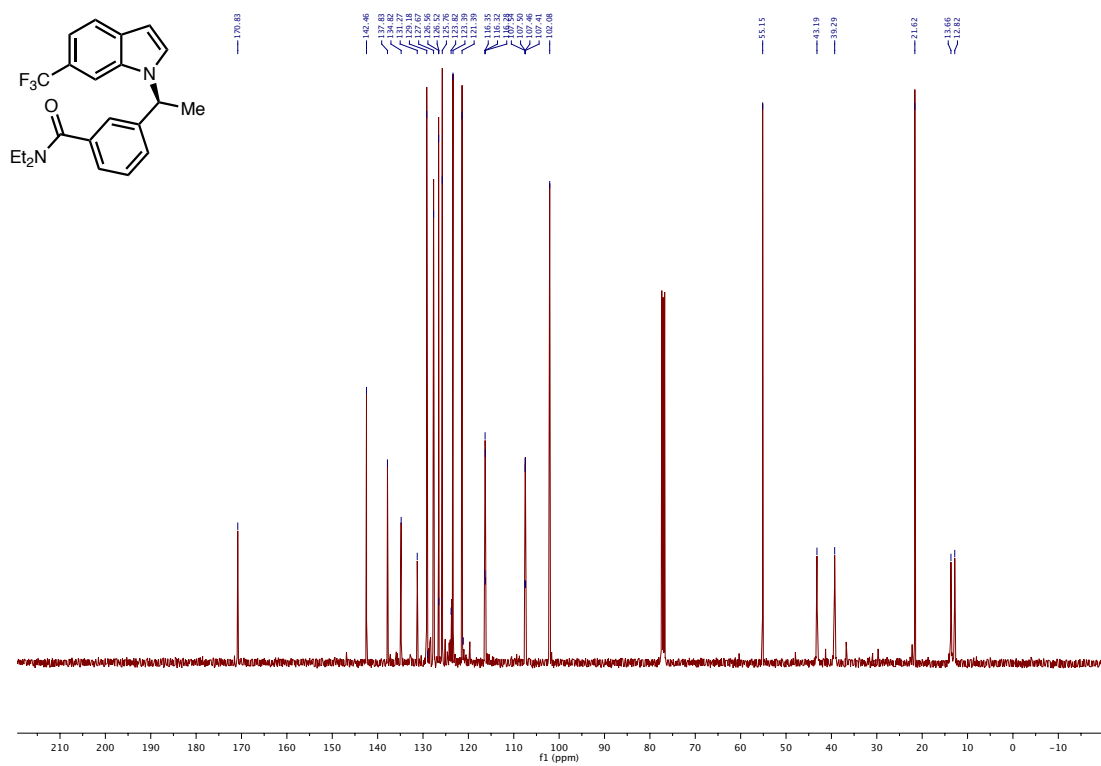


(S)-N,N-diethyl-3-(1-(6-(trifluoromethyl)-1H-indol-1-yl)ethyl)benzamide (3j)

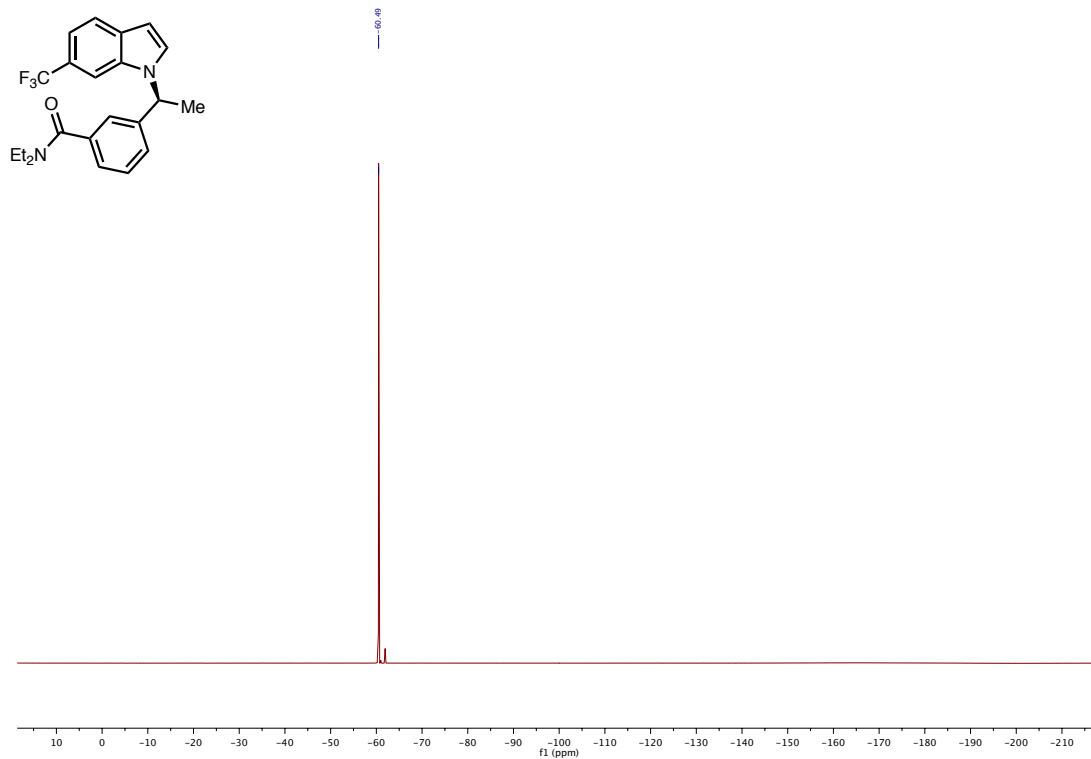
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

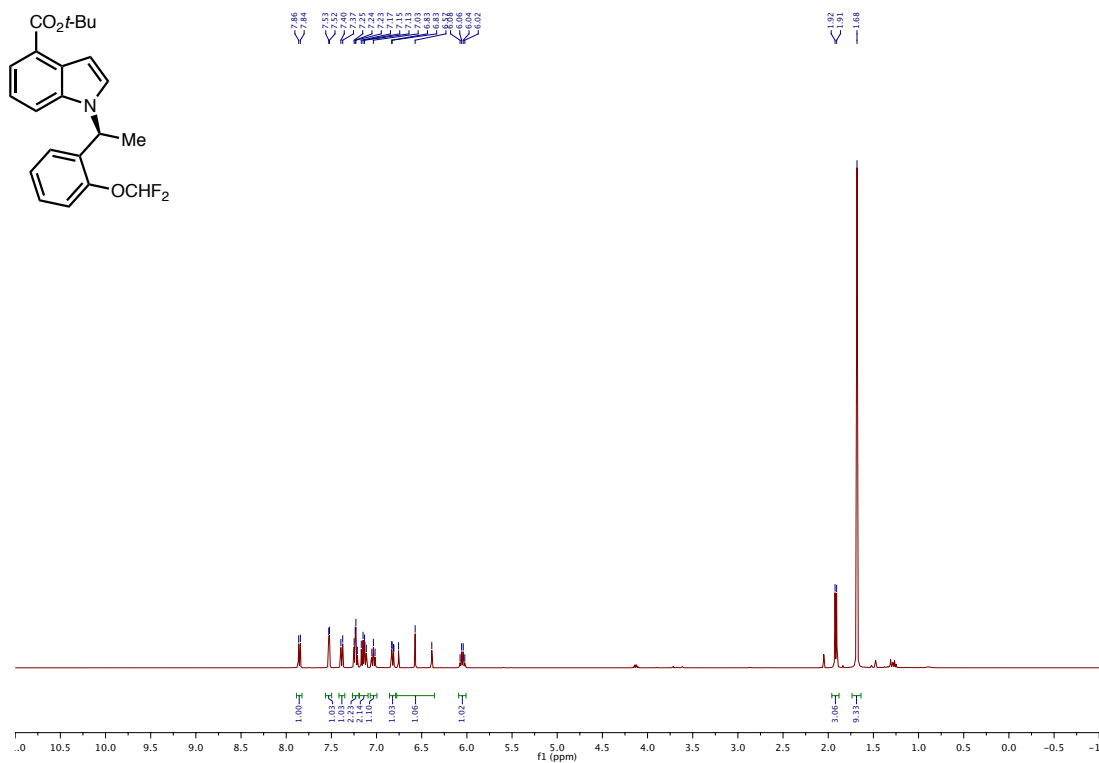


^{19}F NMR, 376 MHz, CDCl_3

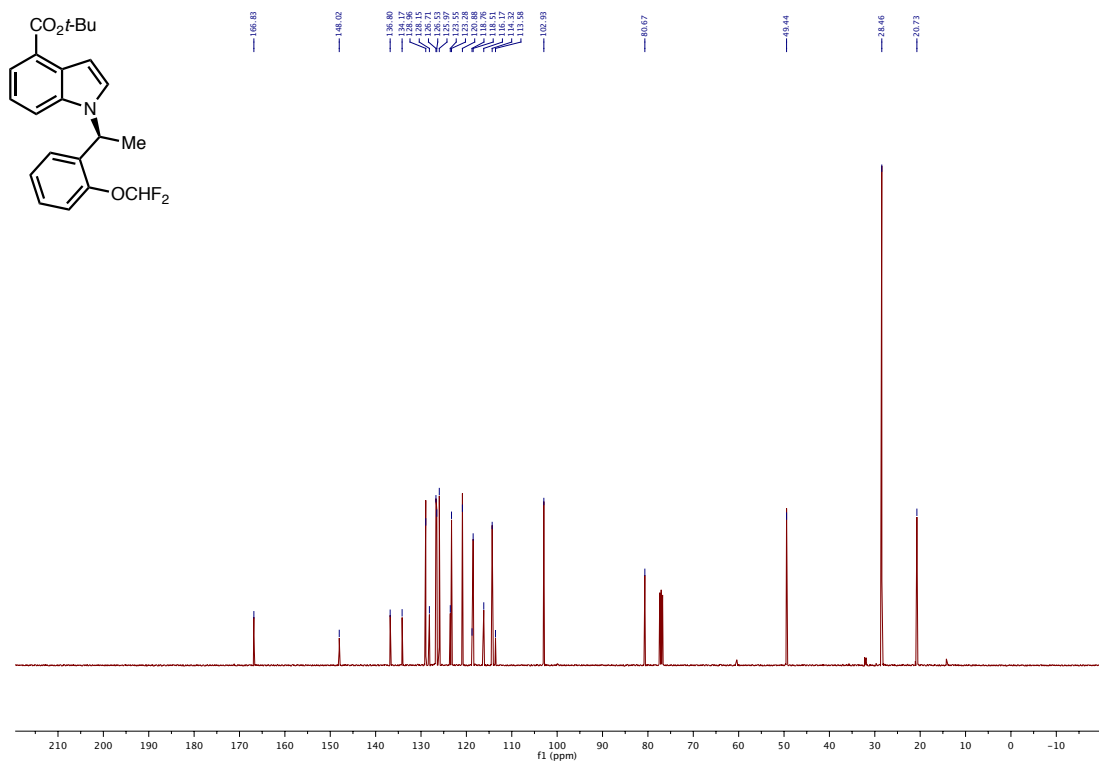


***tert*-butyl (*S*)-1-(1-(2-(difluoromethoxy)phenyl)ethyl)-1*H*-indole-4-carboxylate (3k)**

¹H NMR, 400 MHz, CDCl₃

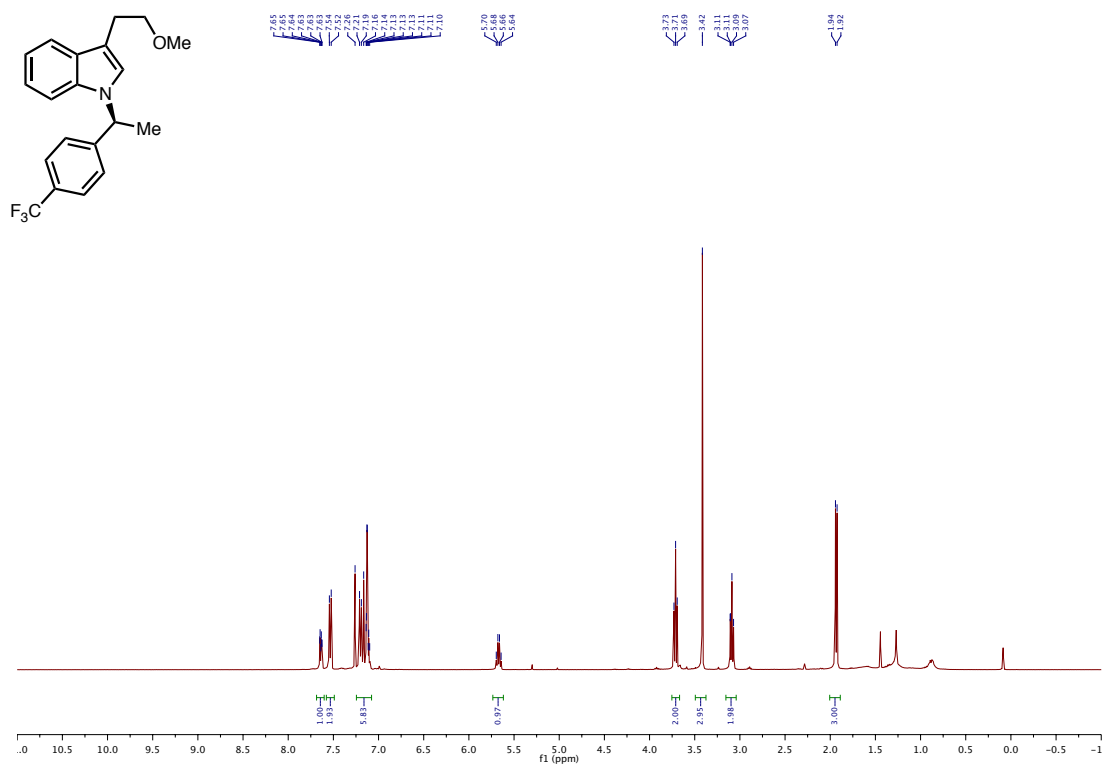


¹³C NMR, 101 MHz, CDCl₃

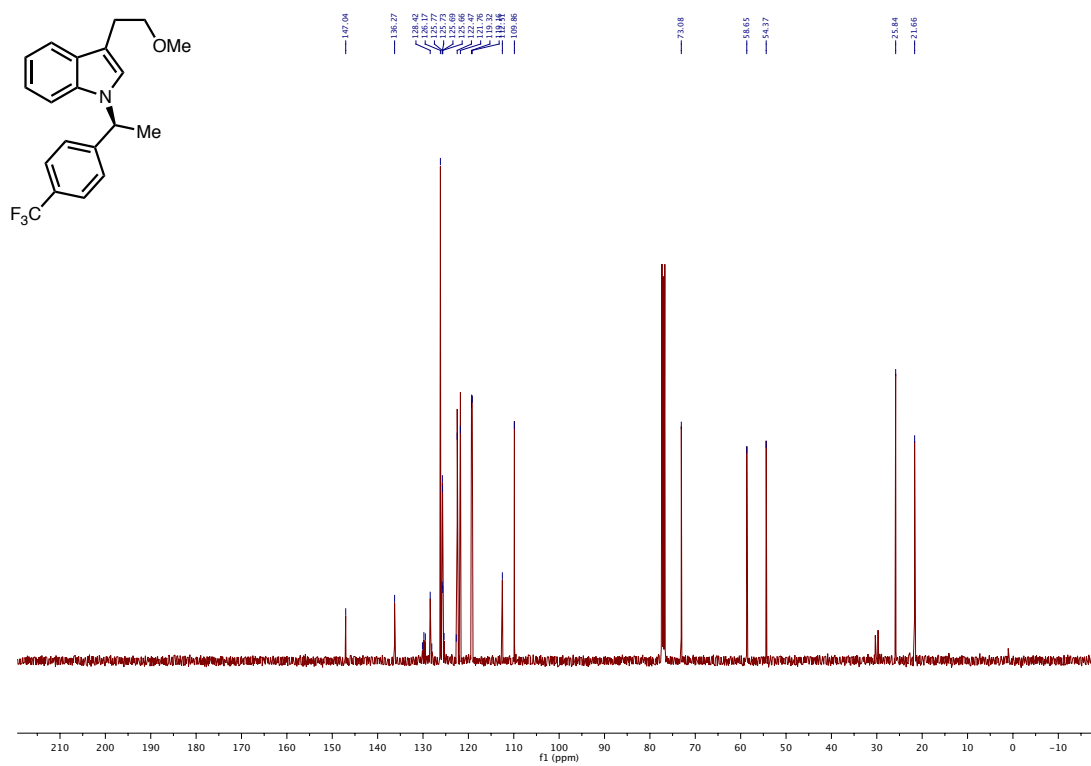


(S)-3-(2-methoxyethyl)-1-(1-(4-(trifluoromethyl)phenyl)ethyl)-1H-indole (3n)

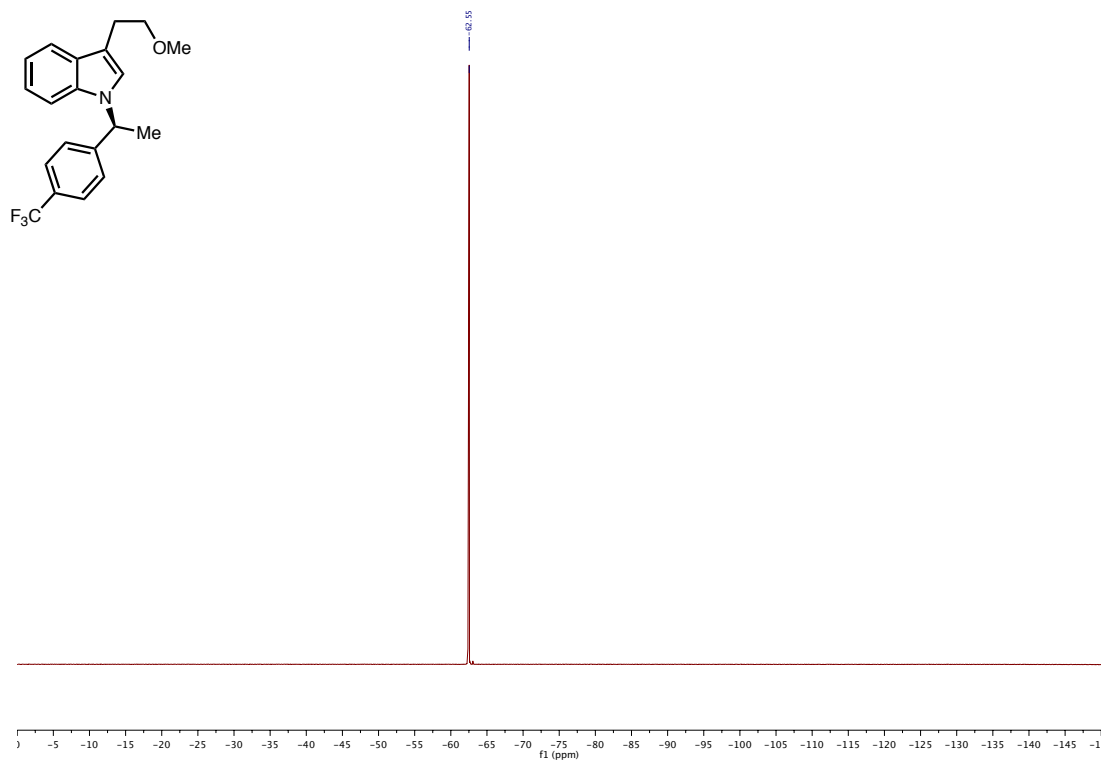
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

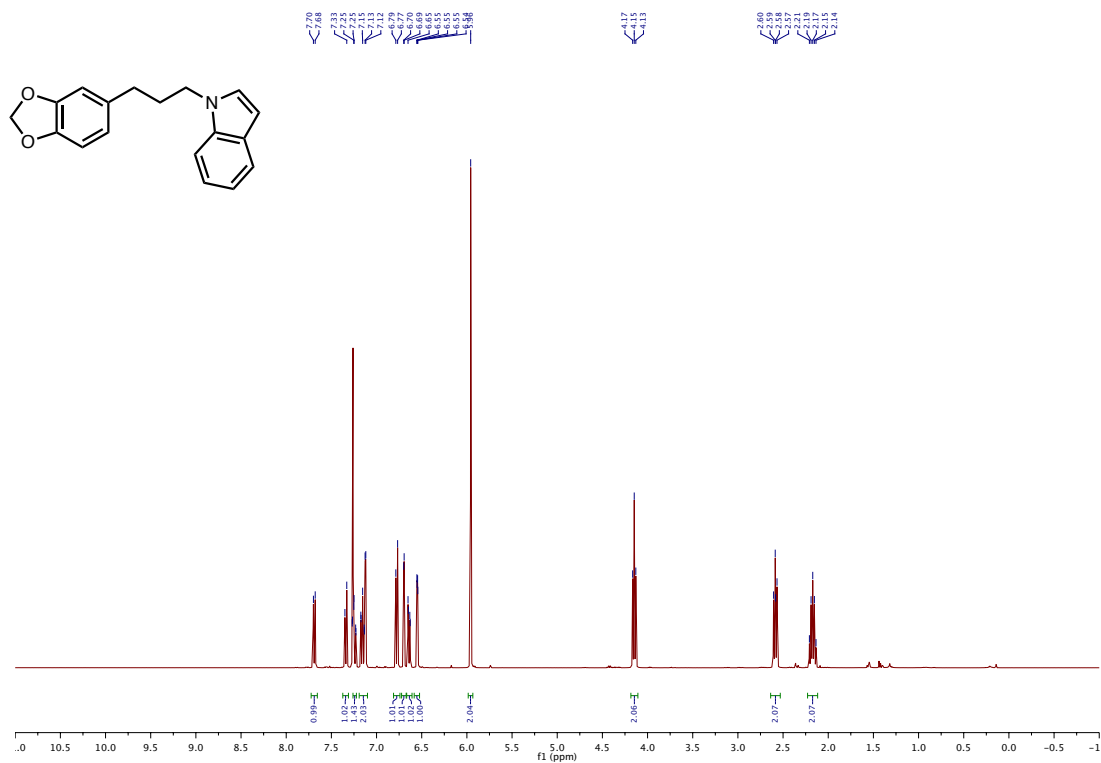


^{19}F NMR, 376 MHz, CDCl_3

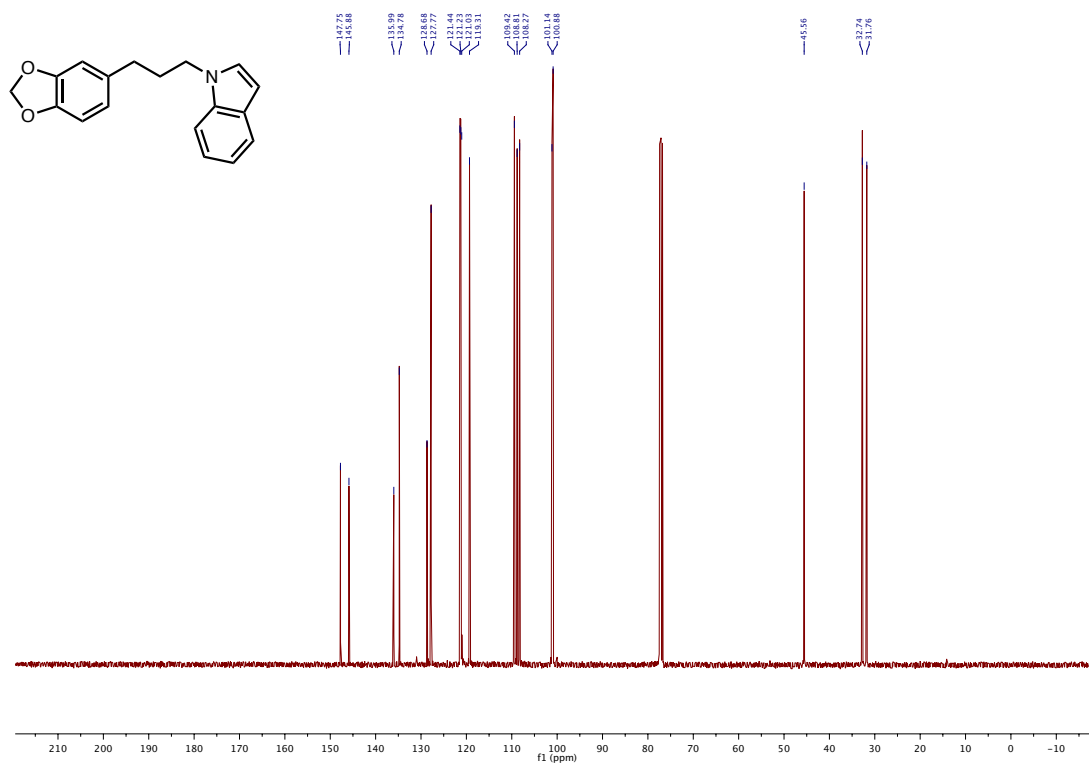


1-(3-(benzo[d][1,3]dioxol-5-yl)propyl)-1H-indole (3o)

^1H NMR, 400 MHz, CDCl_3

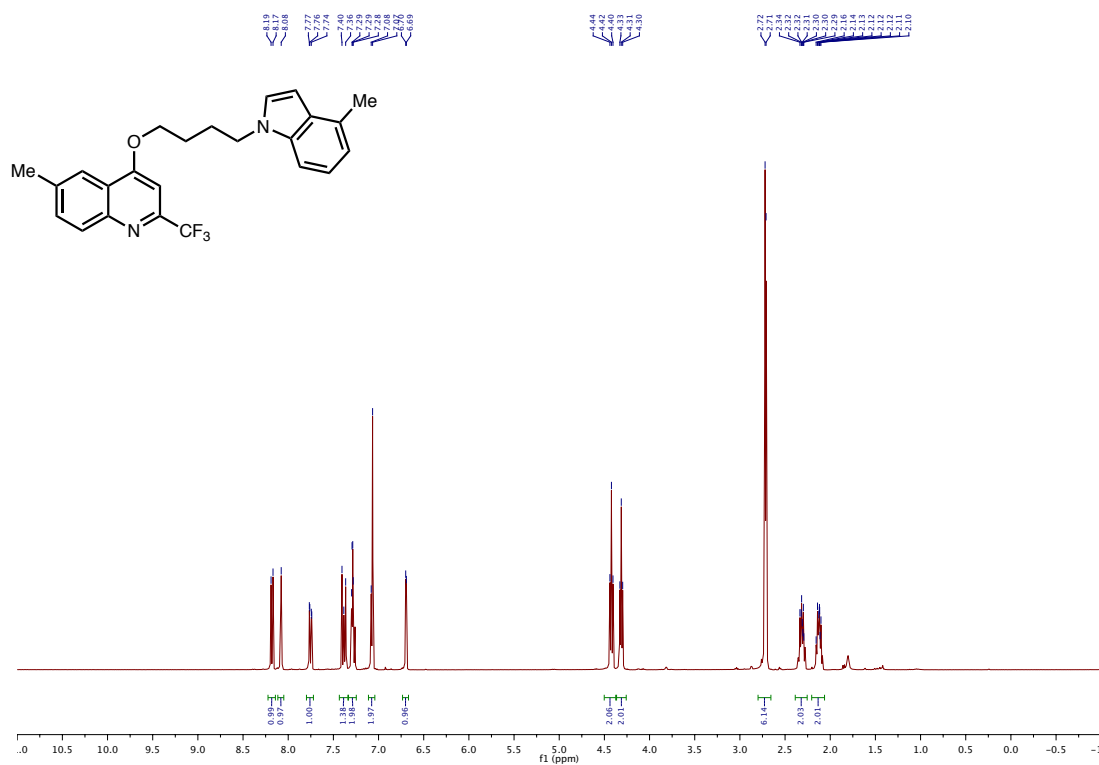


^{13}C NMR, 101 MHz, CDCl_3

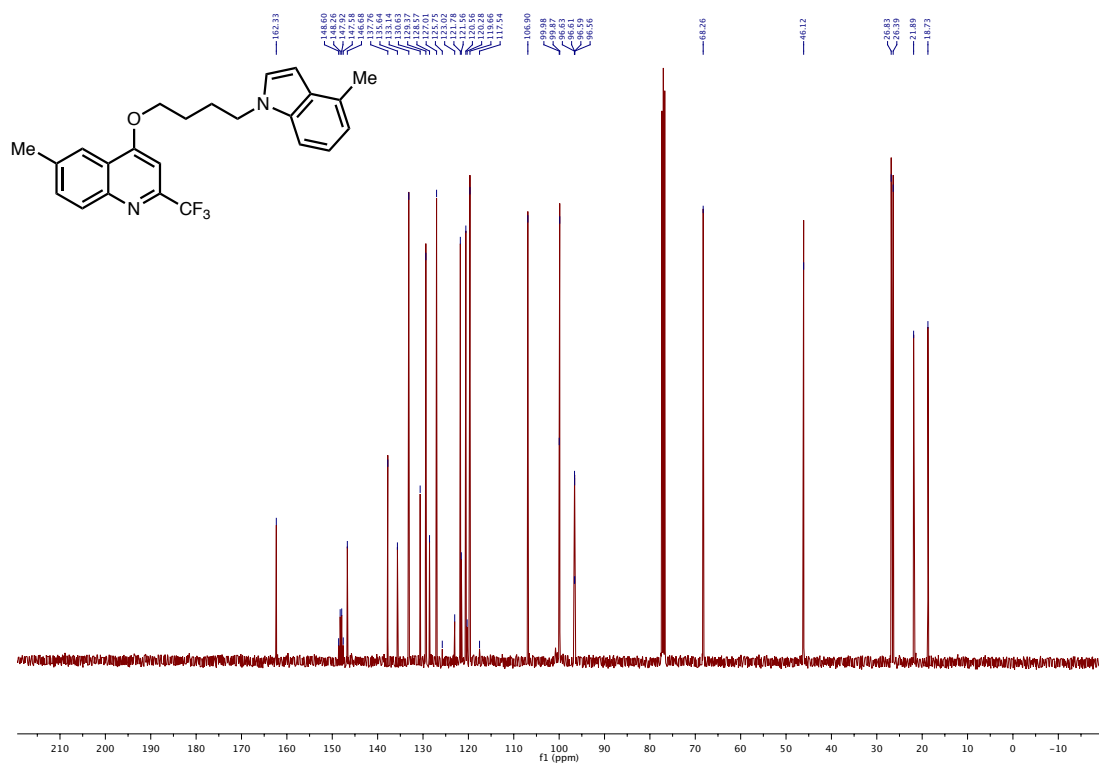


6-methyl-4-(4-(4-methyl-1H-indol-1-yl)butoxy)-2-(trifluoromethyl)quinolone (3p)

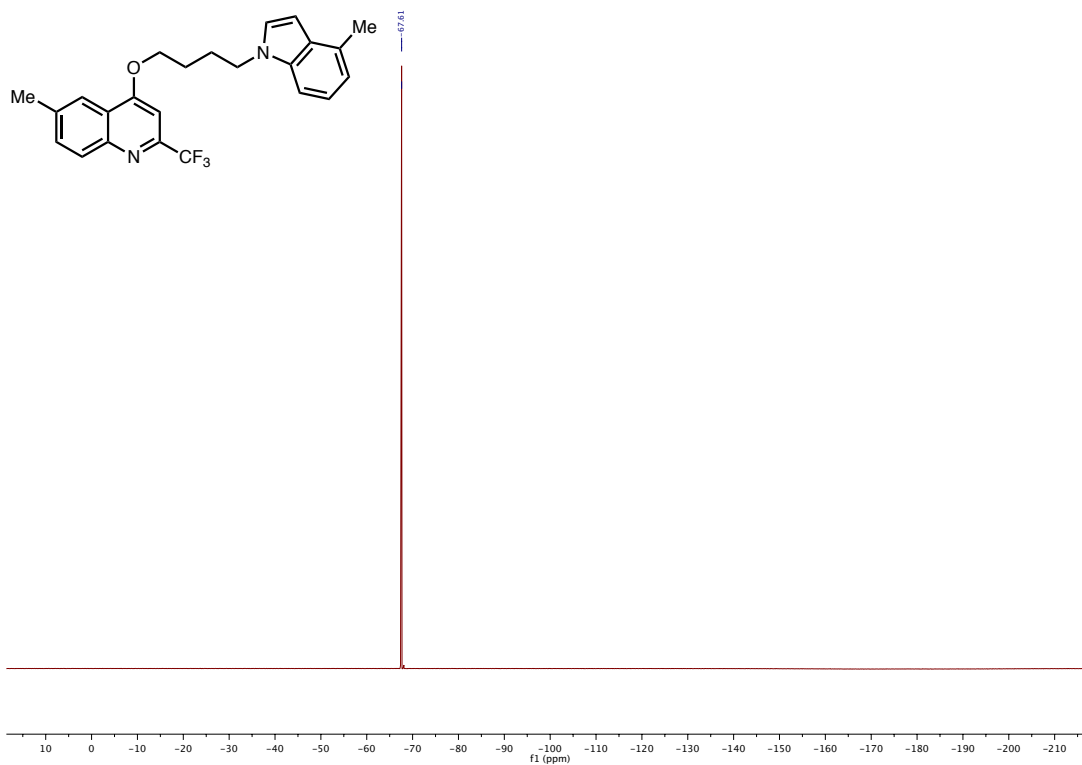
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

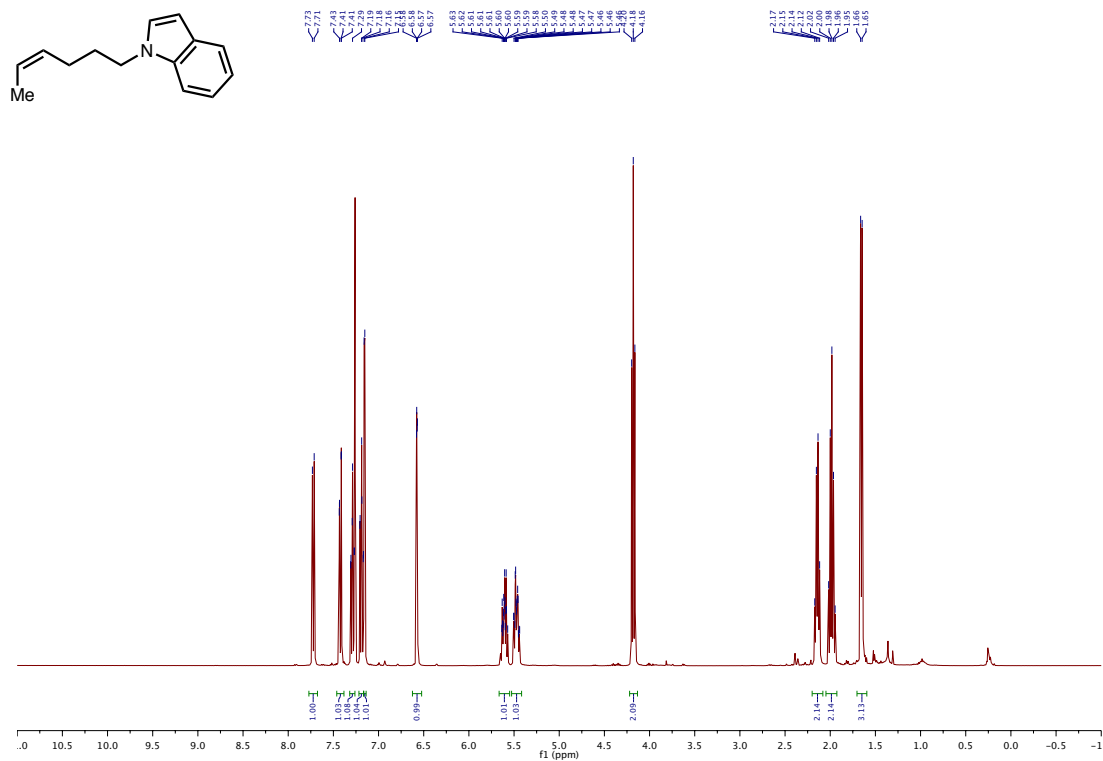


^{19}F NMR, 376 MHz, CDCl_3

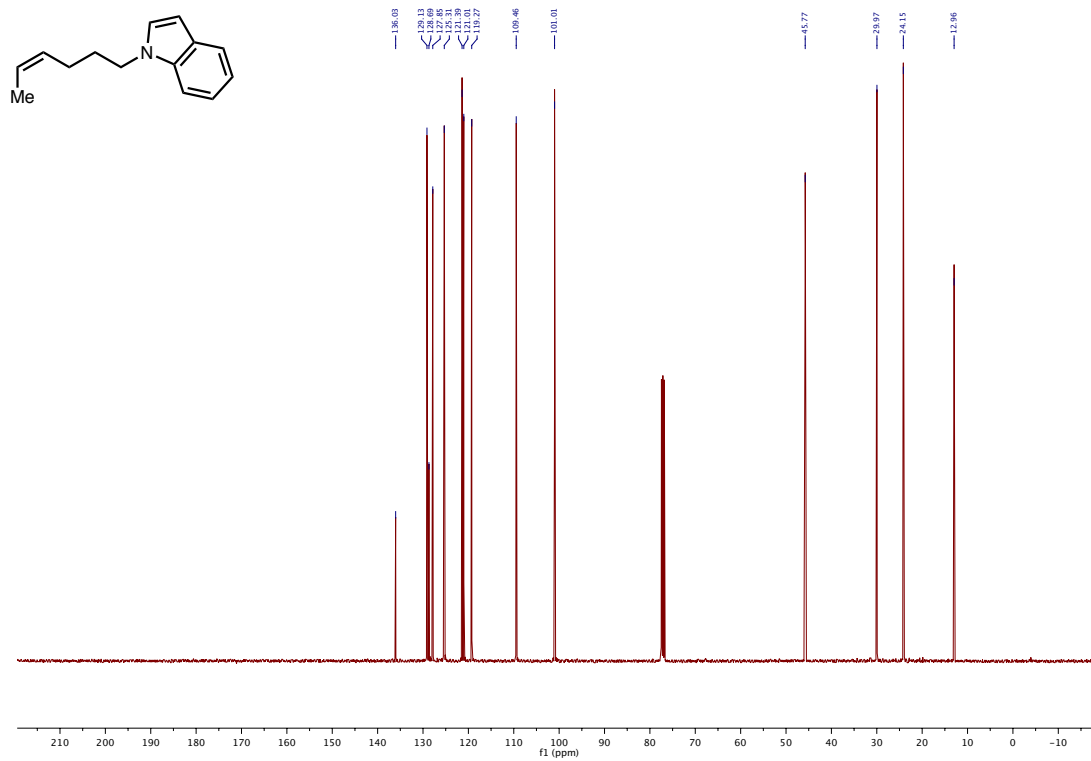


(Z)-1-(hex-4-en-1-yl)-1H-indole (3q)

¹H NMR, 400 MHz, CDCl₃

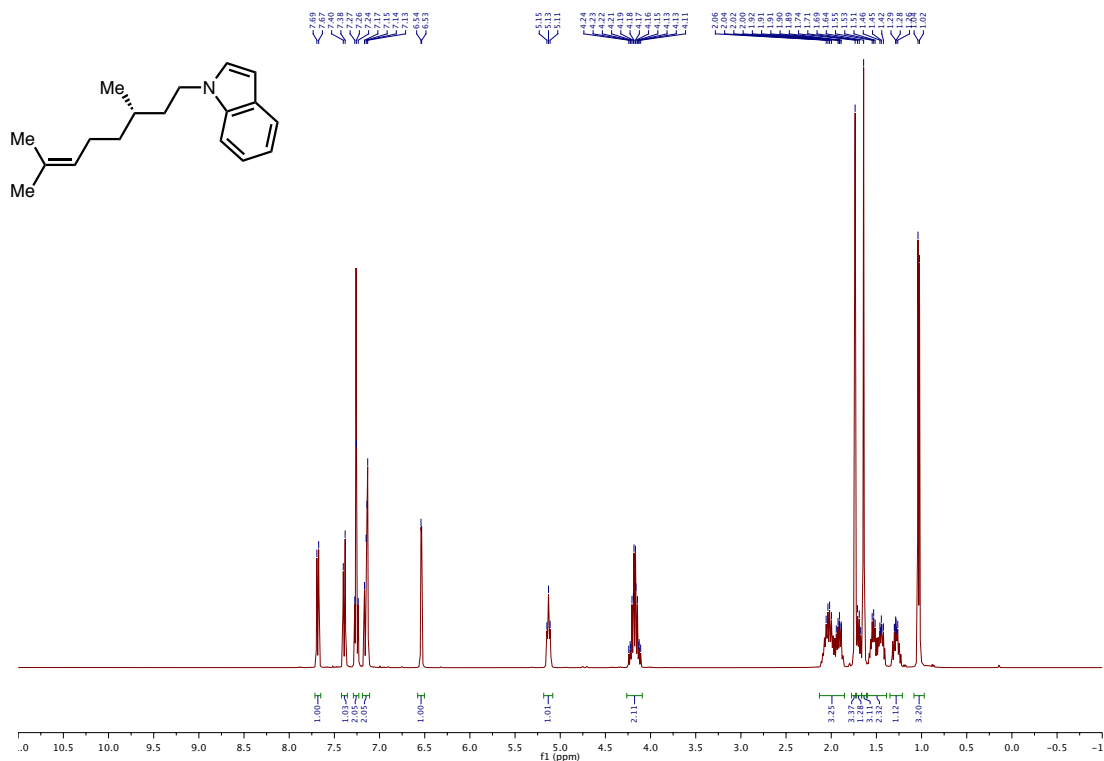


¹³C NMR, 101 MHz, CDCl₃

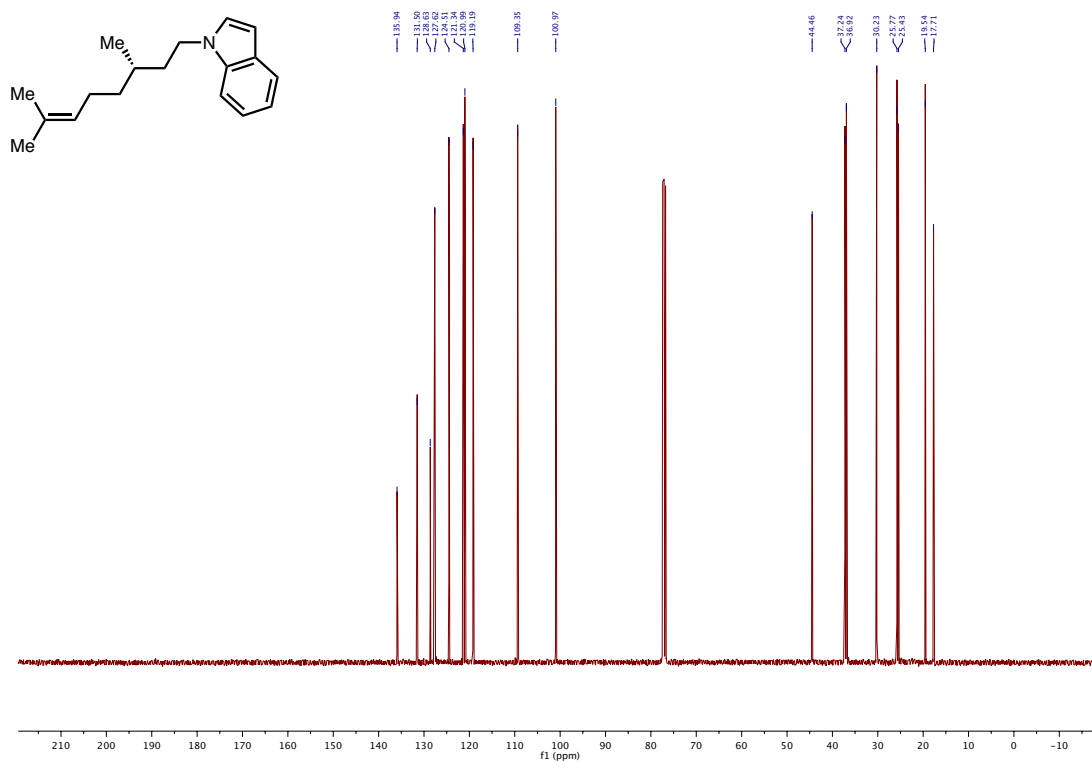


(S)-1-(3,7-dimethyloct-6-en-1-yl)-1H-indole (3r)

^1H NMR, 400 MHz, CDCl_3

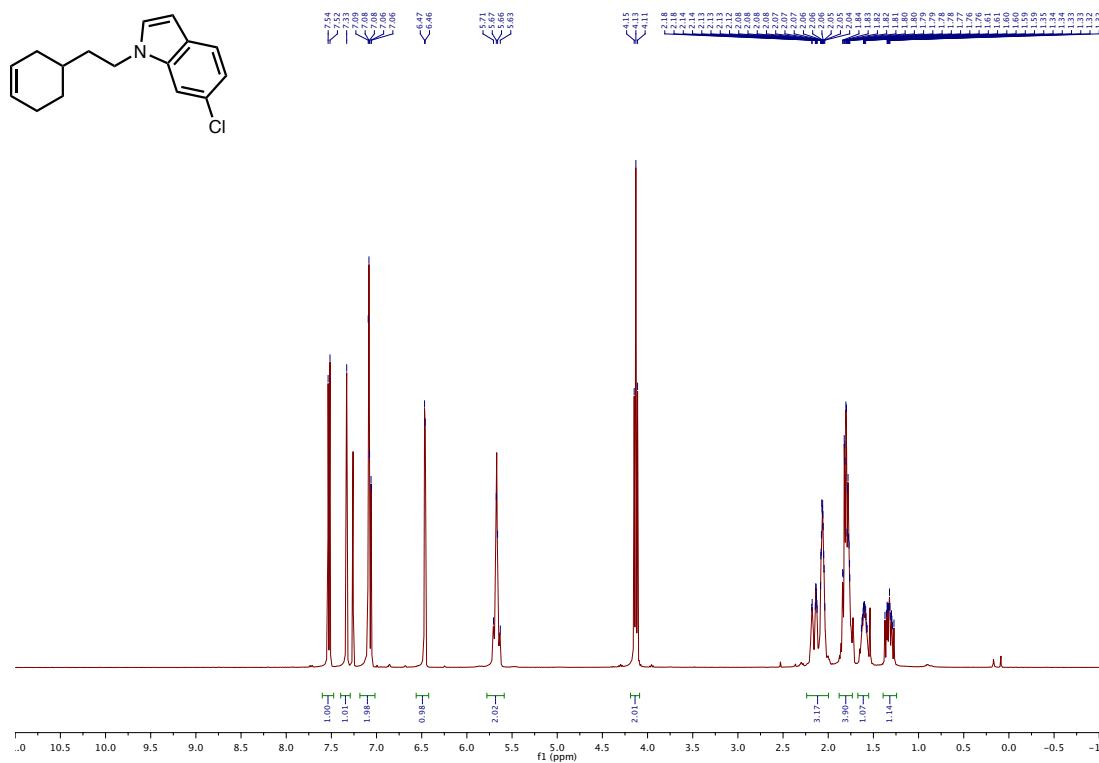


^{13}C NMR, 101 MHz, CDCl_3

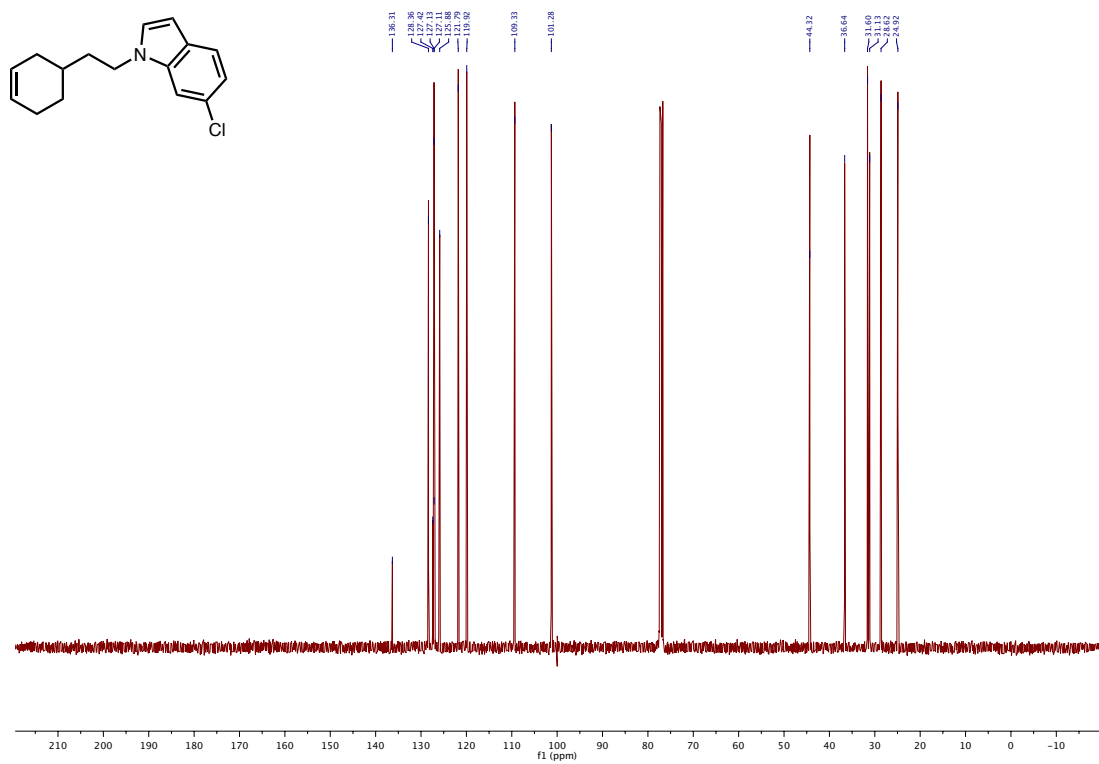


6-chloro-1-(2-(cyclohex-3-en-1-yl)ethyl)-1H-indole (3s)

^1H NMR, 400 MHz, CDCl_3

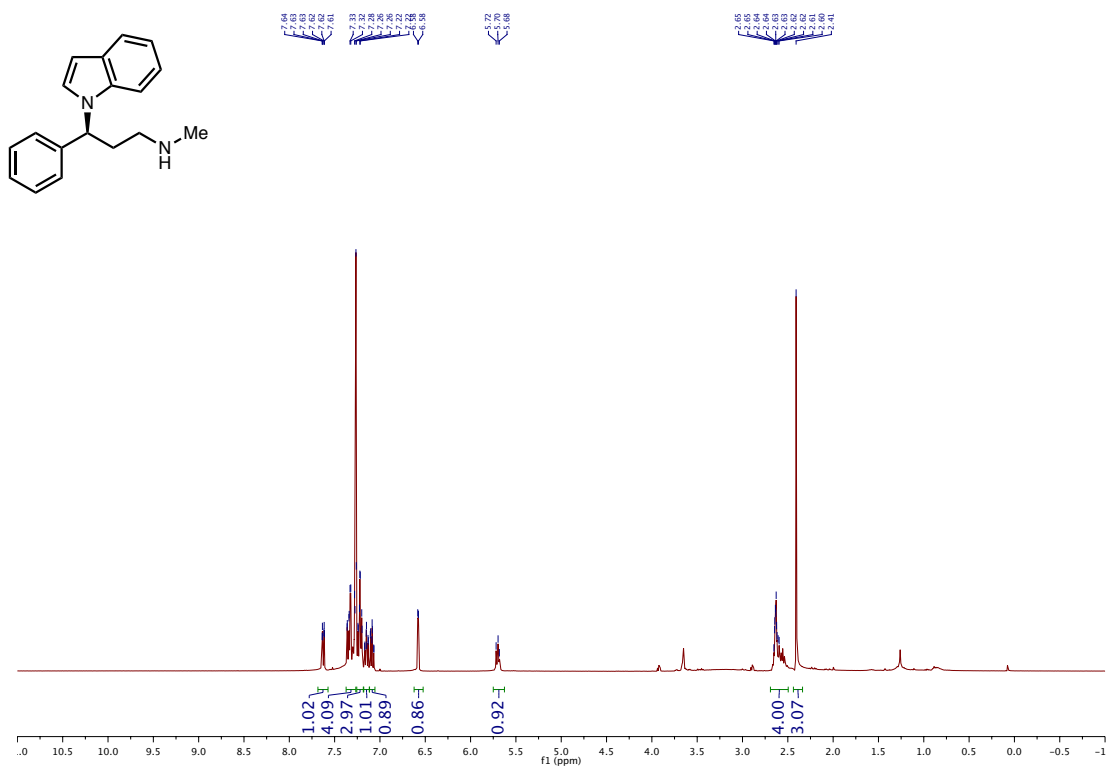


^{13}C NMR, 101 MHz, CDCl_3

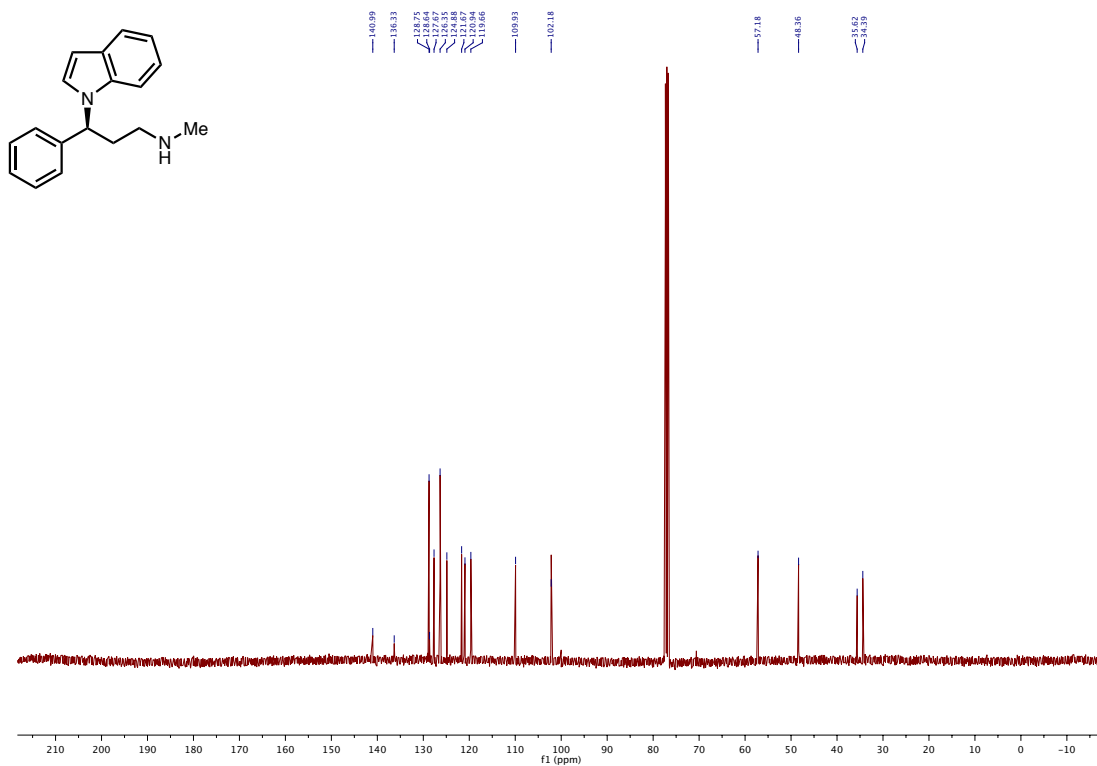


(S)-3-(1*H*-indol-1-yl)-*N*-methyl-3-phenylpropan-1-amine (3t) (~95% purity)

¹H NMR, 400 MHz, CDCl₃

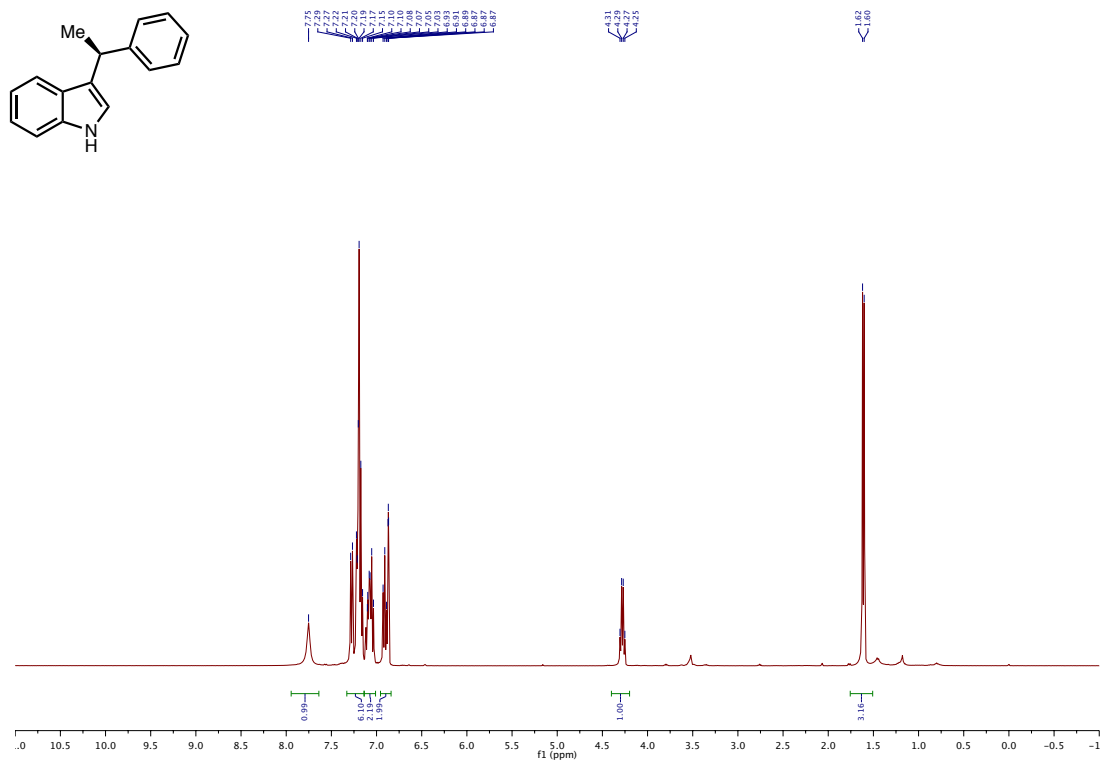


¹³C NMR, 101 MHz, CDCl₃

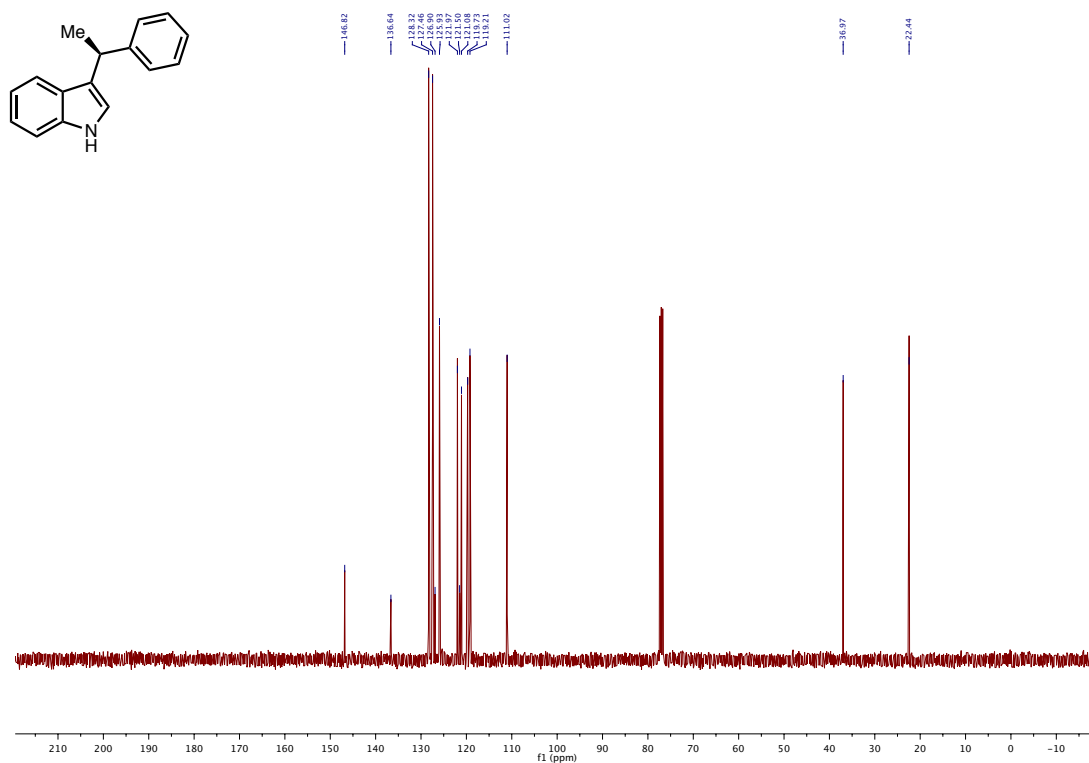


(S)-3-(1-phenylethyl)-1H-indole (4a)

^1H NMR, 400 MHz, CDCl_3

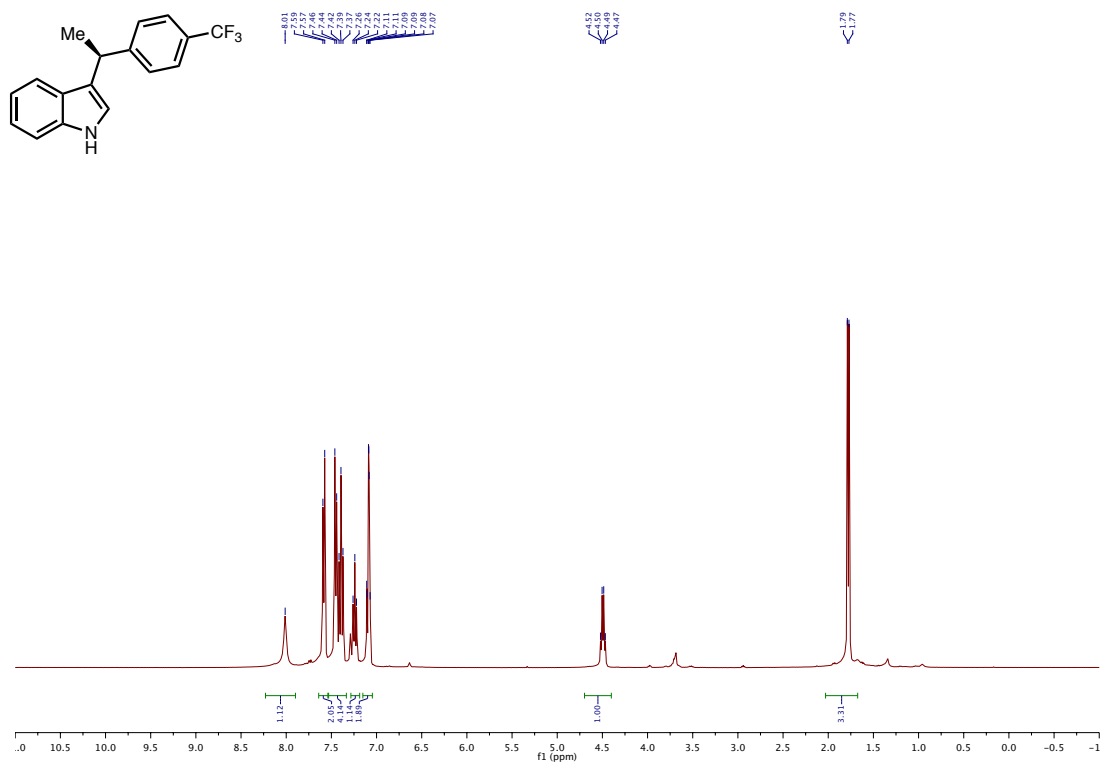


^{13}C NMR, 101 MHz, CDCl_3

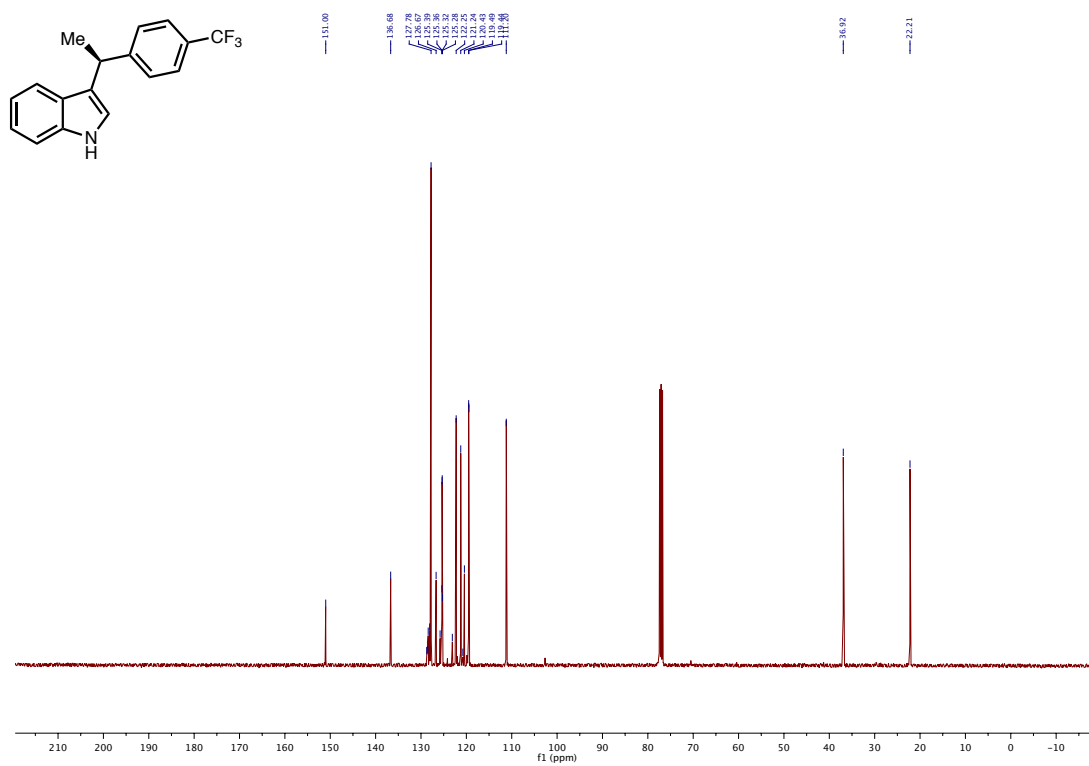


(S)-3-(1-(4-(trifluoromethyl)phenyl)ethyl)-1H-indole (4b)

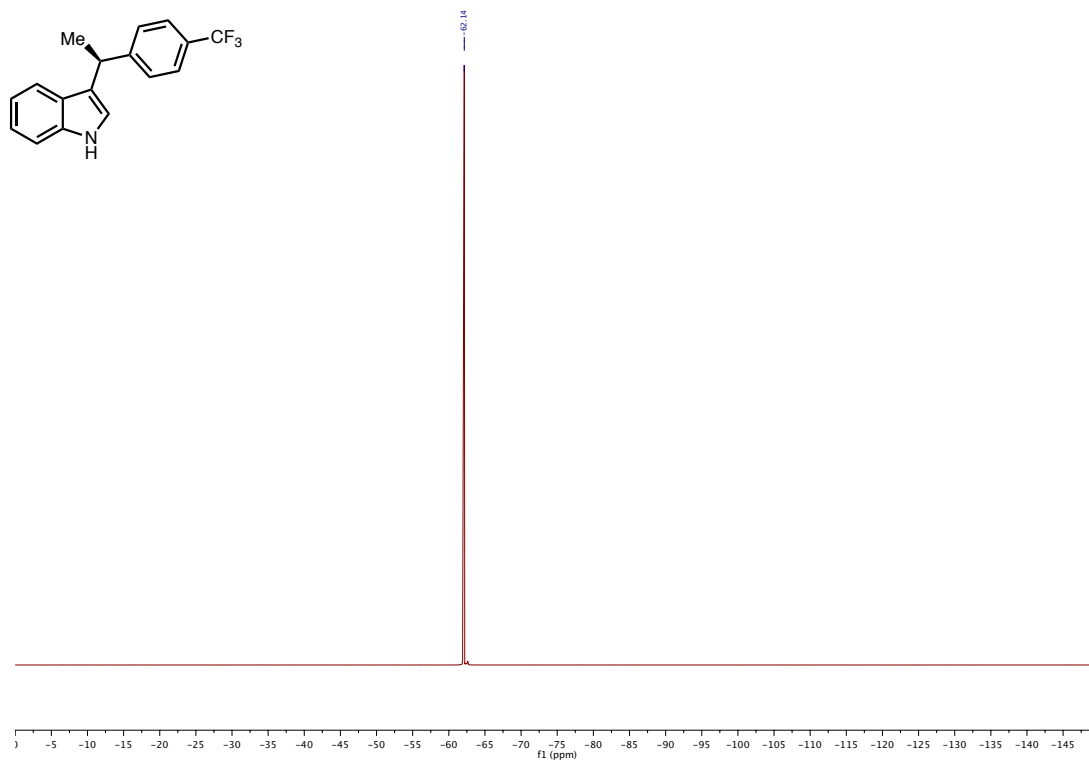
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

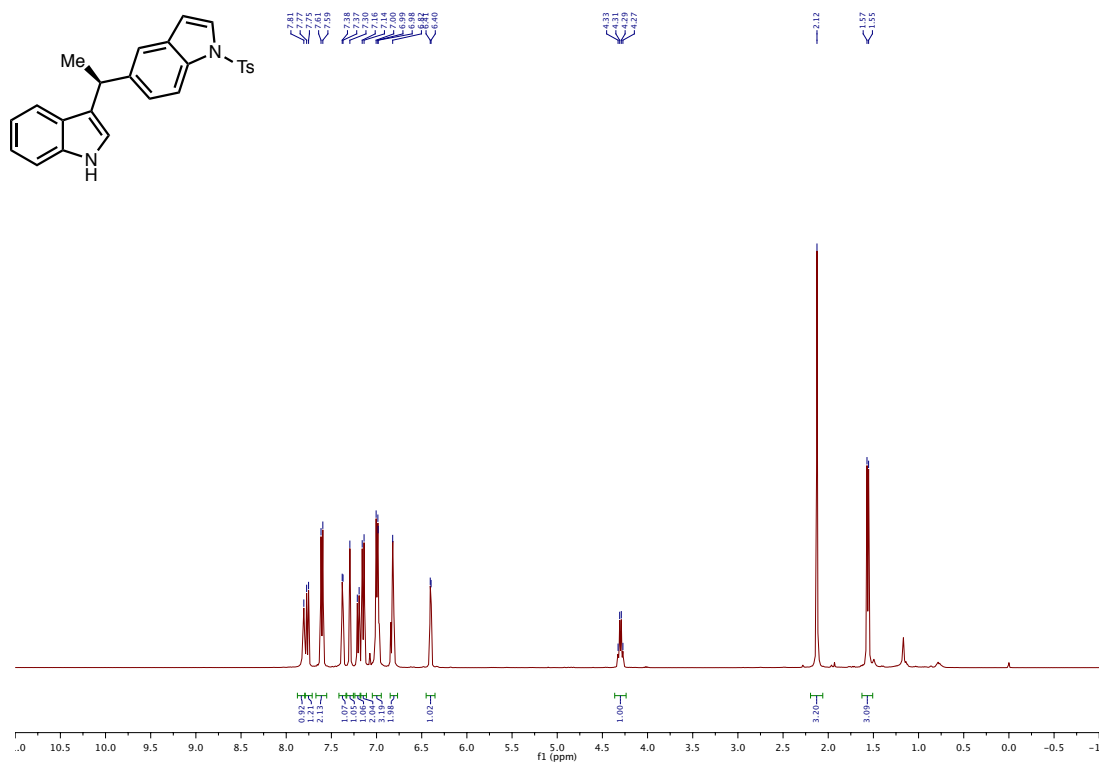


^{19}F NMR, 376 MHz, CDCl_3

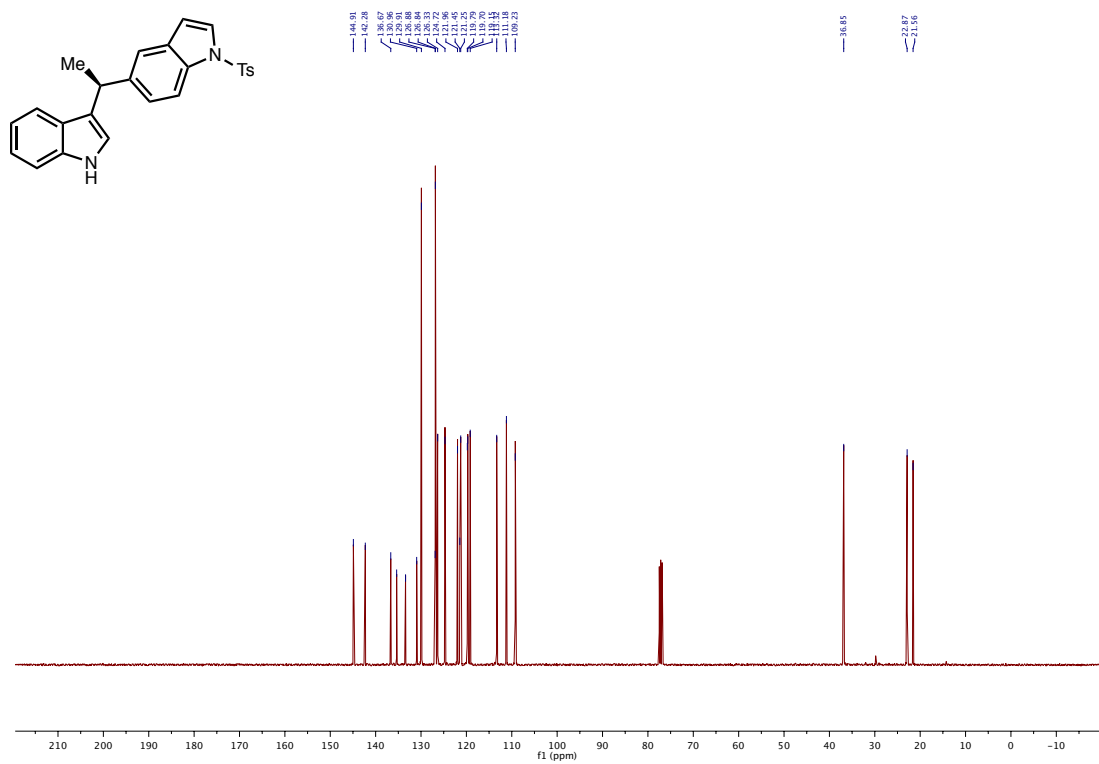


(S)-5-(1-(1H-indol-3-yl)ethyl)-1-tosyl-1H-indole (4c)

¹H NMR, 400 MHz, CDCl₃

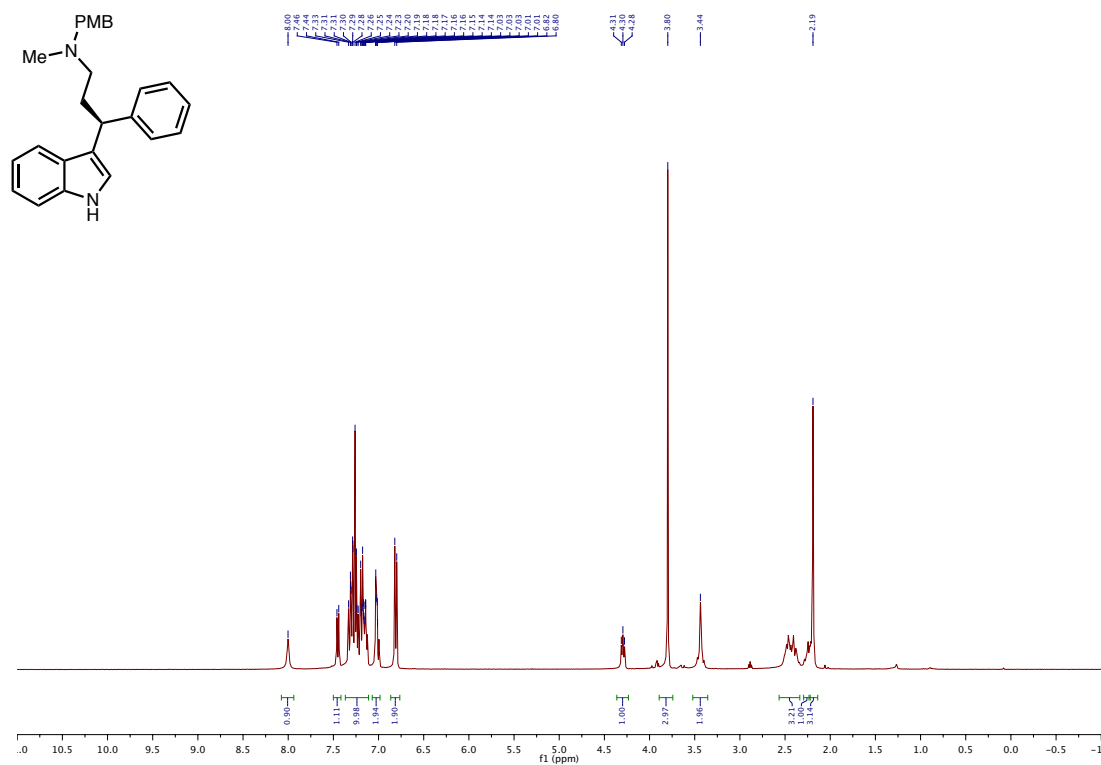


¹³C NMR, 101 MHz, CDCl₃

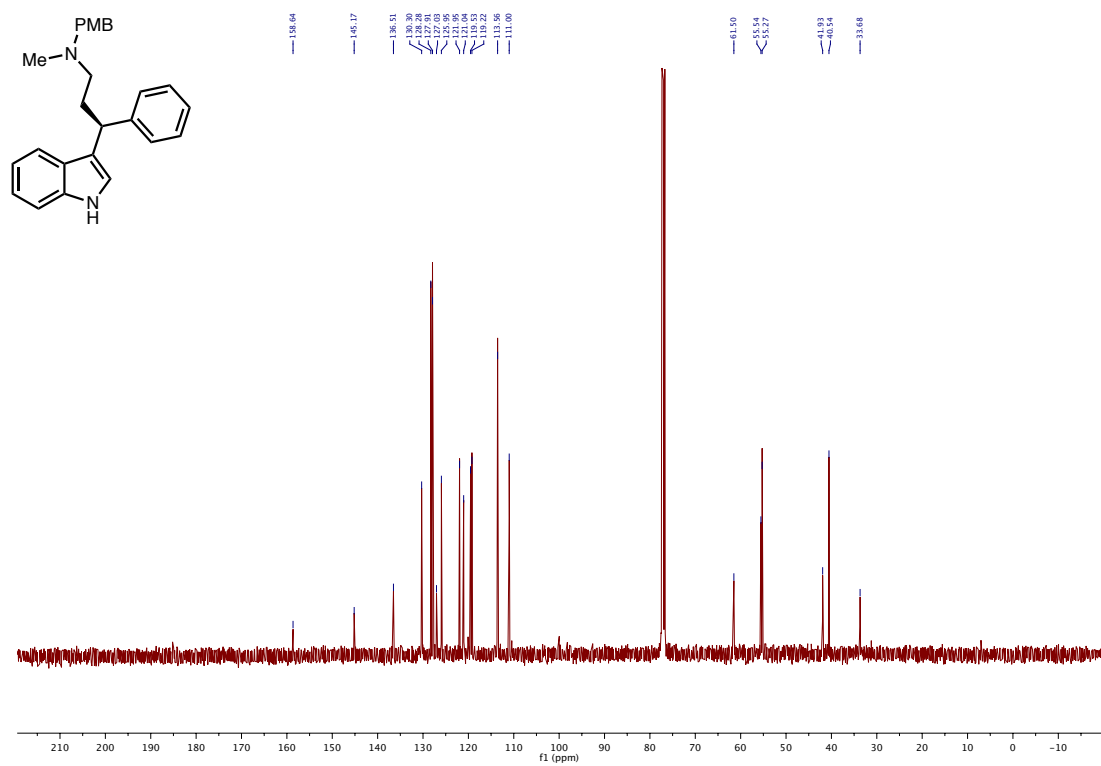


(S)-3-(1H-indol-3-yl)-N-(4-methoxybenzyl)-N-methyl-3-phenylpropan-1-amine (4d)

¹H NMR, 400 MHz, CDCl₃

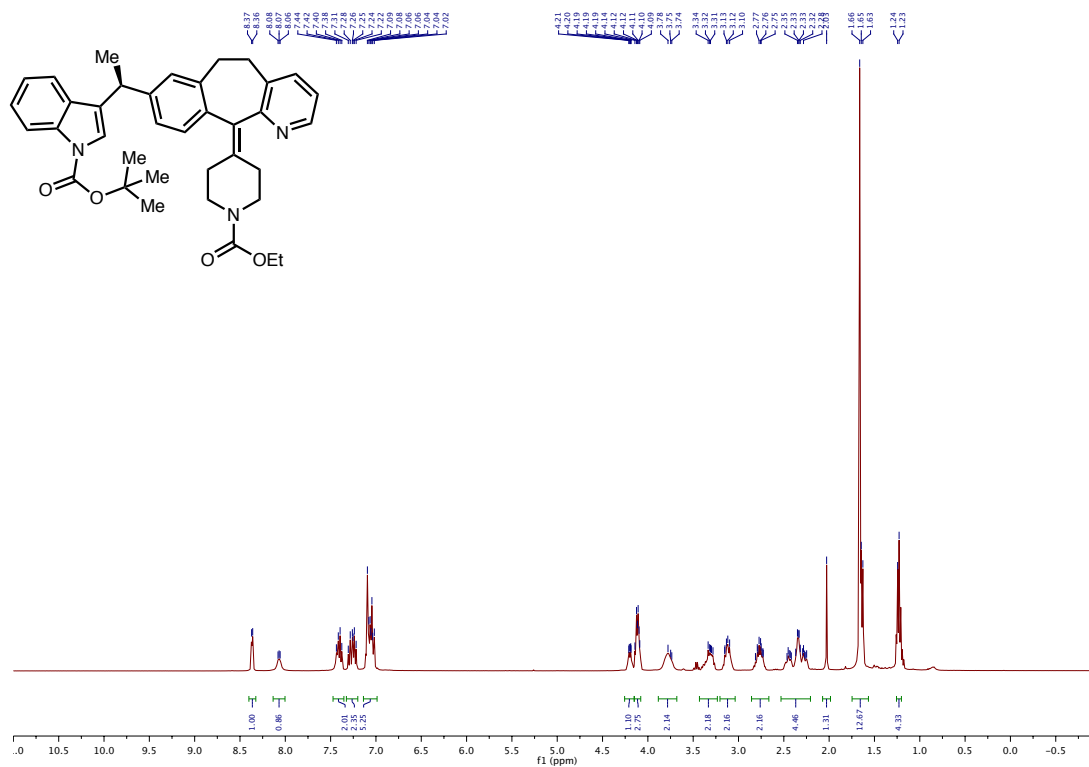


¹³C NMR, 101 MHz, CDCl₃

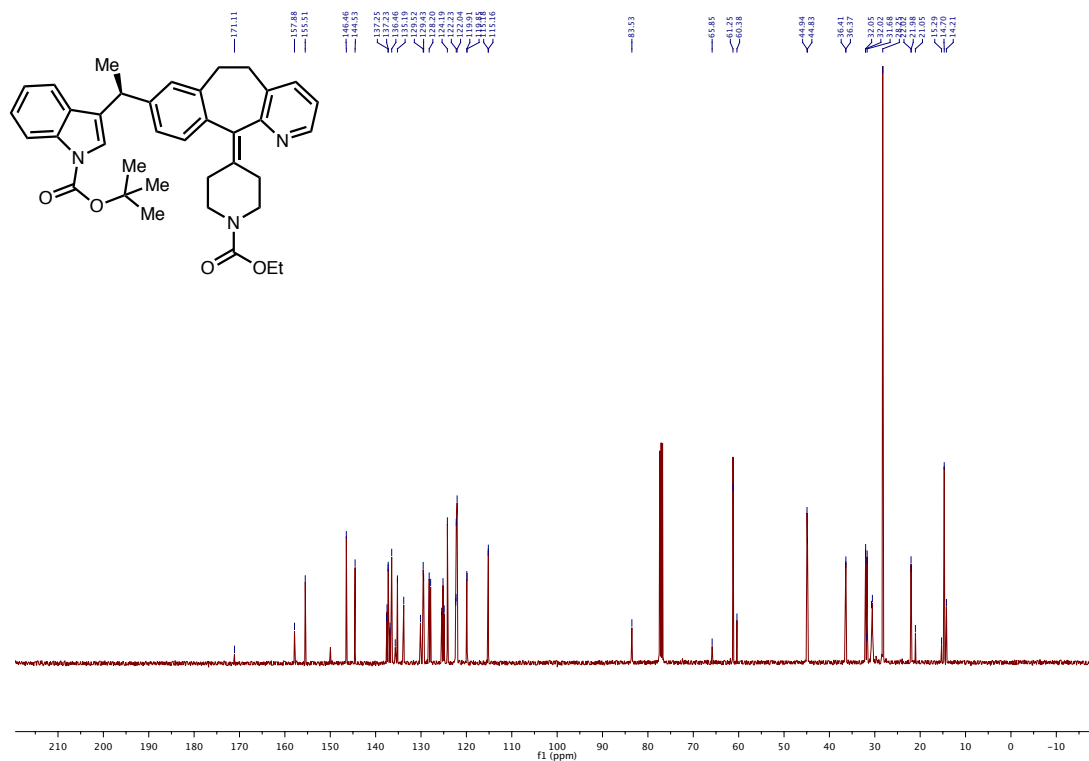


tert-butyl (S)-3-(1-(11-(1-(ethoxycarbonyl)piperidin-4-ylidene)-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-8-yl)ethyl)-1H-indole-1-carboxylate (4f')

¹H NMR, 400 MHz, CDCl₃

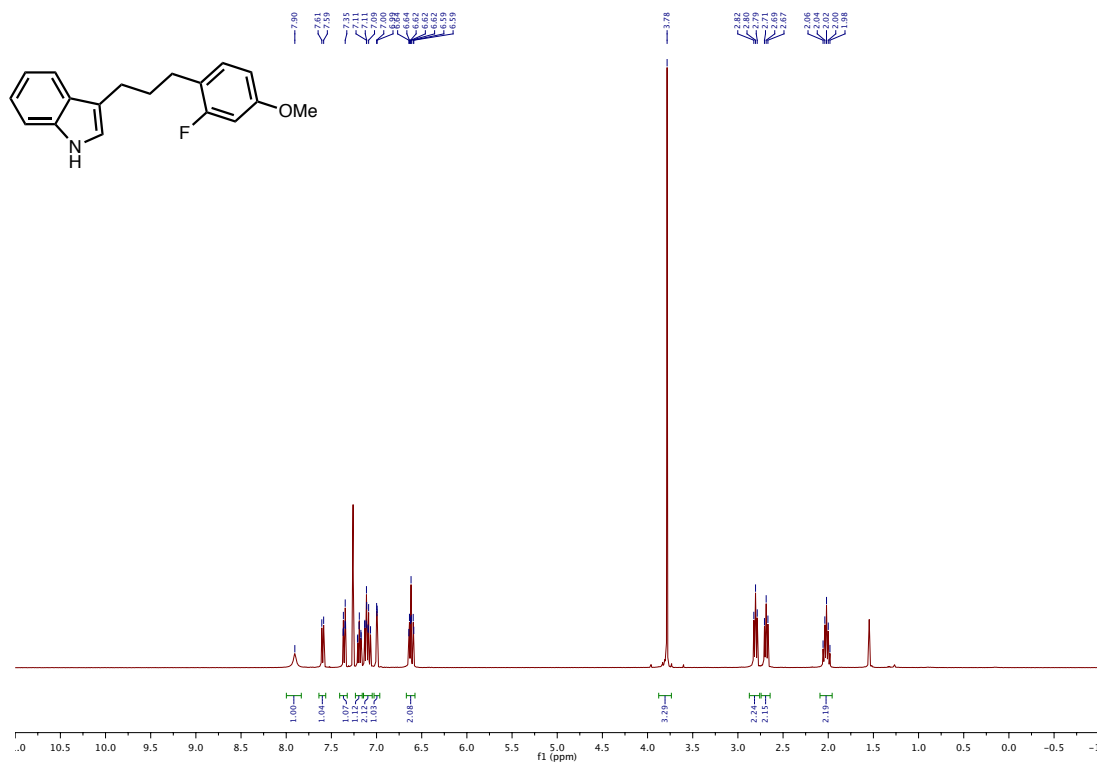


¹³C NMR, 101 MHz, CDCl₃

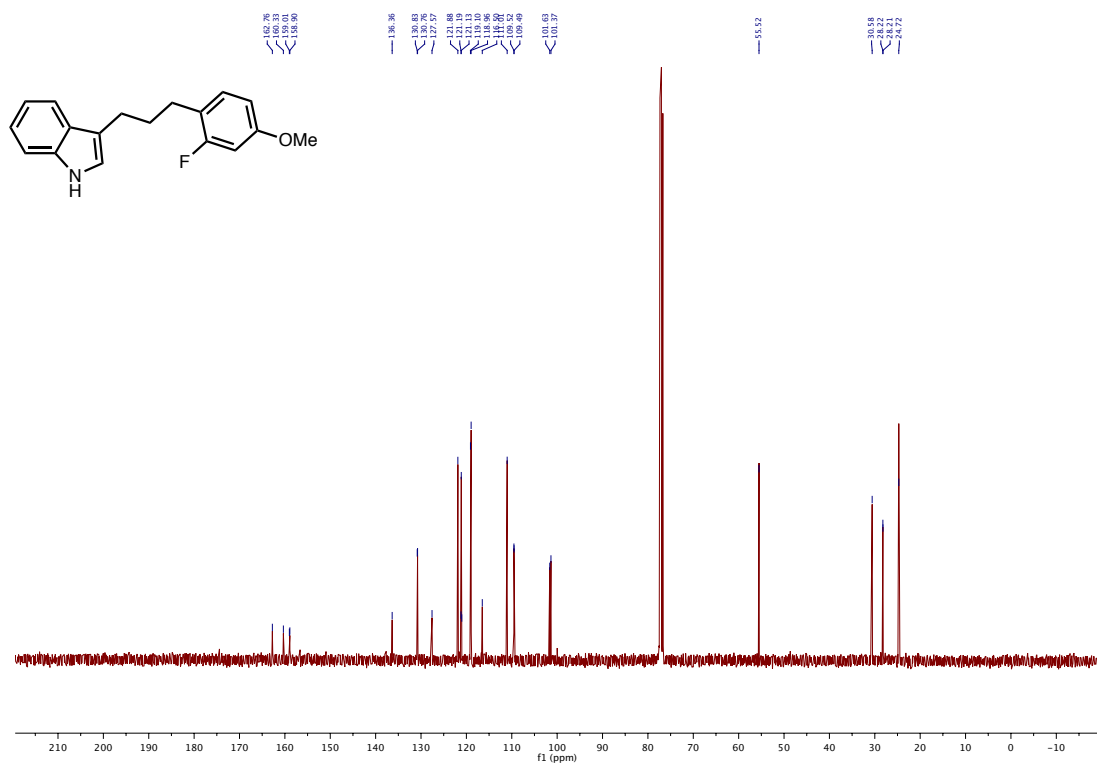


3-(3-(2-fluoro-4-methoxyphenyl)propyl)-1H-indole (4g)

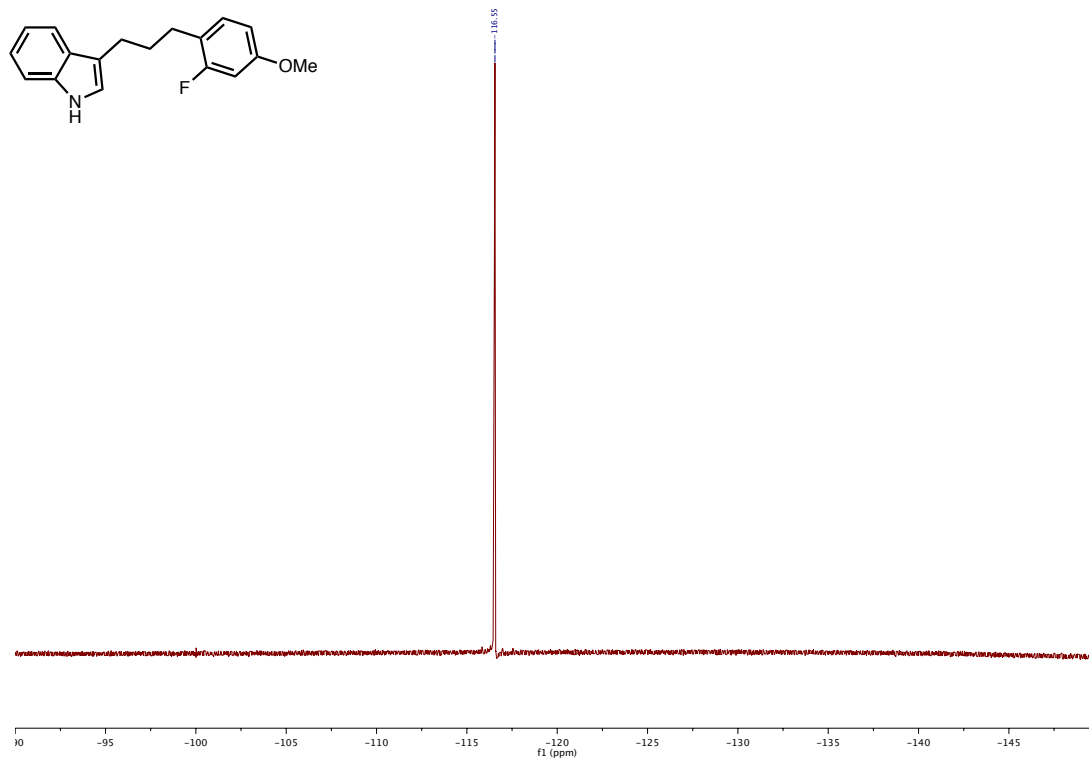
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

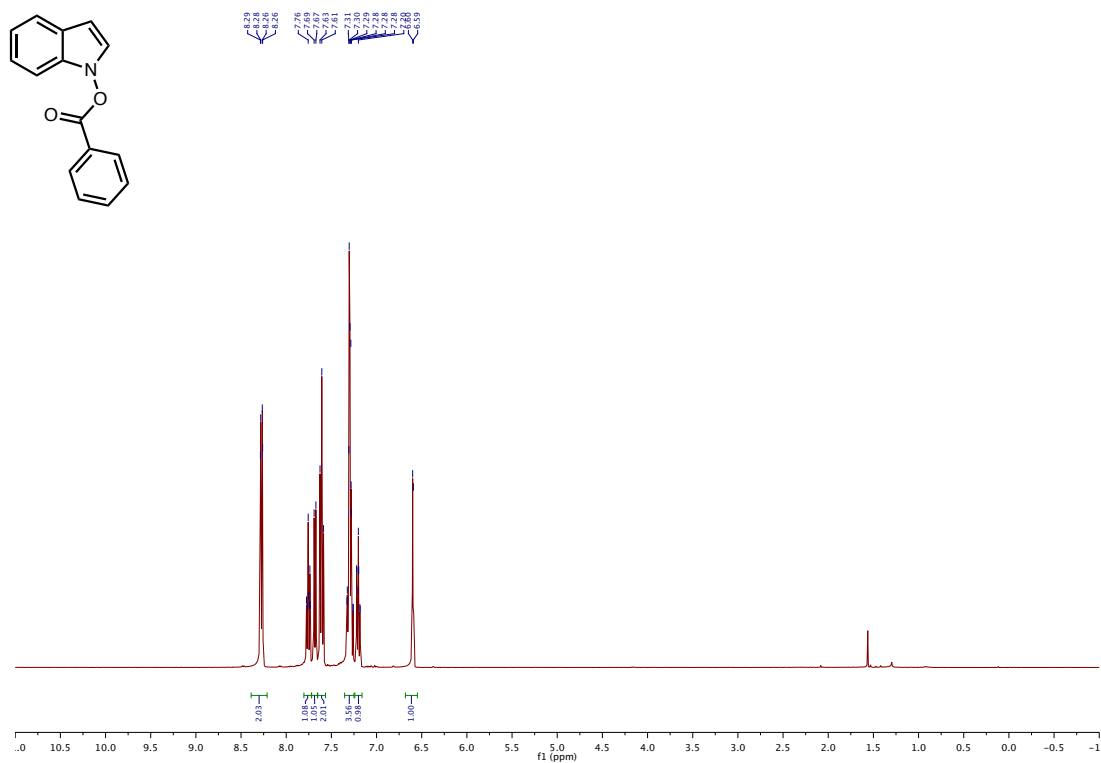


^{19}F NMR, 376 MHz, CDCl_3

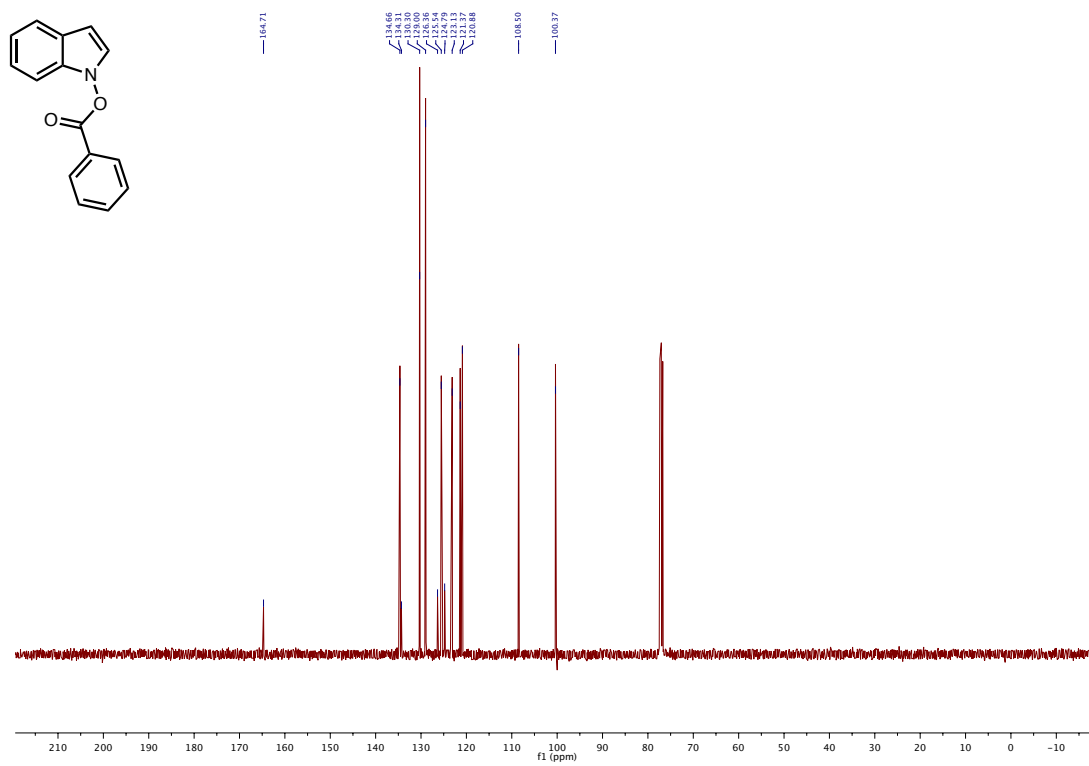


1H-indol-1-yl benzoate (2a)

¹H NMR, 400 MHz, CDCl₃

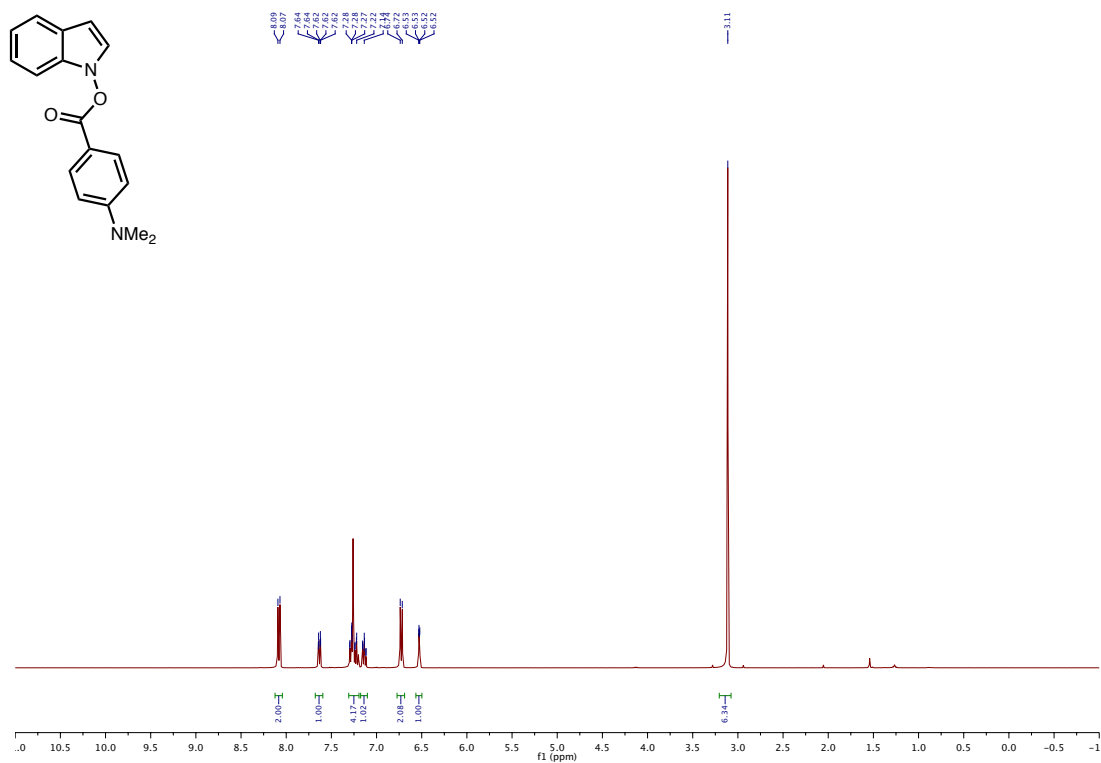


¹³C NMR, 101 MHz, CDCl₃

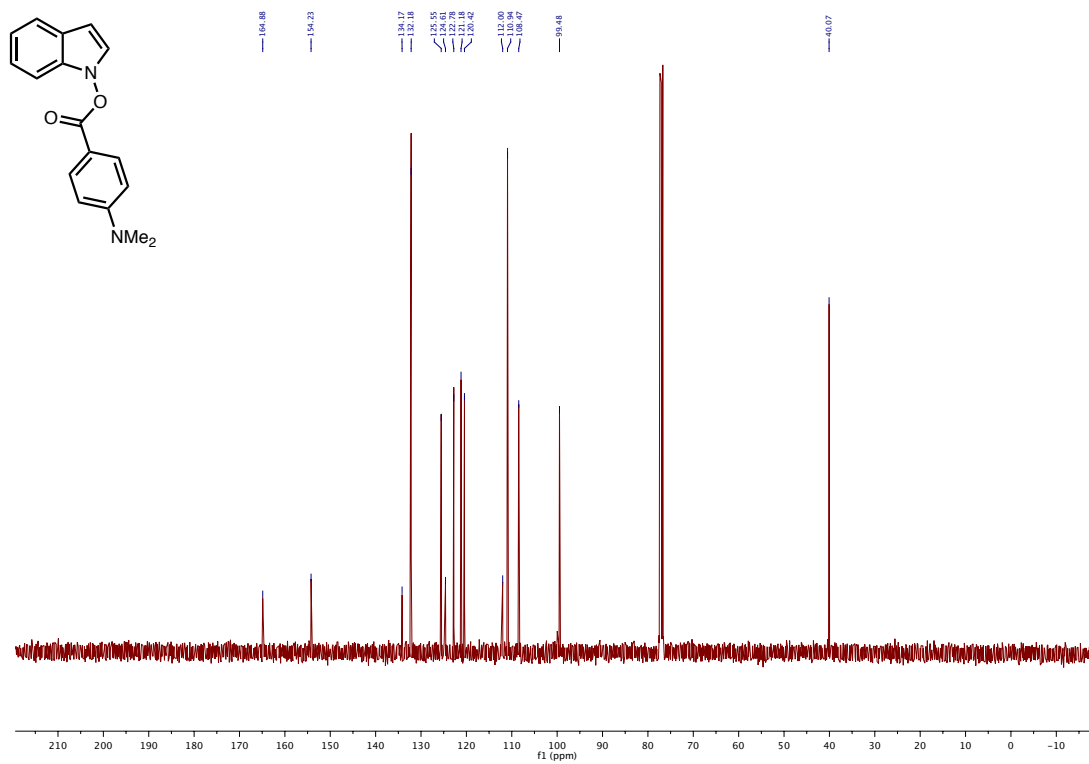


1H-indol-1-yl 4-(dimethylamino)benzoate (2b)

¹H NMR, 400 MHz, CDCl₃

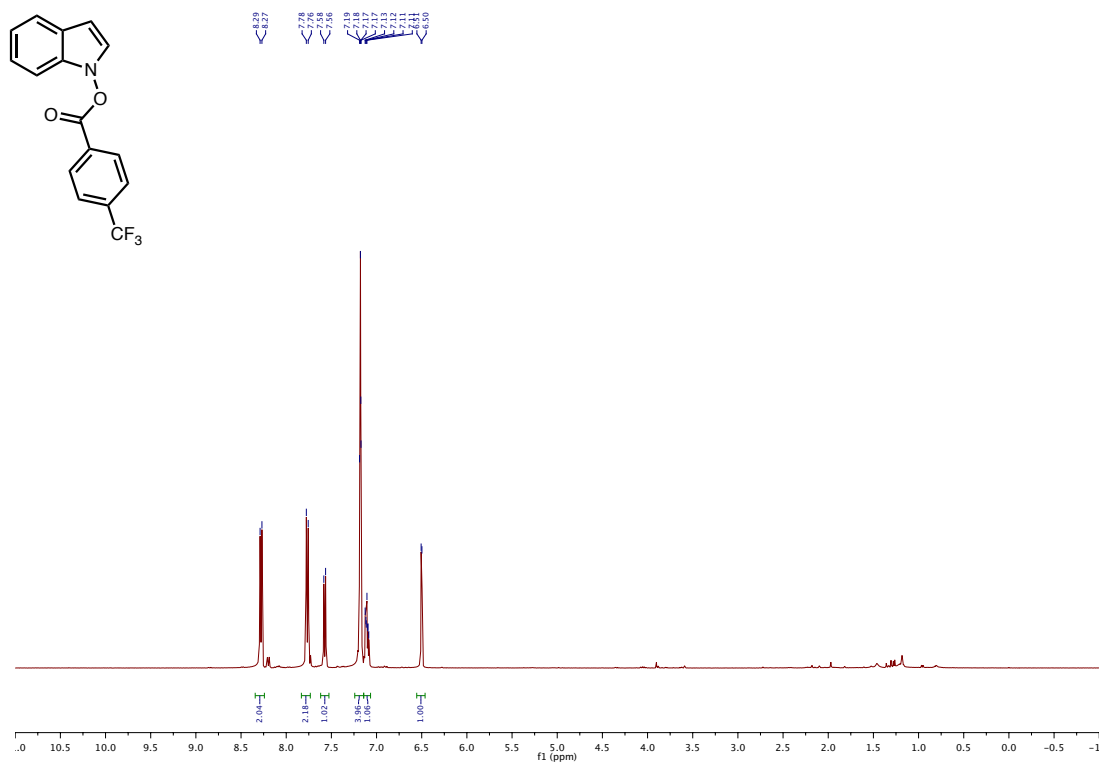


¹³C NMR, 101 MHz, CDCl₃

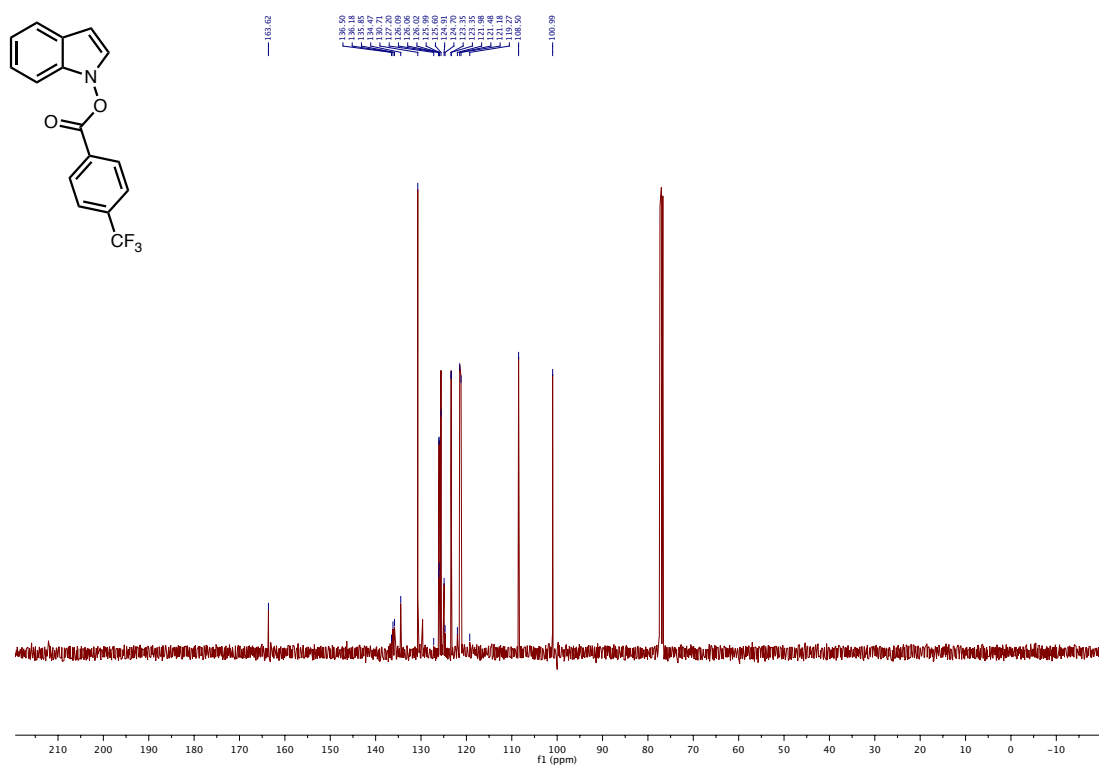


1*H*-indol-1-yl 4-(trifluoromethyl)benzoate (2c)

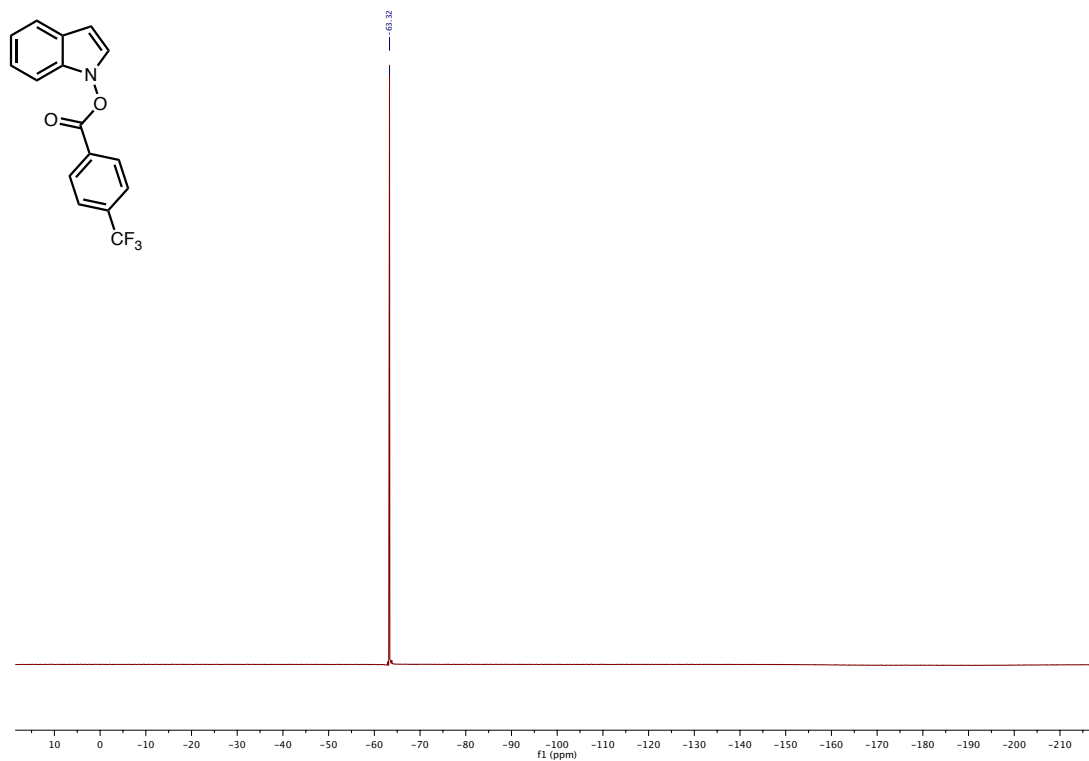
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

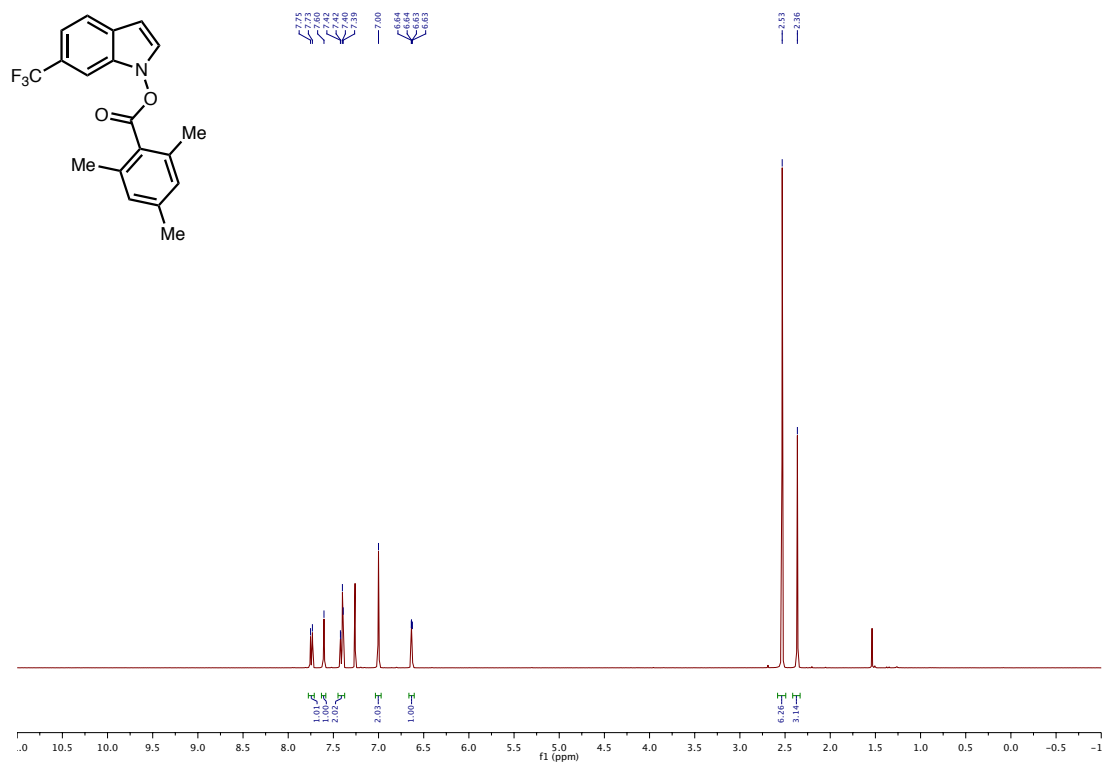


^{19}F NMR, 376 MHz, CDCl_3

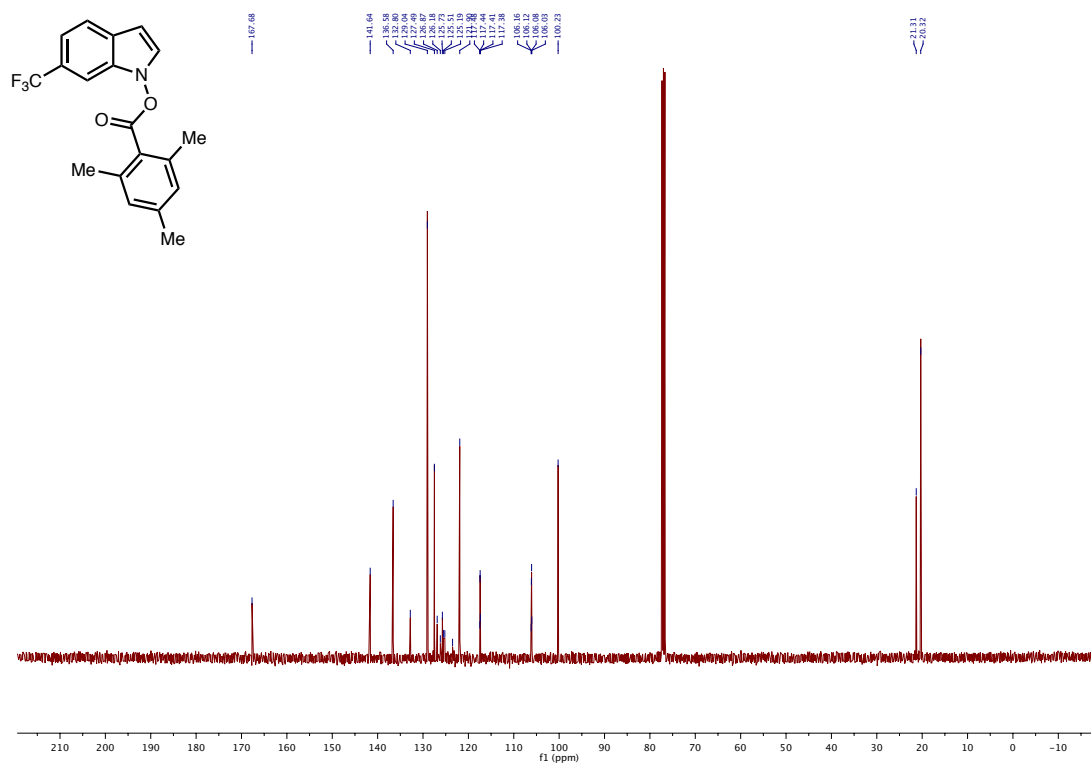


6-(trifluoromethyl)-1H-indol-1-yl 2,4,6-trimethylbenzoate (2e)

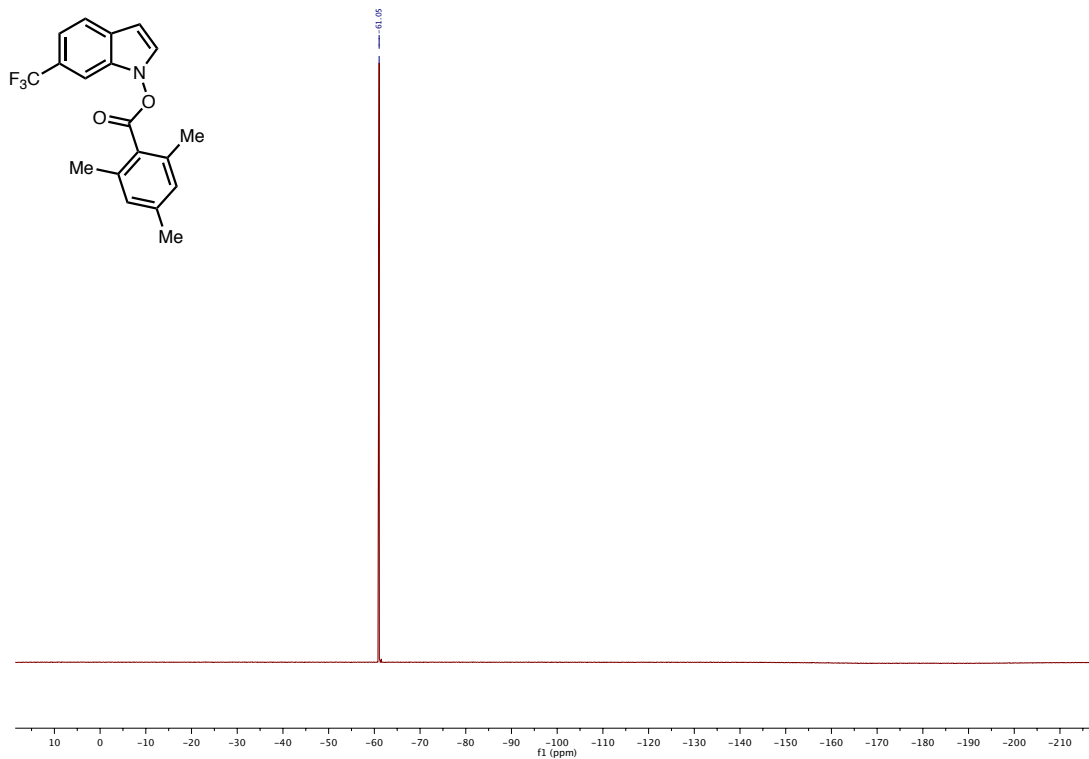
¹H NMR, 400 MHz, CDCl₃



¹³C NMR, 101 MHz, CDCl₃

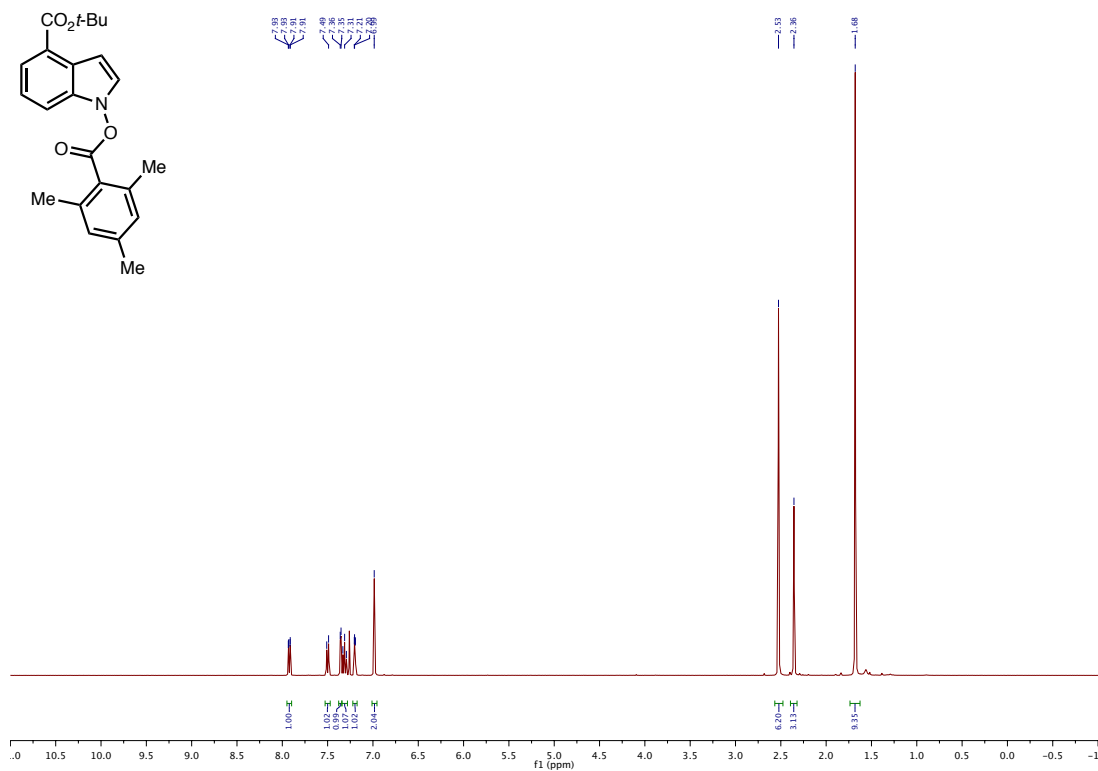


^{19}F NMR, 376 MHz, CDCl_3

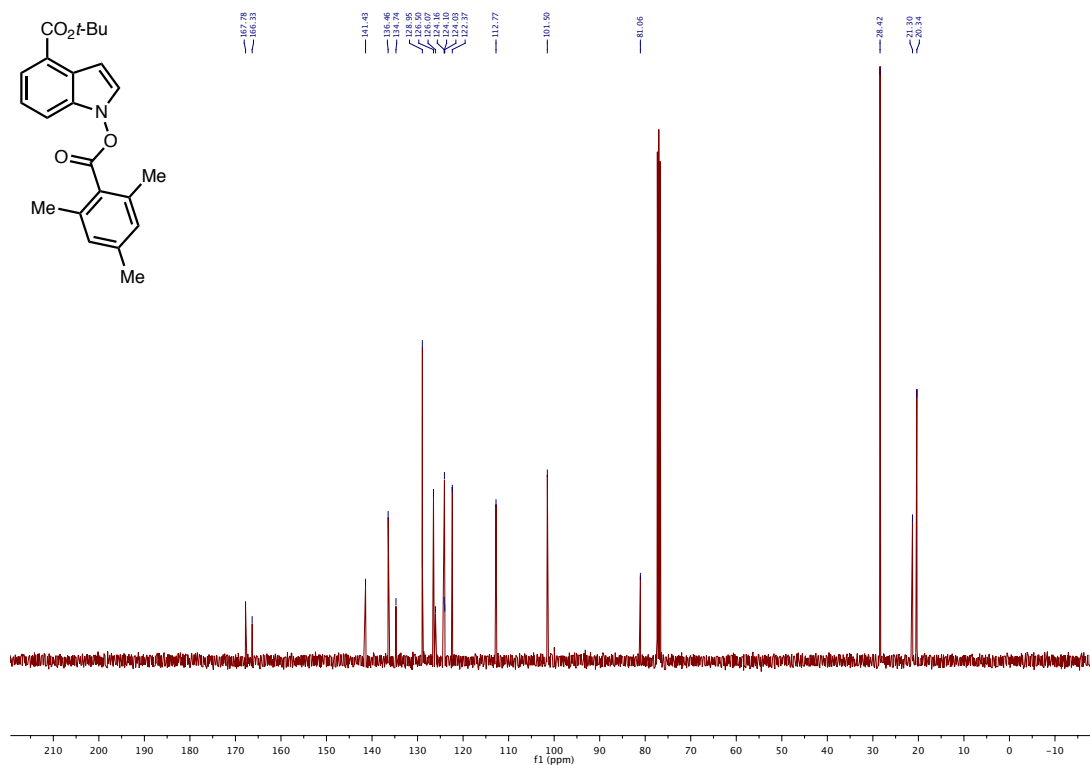


***tert*-butyl 1-((2,4,6-trimethylbenzoyl)oxy)-1*H*-indole-4-carboxylate (2f)**

¹H NMR, 400 MHz, CDCl₃

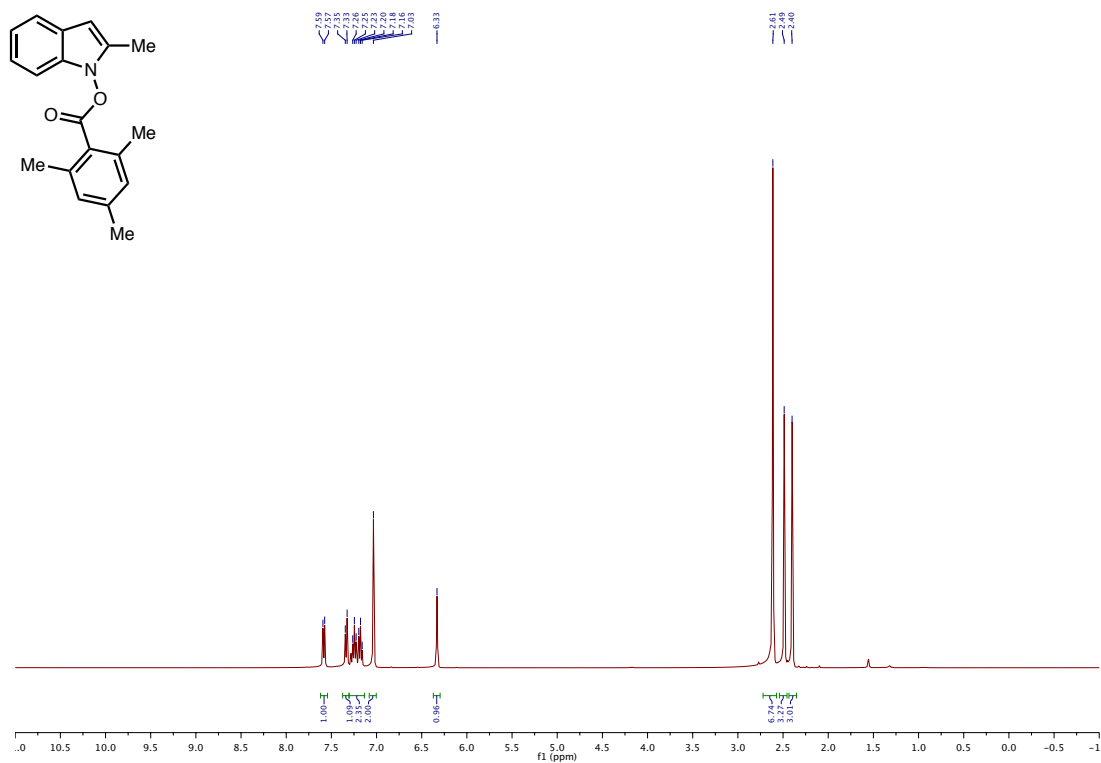


¹³C NMR, 101 MHz, CDCl₃

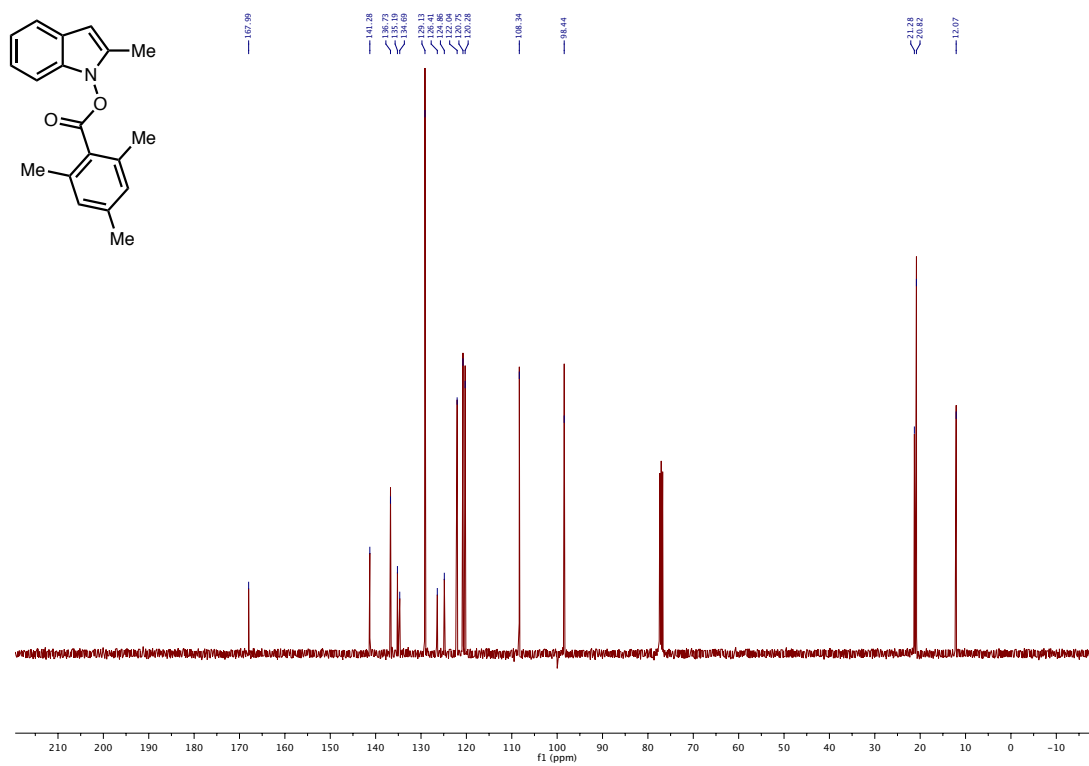


2-methyl-1*H*-indol-1-yl 2,4,6-trimethylbenzoate (2g)

¹H NMR, 400 MHz, CDCl₃

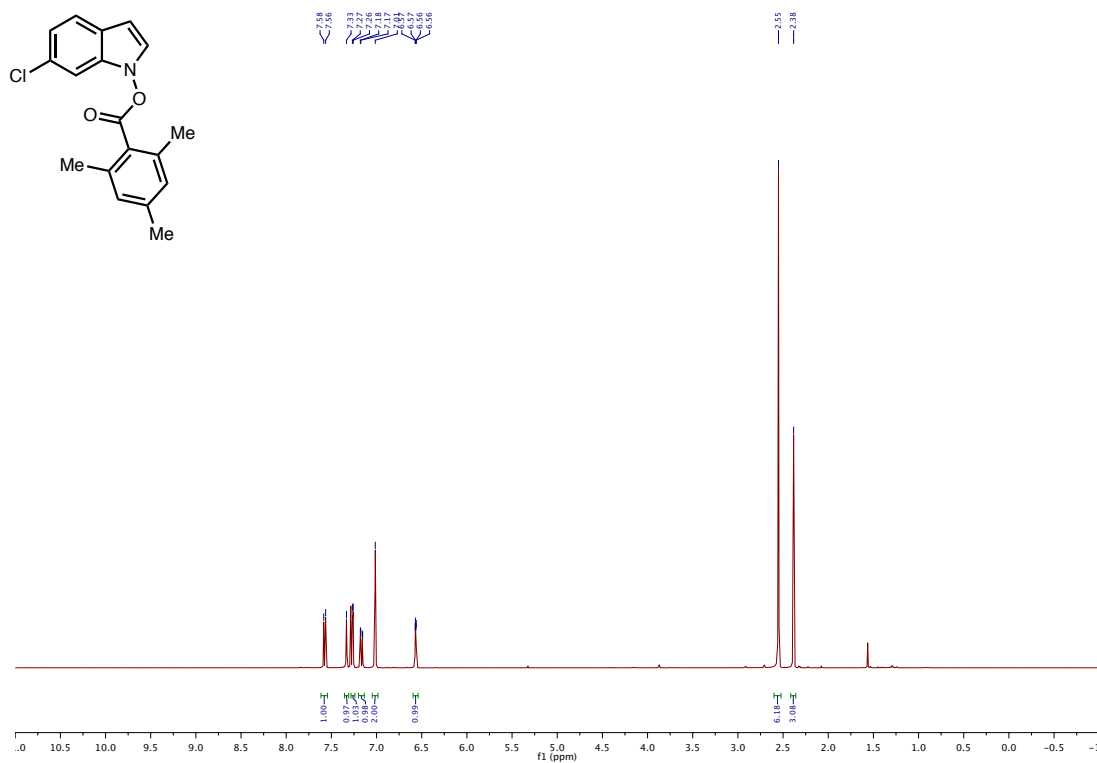


¹³C NMR, 101 MHz, CDCl₃

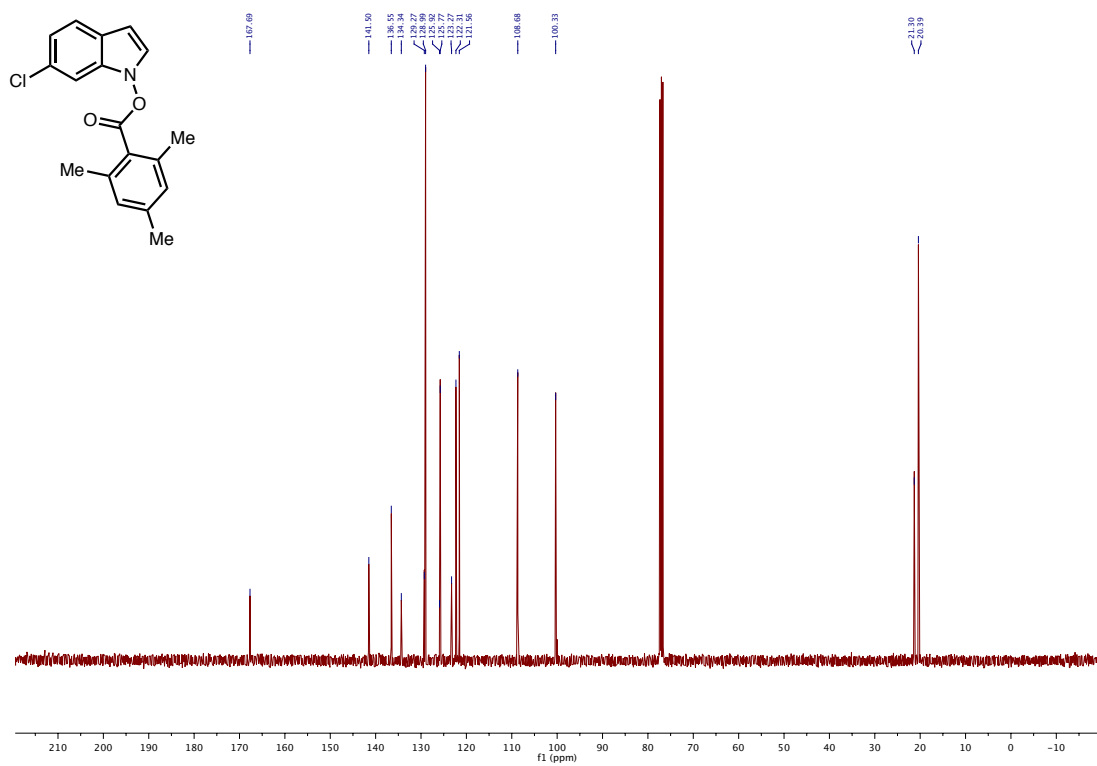


6-chloro-1*H*-indol-1-yl 2,4,6-trimethylbenzoate (2i)

¹H NMR, 400 MHz, CDCl₃

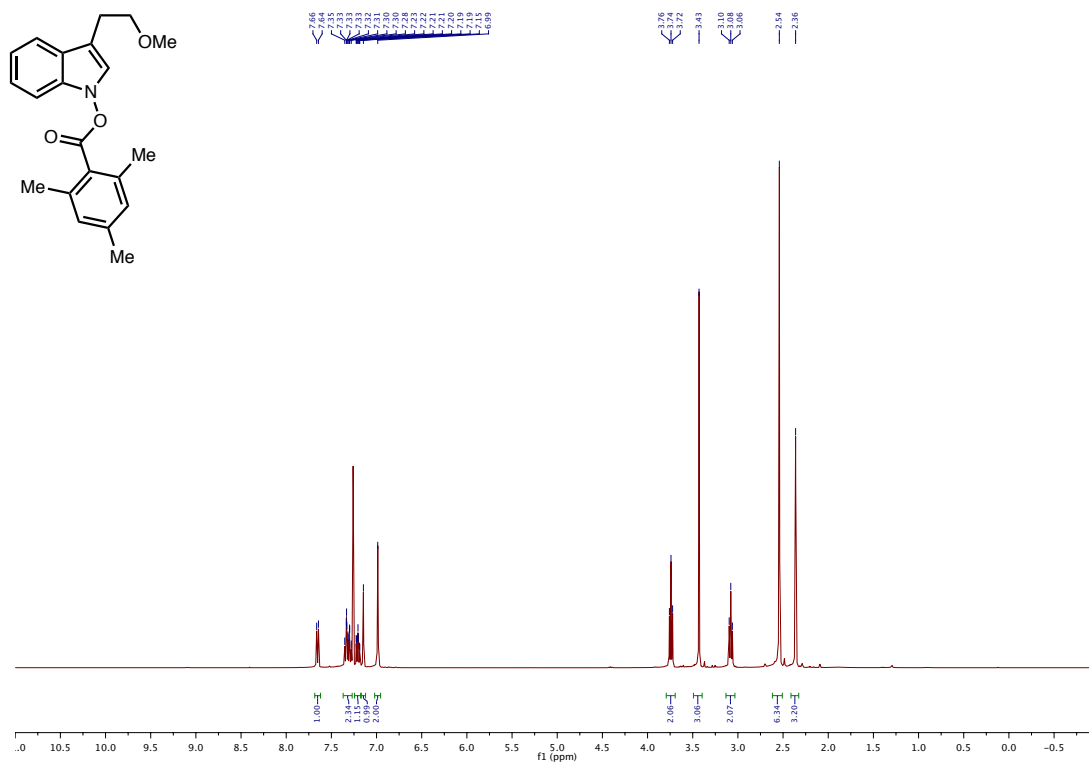


¹³C NMR, 101 MHz, CDCl₃

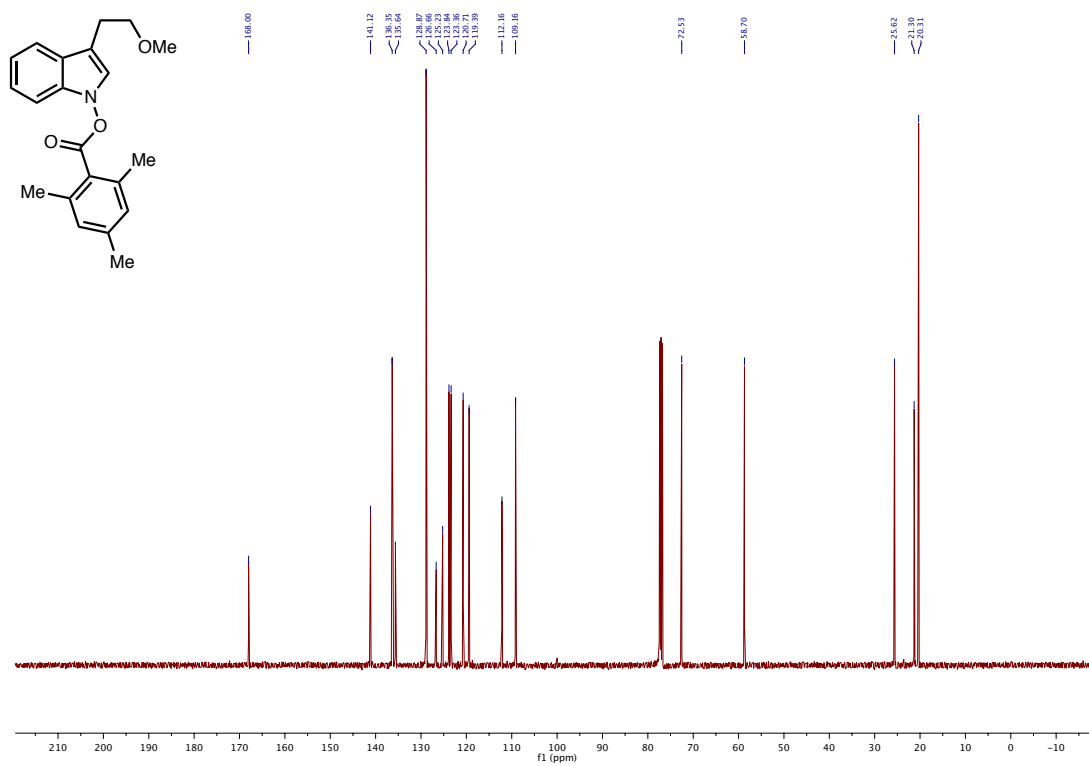


3-(2-methoxyethyl)-1H-indol-1-yl 2,4,6-trimethylbenzoate (2k)

^1H NMR, 400 MHz, CDCl_3

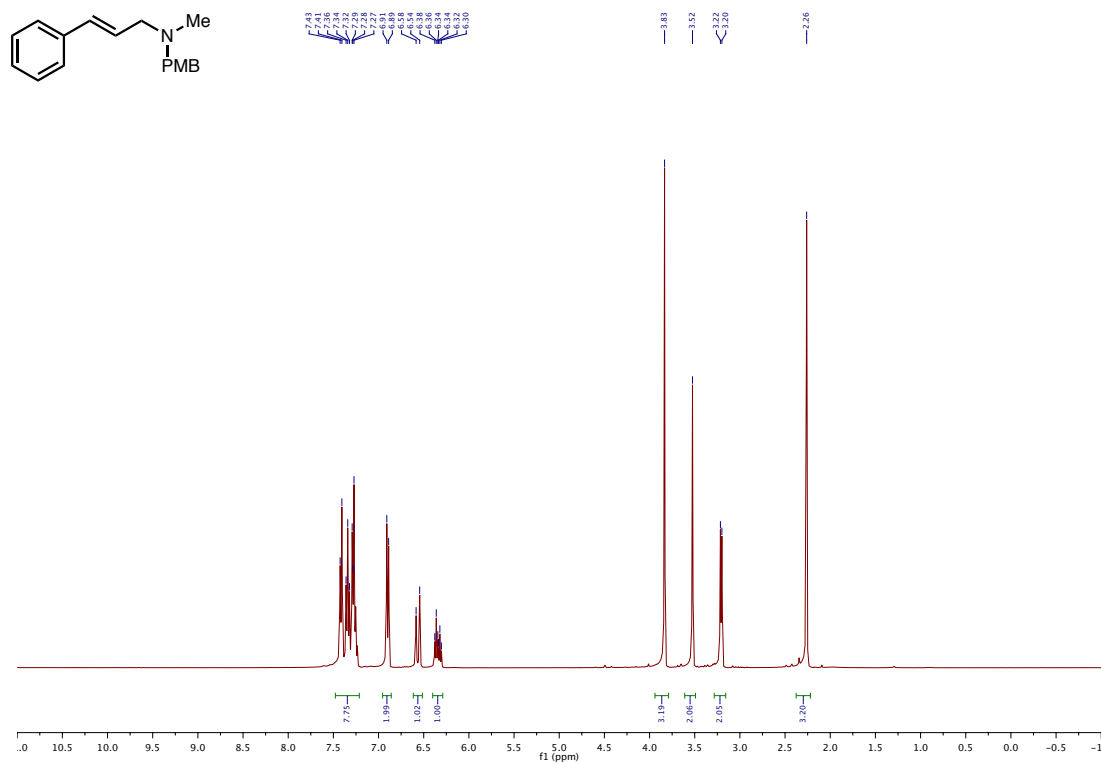


^{13}C NMR, 101 MHz, CDCl_3

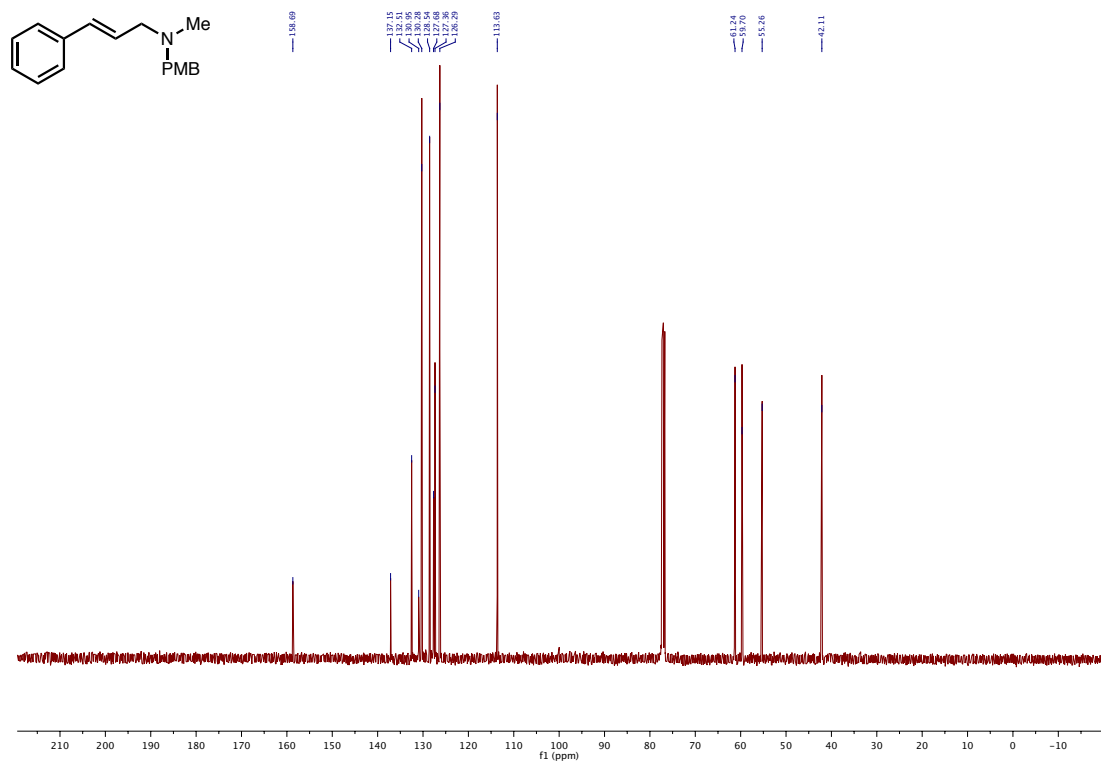


(E)-N-(4-methoxybenzyl)-N-methyl-3-phenylprop-2-en-1-amine (1s)

¹H NMR, 400 MHz, CDCl₃

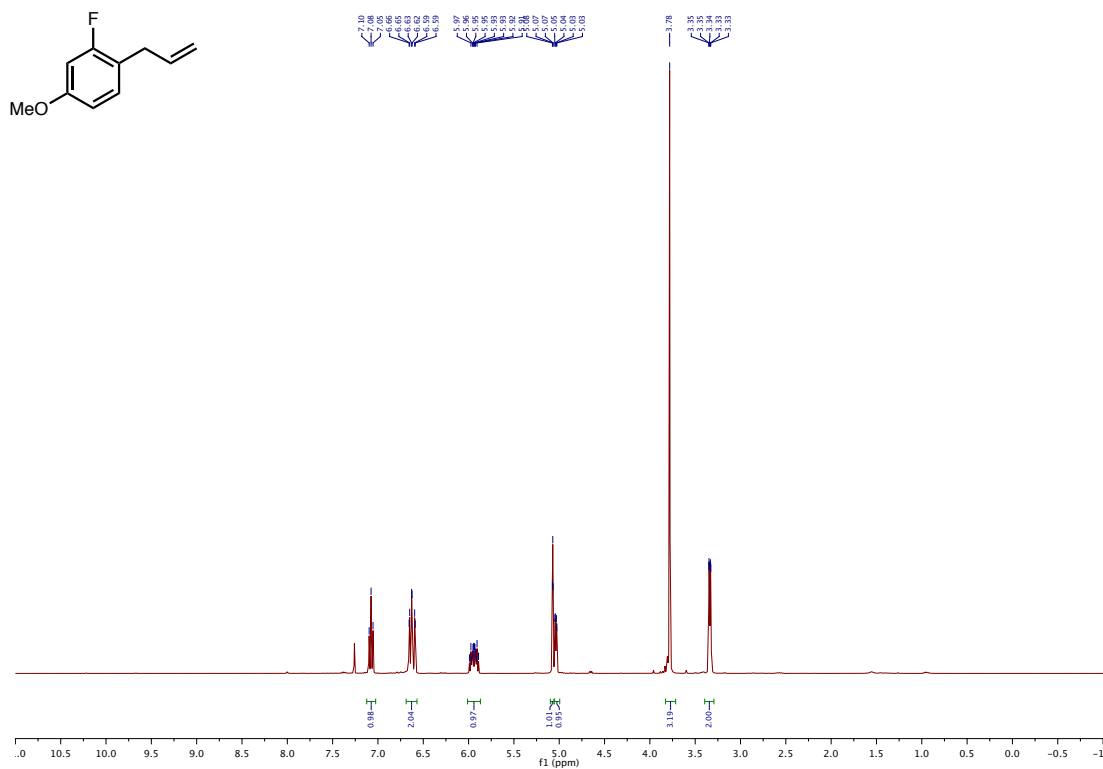


¹³C NMR, 101 MHz, CDCl₃

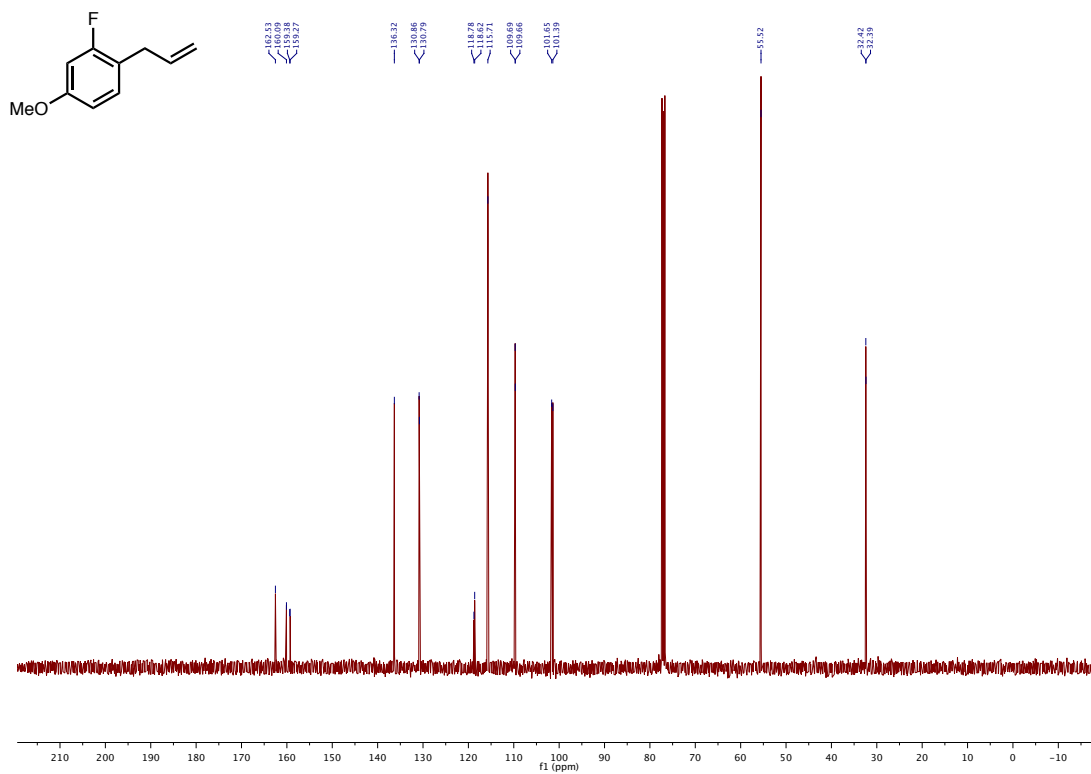


1-allyl-2-fluoro-4-methoxybenzene (1v)

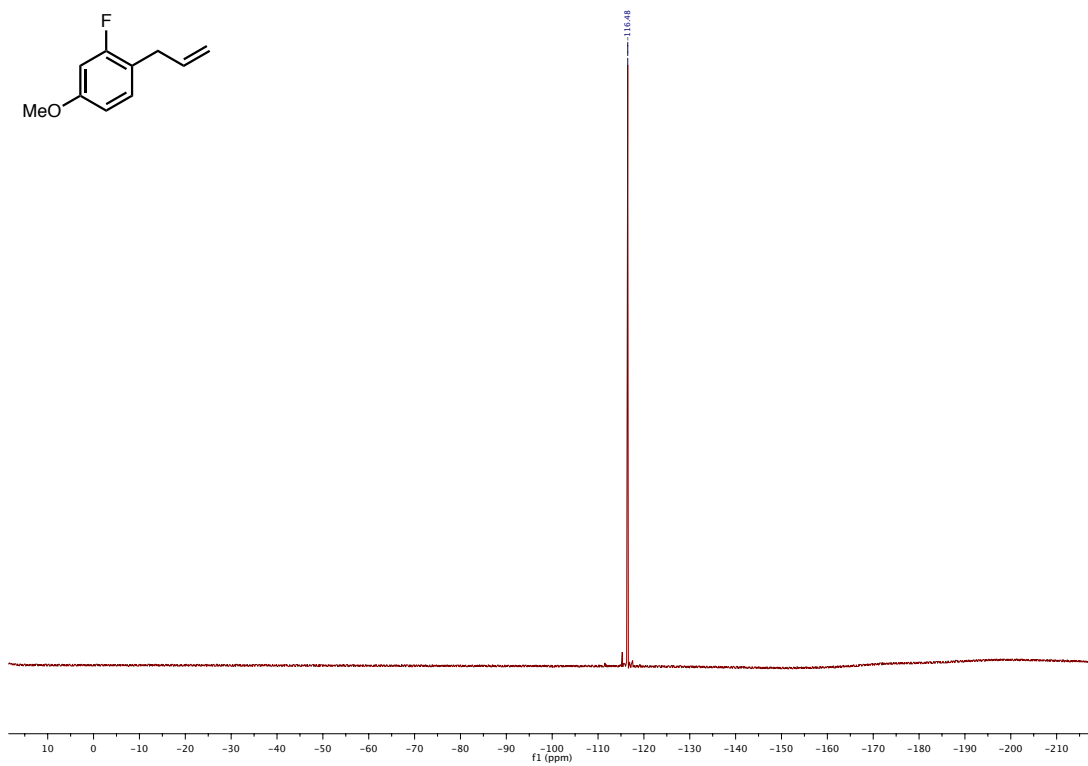
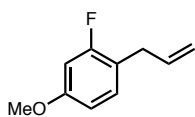
^1H NMR, 400 MHz, CDCl_3



^{13}C NMR, 101 MHz, CDCl_3

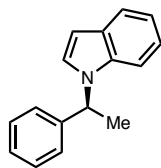


^{19}F NMR, 376 MHz, CDCl_3

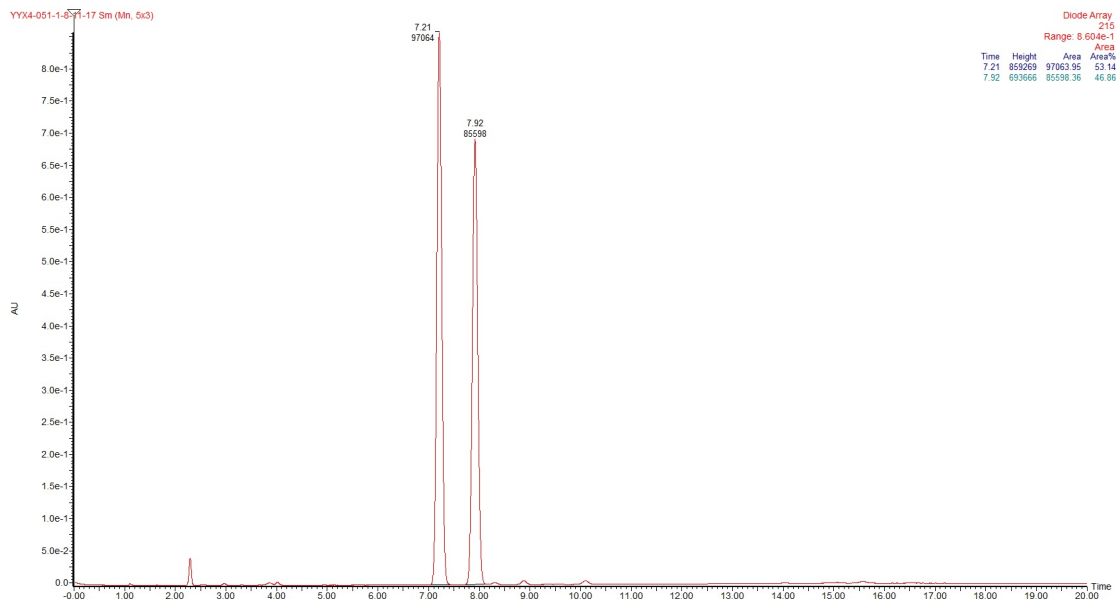


IX. SFC/HPLC Traces

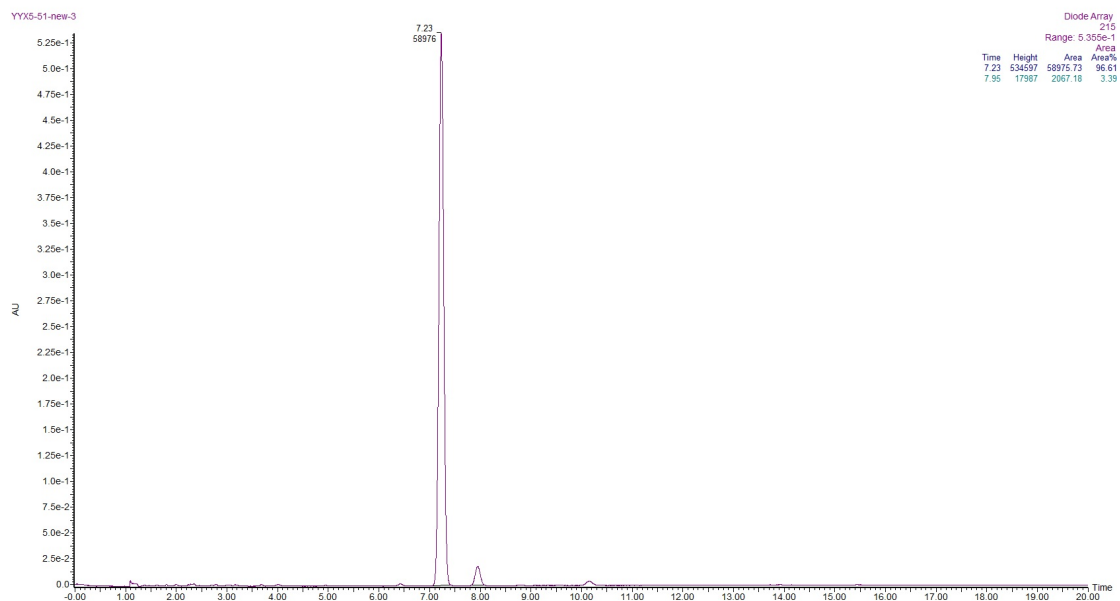
(S)-1-(1-phenylethyl)-1H-indole (3a)



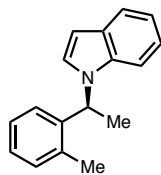
Racemic 3a:



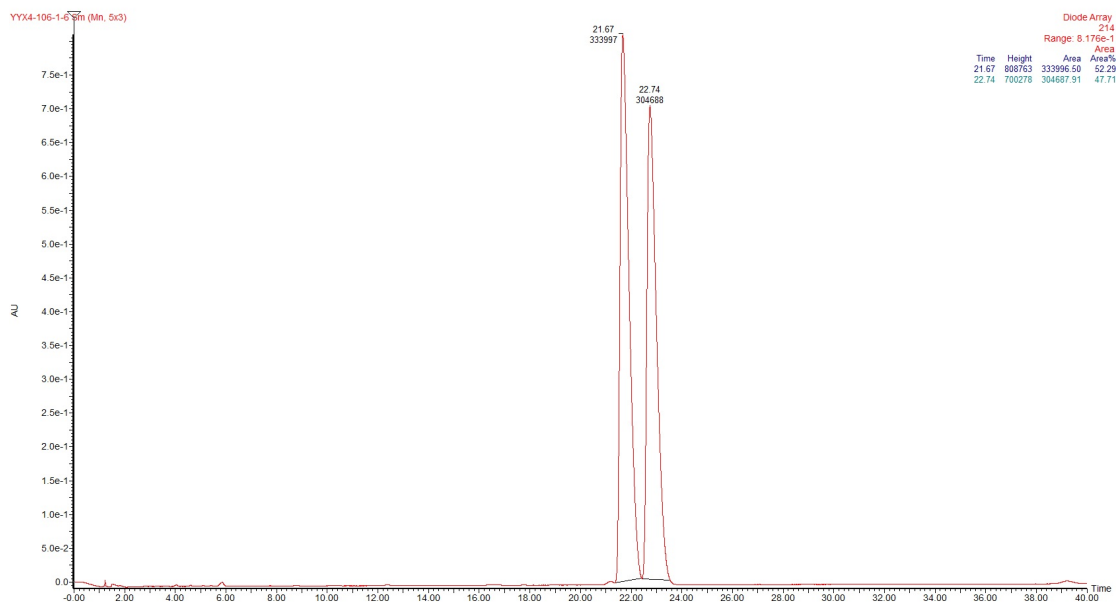
Enantioenriched 3a:



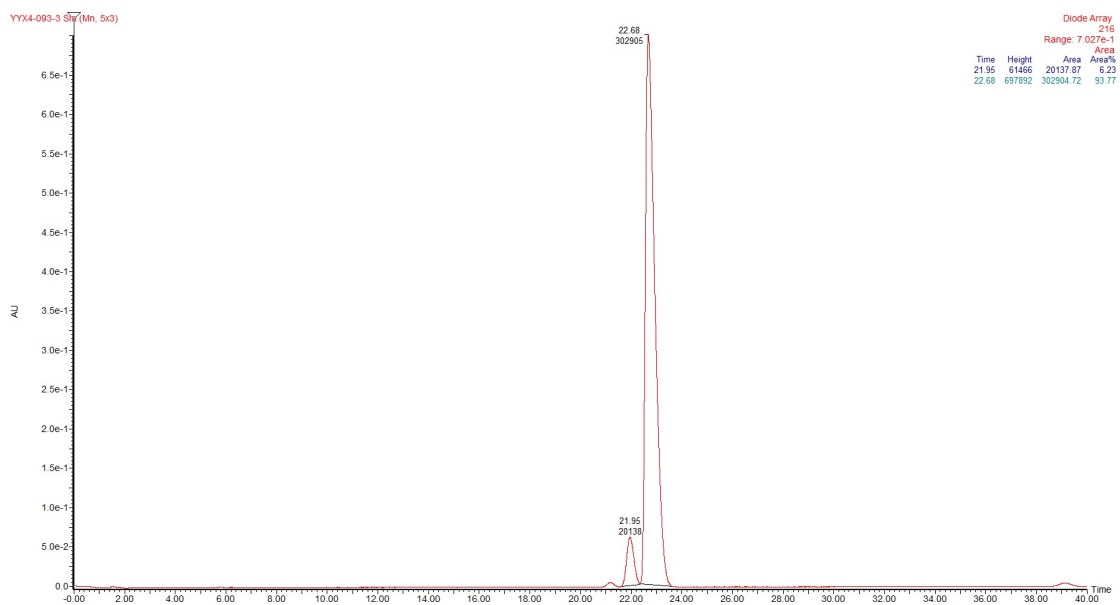
(S)-1-(1-(*o*-tolyl)ethyl)-1*H*-indole (3b)



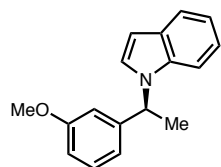
Racemic 3b:



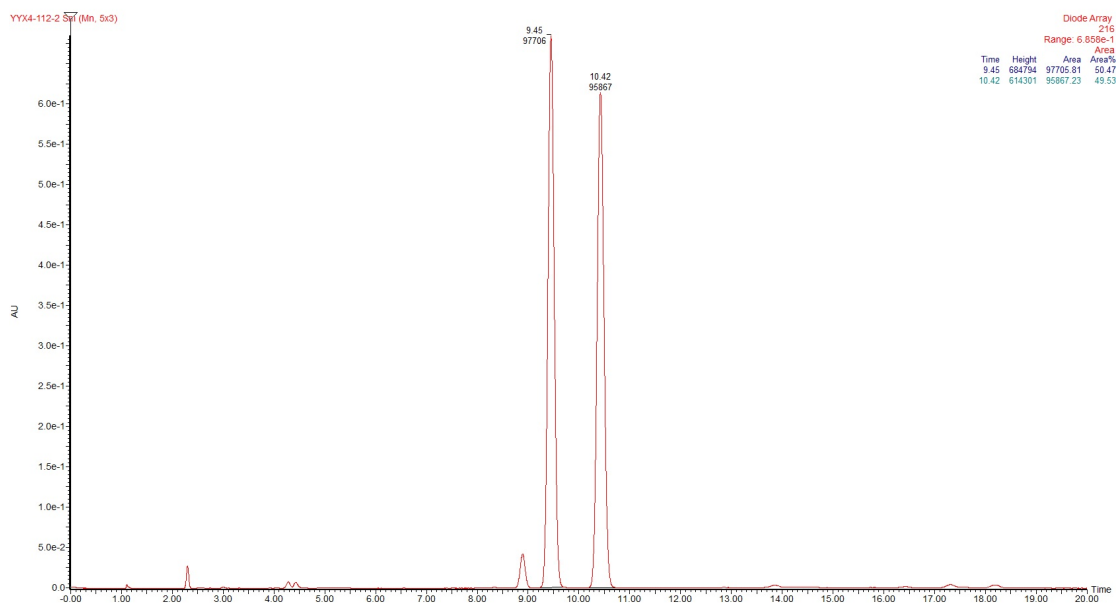
Enantioenriched 3b:



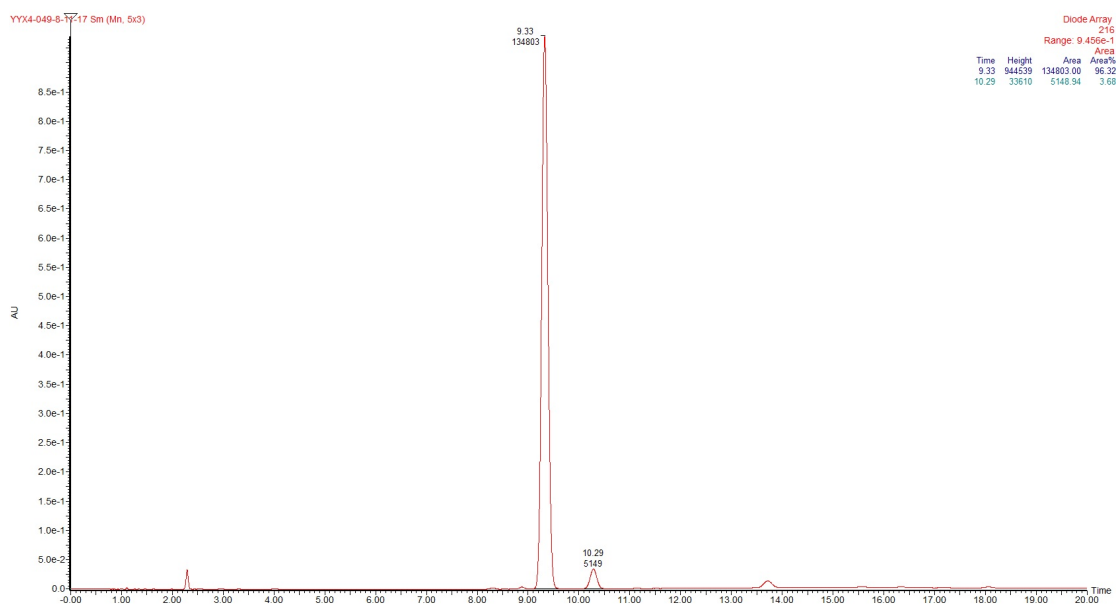
(S)-1-(1-(3-methoxyphenyl)ethyl)-1H-indole (3c)



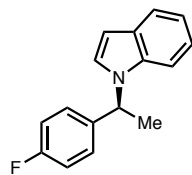
Racemic 3c:



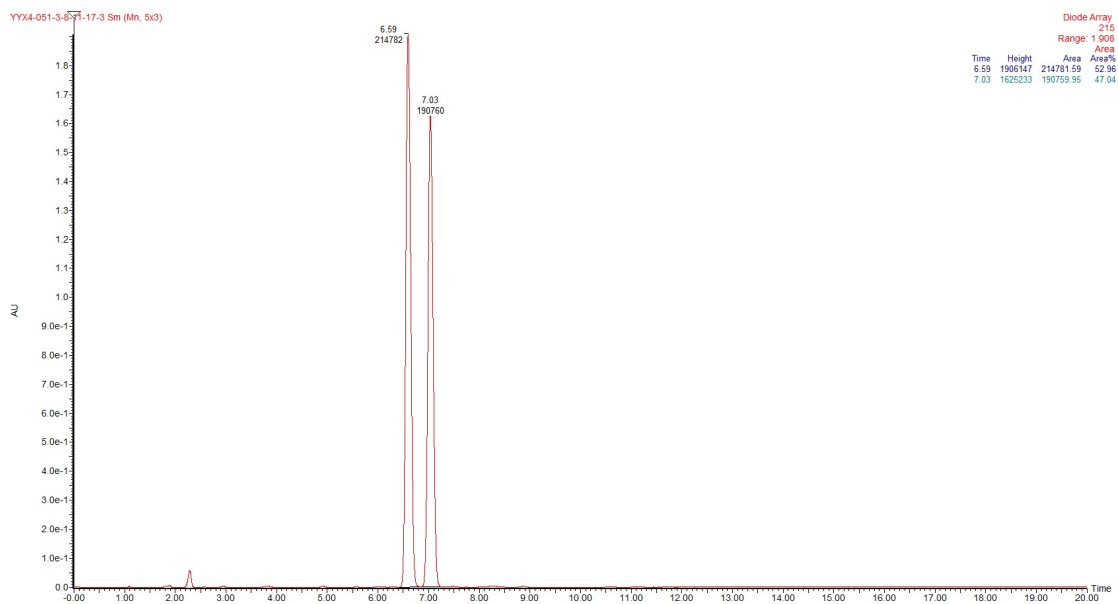
Enantioenriched 3c:



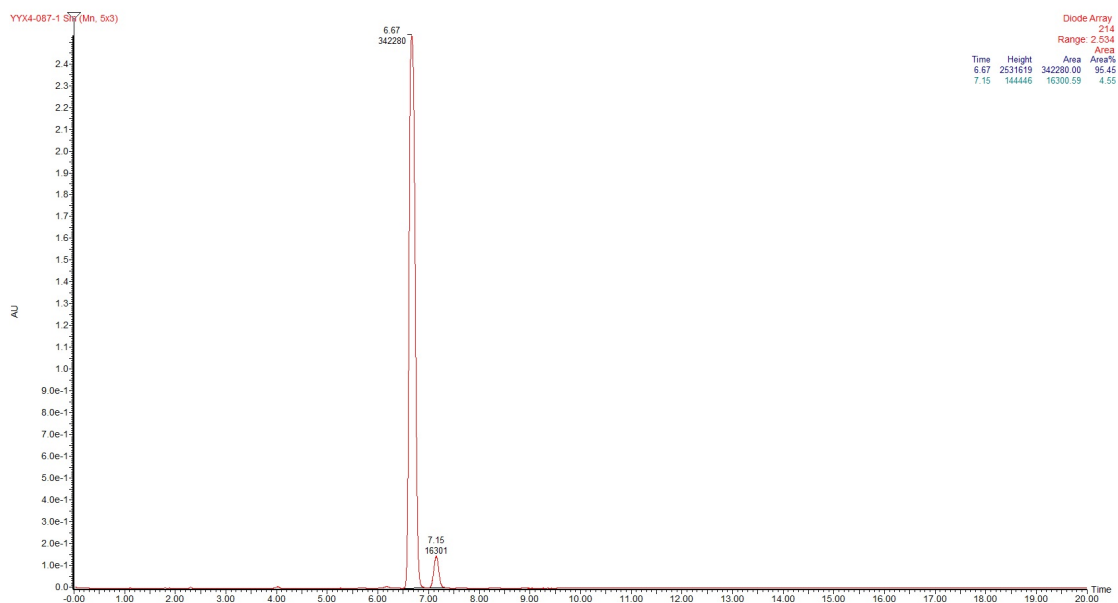
(S)-1-(1-(4-fluorophenyl)ethyl)-1H-indole (3e)



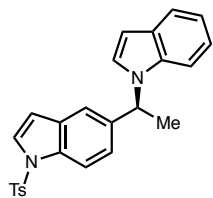
Racemic 3e:



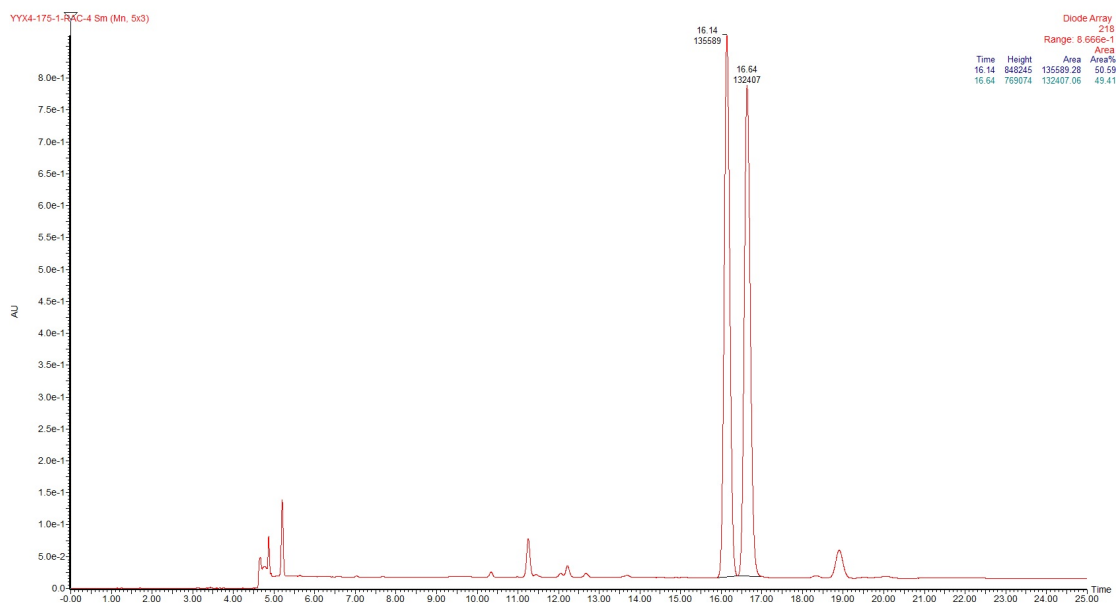
Enantioenriched 3e:



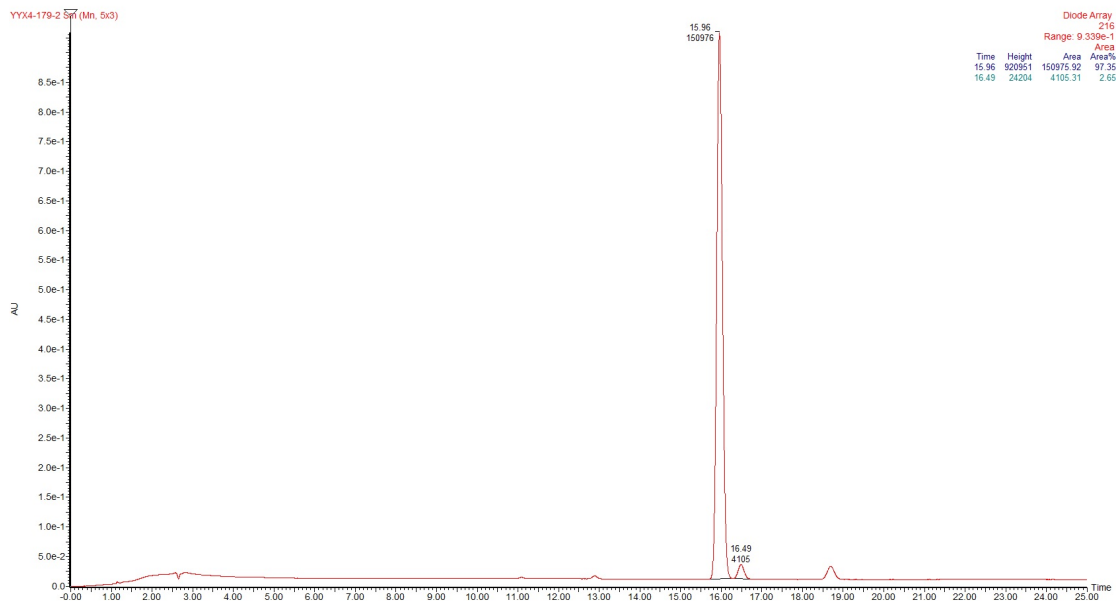
(S)-5-(1-(1*H*-indol-1-yl)ethyl)-1-tosyl-1*H*-indole (3f)



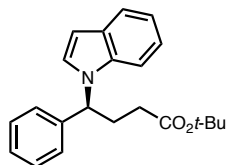
Racemic 3f:



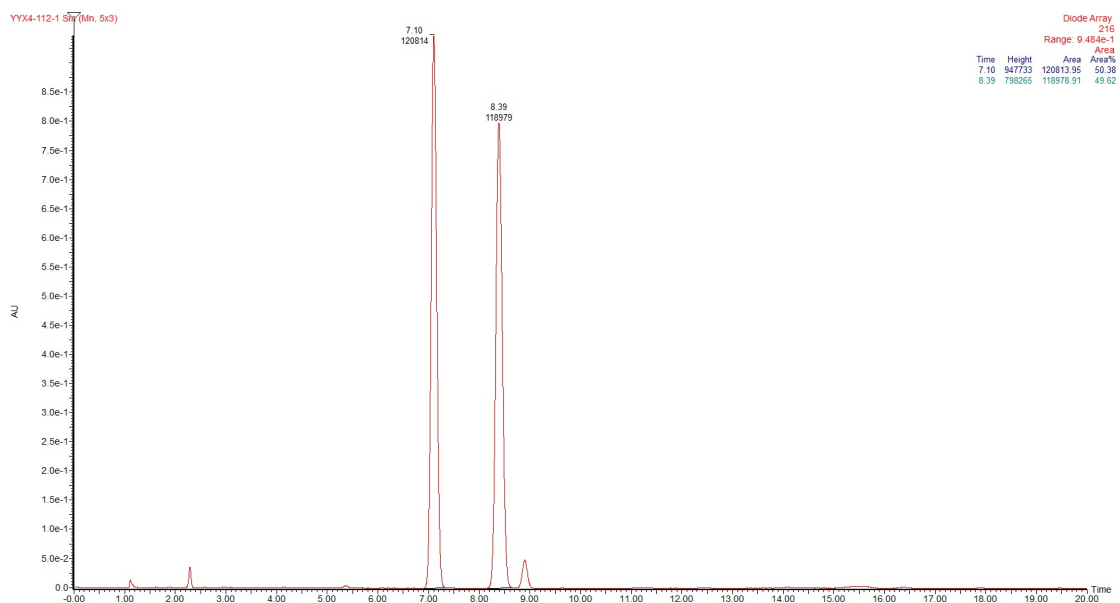
Enantioenriched 3f:



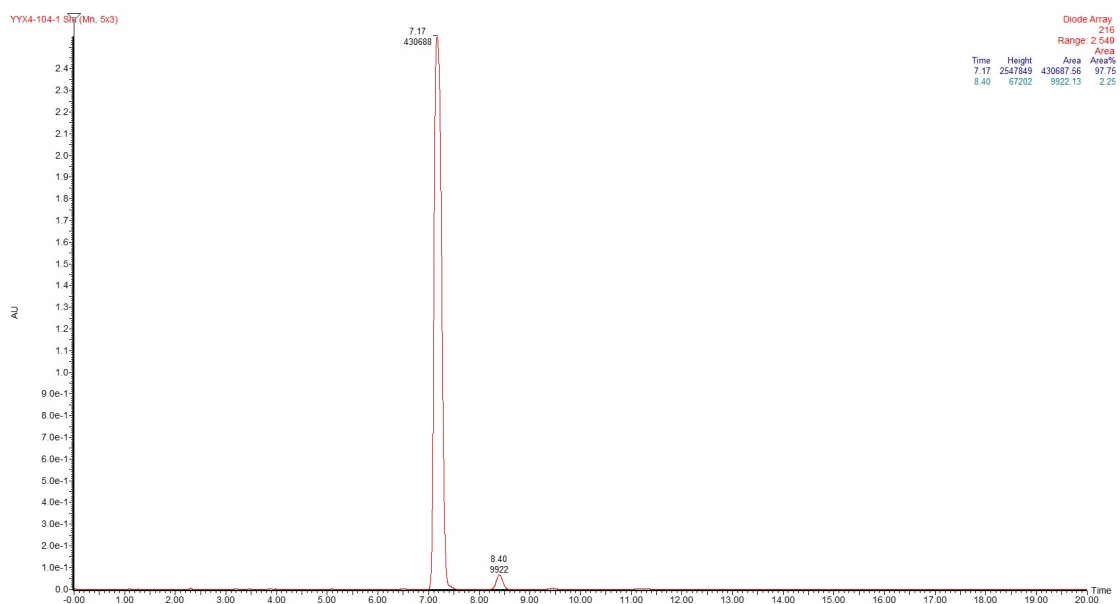
***tert*-butyl (*S*)-4-(1*H*-indol-1-yl)-4-phenylbutanoate (**3g**)**



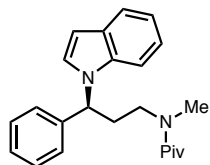
Racemic **3g:**



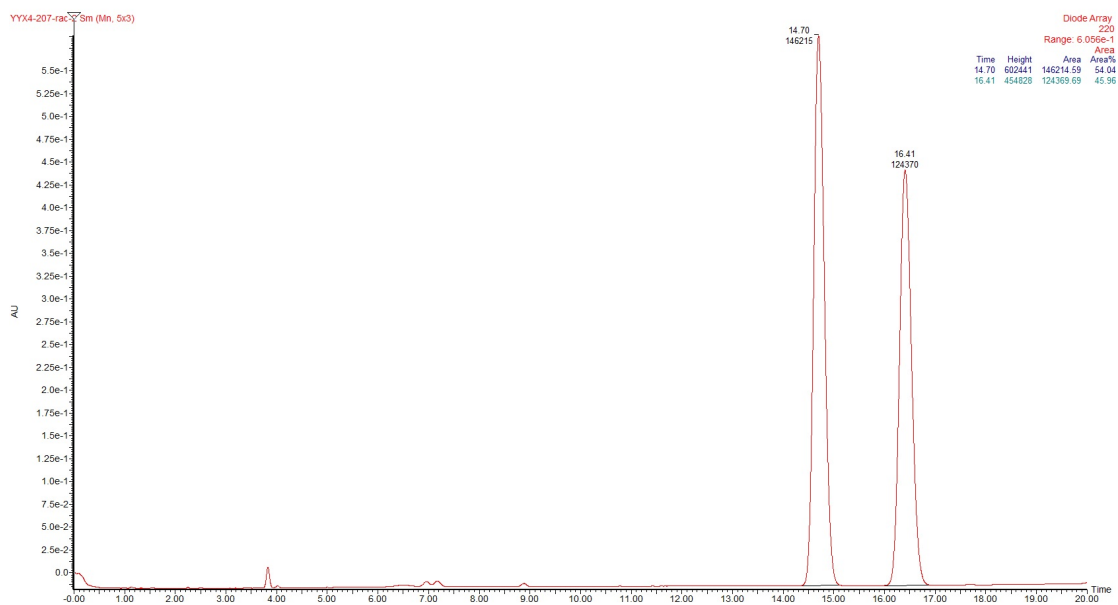
Enantioenriched **3g:**



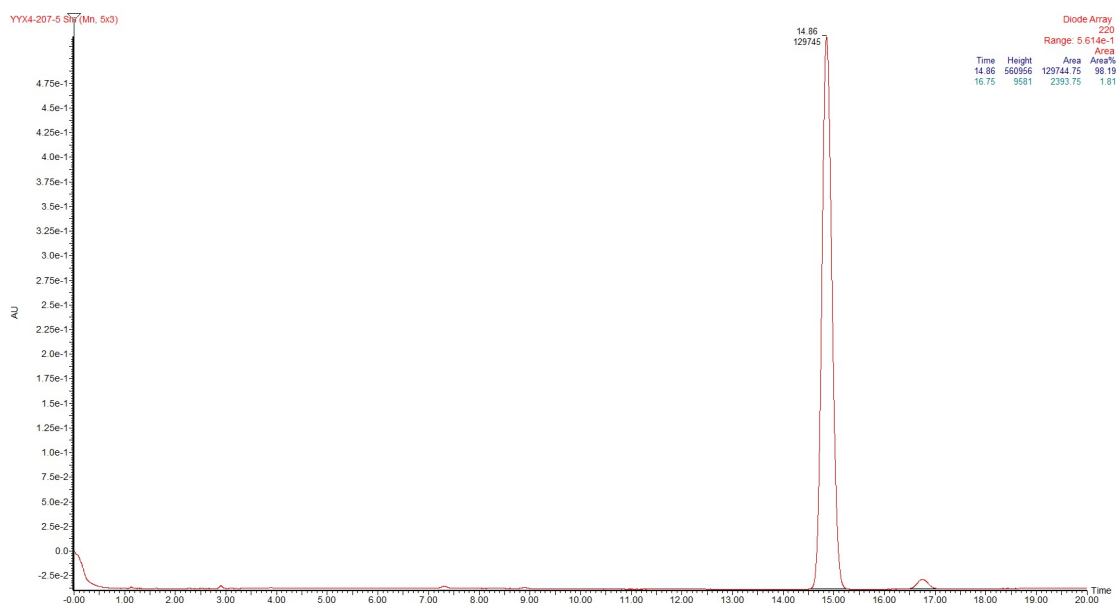
(S)-N-(3-(1*H*-indol-1-yl)-3-phenylpropyl)-*N*-methylpivalamide (3h)



Racemic 3h:

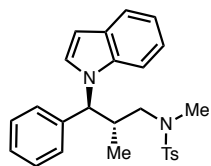


Enantioenriched 3h:



N-((2*S*,3*S*)-3-(1*H*-indol-1-yl)-2-methyl-3-phenylpropyl)-*N*,4-dimethylbenzenesulfonamide

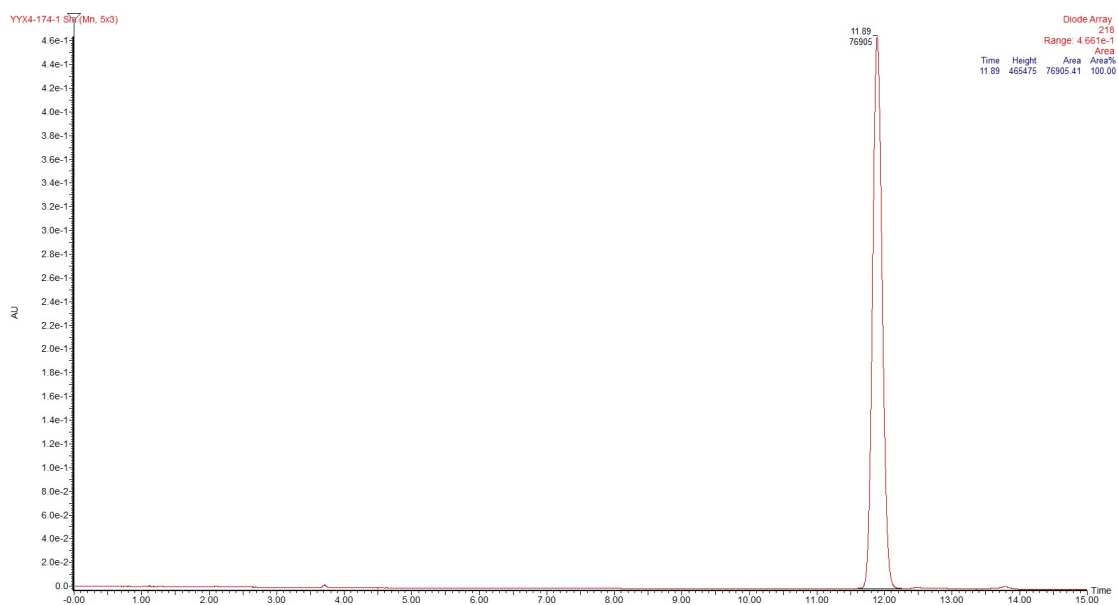
(3i)



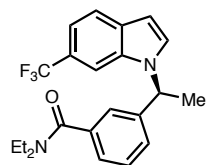
Racemic **3i**:



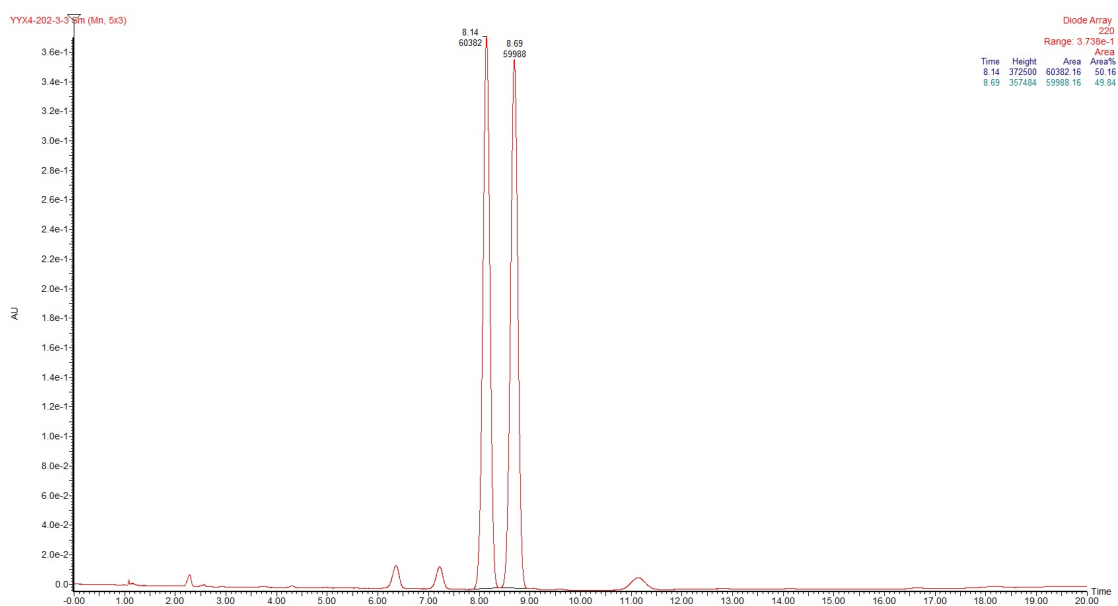
Enantioenriched **3i**:



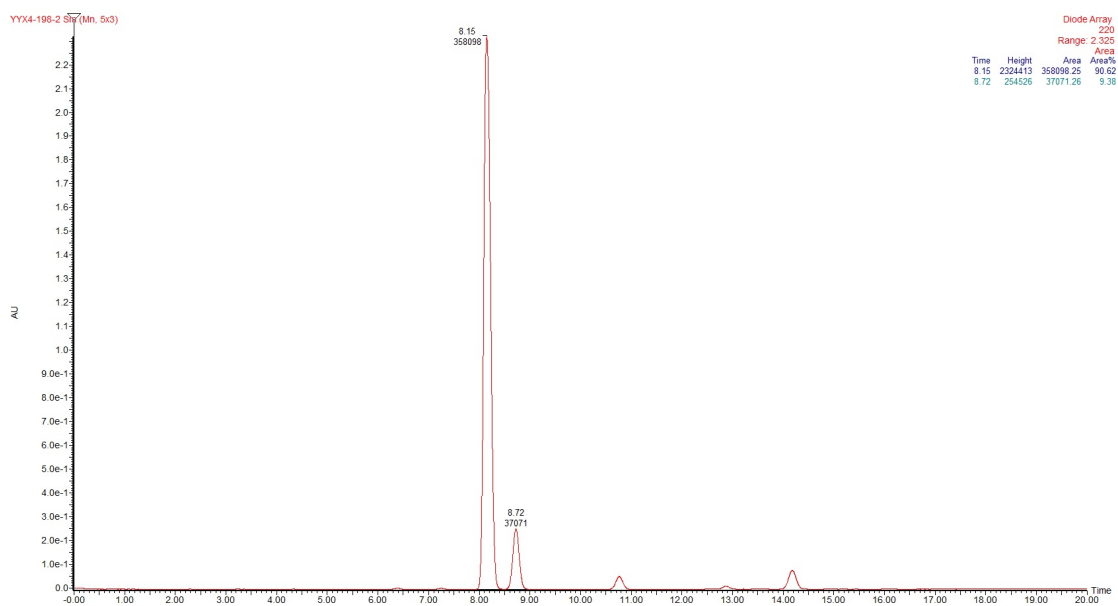
(S)-N,N-diethyl-3-(1-(6-(trifluoromethyl)-1H-indol-1-yl)ethyl)benzamide (3j)



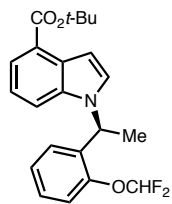
Racemic 3j:



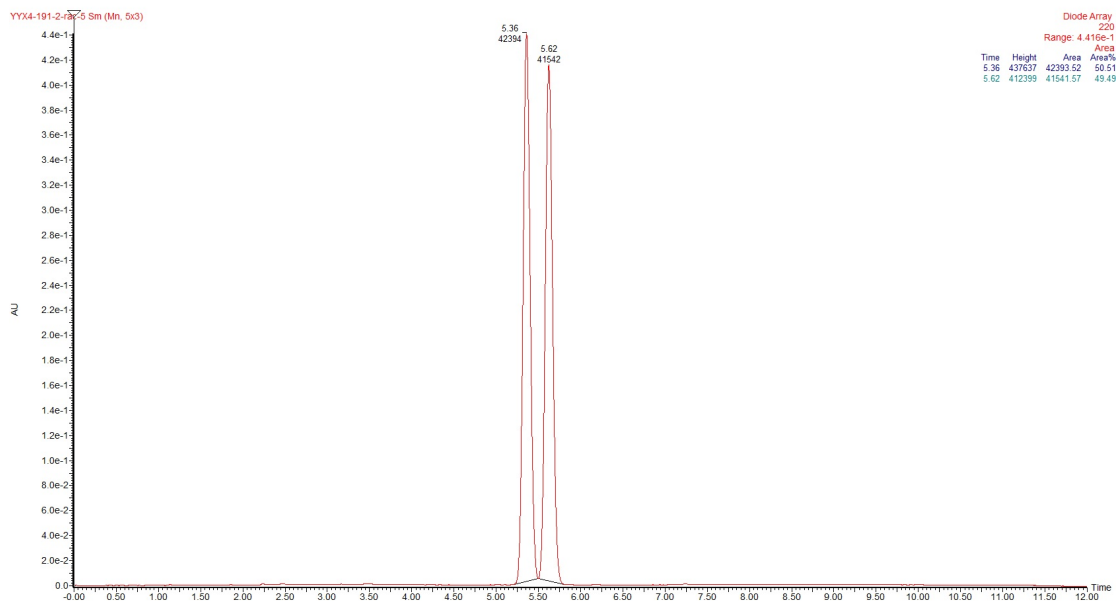
Enantioenriched 3j:



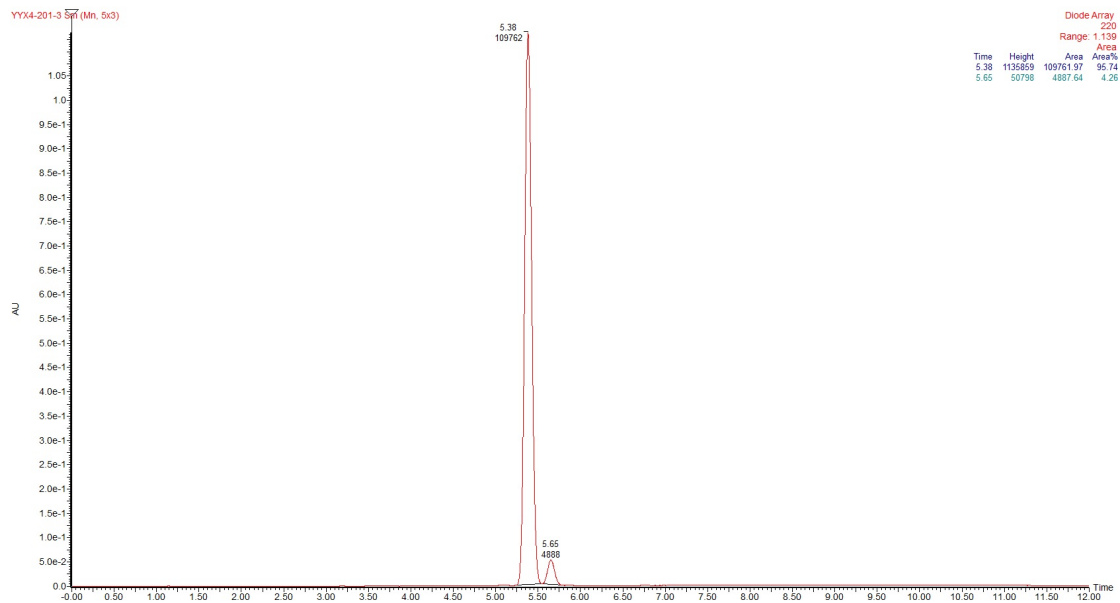
tert-butyl (*S*)-1-(1-(2-(difluoromethoxy)phenyl)ethyl)-1*H*-indole-4-carboxylate (**3k**)



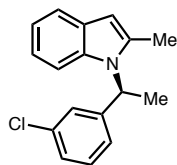
Racemic **3k**:



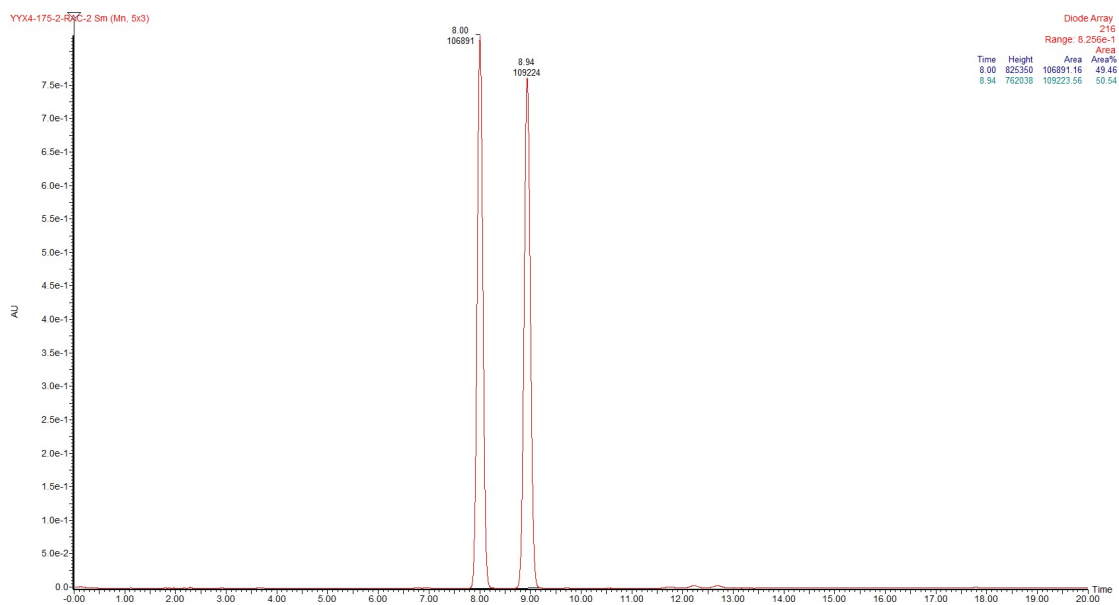
Enantioenriched **3k**:



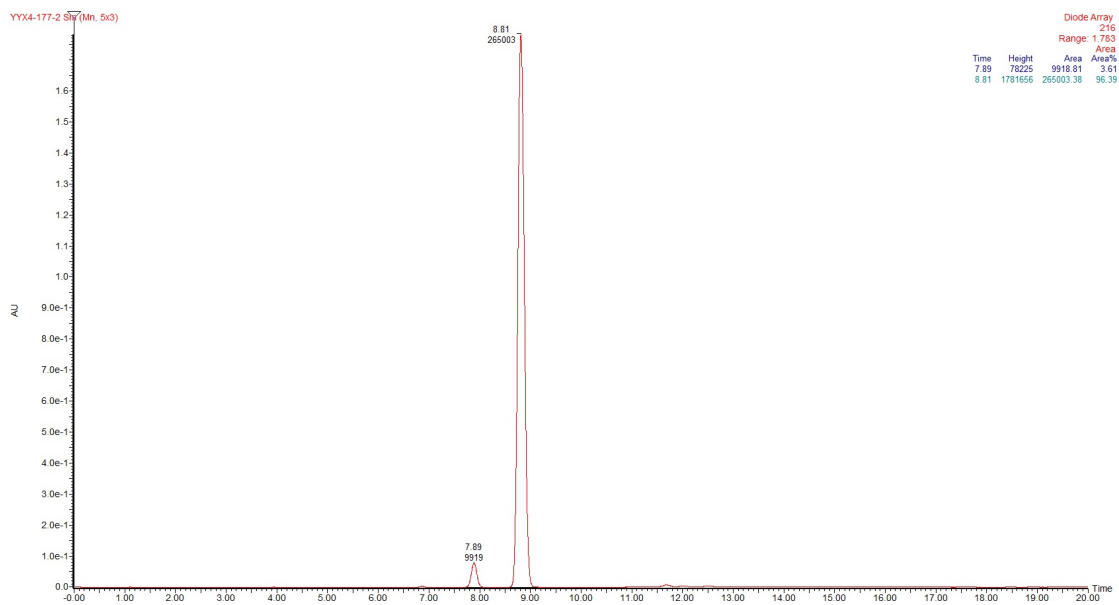
(S)-1-(1-(3-chlorophenyl)ethyl)-2-methyl-1H-indole (3I)



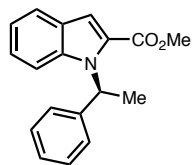
Racemic 3I:



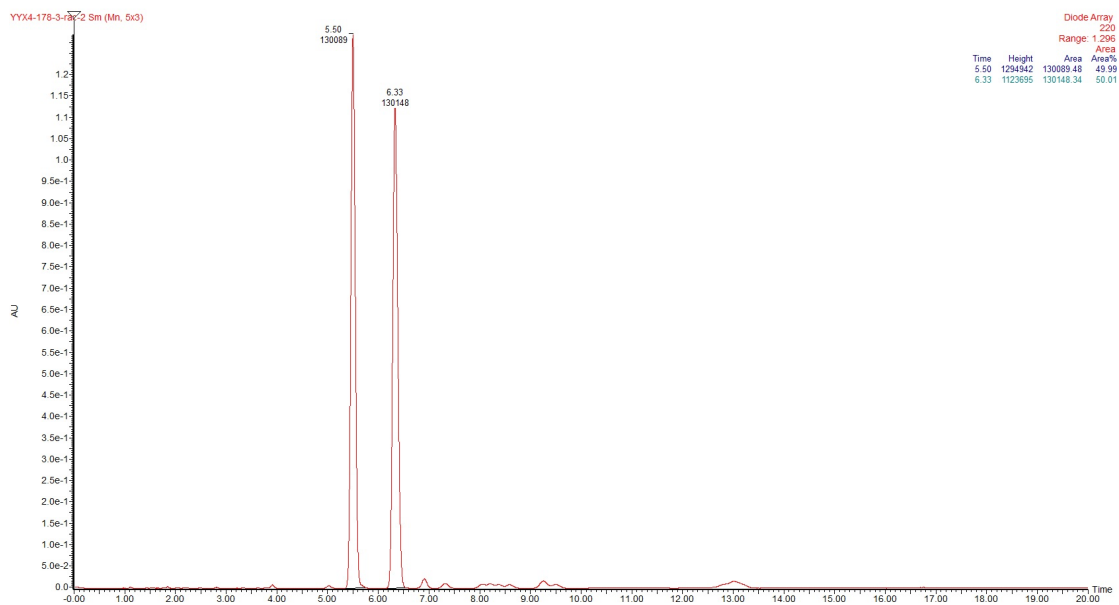
Enantioenriched 3I:



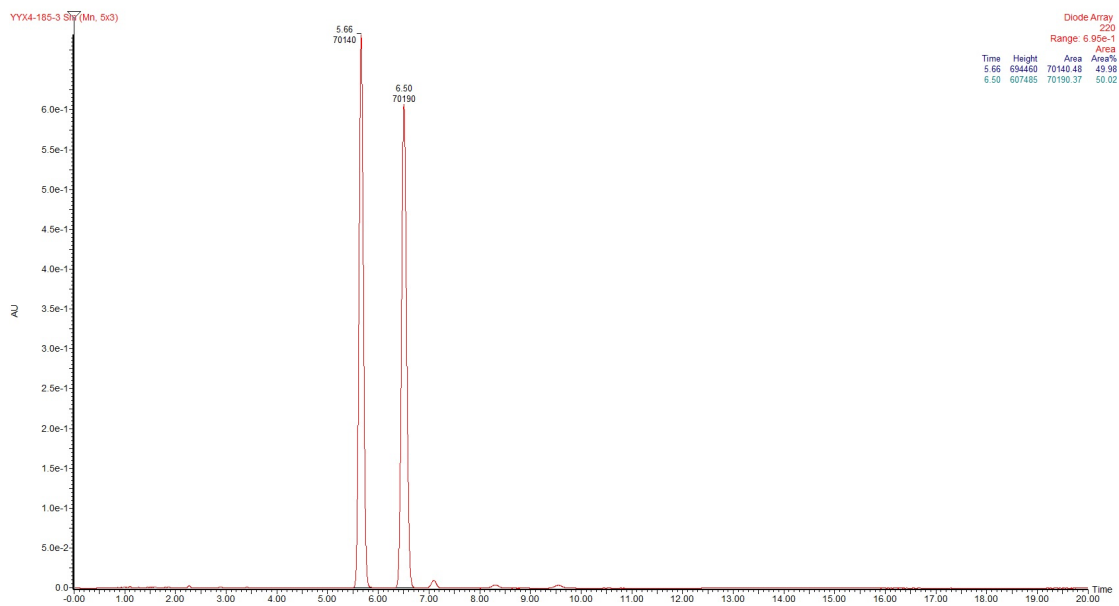
methyl (*S*)-1-(1-phenylethyl)-1*H*-indole-2-carboxylate (**3m**)



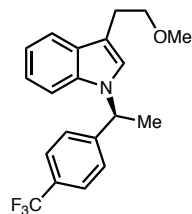
Racemic **3m**:



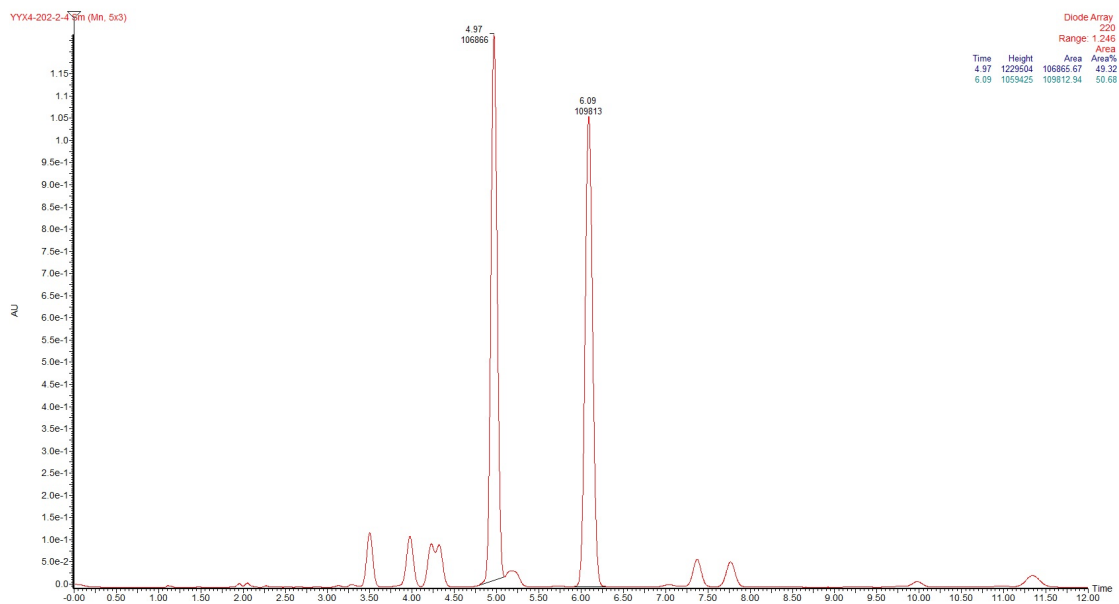
Enantioenriched **3m**:



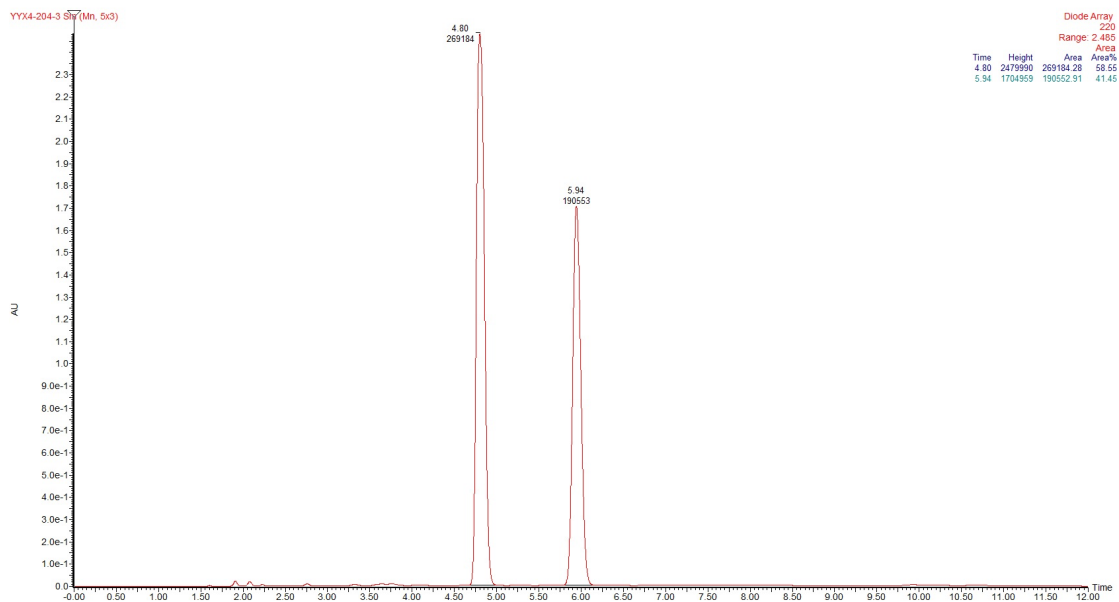
(S)-3-(2-methoxyethyl)-1-(1-(4-(trifluoromethyl)phenyl)ethyl)-1H-indole (3n)



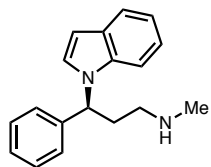
Racemic 3n:



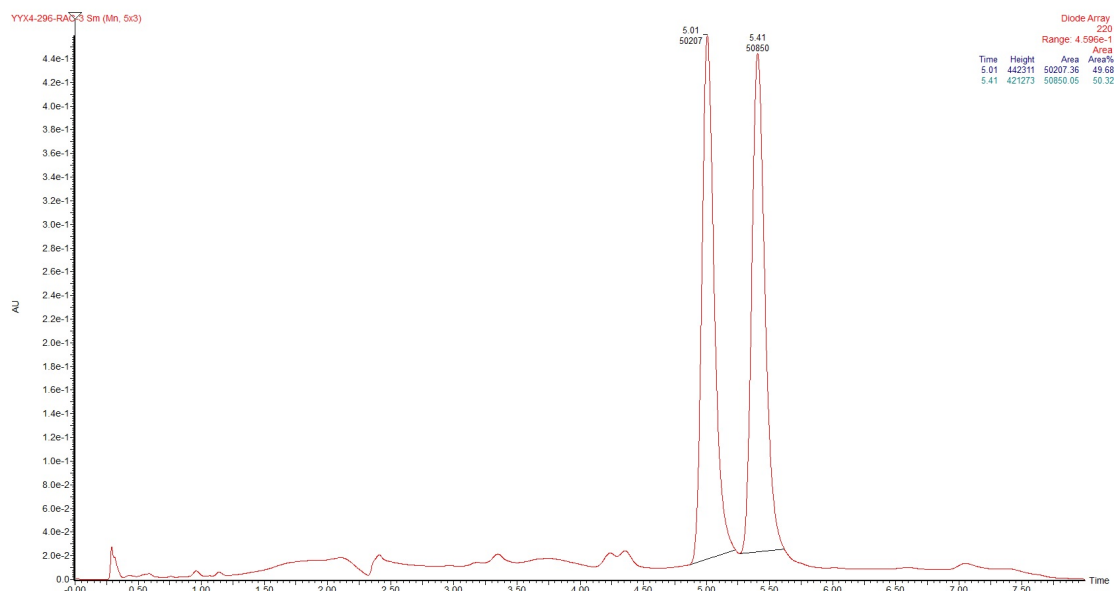
Enantioenriched 3n:



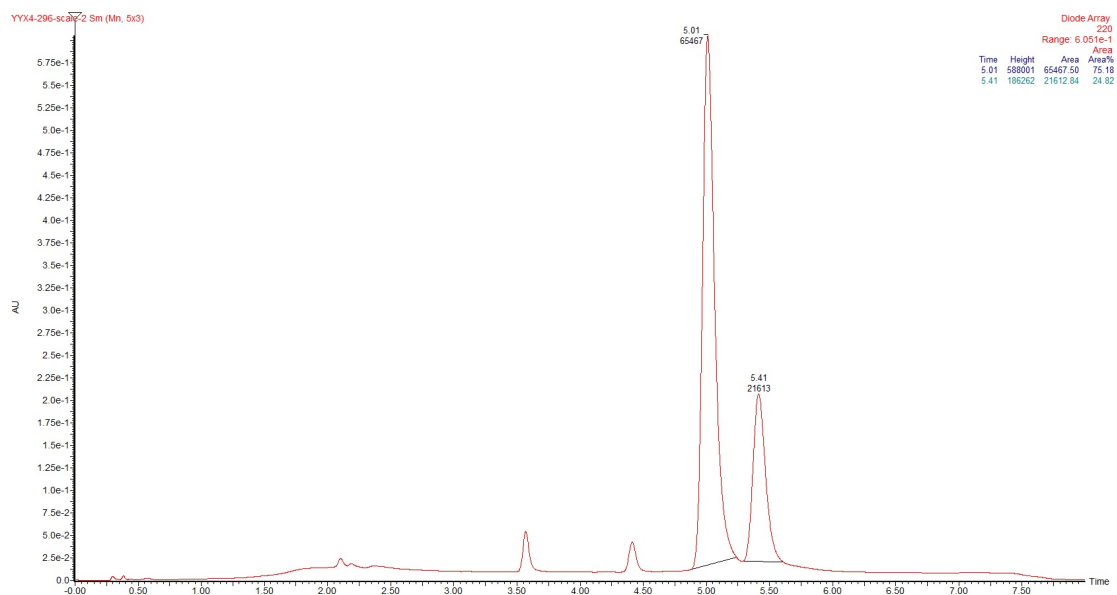
(S)-3-(1H-indol-1-yl)-N-methyl-3-phenylpropan-1-amine (3t)



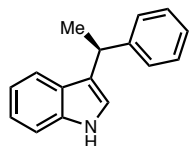
Racemic 3t:



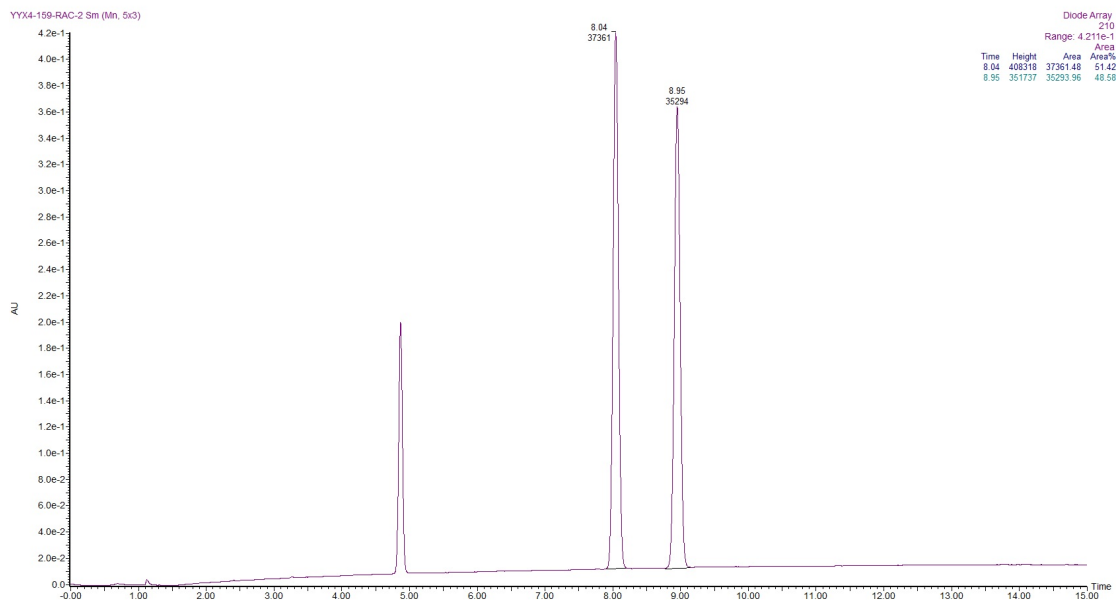
Enantioenriched 3t:



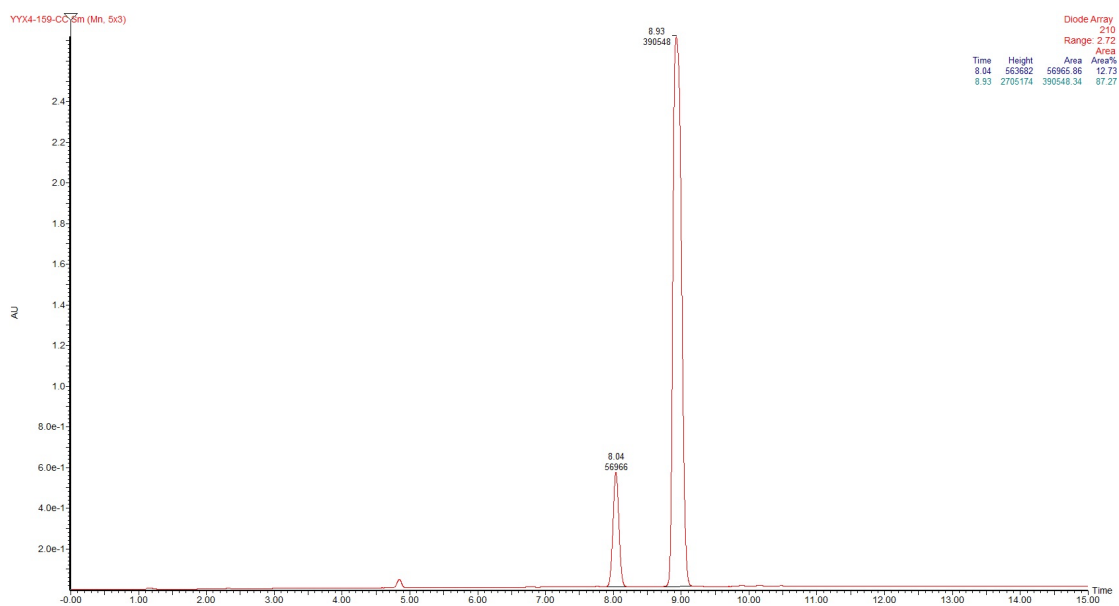
(S)-3-(1-phenylethyl)-1H-indole (4a)



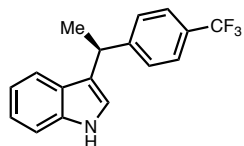
Racemic 4a:



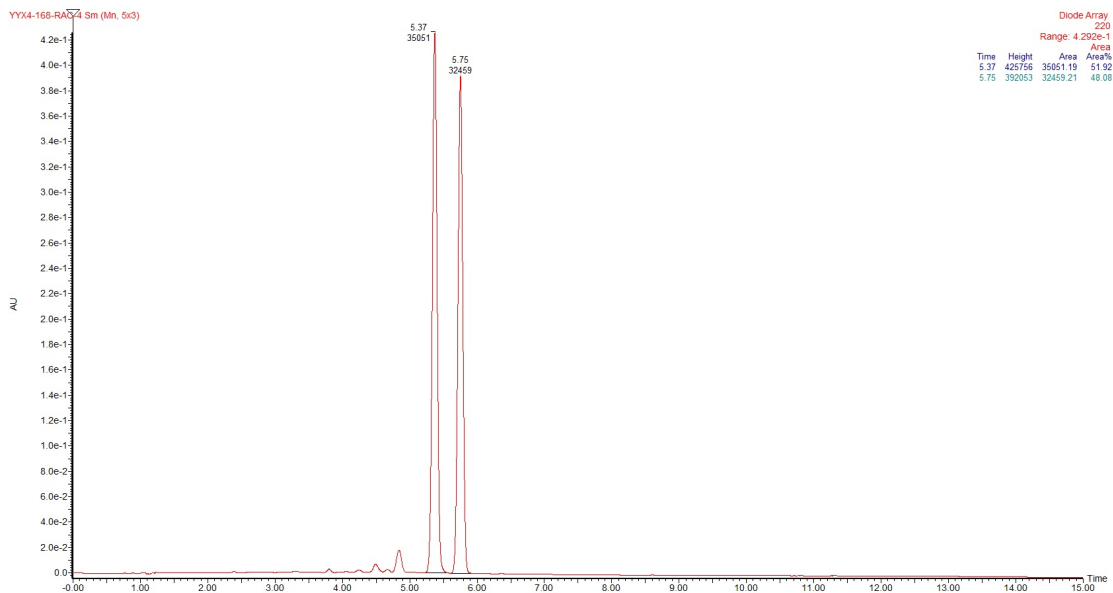
Enantioenriched 4a:



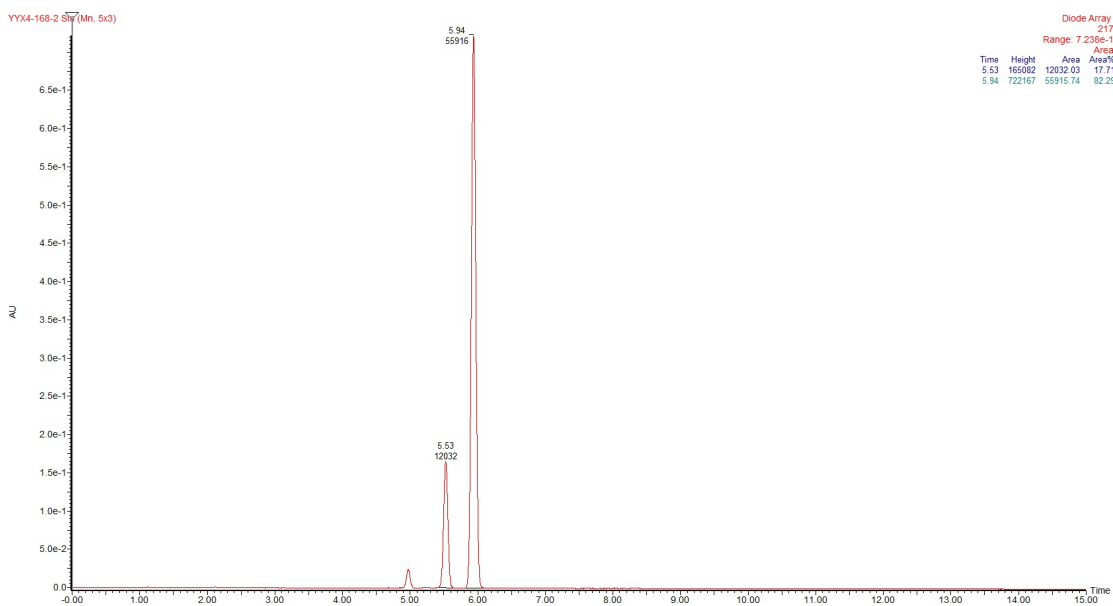
(S)-3-(1-(4-(trifluoromethyl)phenyl)ethyl)-1H-indole (4b)



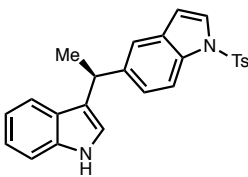
Racemic 4b:



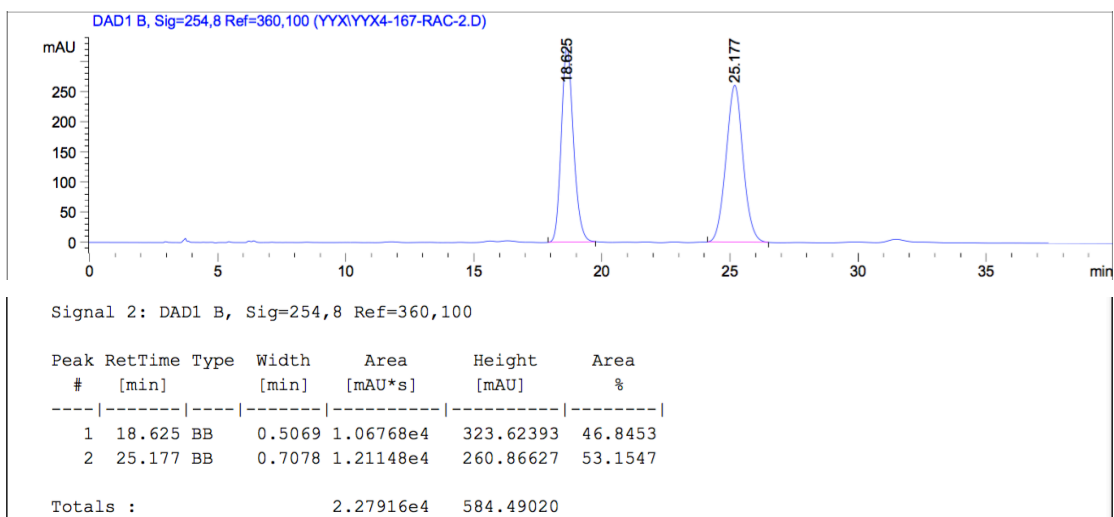
Enantioenriched 4b:



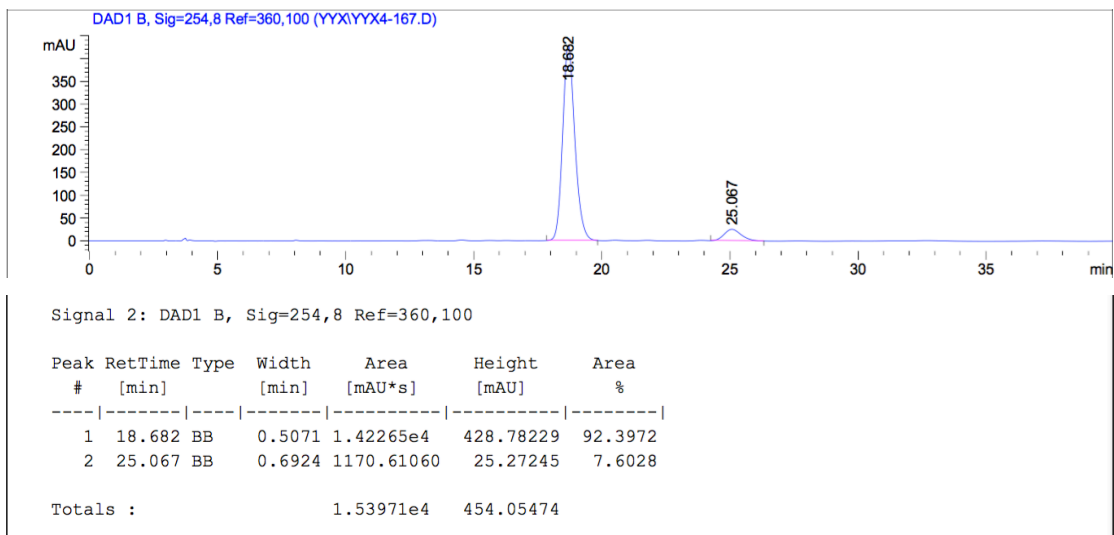
(S)-5-(1-(1*H*-indol-3-yl)ethyl)-1-tosyl-1*H*-indole (4c)



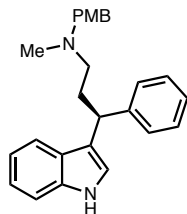
Racemic 4c:



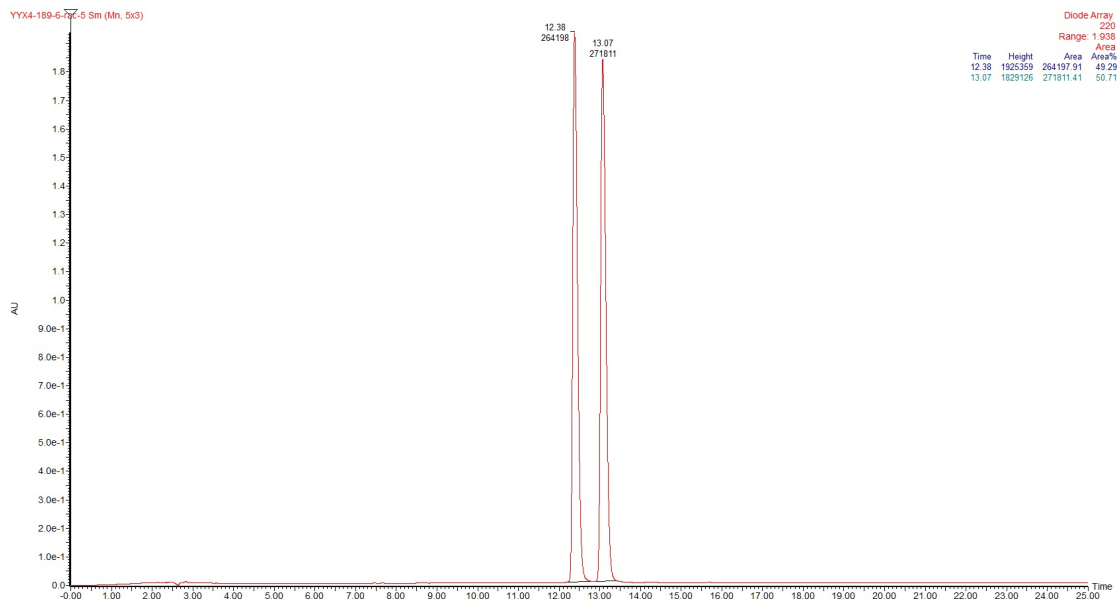
Enantioenriched 4c:



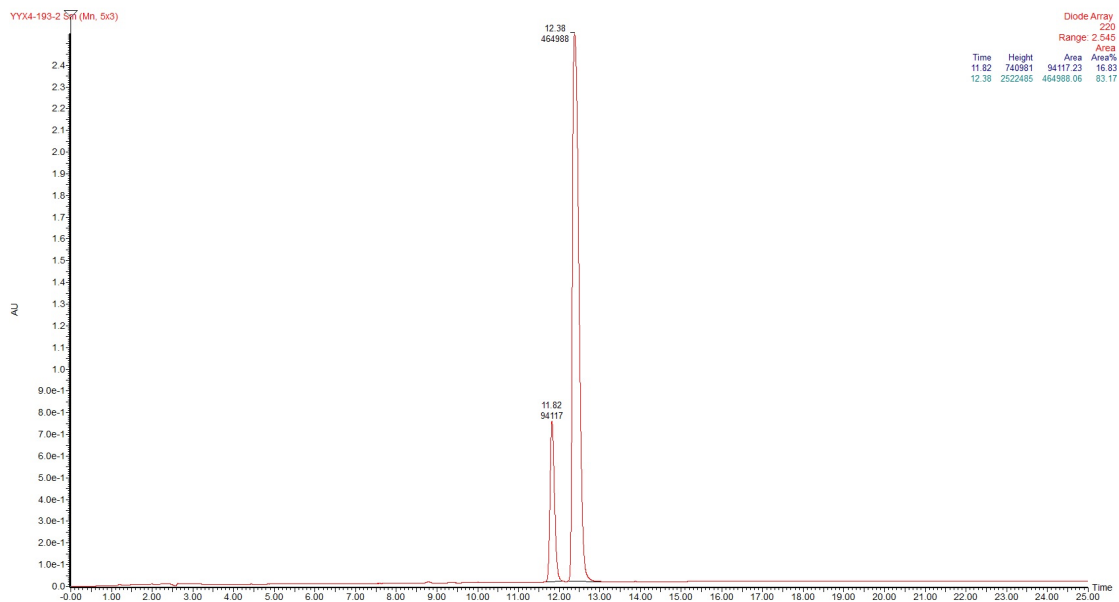
(S)-3-(1H-indol-3-yl)-N-(4-methoxybenzyl)-N-methyl-3-phenylpropan-1-amine (4d)



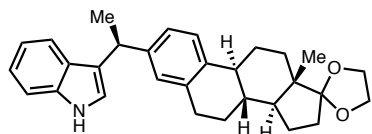
Racemic 4d:



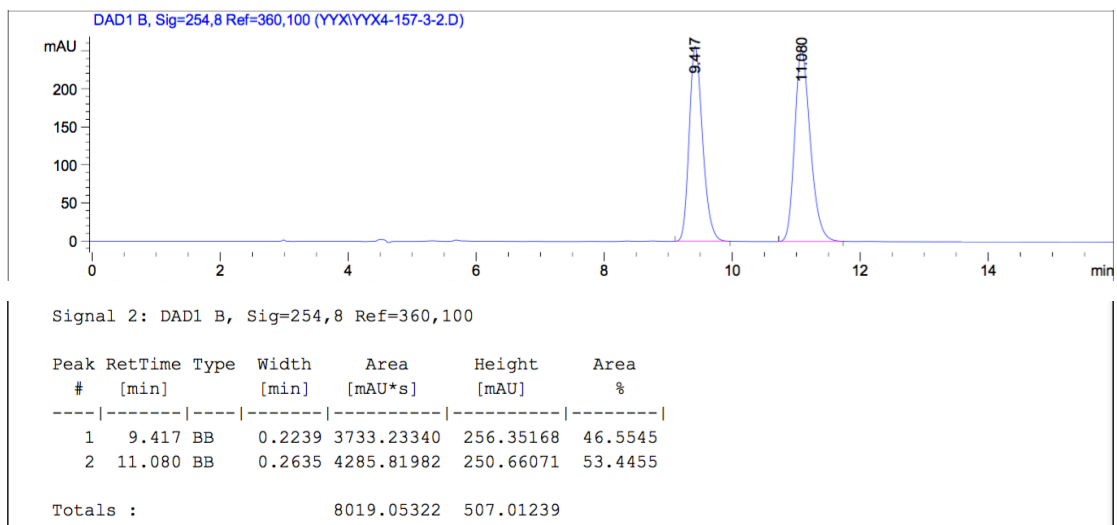
Enantioenriched 4d:



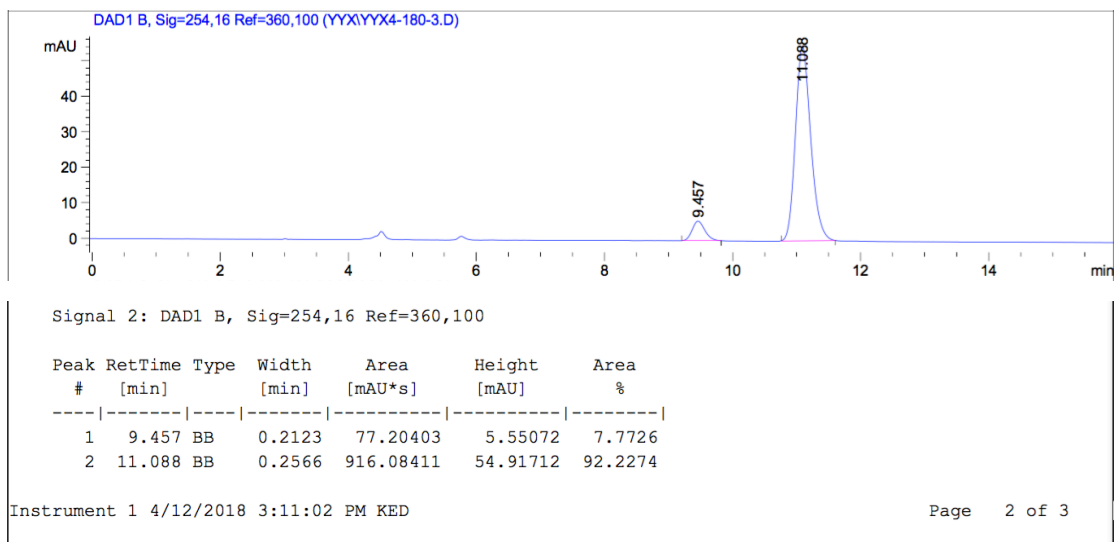
3-((*S*)-1-((*8R,9S,13S,14S*)-13-methyl-6,7,8,9,11,12,13,14,15,16-decahydrospiro[cyclopenta[*a*]phenanthrene-17,2'-[1,3]dioxolan]-2-yl)ethyl)-1*H*-indole (4e)



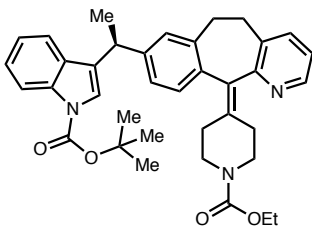
Racemic 4e:



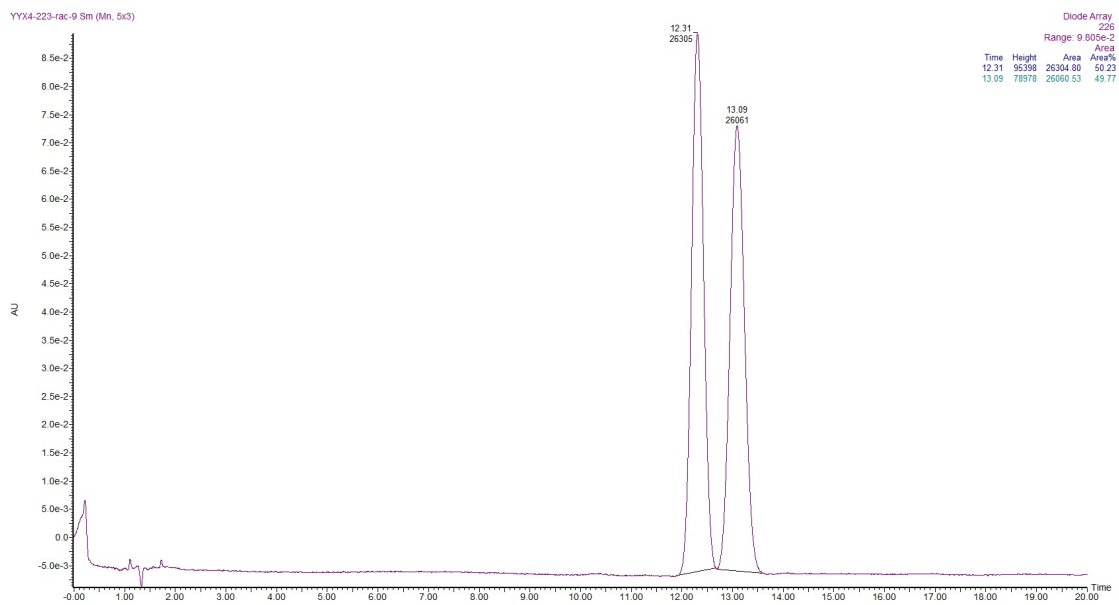
Enantioenriched 4e:



tert-butyl (S)-3-(1-(11-(1-(ethoxycarbonyl)piperidin-4-ylidene)-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-*b*]pyridin-8-yl)ethyl)-1H-indole-1-carboxylate (**4f'**)



Racemic **4f'**:



Enantioenriched **4f'**:

