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Supporting Information

Design, Synthesis and Anti-inflammatory activity research of Indole-2-formamide Benzimidazole [2,1-b] thiazole Derivatives

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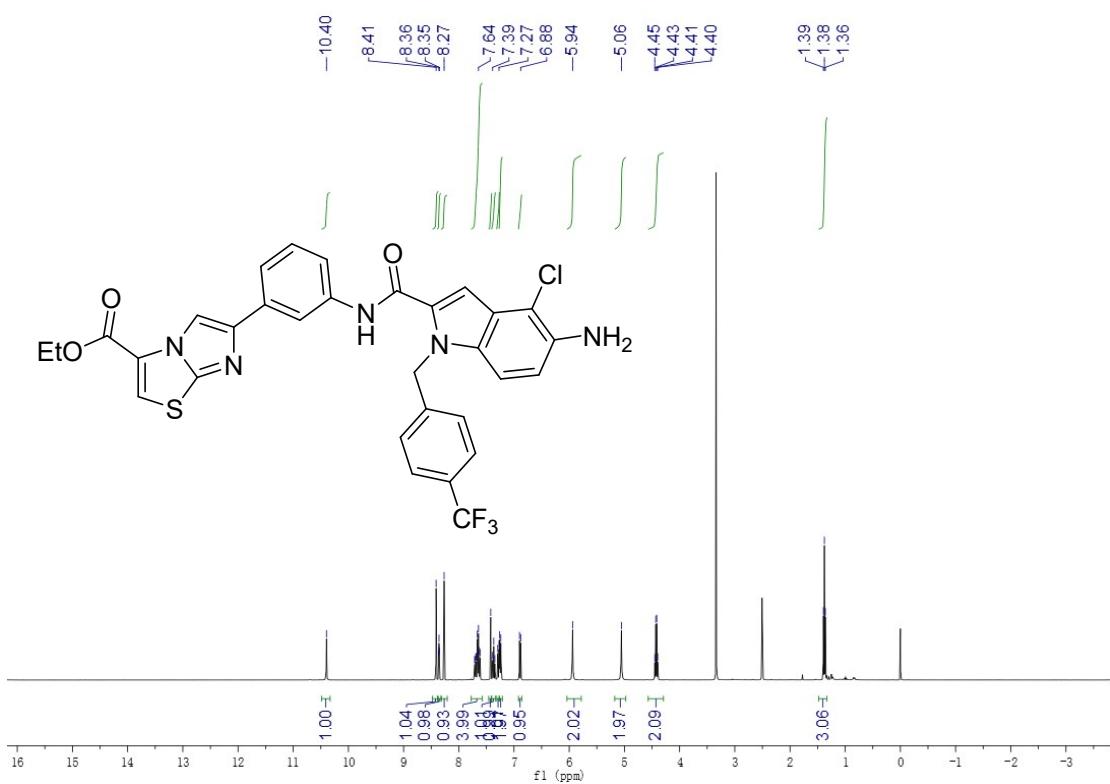


Figure 1: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of ethyl 6-(3-(5-amino-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate (**12**)

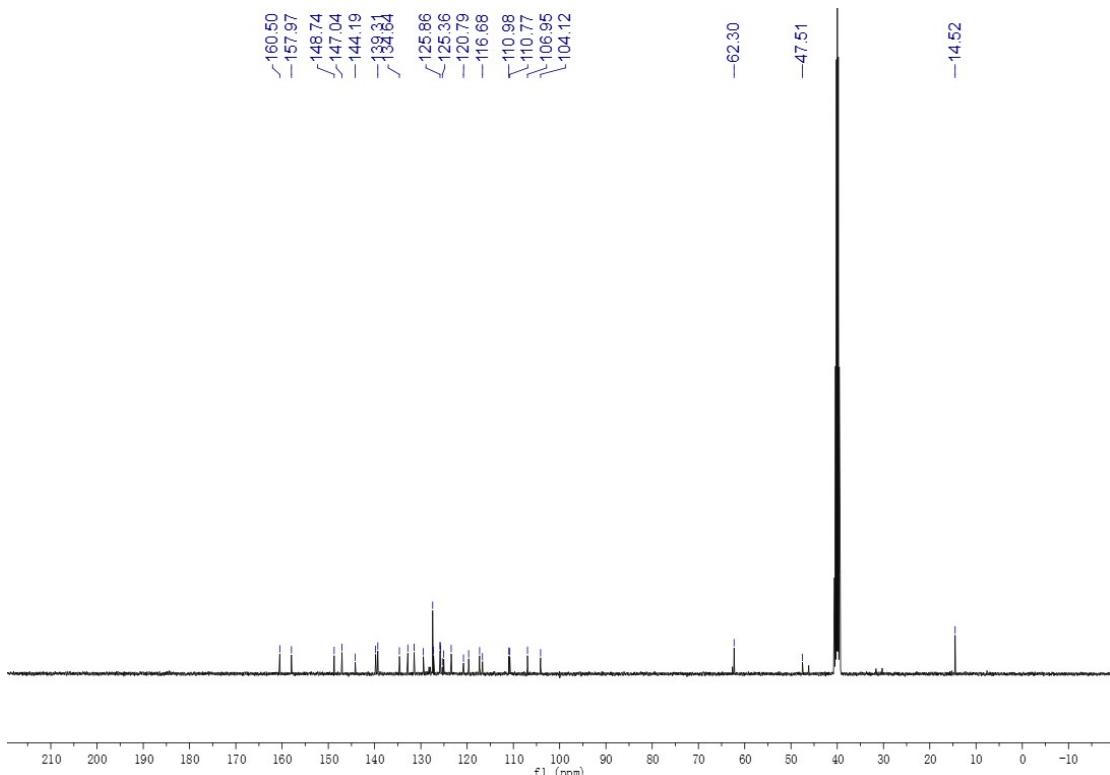


Figure 2: ¹³C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(5-amino-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate (**12**)

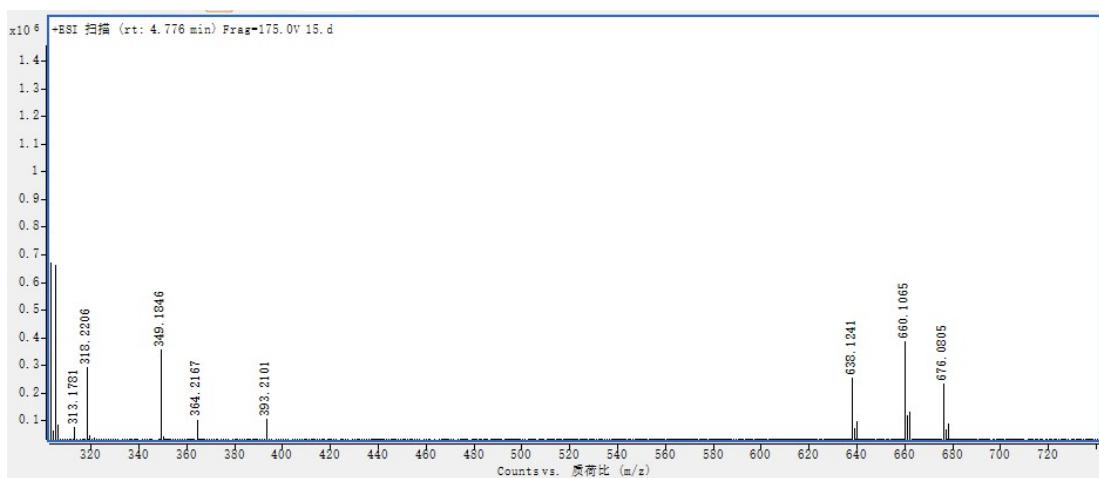


Figure 3: HR-ESI-MS spectrum of ethyl 6-(3-(5-amino-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate (**12**)

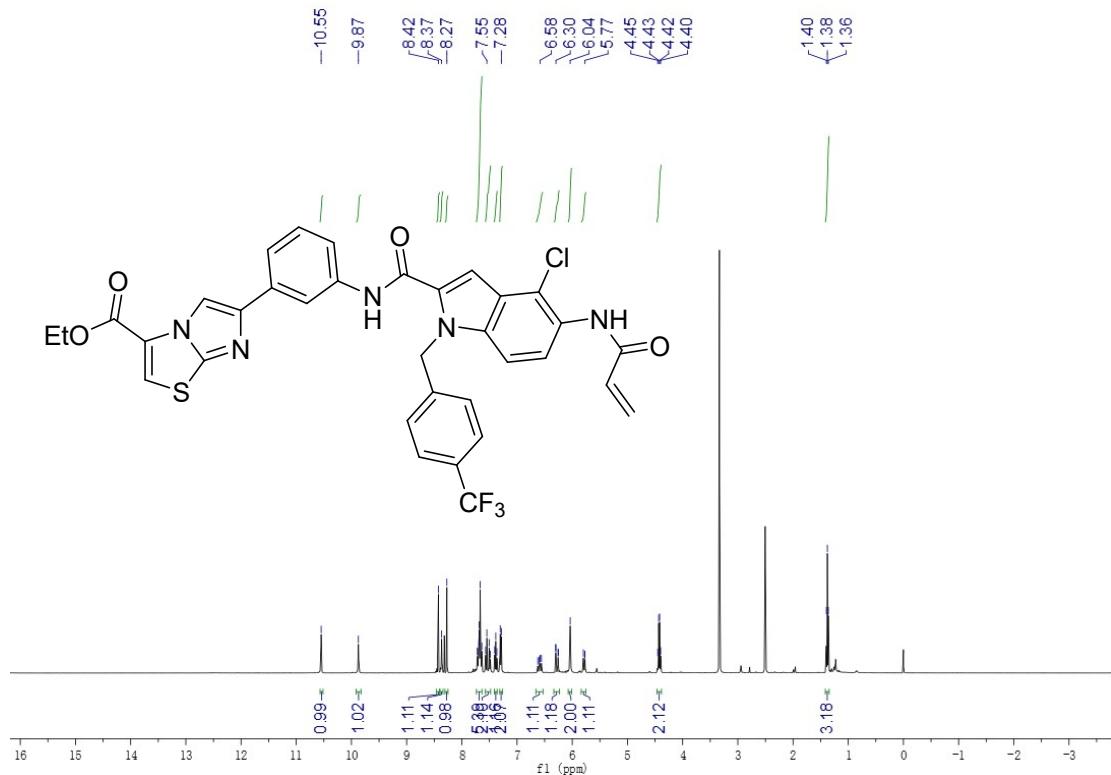


Figure 4: ^1H NMR (400 MHz, $\text{DMSO}-d_6$) spectrum of ethyl 6-(3-(5-acrylamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate (**13a**)

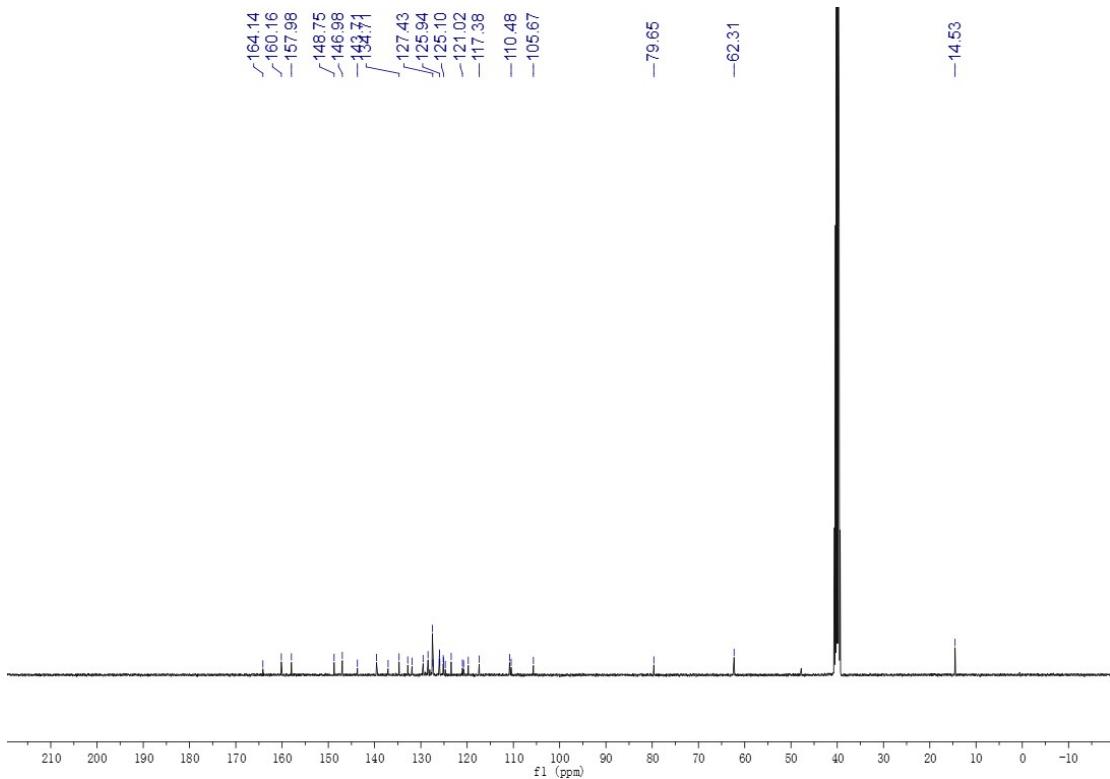


Figure 5: ^{13}C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(5-acrylamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13a**)

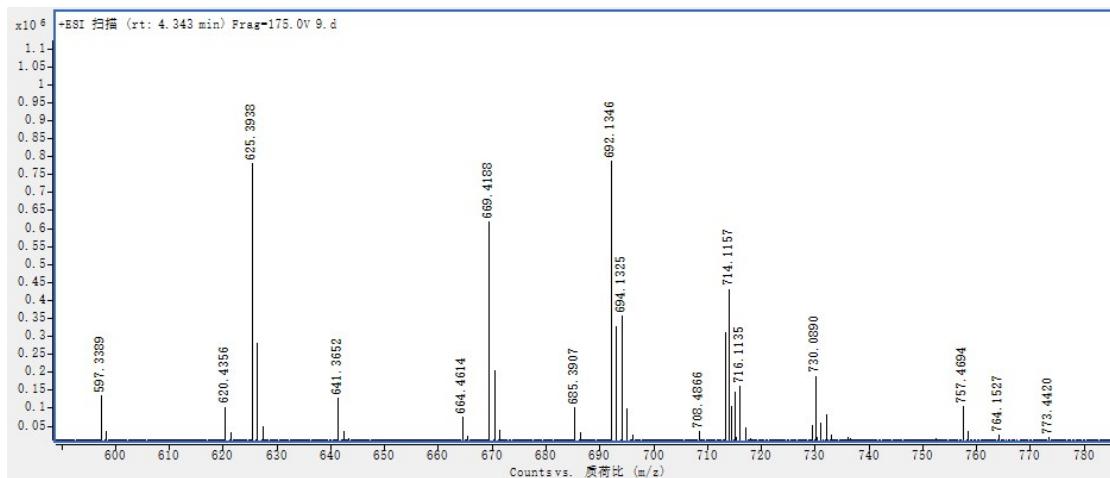


Figure 6: HR-ESI-MS spectrum of ethyl 6-(3-(5-acrylamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13a**)

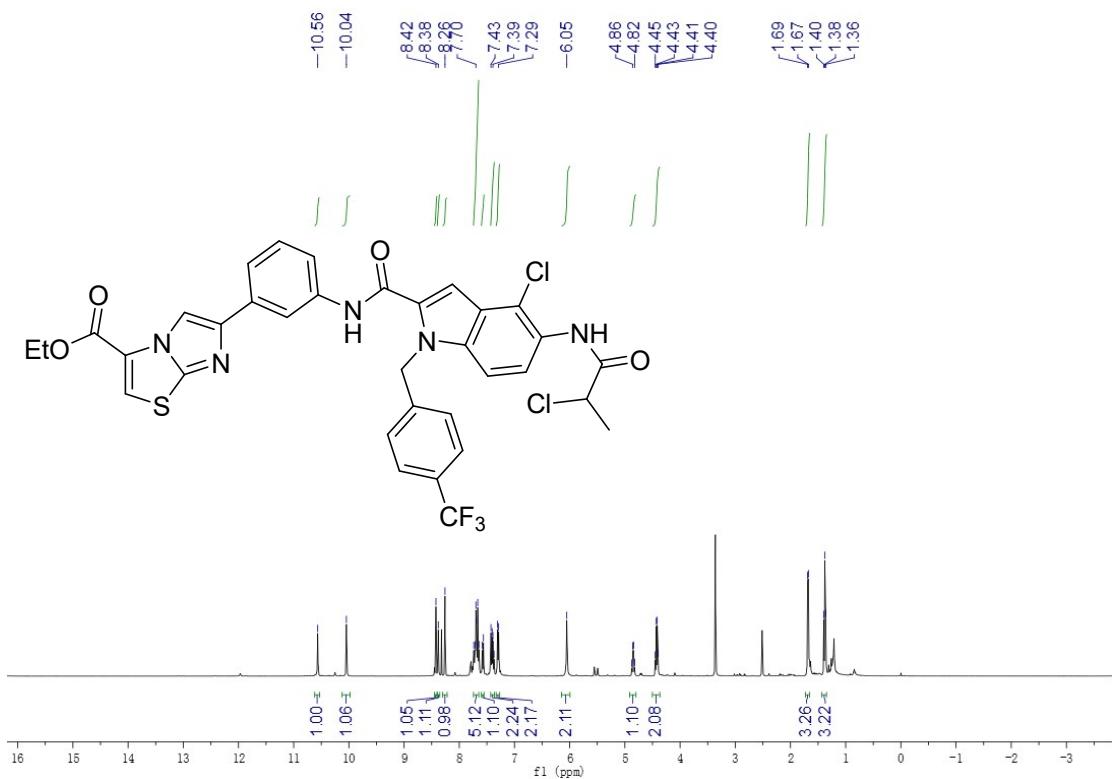


Figure 7: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of ethyl 6-(3-(4-chloro-5-(2-chloropropanamido)-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate(**13b**)

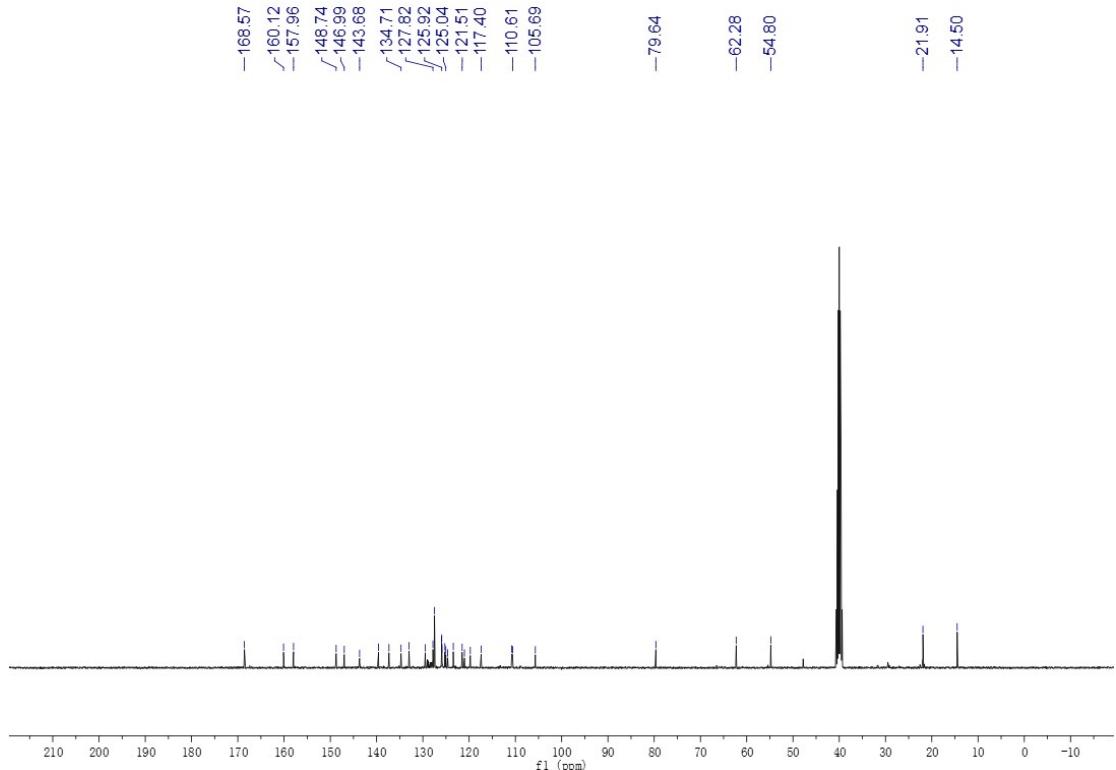


Figure 8: ¹³C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(4-chloro-5-(2-chloropropanamido)-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole-3-carboxylate(**13b**)

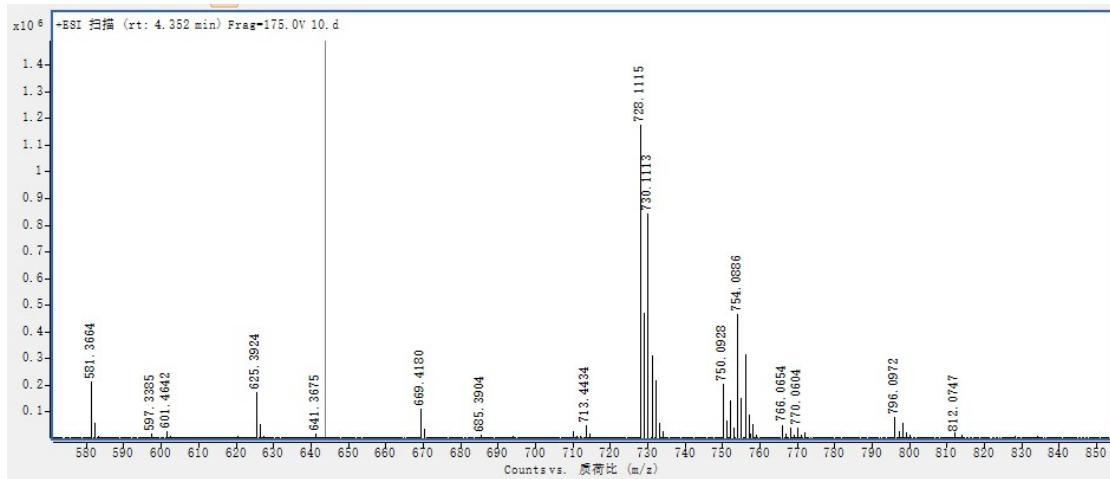


Figure 9: HR-ESI-MS spectrum of ethyl 6-(3-(4-chloro-5-(2-chloropropanamido)-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate(**13b**)

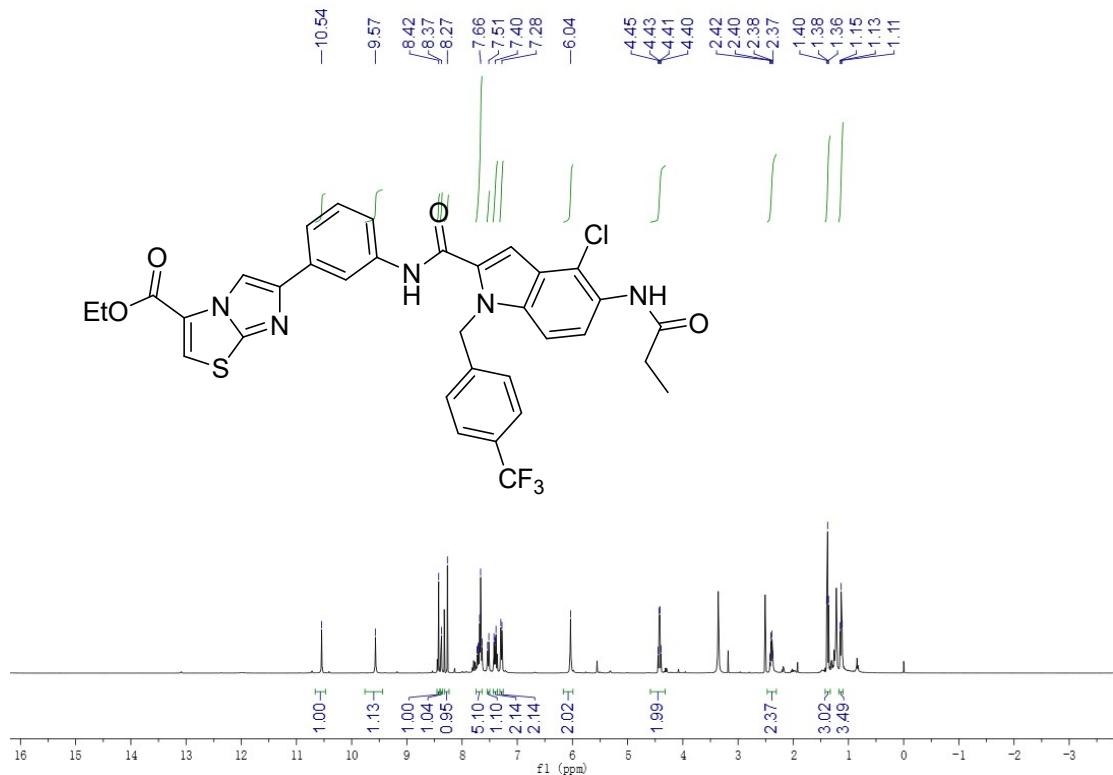


Figure 10: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of ethyl 6-(3-(4-chloro-5-propionamido-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido)phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13c**)

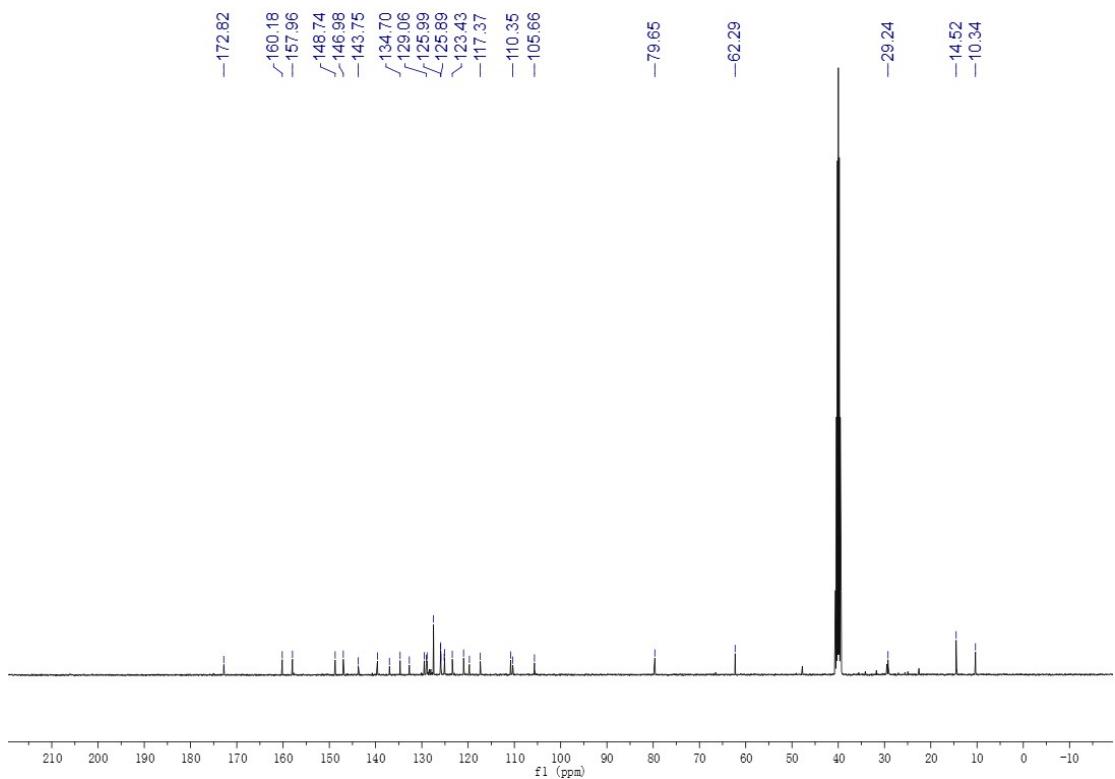


Figure 11: ^{13}C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(4-chloro-5-propionamido-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl imidazole [2,1-*b*] thiazole-3-carboxylate (**13c**)

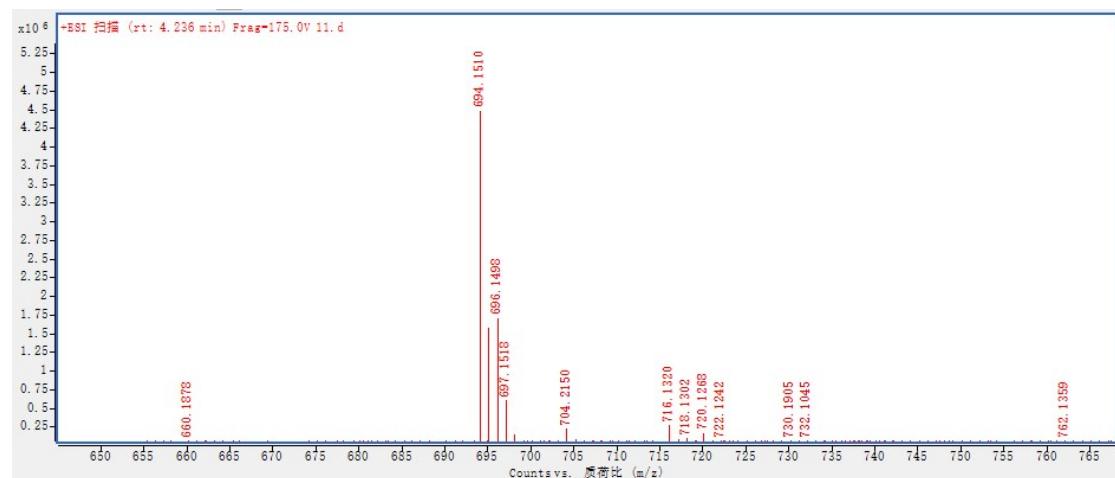


Figure 12: HR-ESI-MS spectrum of ethyl 6-(3-(4-chloro-5-propionamido-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl imidazole [2,1-*b*] thiazole-3-carboxylate (**13c**)

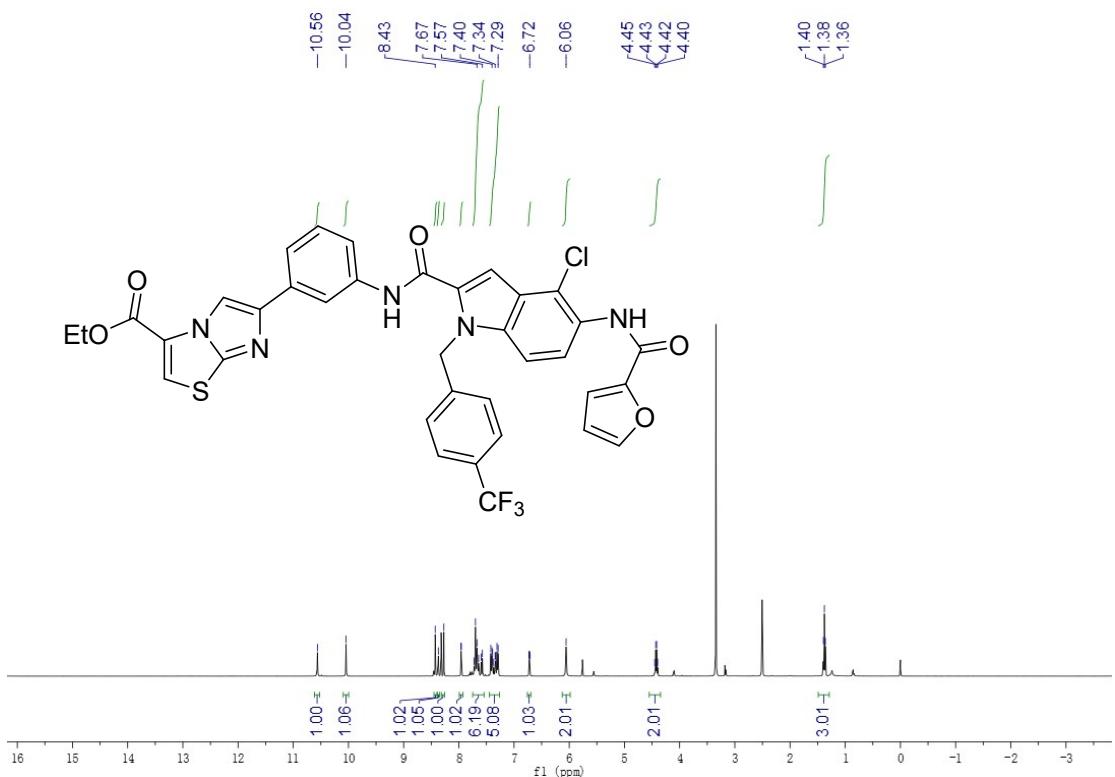


Figure 13: ¹H NMR (400 MHz, DMSO-*d*₆) spectrum of ethyl 6-(3-(4-chloro-5-(furan-2-carboxamido)-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) Imidazole [2,1-*b*] thiazole-3-carboxylate (**13d**)

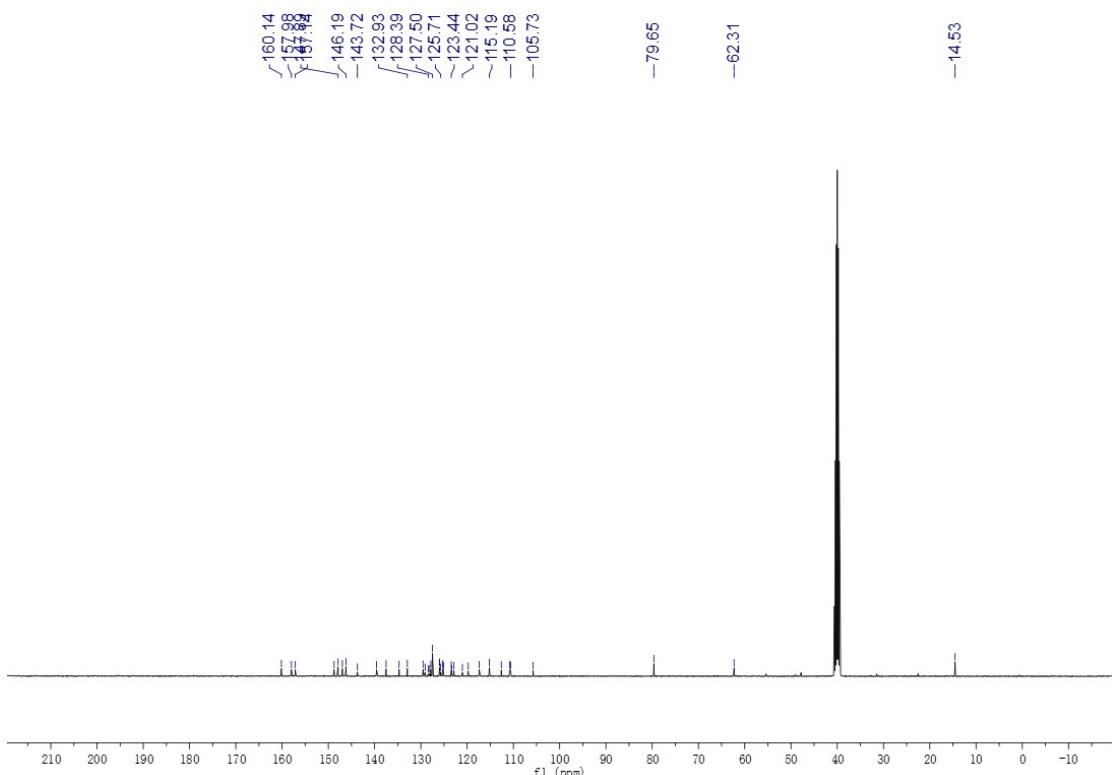


Figure 14: ¹³C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(4-chloro-5-(furan-2-carboxamido)-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl)

Imidazole [2,1-*b*] thiazole-3-carboxylate (**13d**)

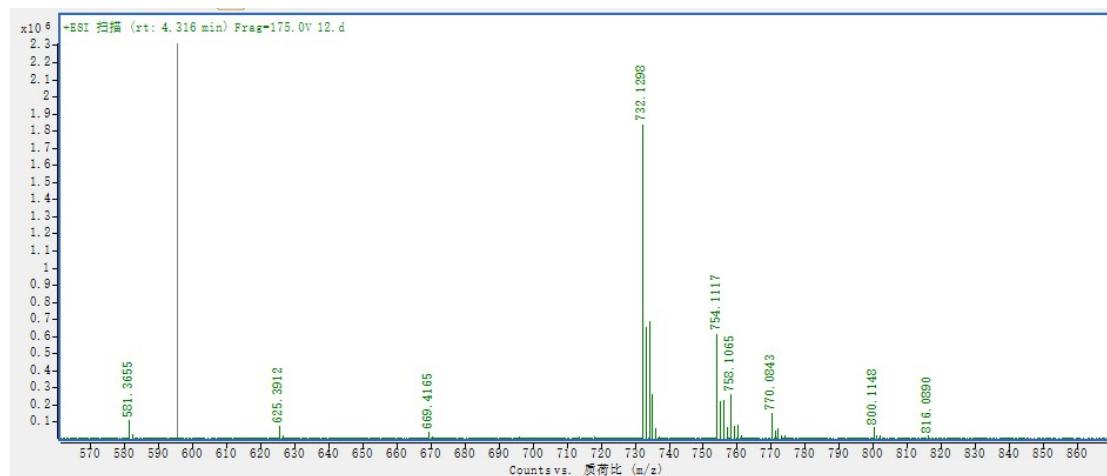


Figure 15: HR-ESI-MS spectrum of ethyl 6-(3-(4-chloro-5-(furan-2-carboxamido)-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13d**)

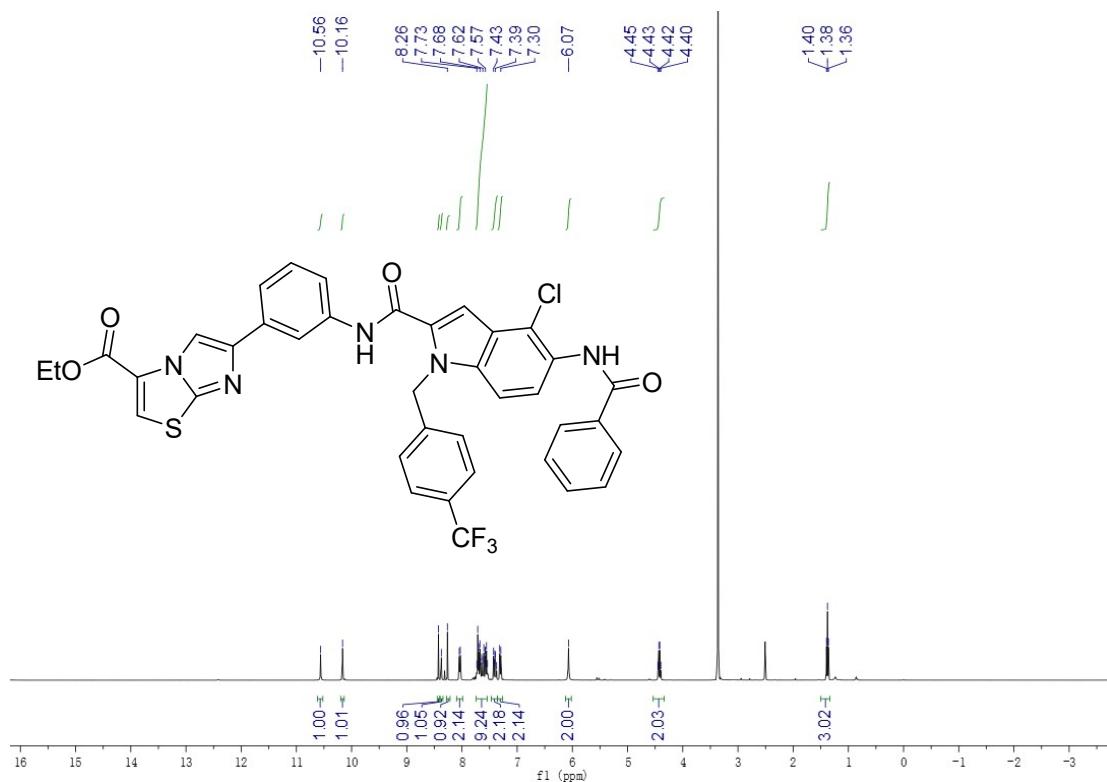


Figure 16: ^1H NMR (400 MHz, $\text{DMSO}-d_6$) spectrum of ethyl 6-(3-(5-benzamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13e**)

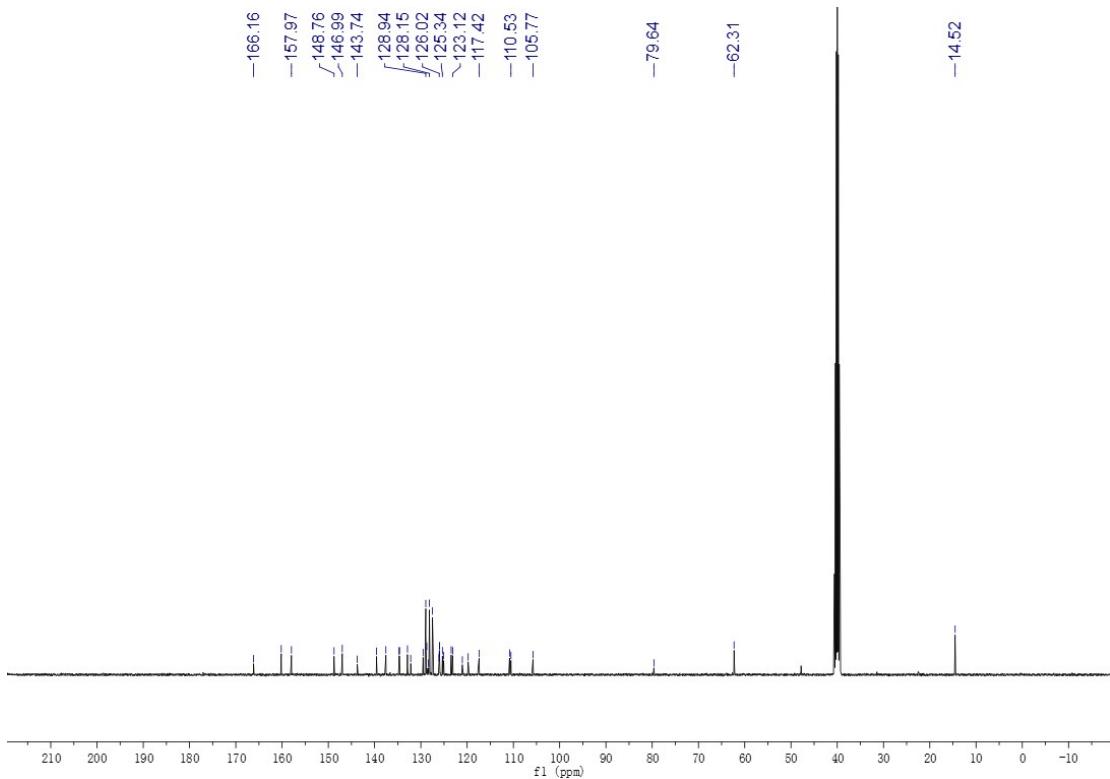


Figure 17: ^{13}C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(5-benzamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido)phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13e**)

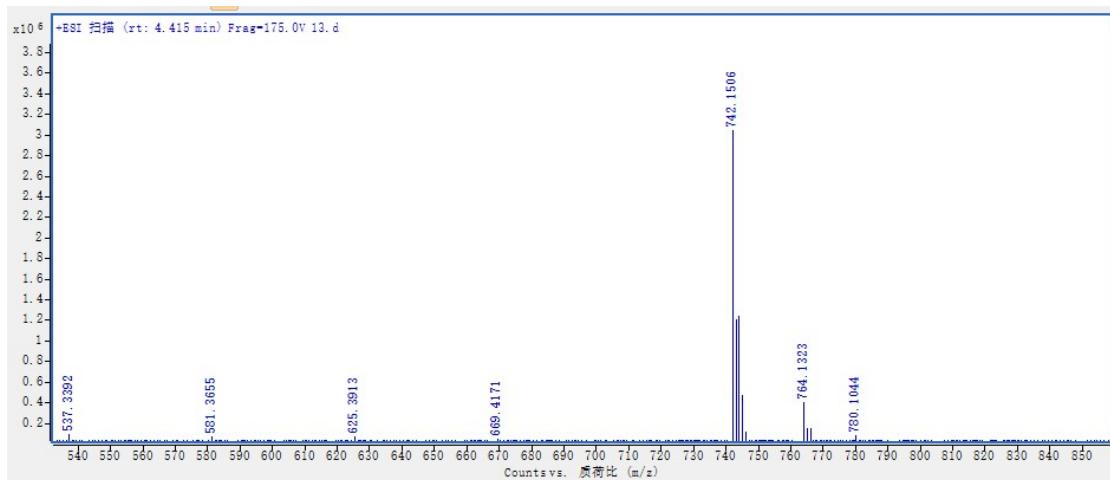


Figure 18: HR-ESI-MS spectrum of ethyl 6-(3-(5-benzamido-4-chloro-1-(4-(trifluoromethyl) benzyl)-1*H*-indole-2-carboxamido)phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13e**)

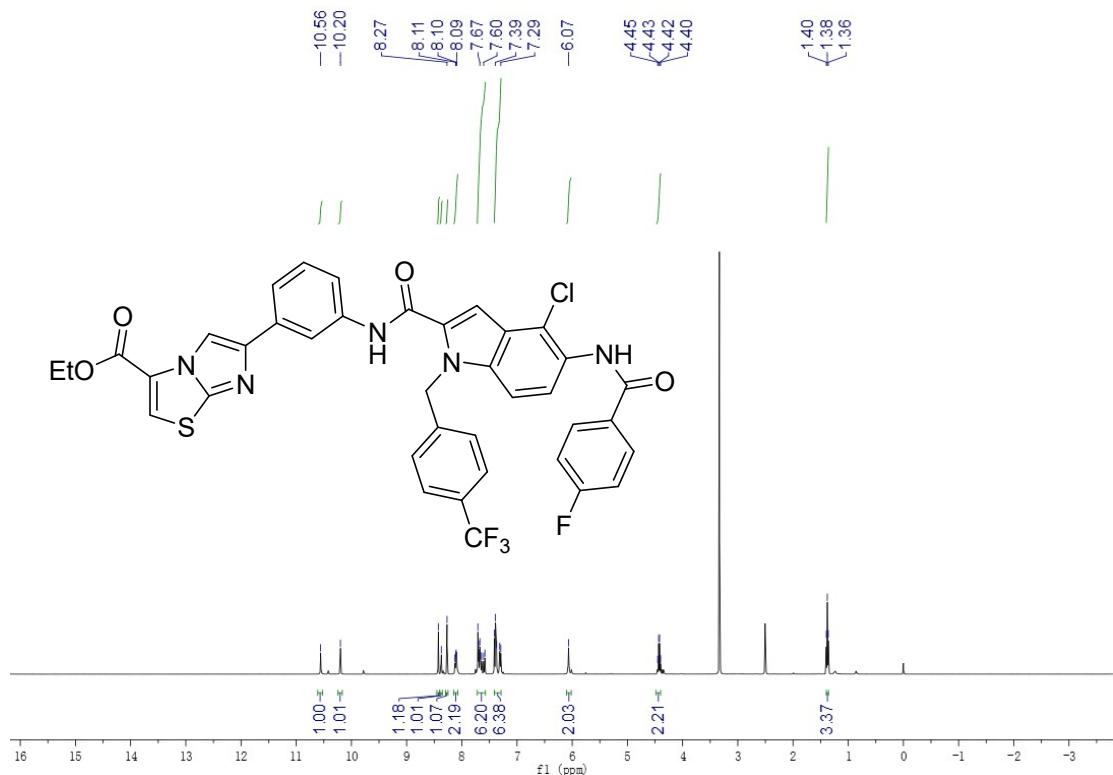


Figure 19: ^1H NMR (400 MHz, DMSO- d_6) spectrum of ethyl 6-(3-(4-chloro-5-(4-fluorobenzamido)-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl)imidazole [2,1-*b*] thiazole-3-carboxylate (**13f**)

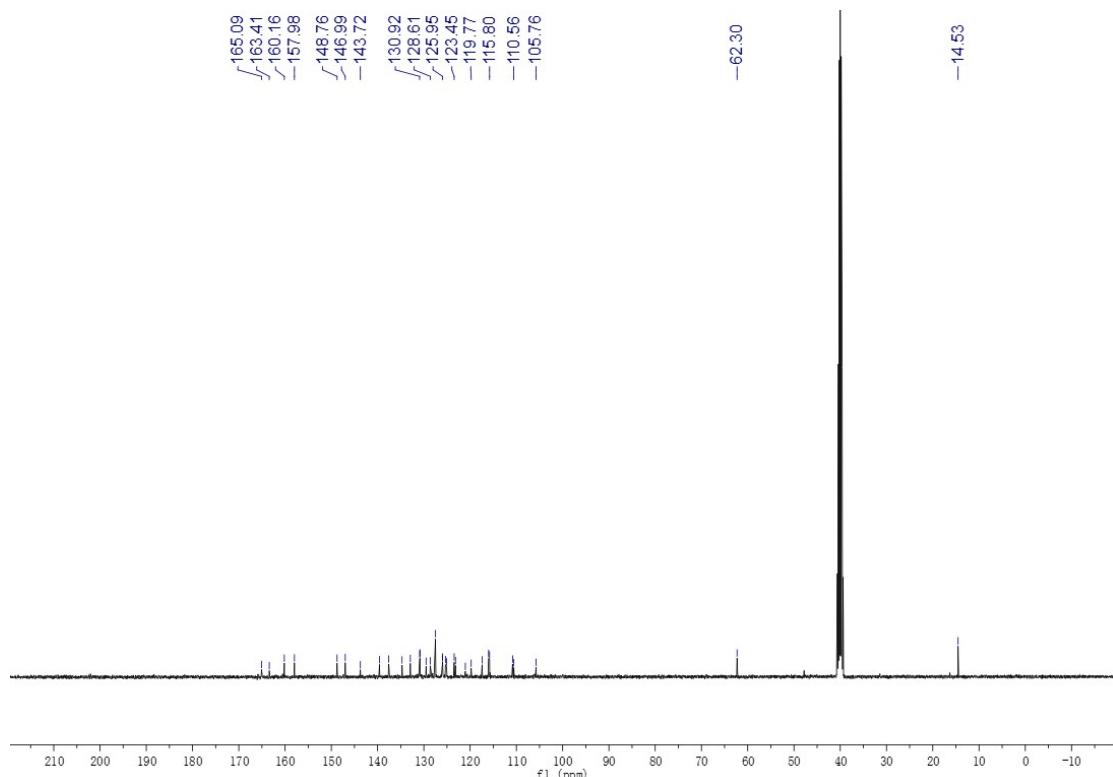


Figure 20: ^{13}C NMR (101 MHz, DMSO) spectrum of ethyl 6-(3-(4-chloro-5-(4-fluorobenzamido)-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl) imidazole [2,1-*b*] thiazole-3-carboxylate (**13f**)

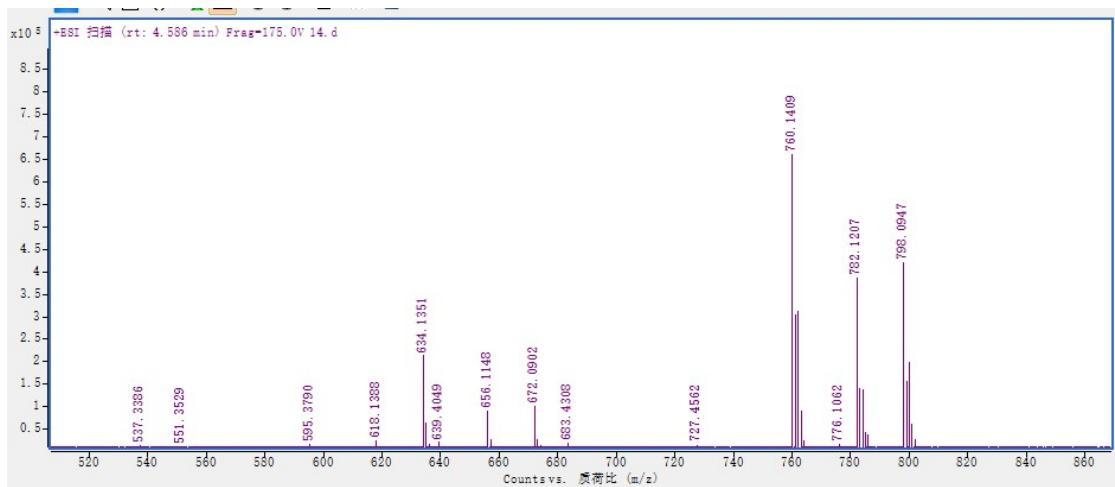


Figure 21: HR-ESI-MS spectrum of ethyl 6-(3-(4-chloro-5-(4-fluorobenzamido)-1-(4-(trifluoromethyl)benzyl)-1*H*-indole-2-carboxamido) phenyl imidazole-3-carboxylate (**13f**)