

Supplementary Information

Synthesis and biological evaluation of indazole derivatives as anti-cancer agents

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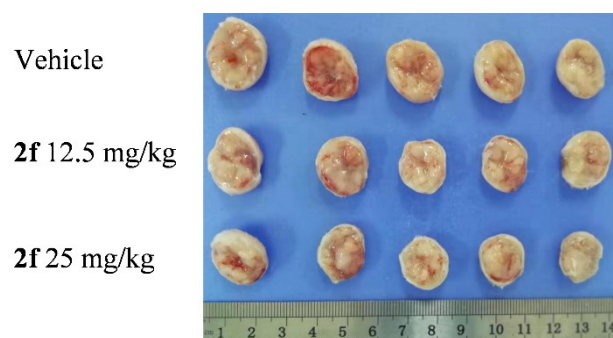


Fig. S1. Photographs of tumor size from mice of different groups, respectively.

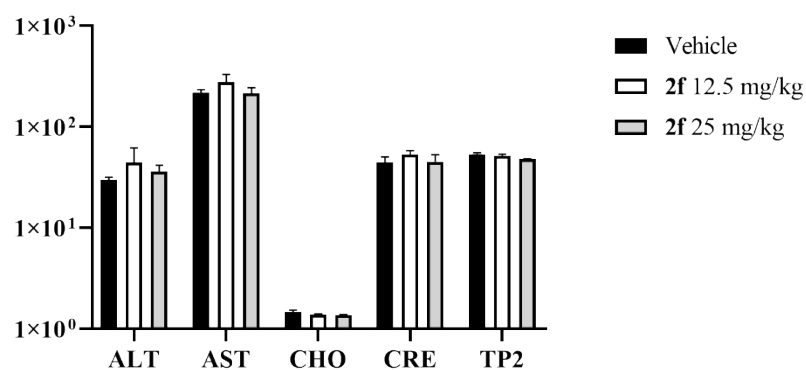


Fig. S2. Hematological and serum biochemical values of mice of different groups. Data were the mean \pm SD. (n = 5 for both control and treated).

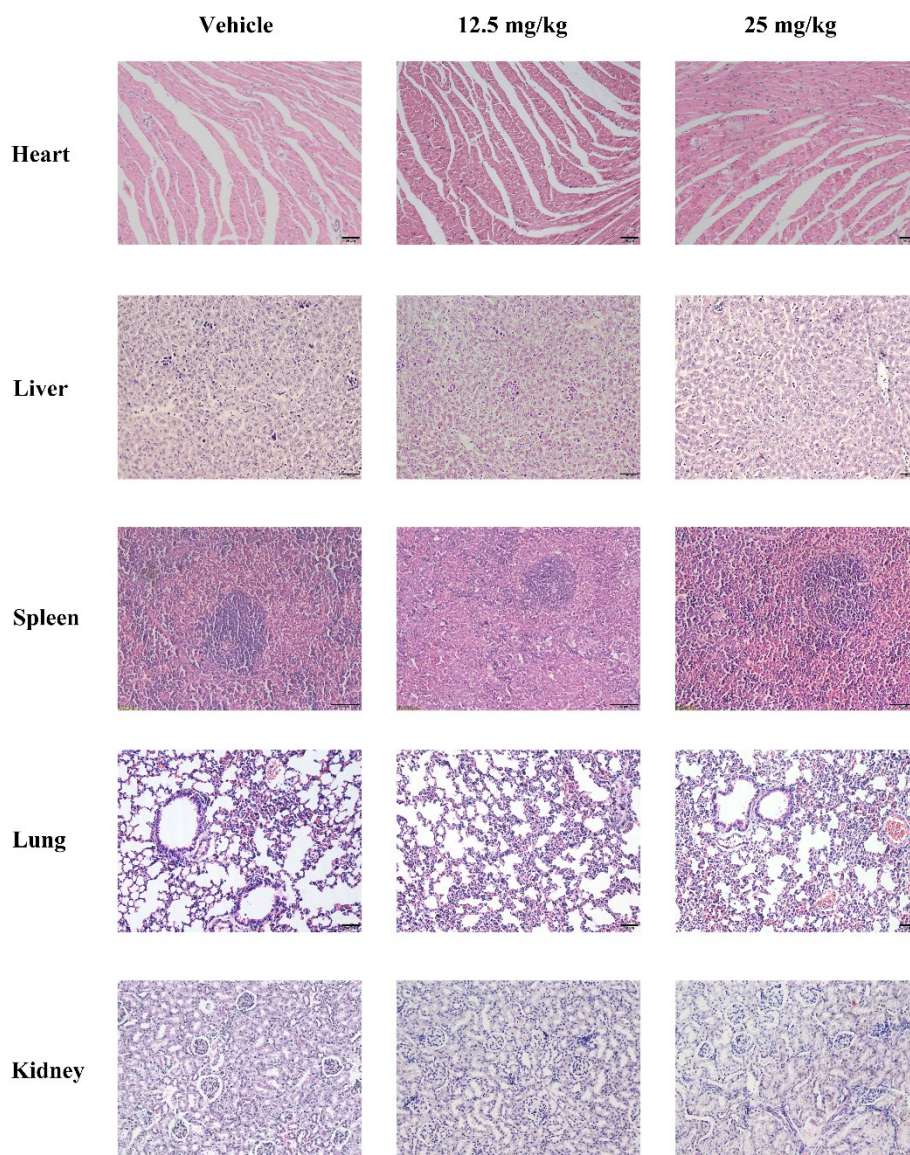
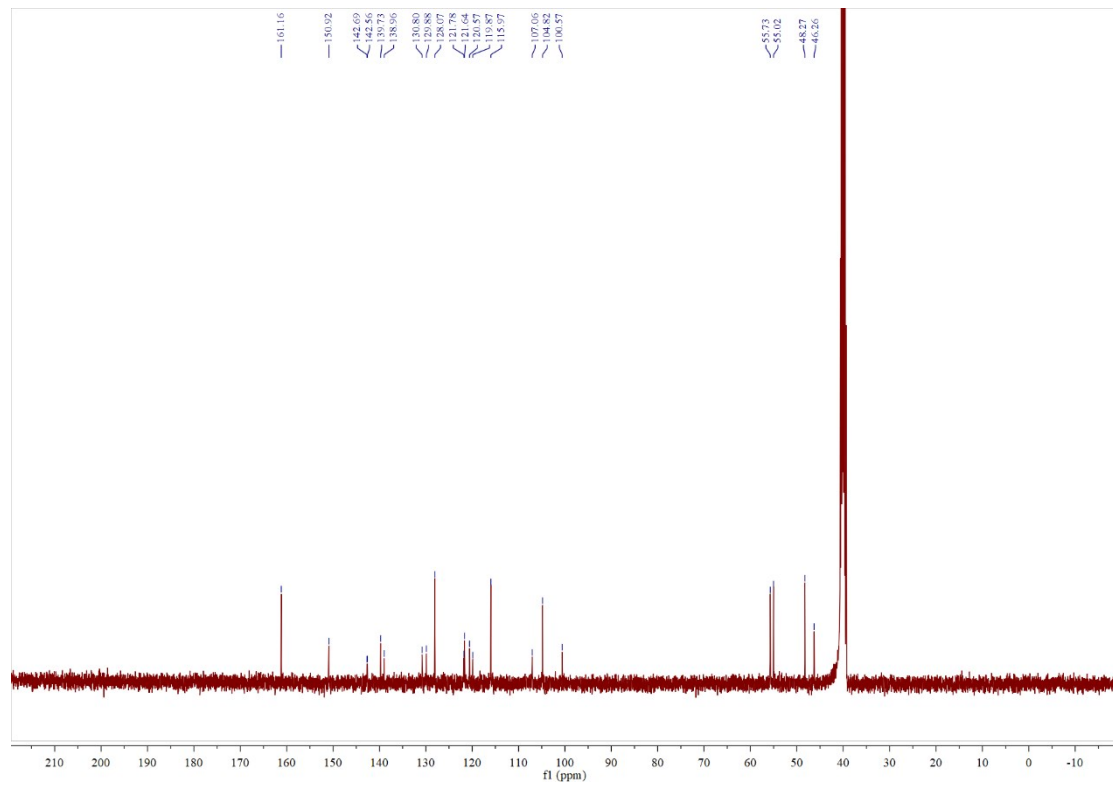
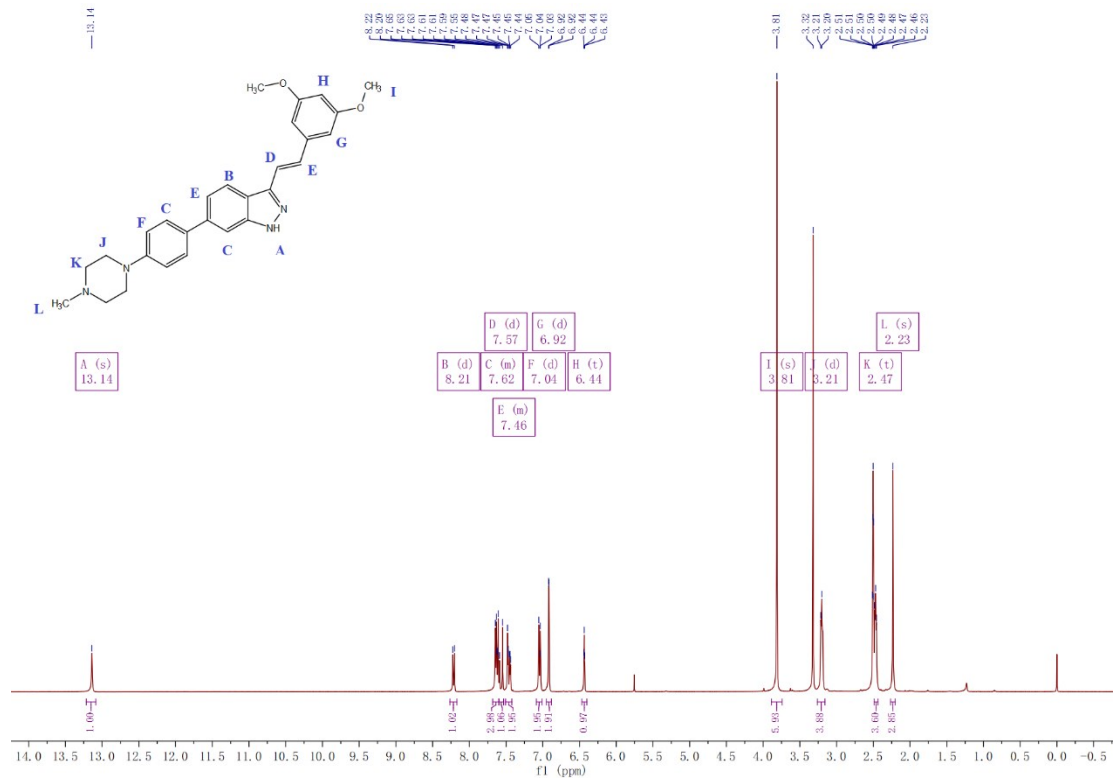
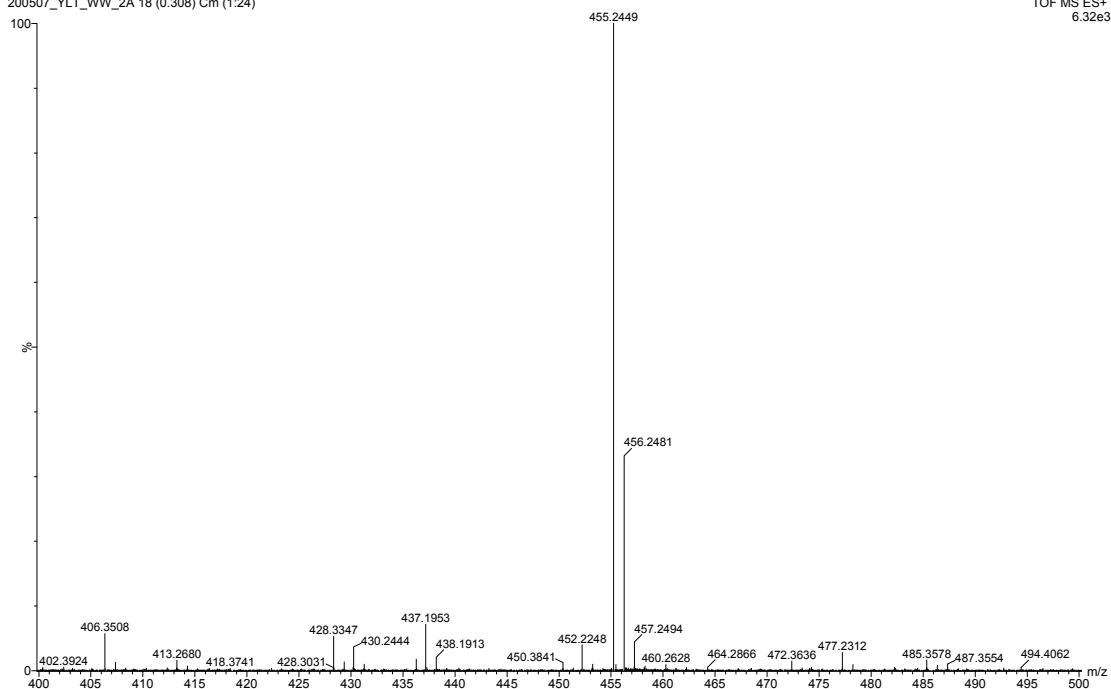


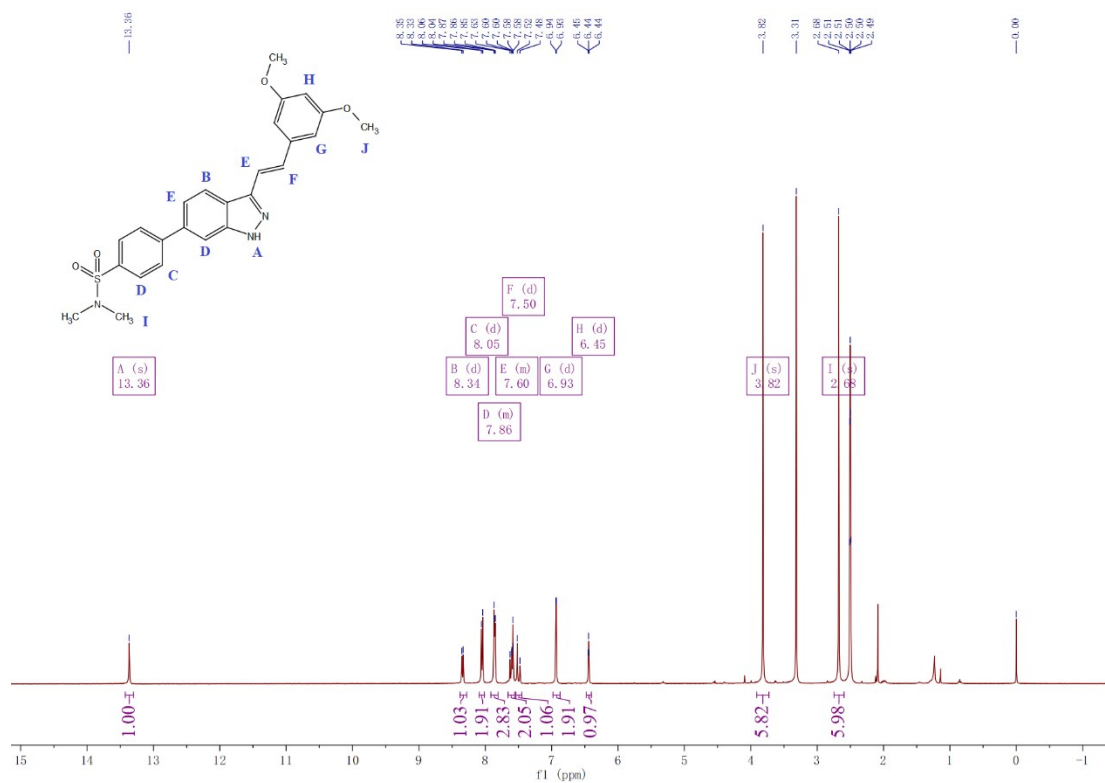
Fig. S3. H&E staining of paraffin-embedded sections of the heart, liver, spleen, lung, and kidney displayed that **2f** did not cause obvious pathologic abnormalities in normal tissues. The scale bar is 50 μm .

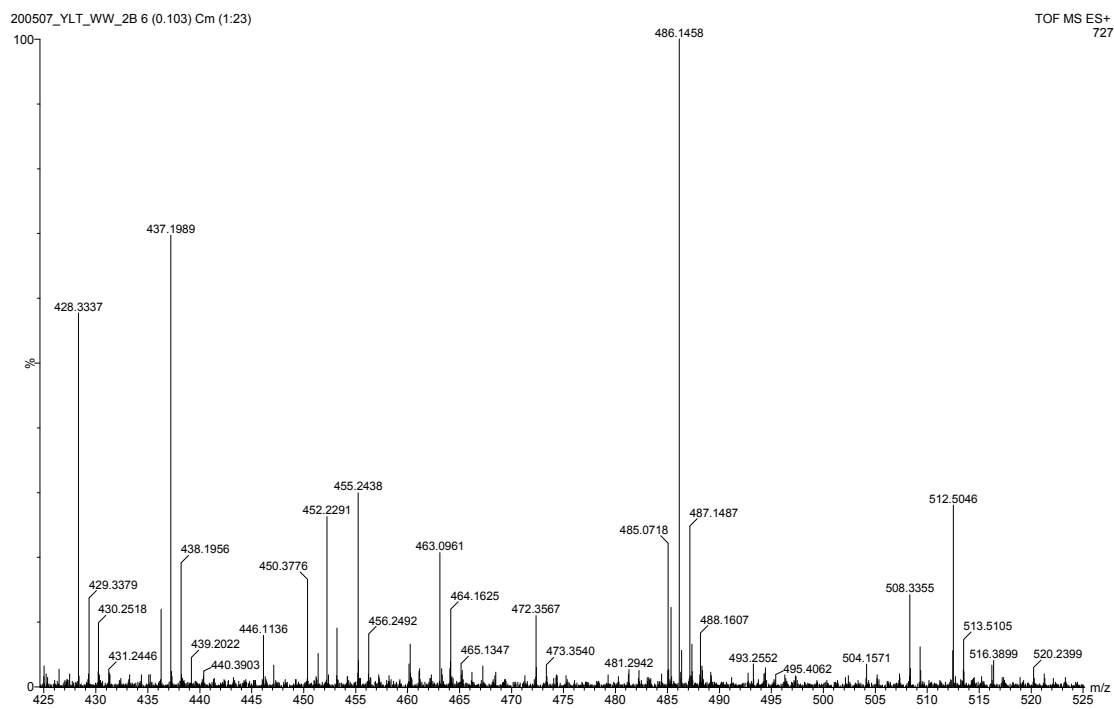
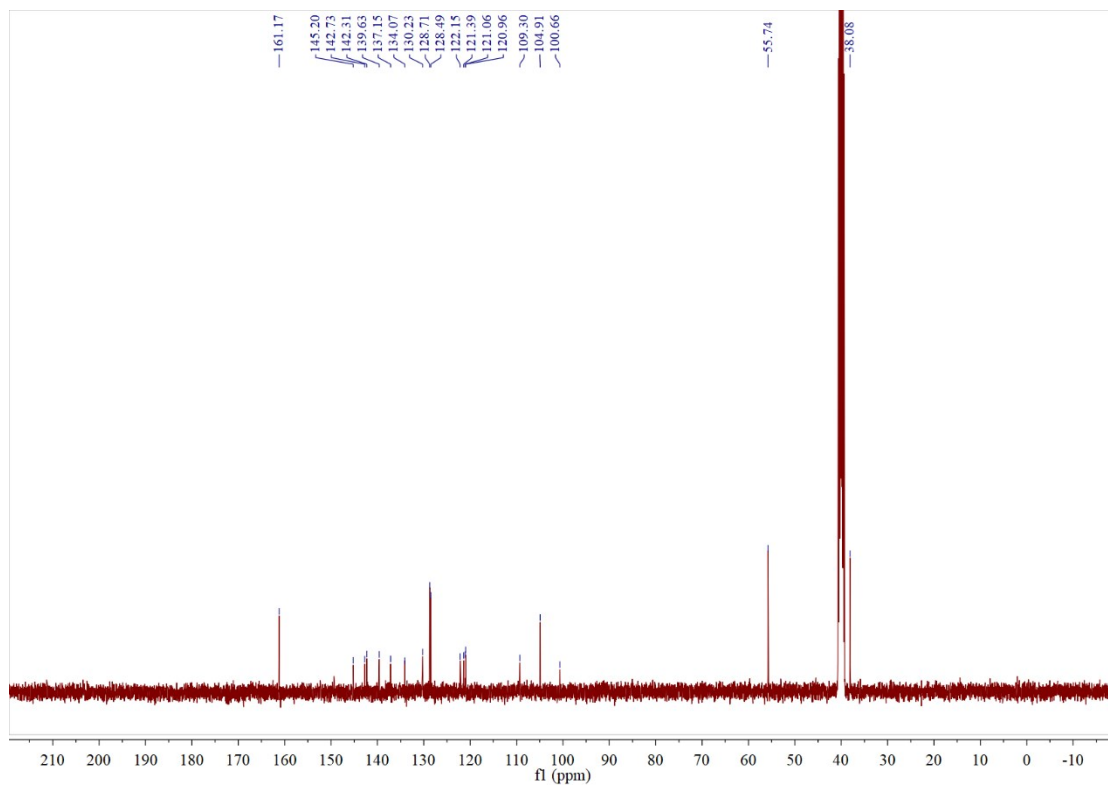
^1H NMR and ^{13}C NMR and HRMS spectrums of compound 2a–2p
(*E*)-3-(3,5-dimethoxystyryl)-6-(4-(4-methylpiperazin-1-yl)phenyl)-1*H*-indazole
(2a)



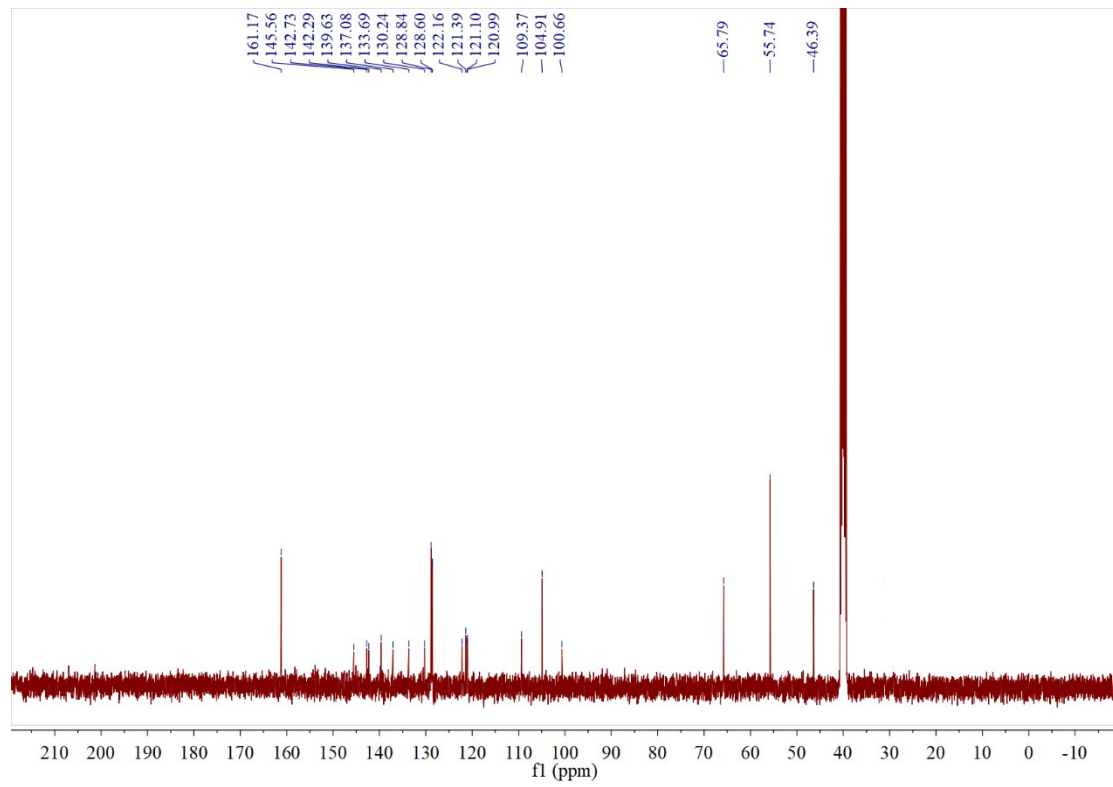
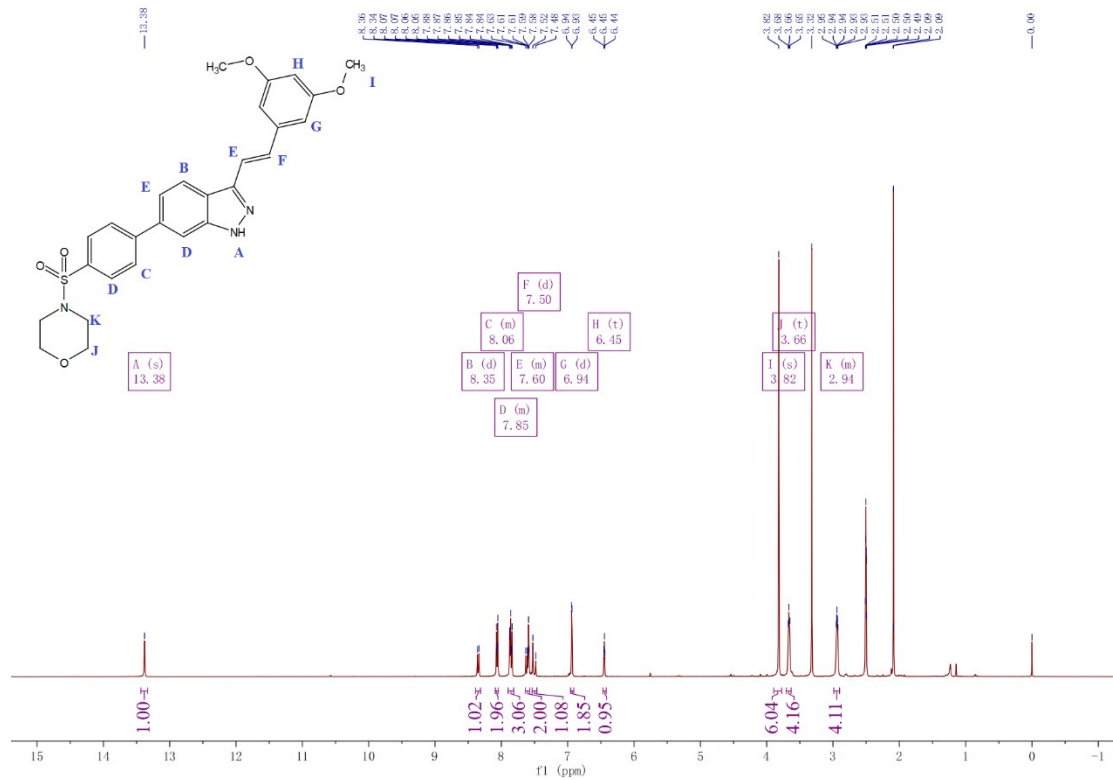


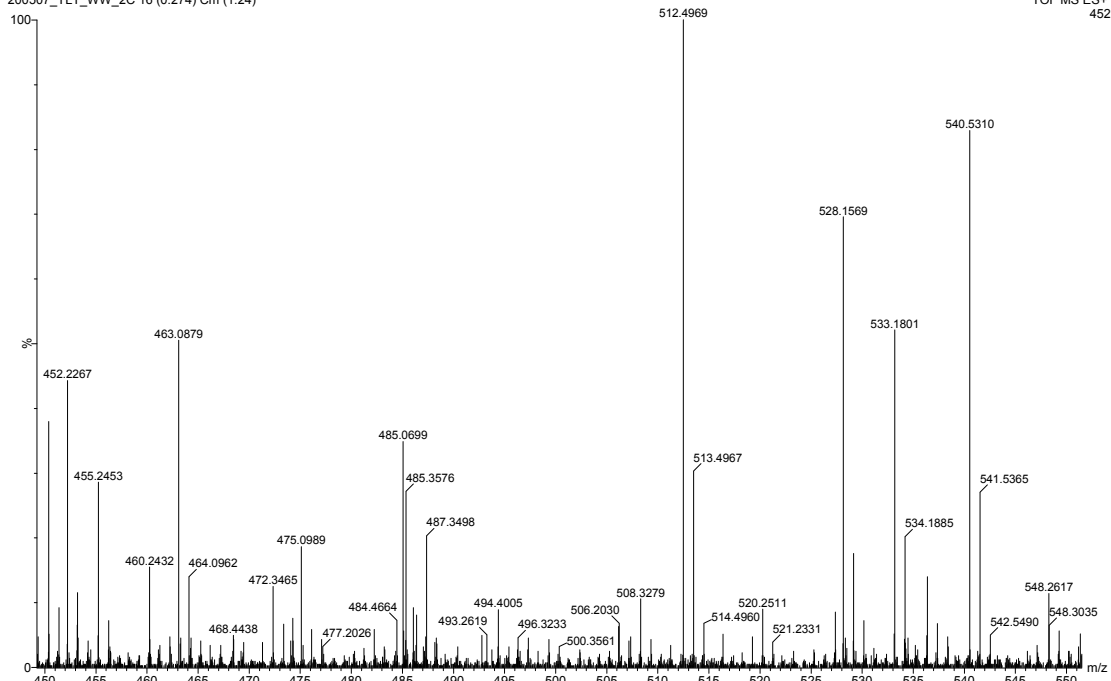
(E)-4-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)-N,N-dimethylbenzenesulfonamide (2b)



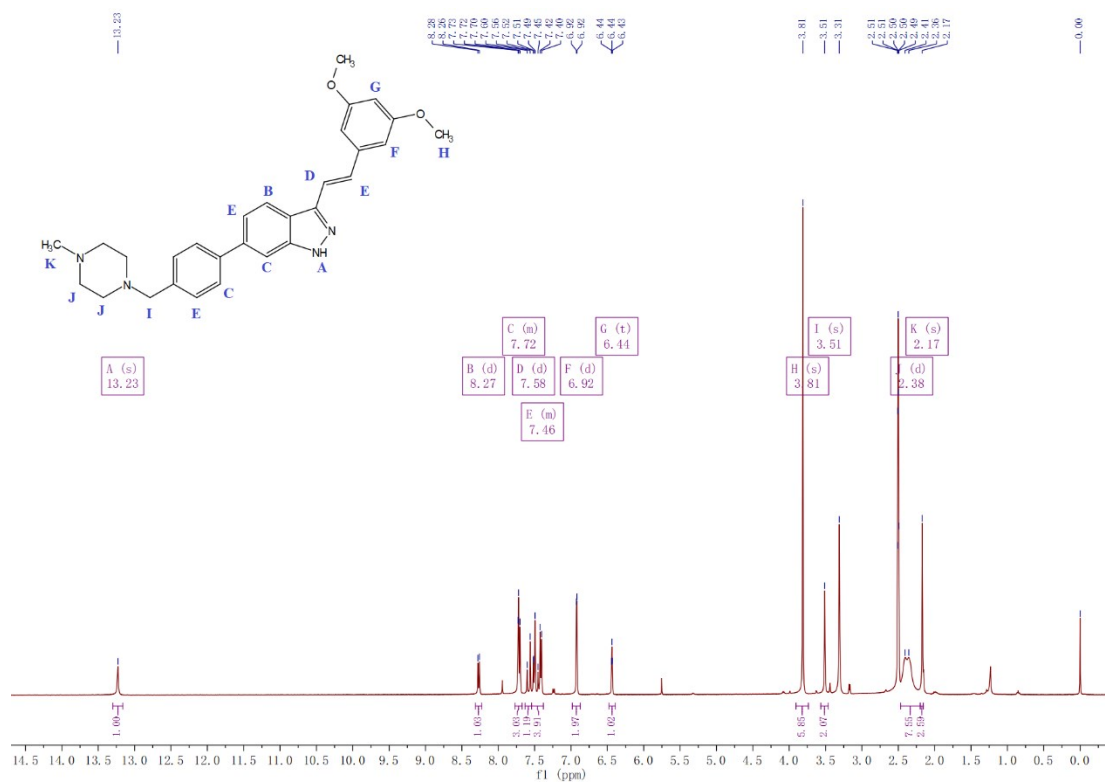


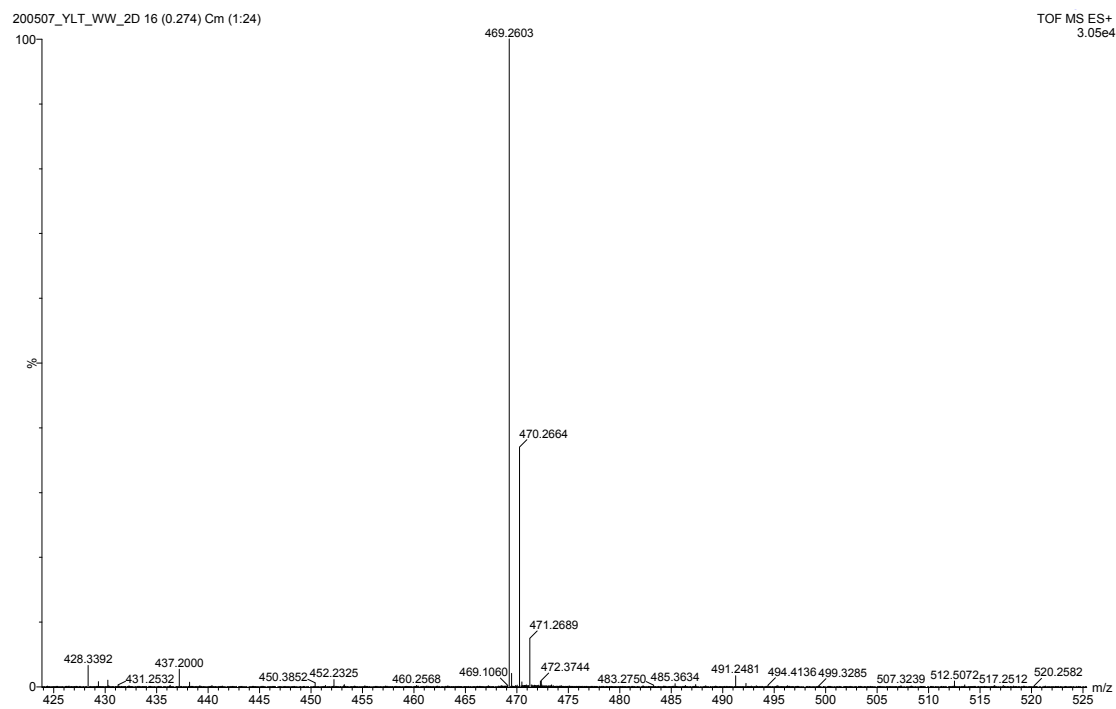
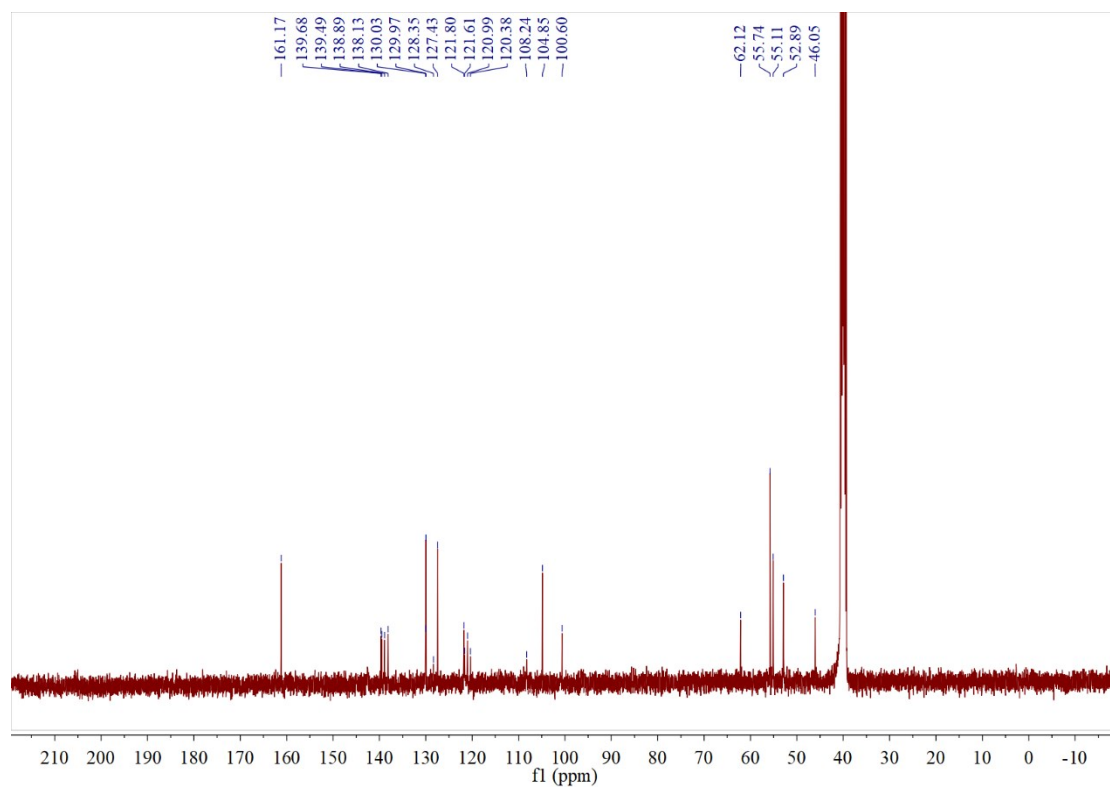
(*E*)-4-((4-(3-(3,5-dimethoxystyryl)-1*H*-indazol-6-yl)phenyl)sulfonyl)morpholine (2c)



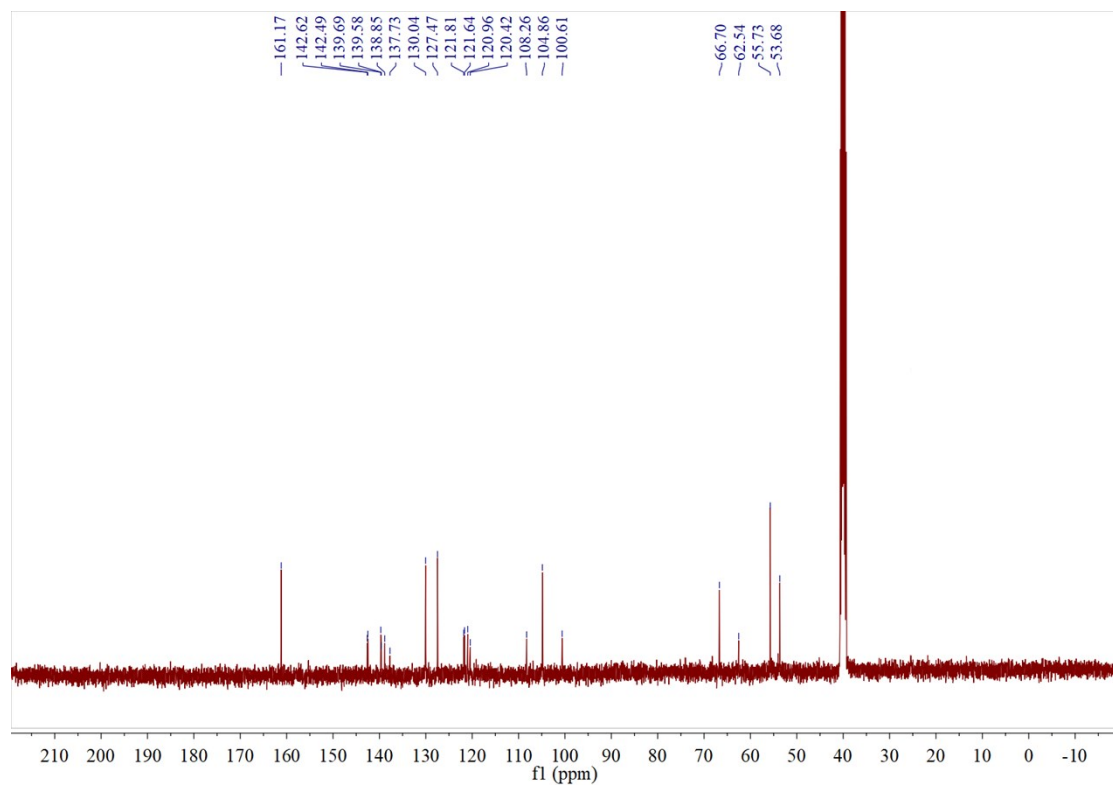
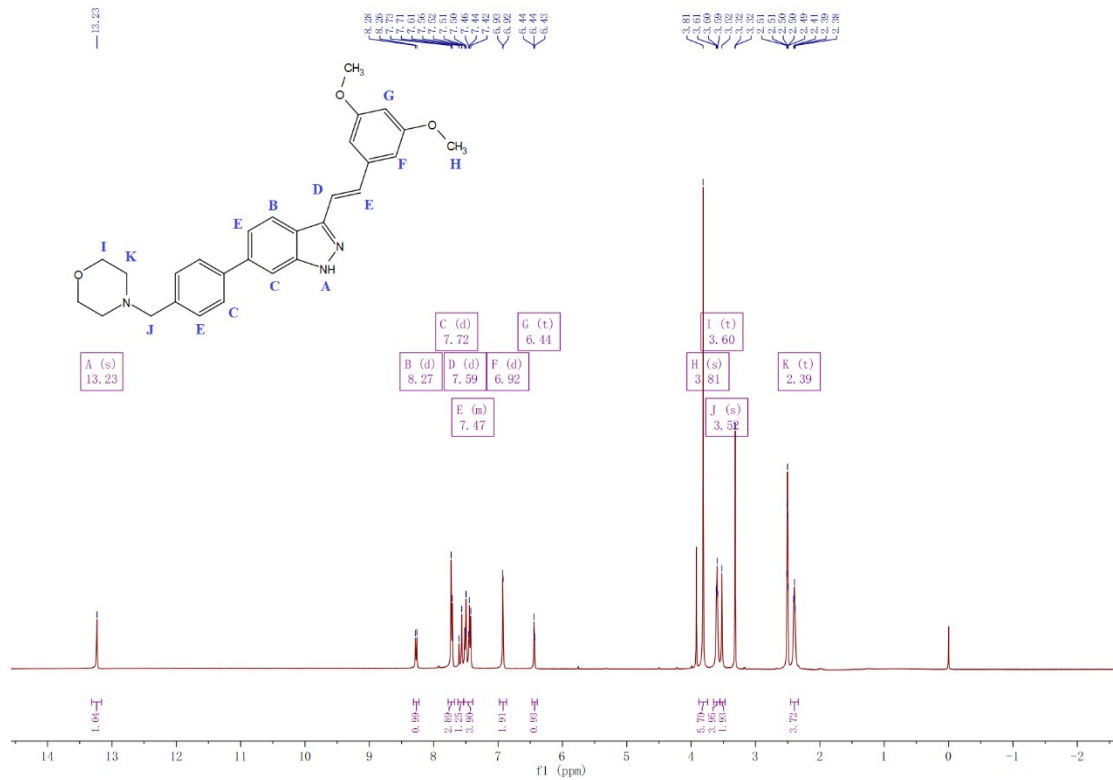


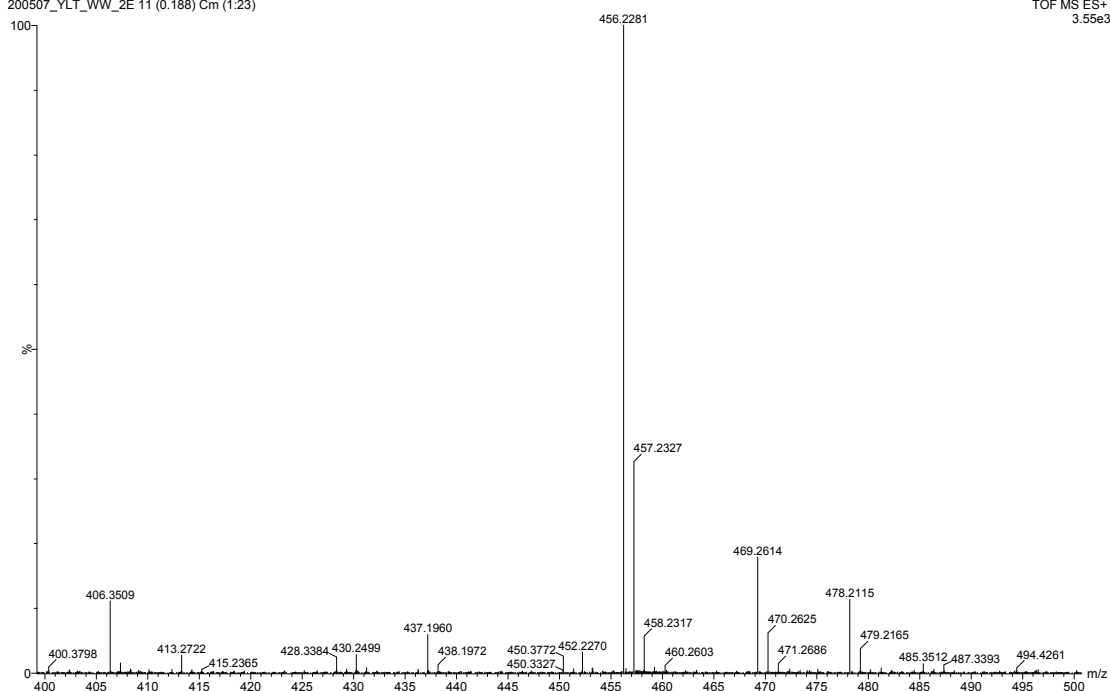
(E)-3-(3,5-dimethoxystyryl)-6-(4-((4-methylpiperazin-1-yl)methyl)phenyl)-1H-indazole (2d)



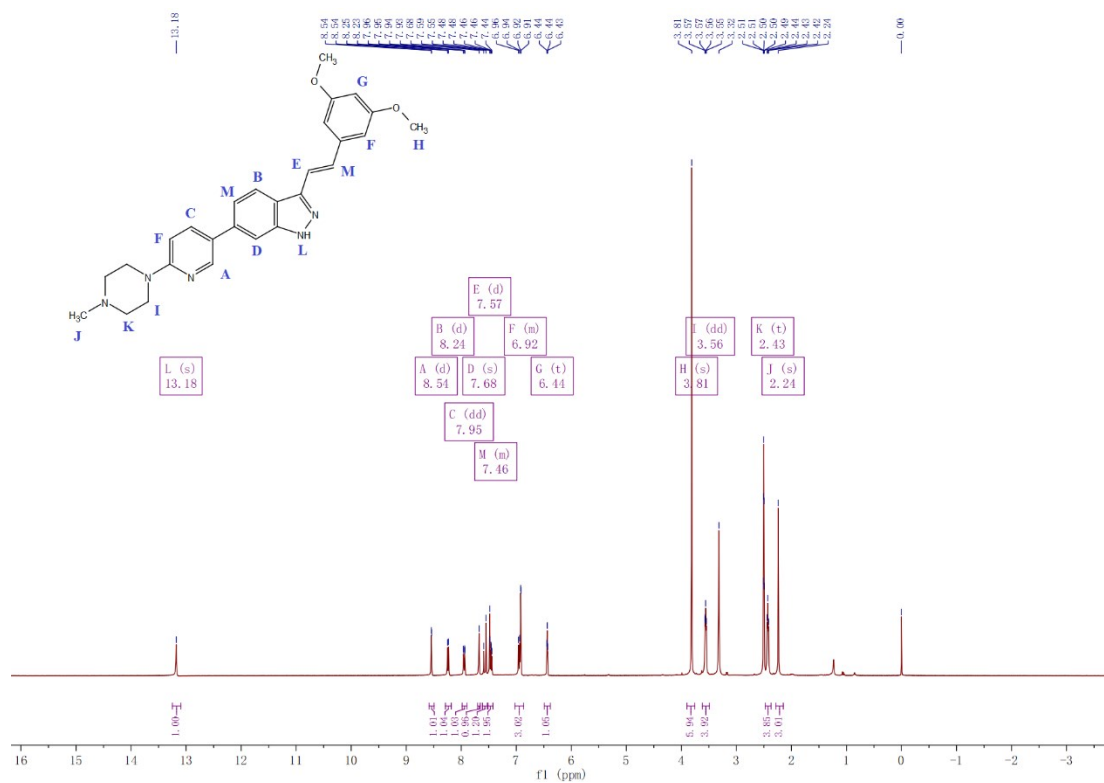


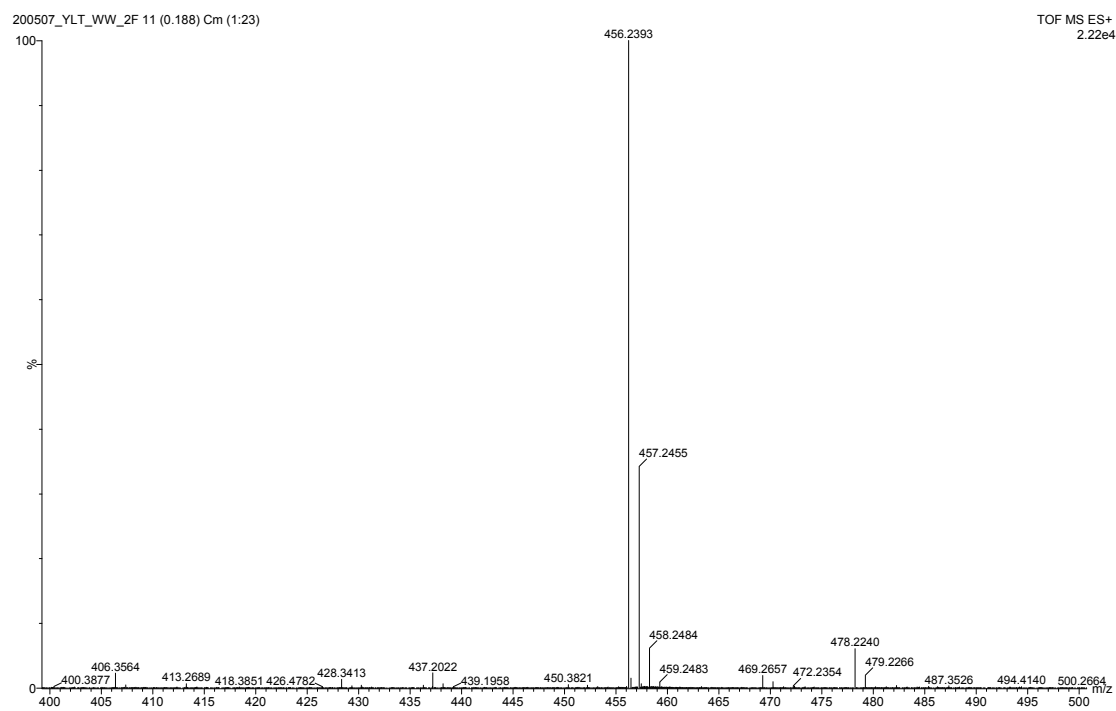
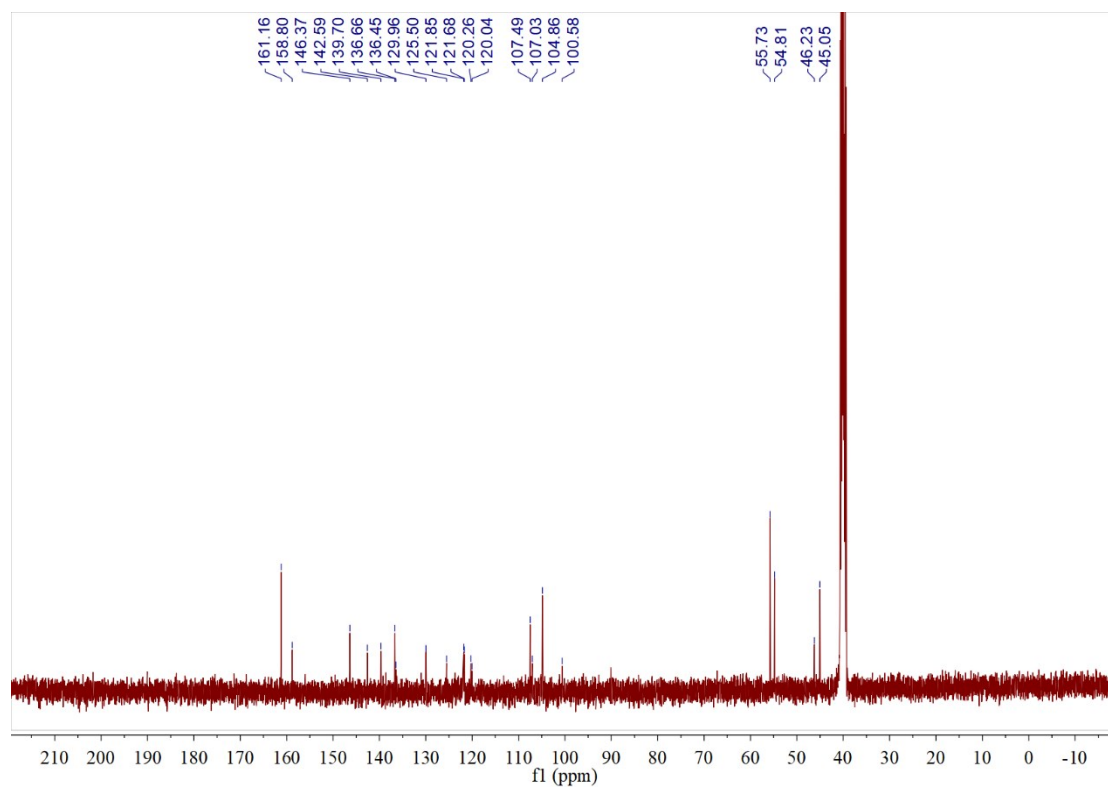
(E)-4-(4-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)benzyl)morpholine (2e)



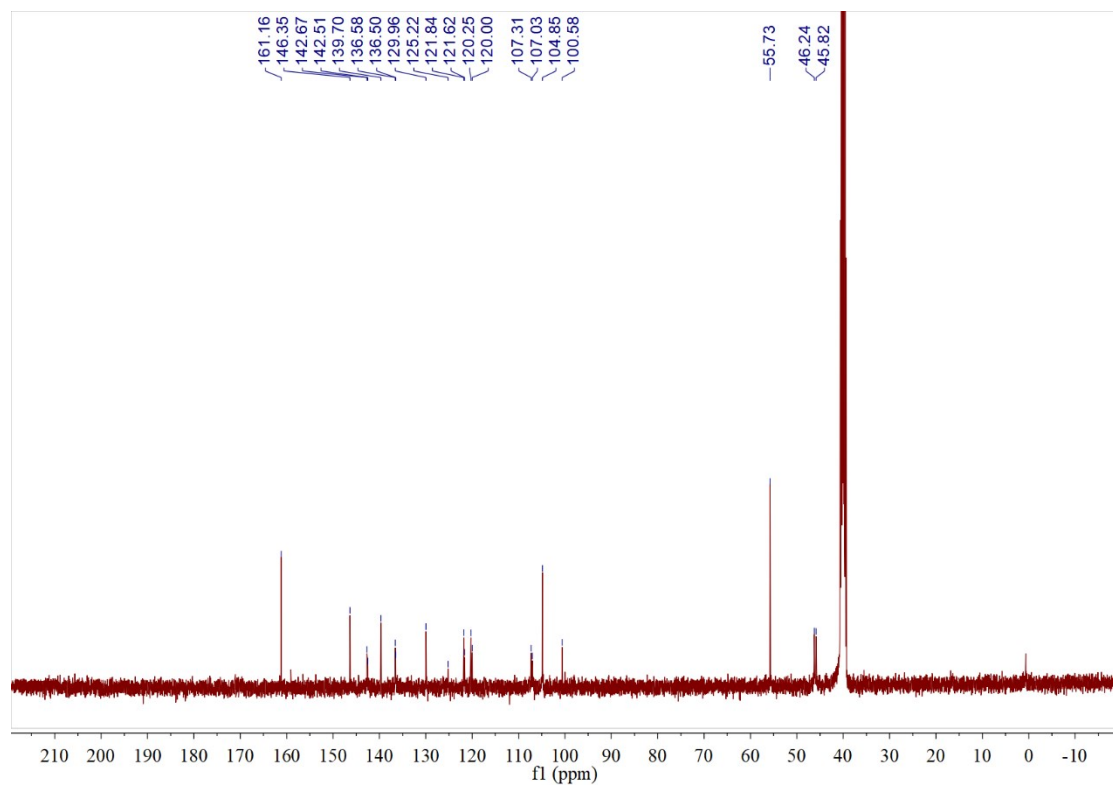
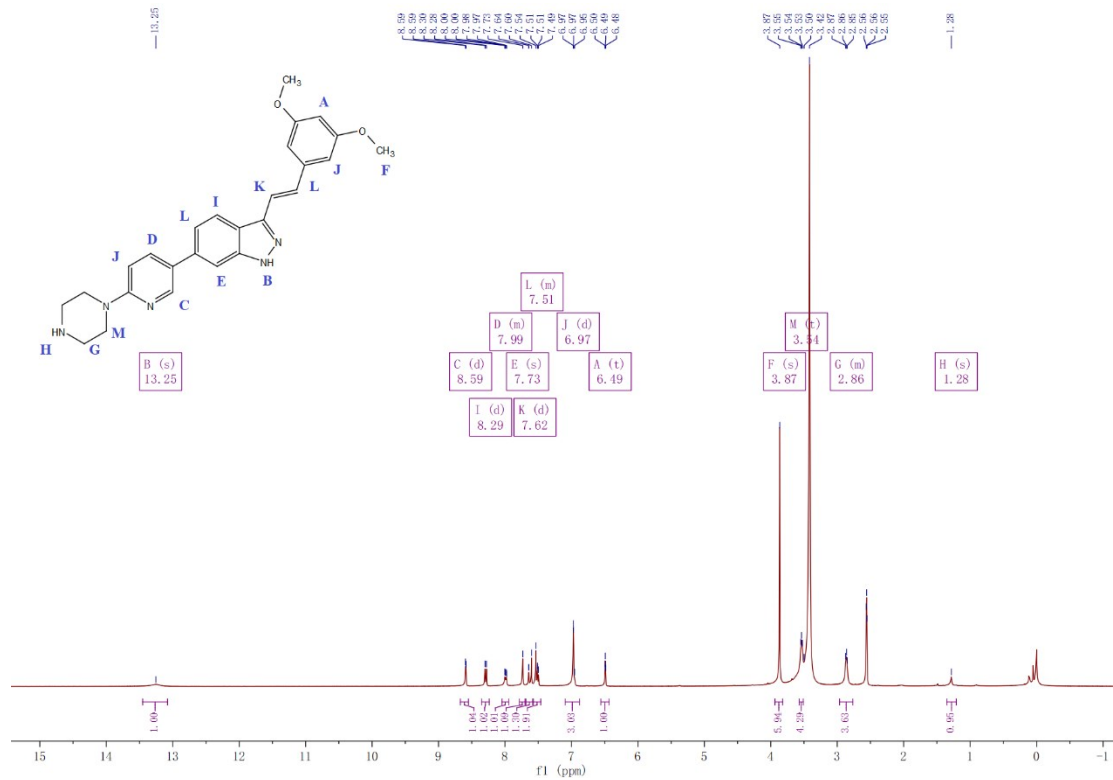


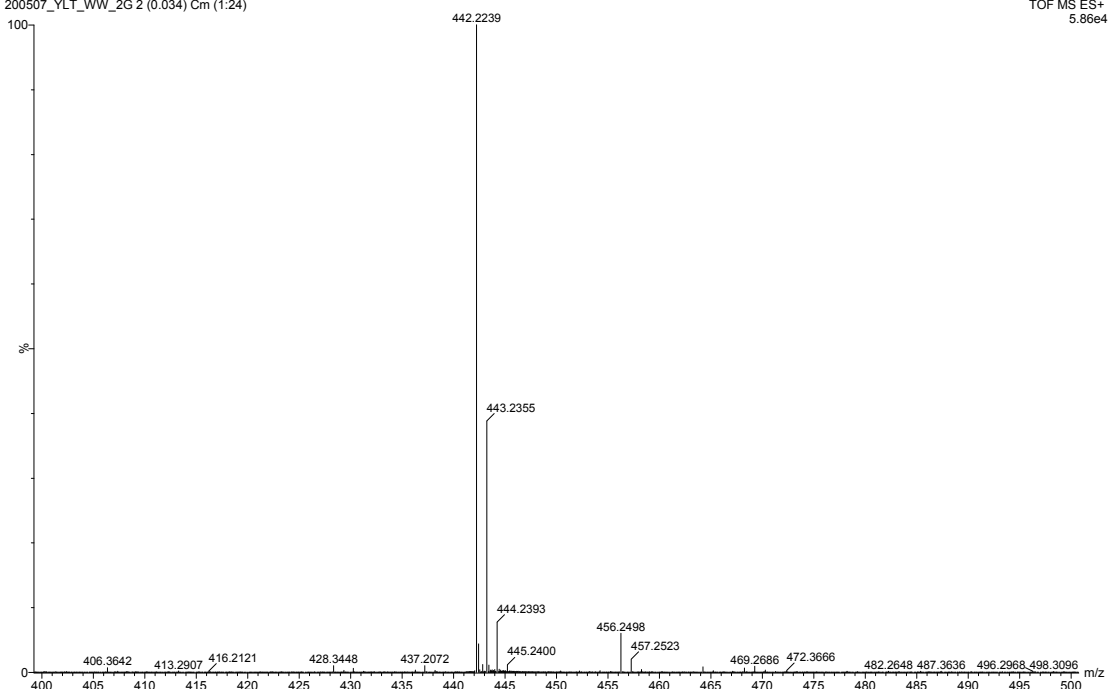
(E)-3-(3,5-dimethoxystyryl)-6-(6-(4-methylpiperazin-1-yl)pyridin-3-yl)-1H-indazole (2f)



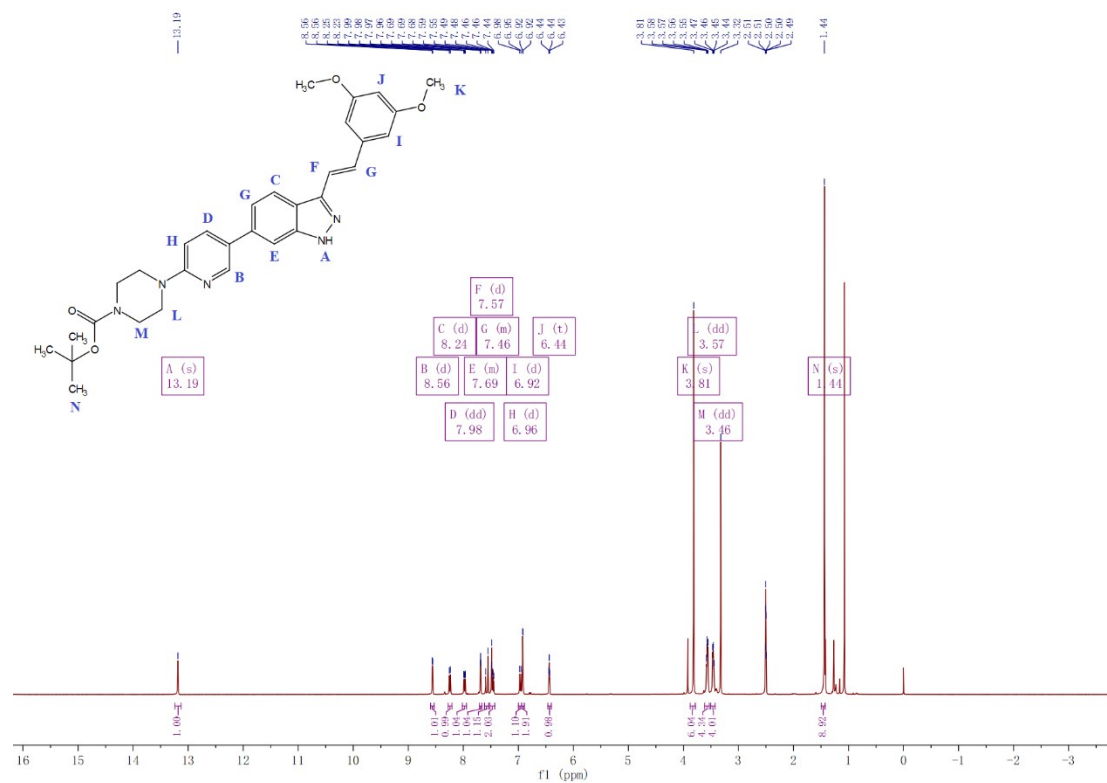


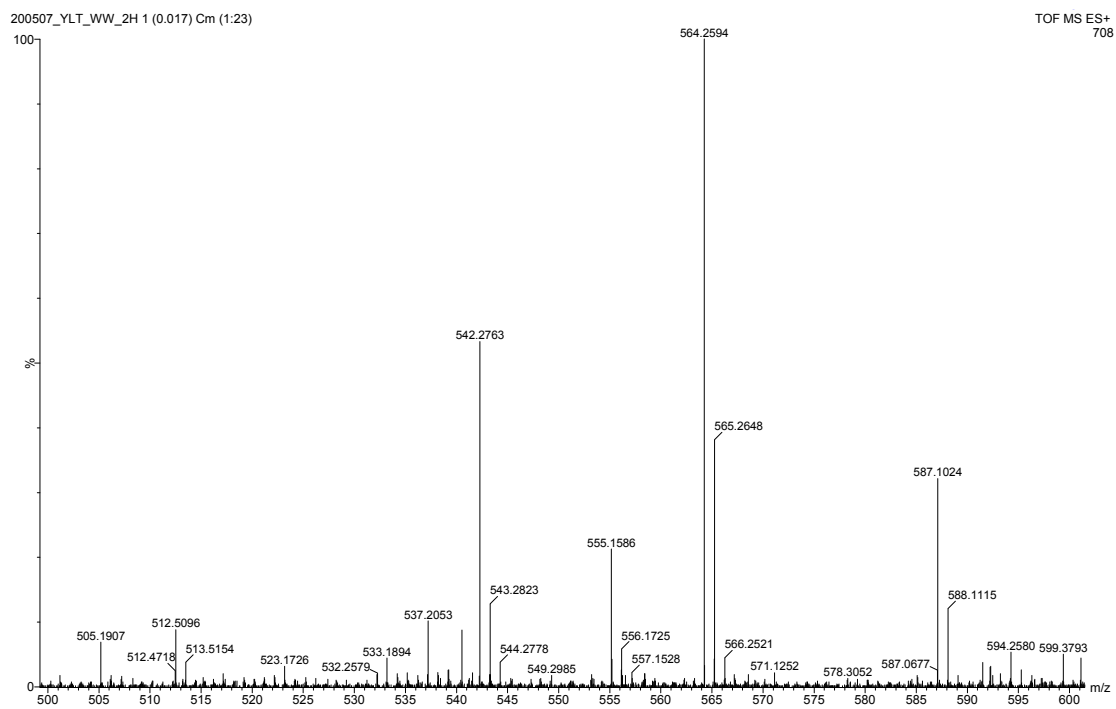
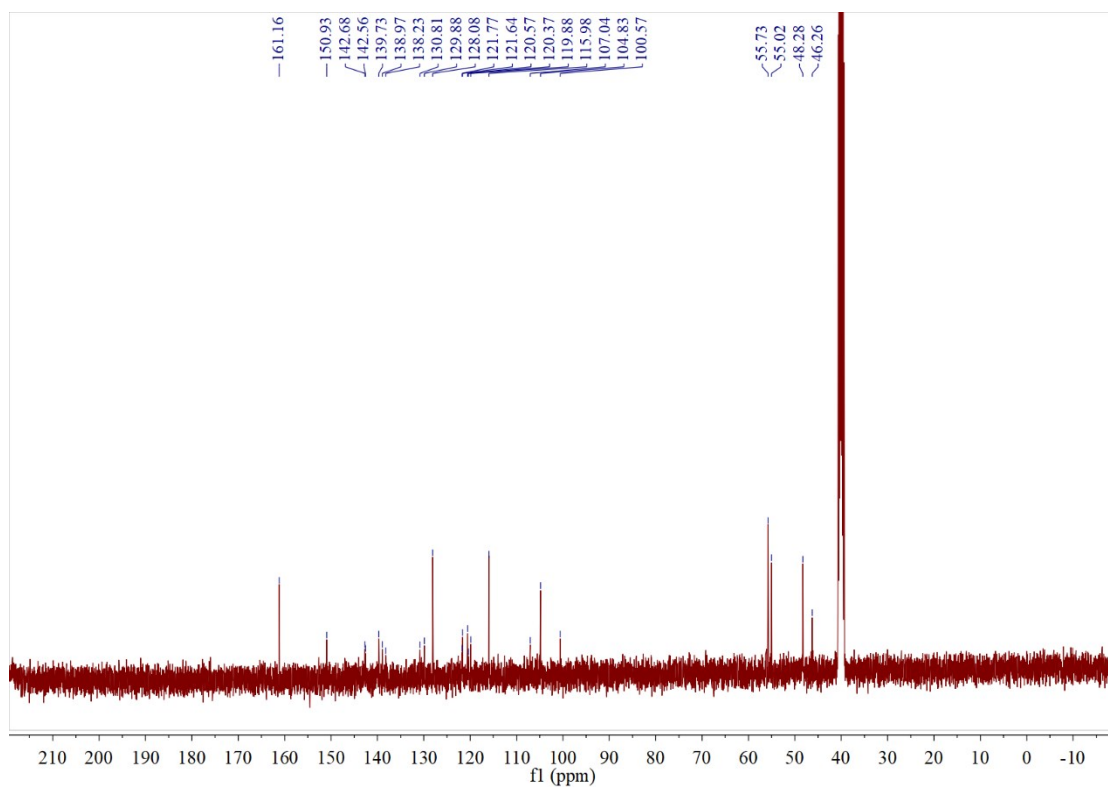
(E)-3-(3,5-dimethoxystyryl)-6-(6-(piperazin-1-yl)pyridin-3-yl)-1H-indazole (2g)



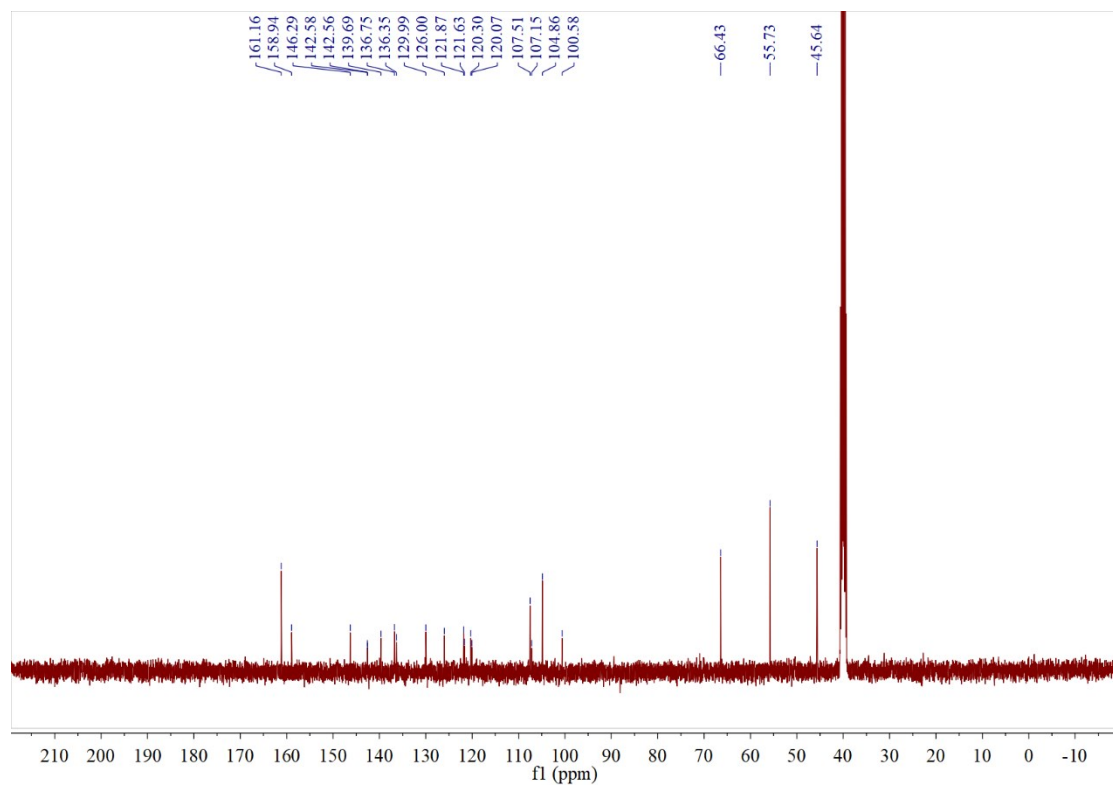
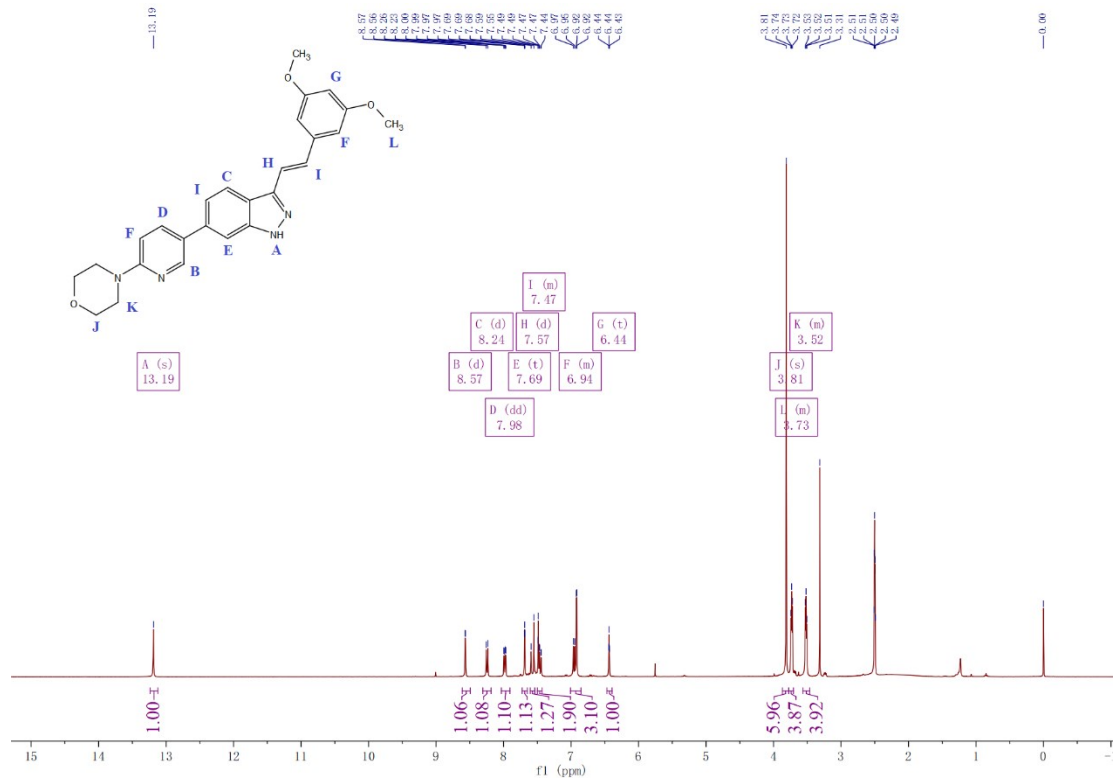


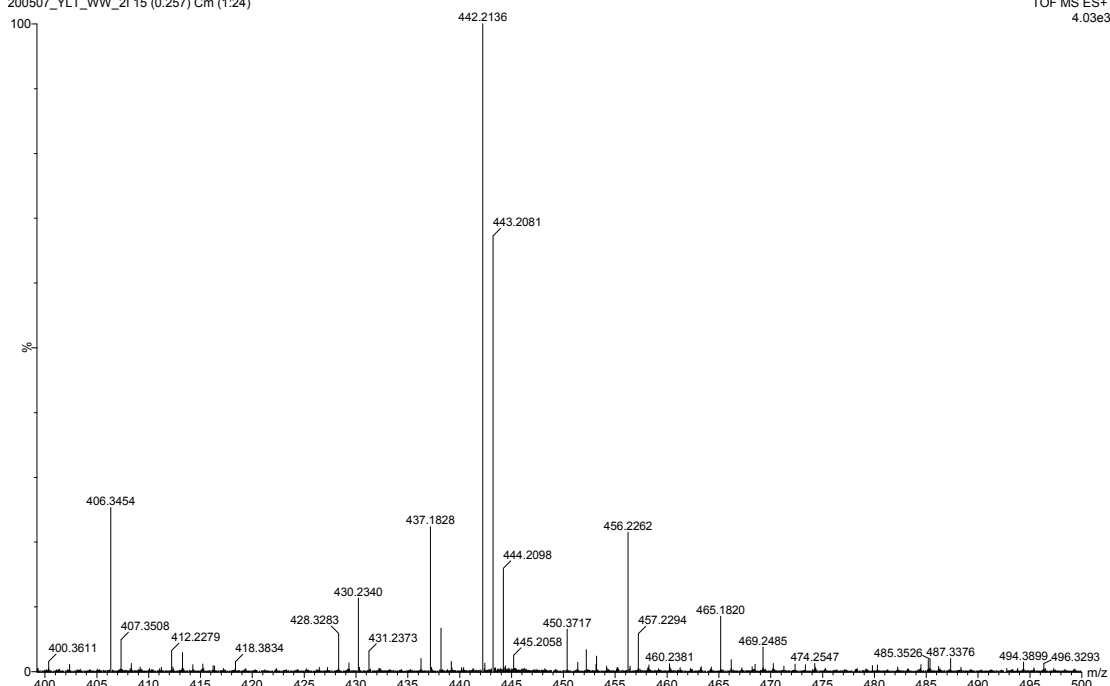
tert-butyl (E)-4-(5-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyridin-2-yl)piperazine-1-carboxylate (2h)



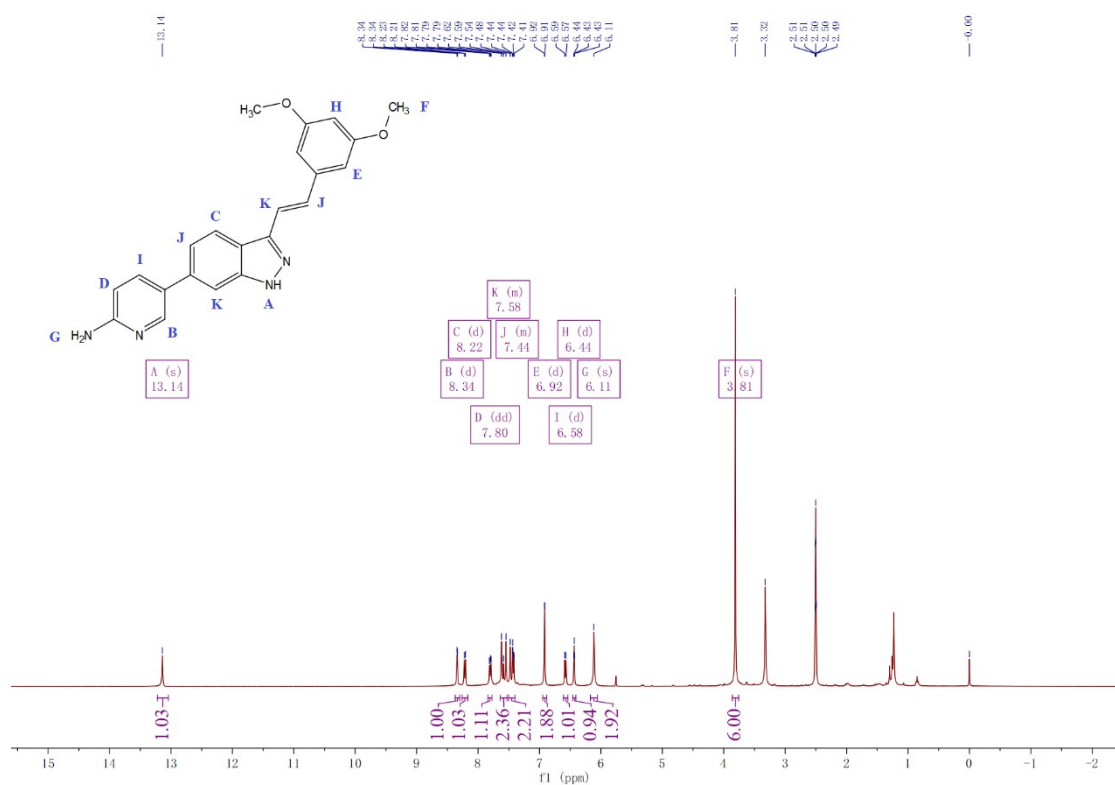


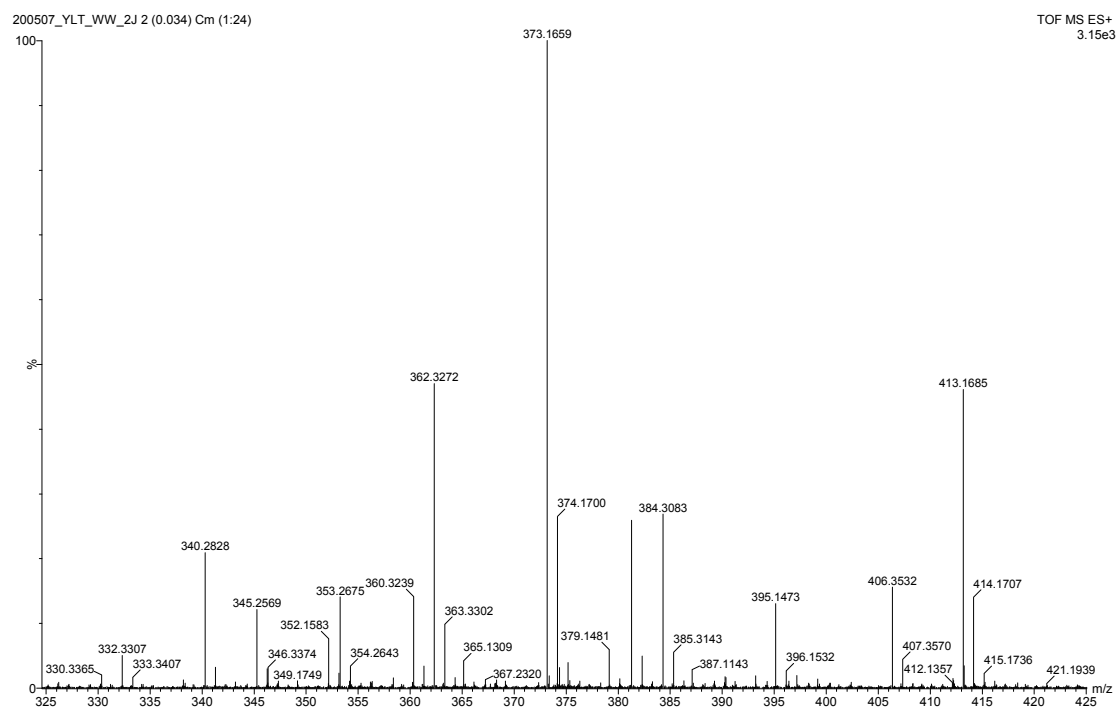
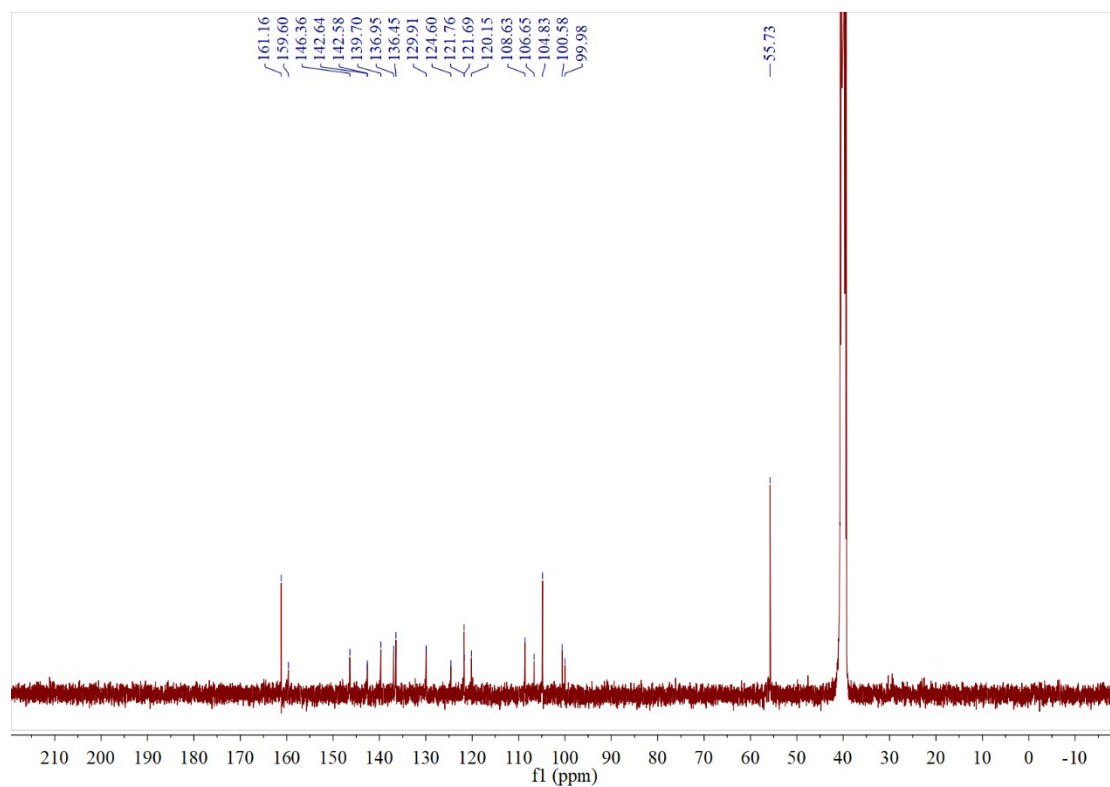
(E)-4-(5-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyridin-2-yl)morpholine (2i)



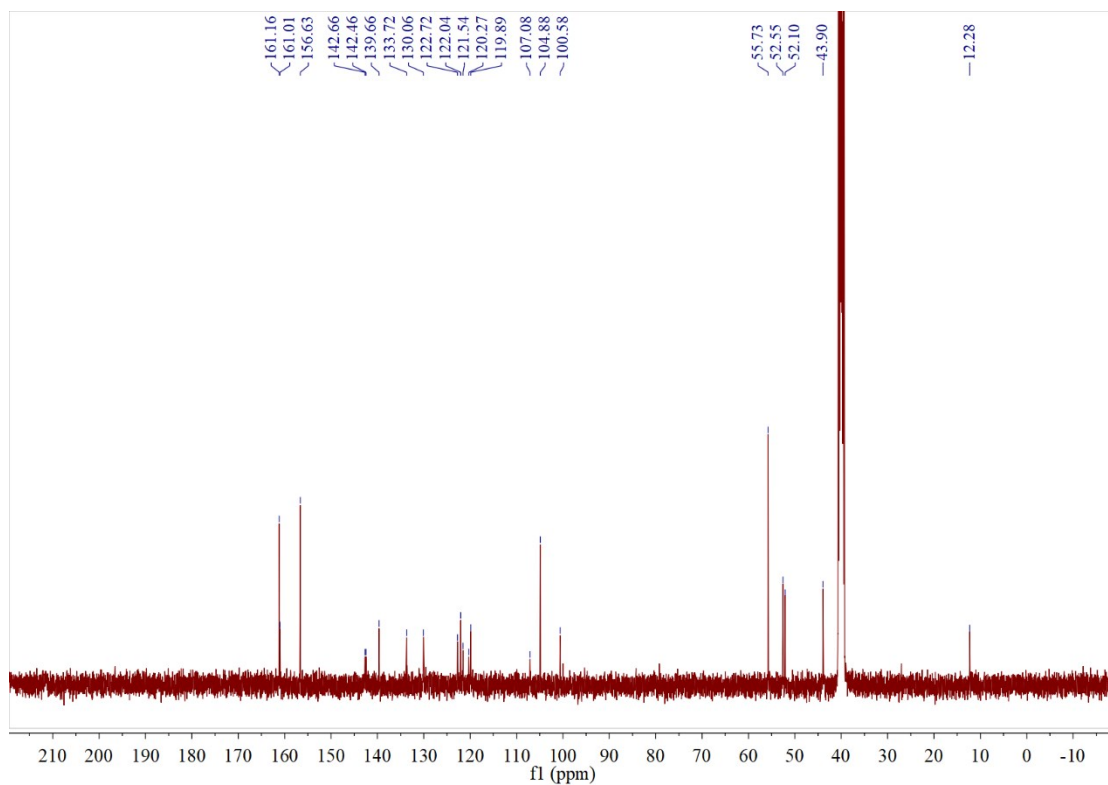
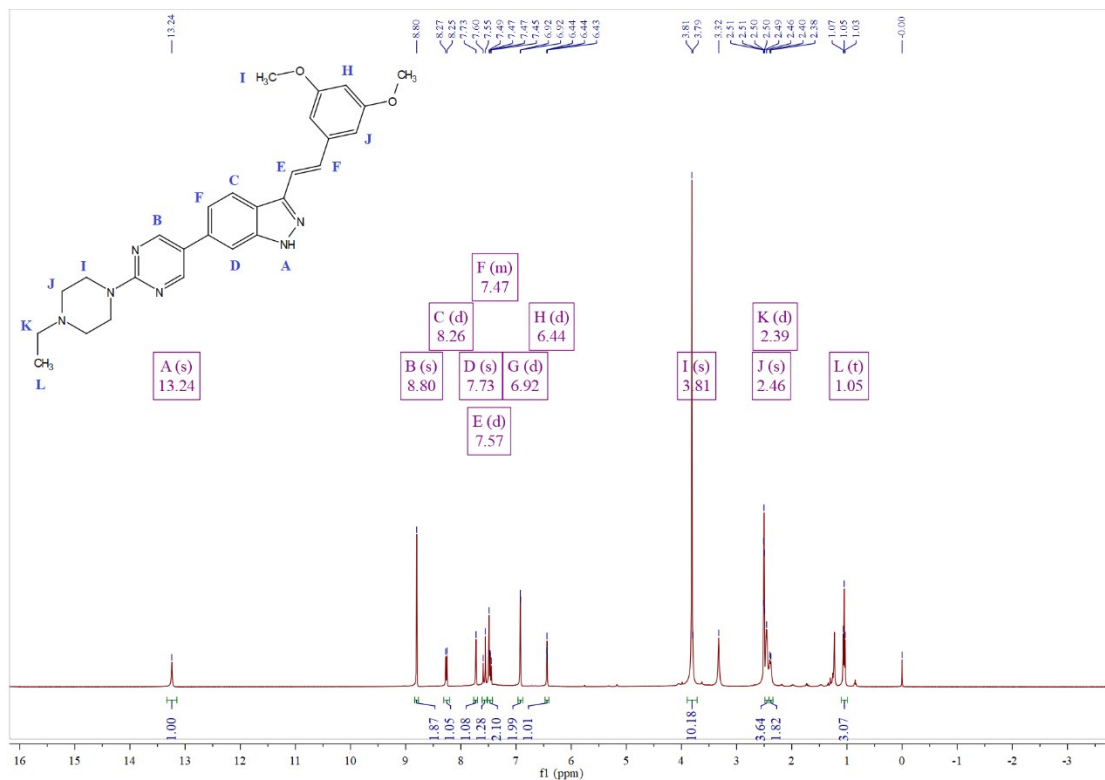


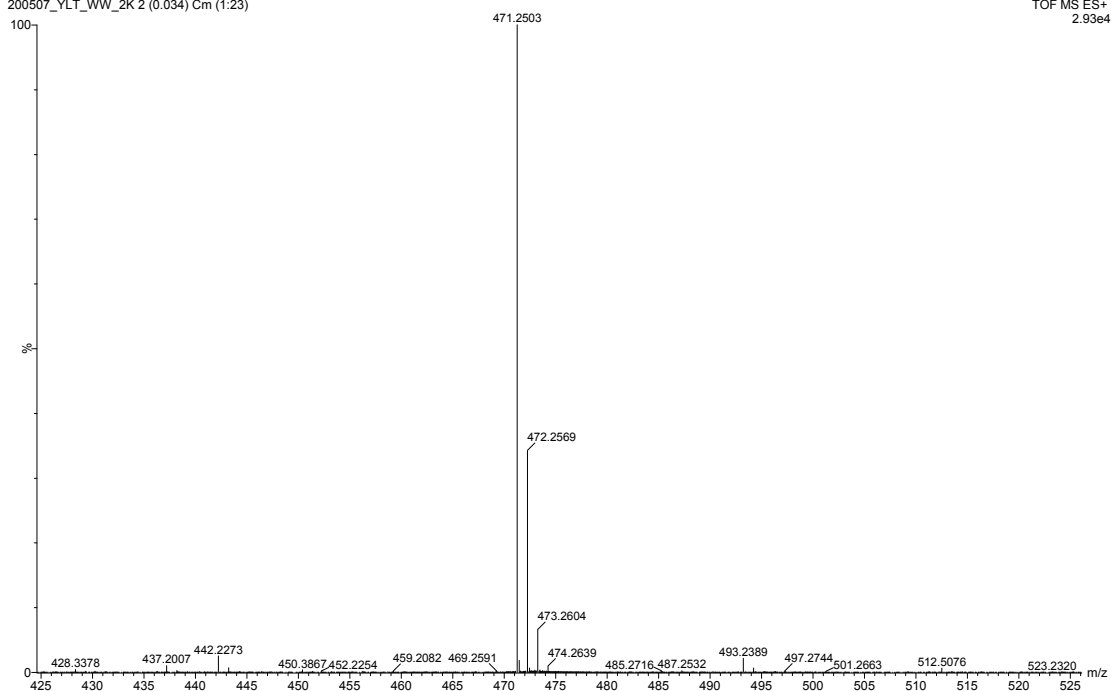
(E)-5-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyridin-2-amine (2j)



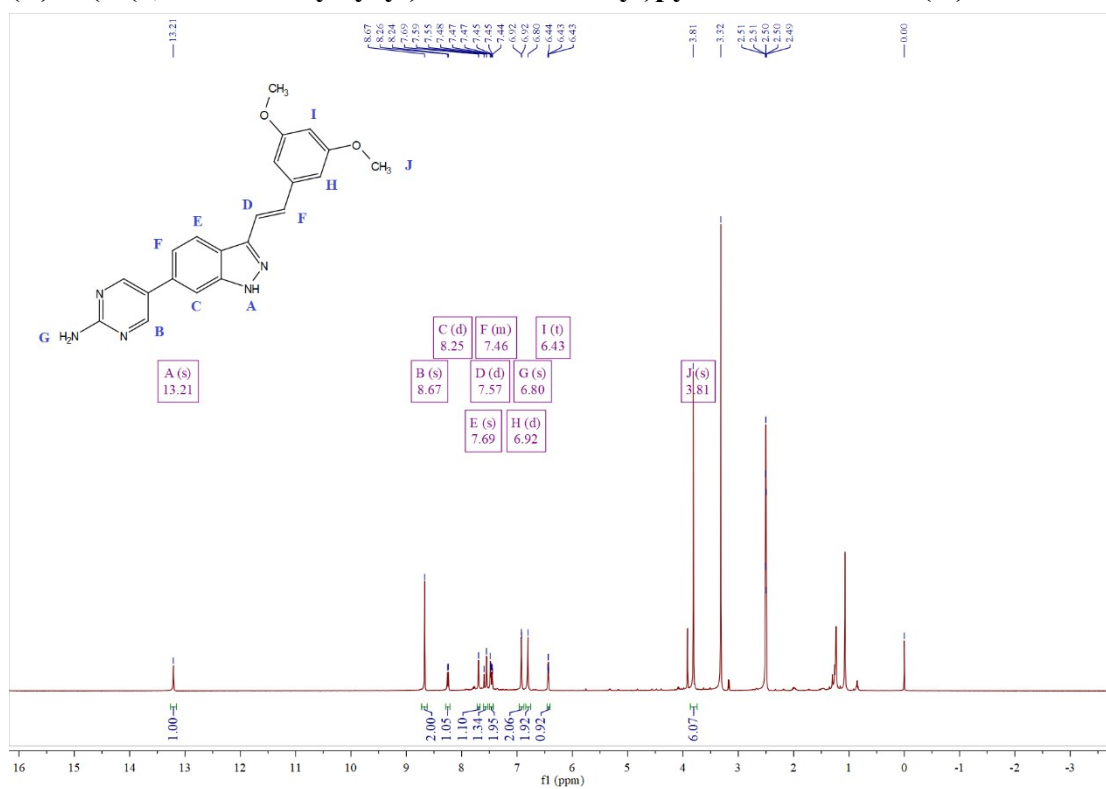


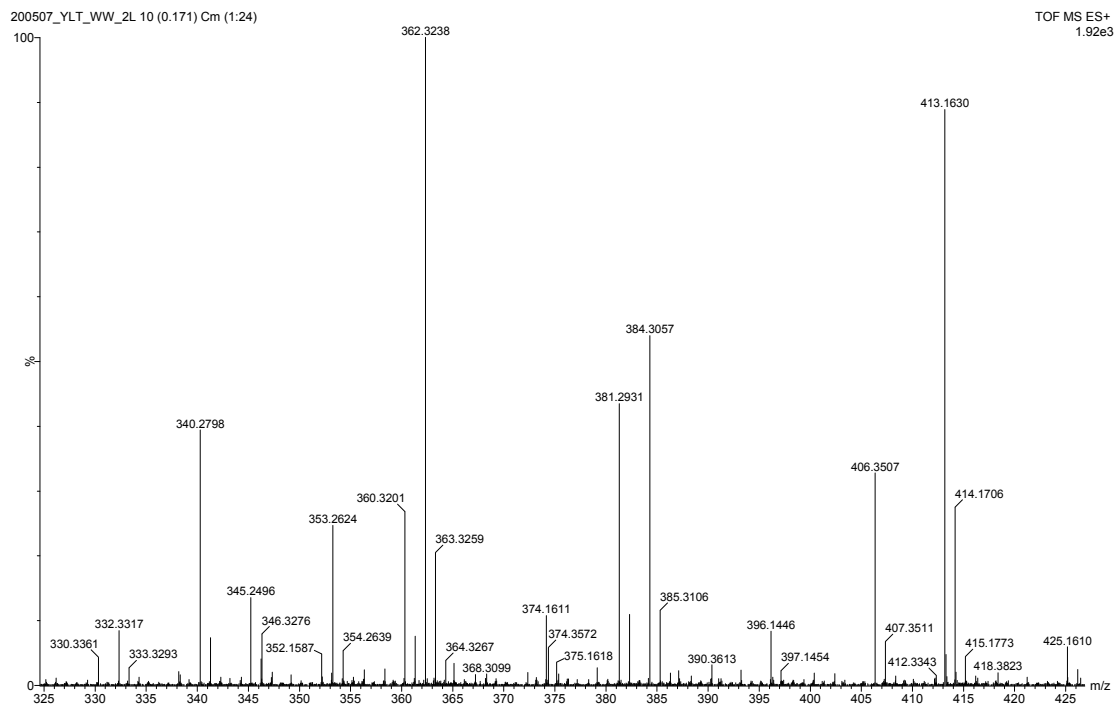
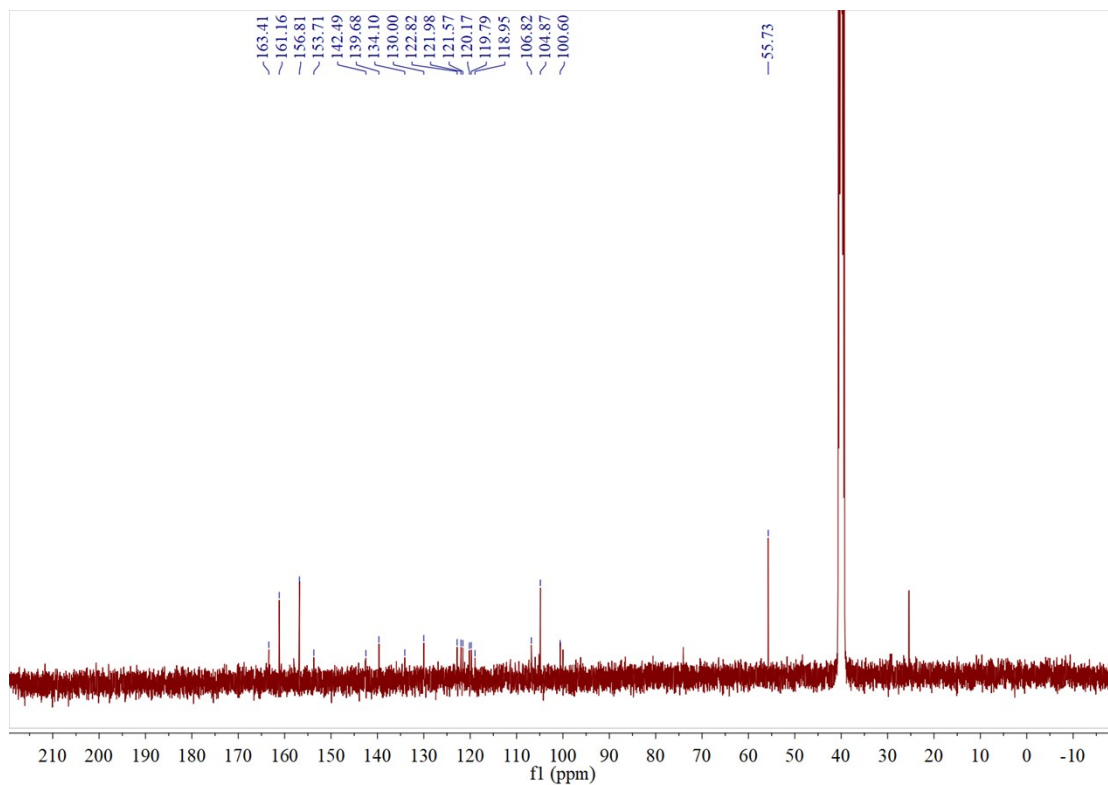
(E)-3-(3,5-dimethoxystyryl)-6-(2-(4-ethylpiperazin-1-yl)pyrimidin-5-yl)-1H-indazole (2k)



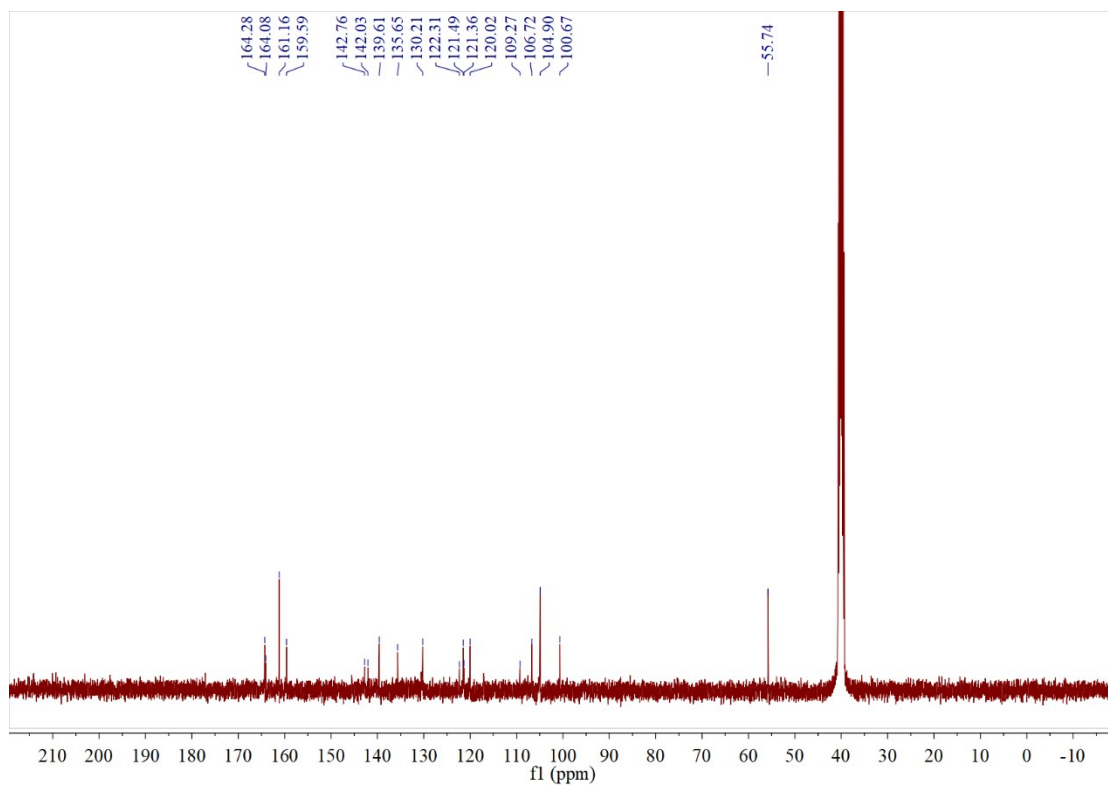
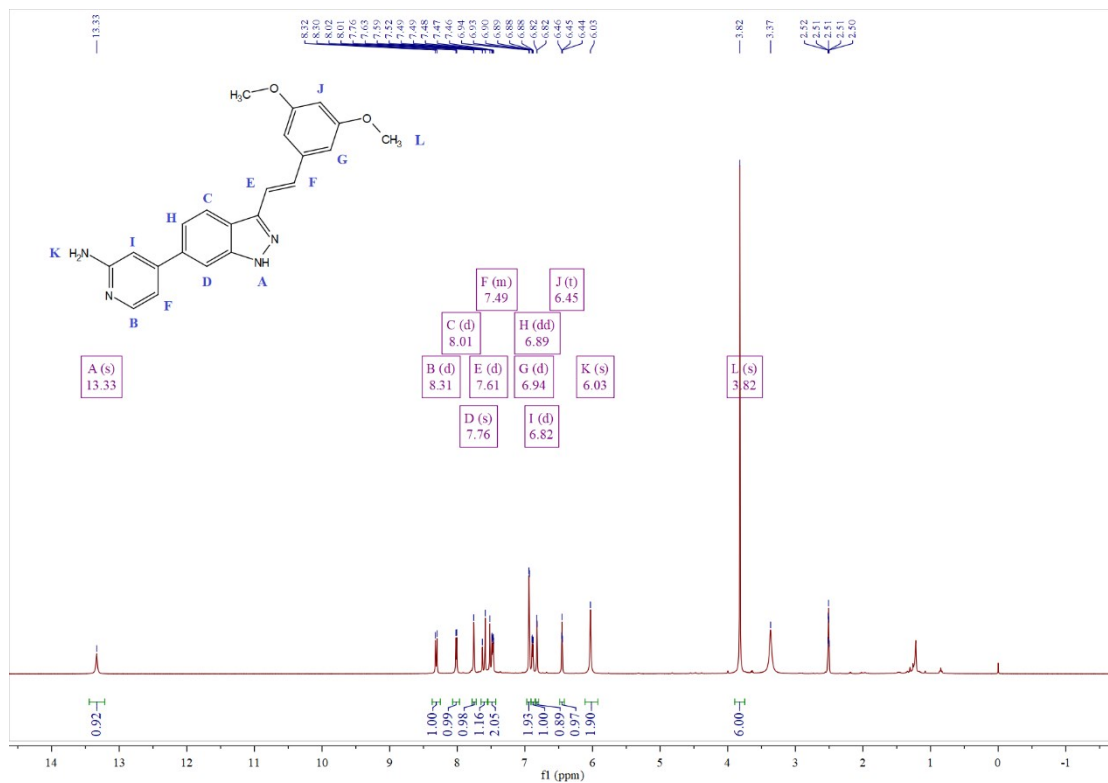


(E)-5-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyrimidin-2-amine (2l)



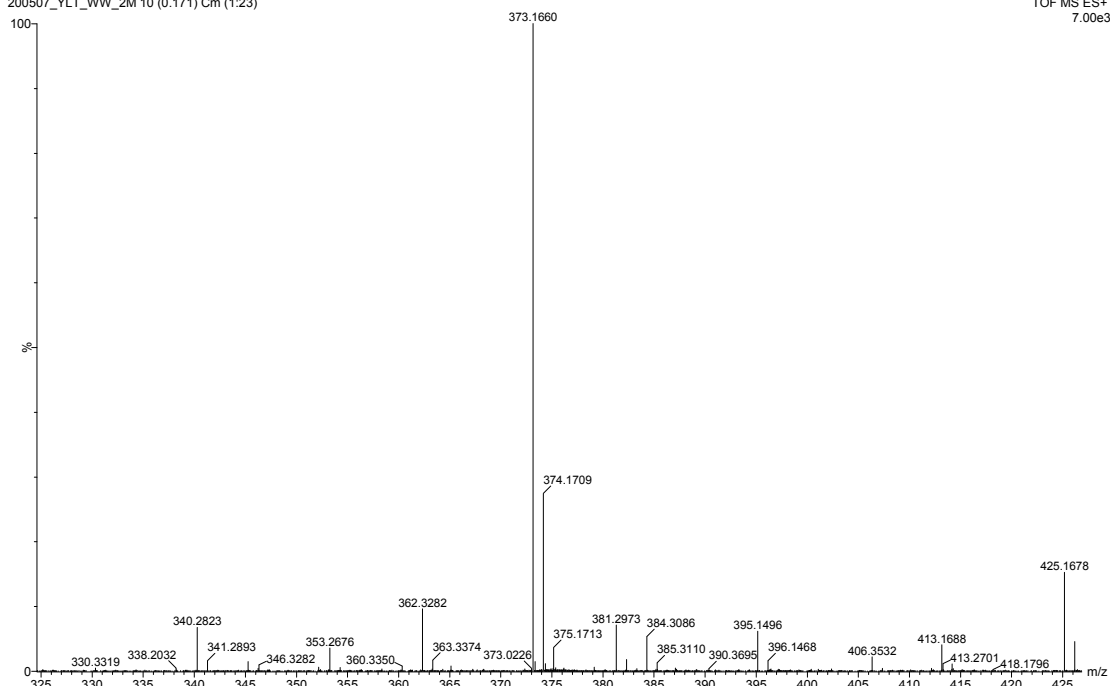


(E)-4-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyridin-2-amine (2m)

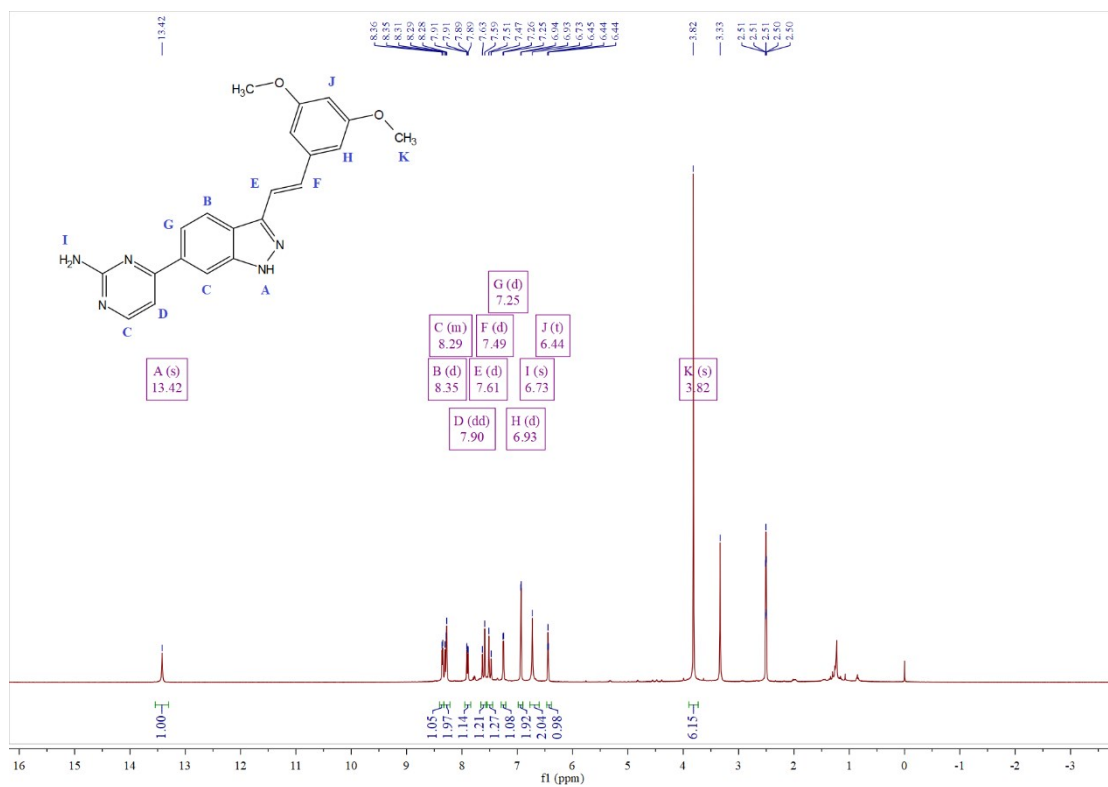


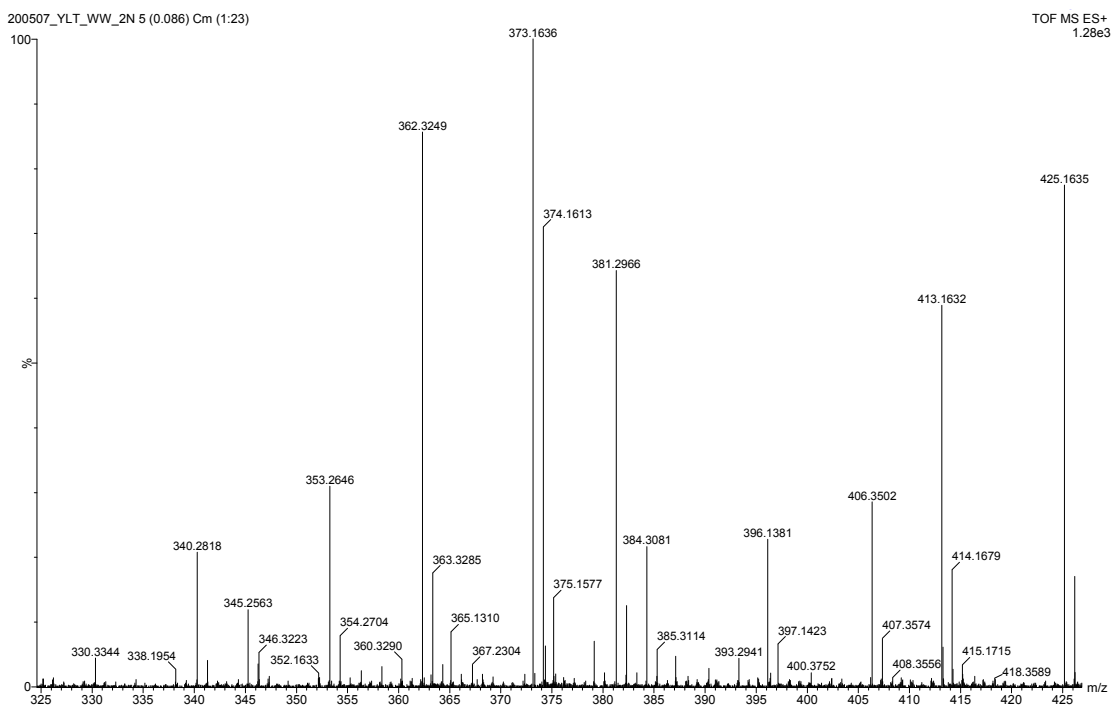
200507_YLT_WW_2M 10 (0.171) Cm (1.23)

TOF MS ES+
7.00e3

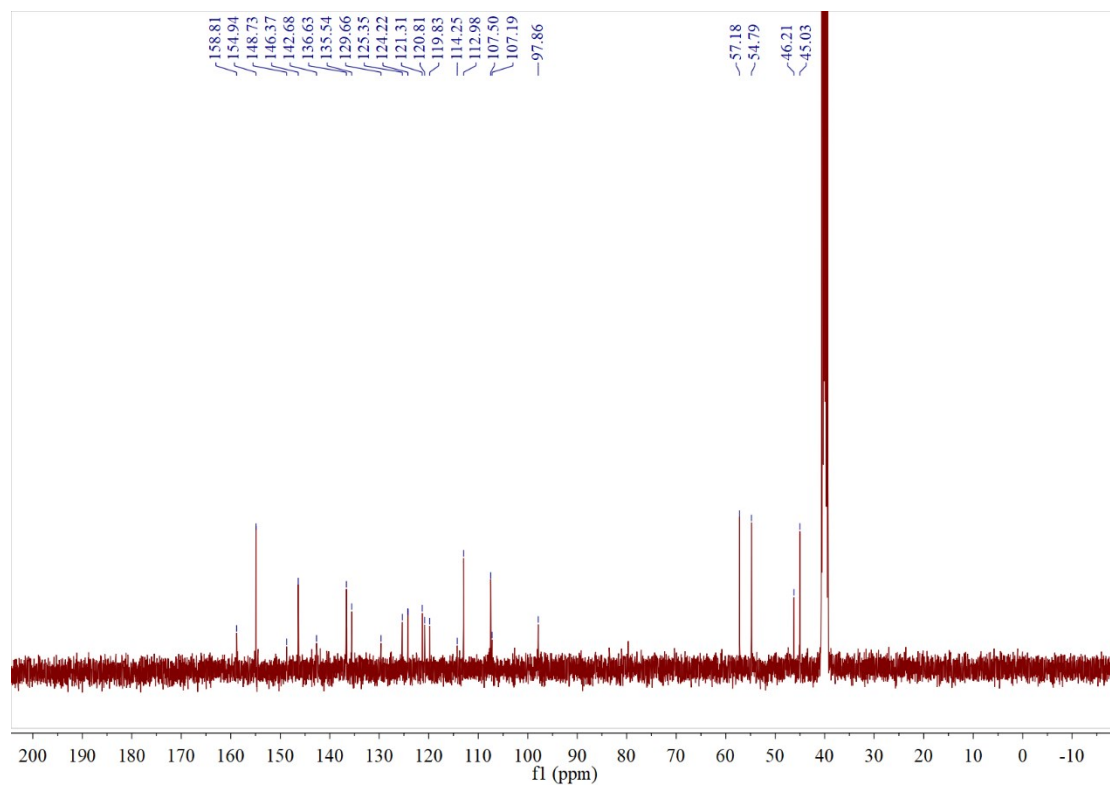
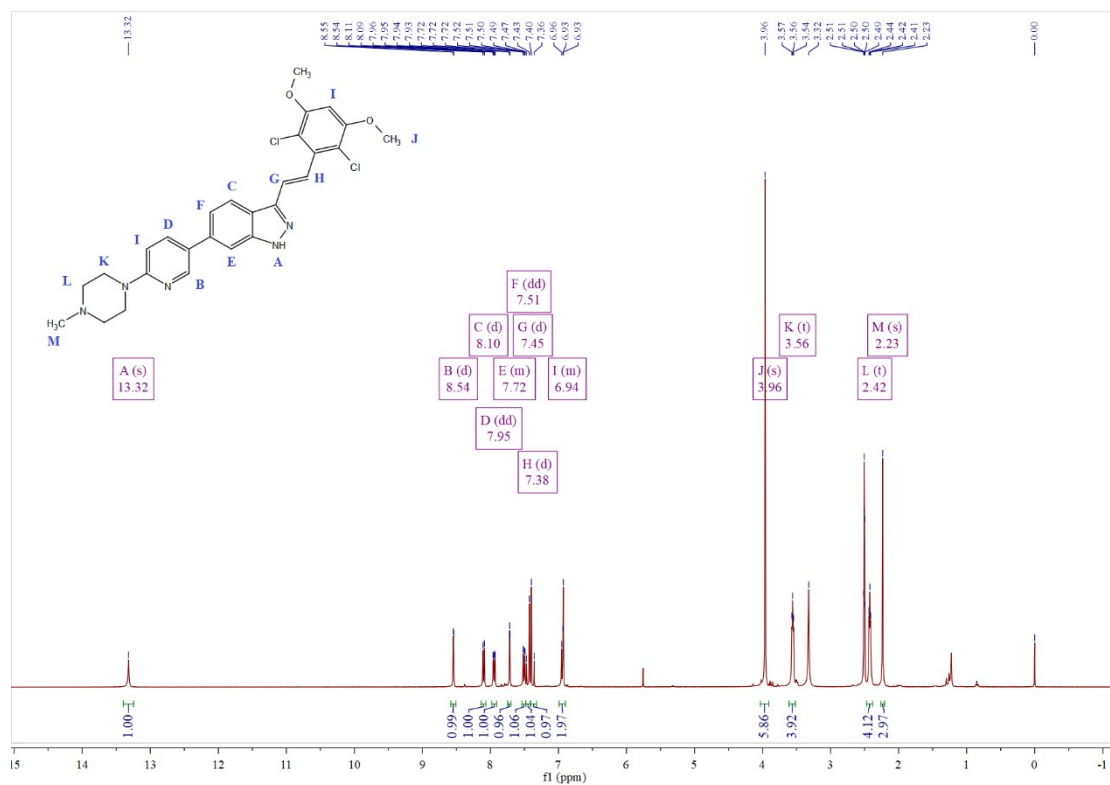


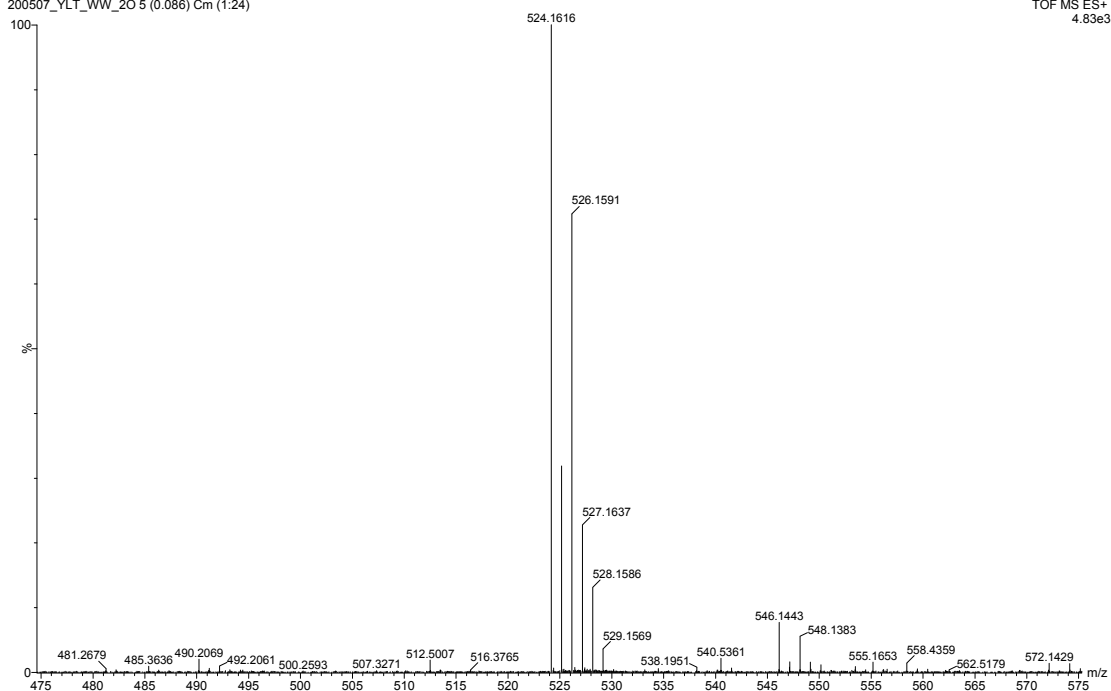
(E)-4-(3-(3,5-dimethoxystyryl)-1H-indazol-6-yl)pyrimidin-2-amine (2n)



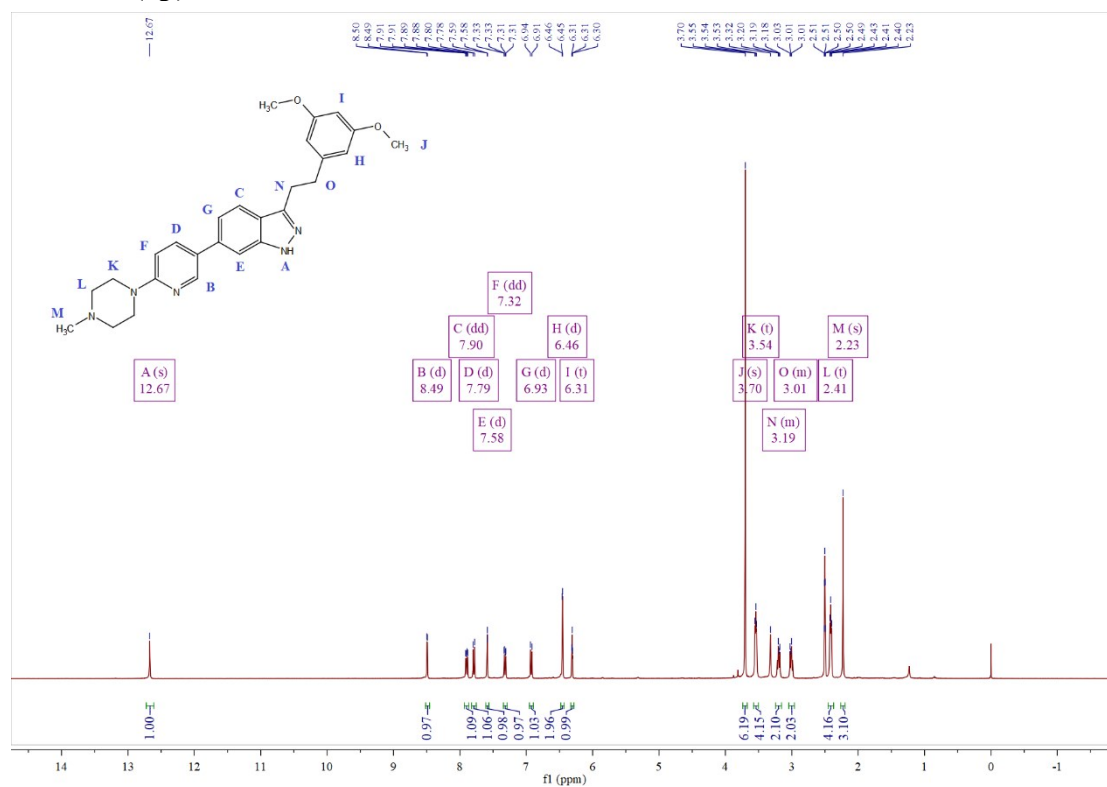


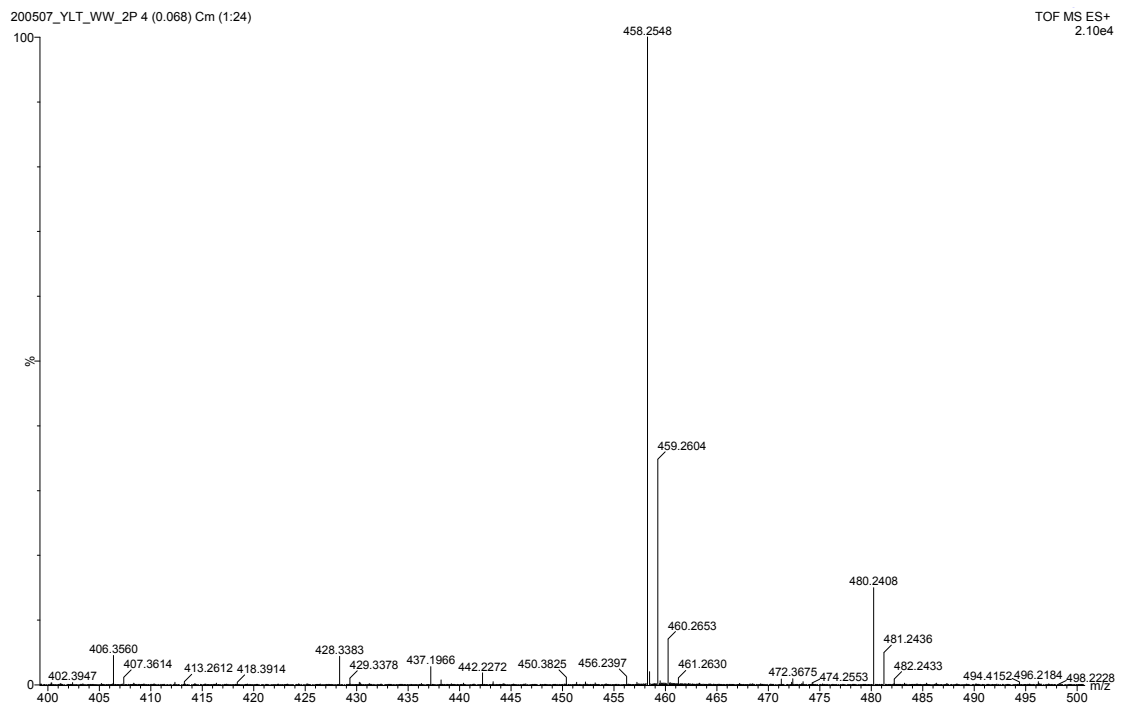
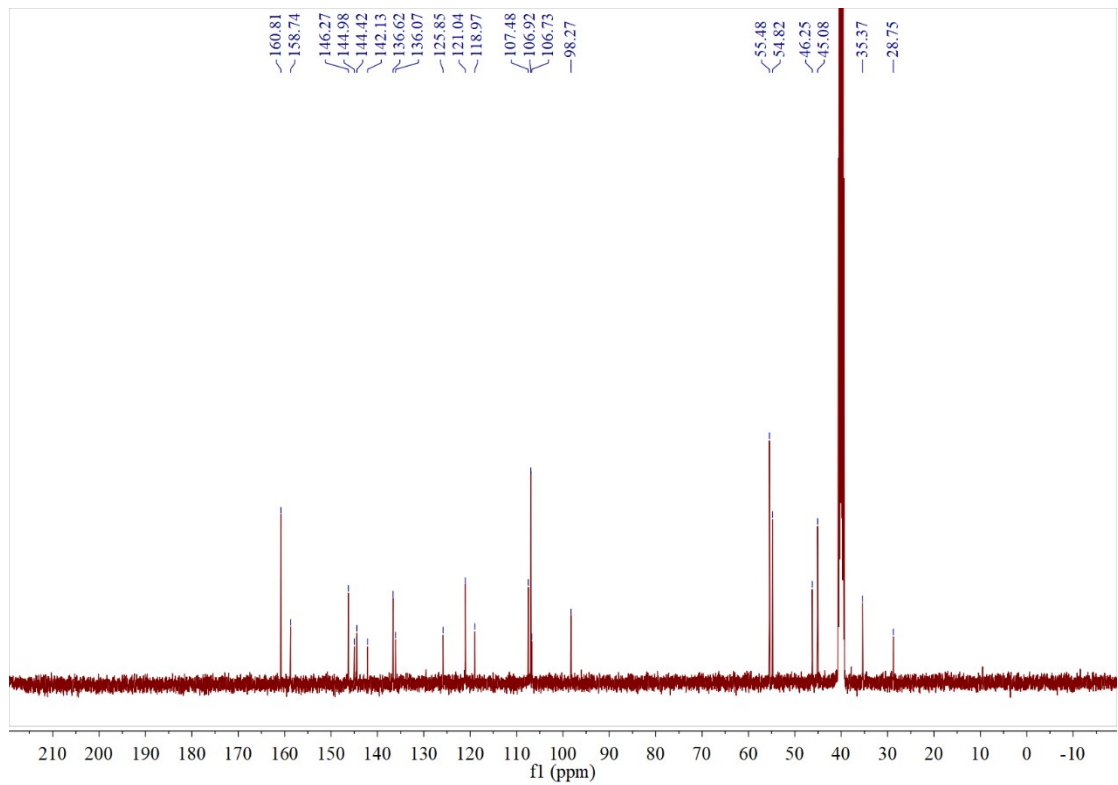
(E)-3-(2,6-dichloro-3,5-dimethoxystyryl)-6-(6-(4-methylpiperazin-1-yl)pyridin-3-yl)-1H-indazole (2o)





3-(3,5-dimethoxyphenethyl)-6-(6-(4-methylpiperazin-1-yl)pyridin-3-yl)-1H-indazole (2p)

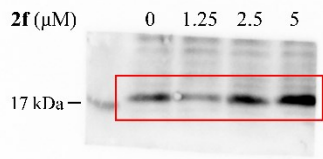




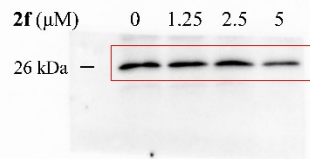
Raw images of Western blot

Samples in Figure 4B

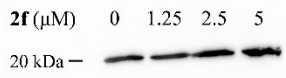
Cleaved caspase-3



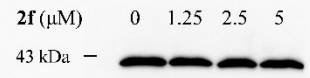
Bcl-2



Bax

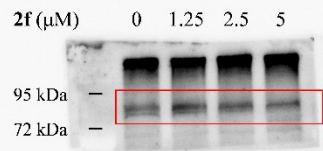


β -actin

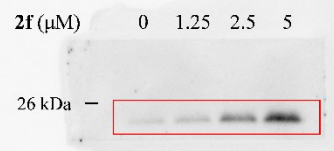


Samples in Figure 5C

MMP-9



TIMP-2



β -actin

