

Supplementary Information for

D-Galactose-conjugated pyrimidine thioureas as potent antimicrobial agents: Rapid green synthesis, structure–activity relationships and molecular modelling

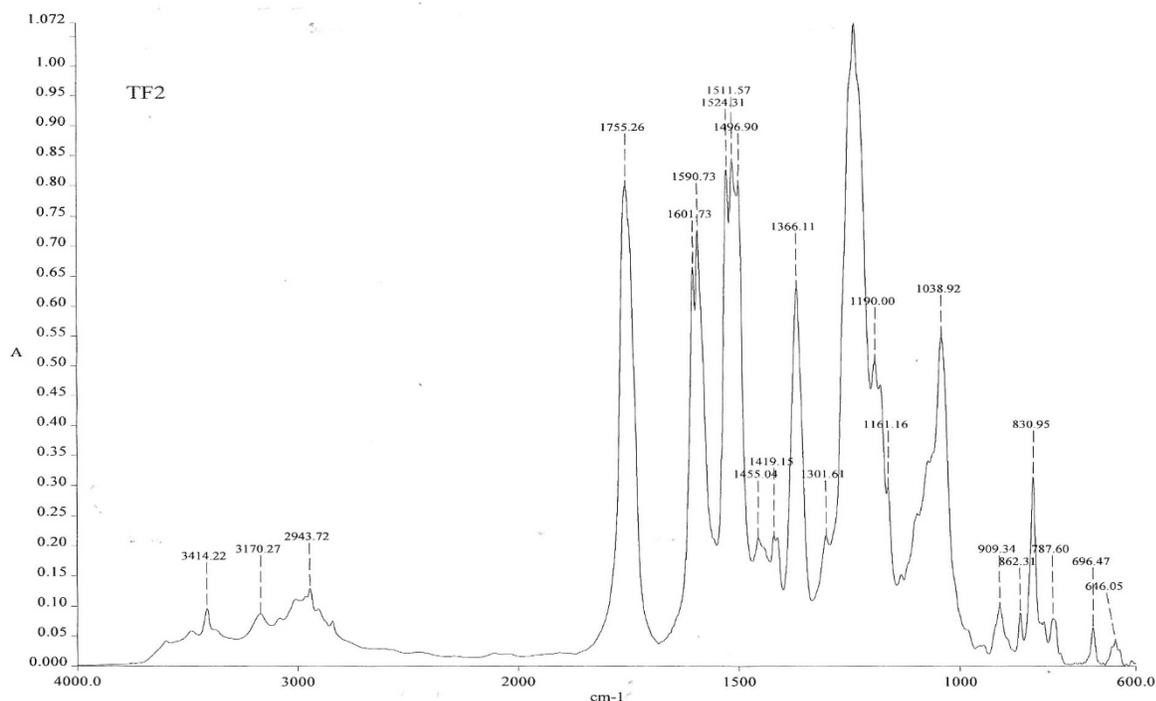
Nguyen Dinh Thanh,^{a,*} Vu Ngoc Toan,^b Ngo Hong Anh Thu,^a Nguyen Minh Tri,^b Duong Ngoc Toan,^c Hoang Thi Kim Van^d

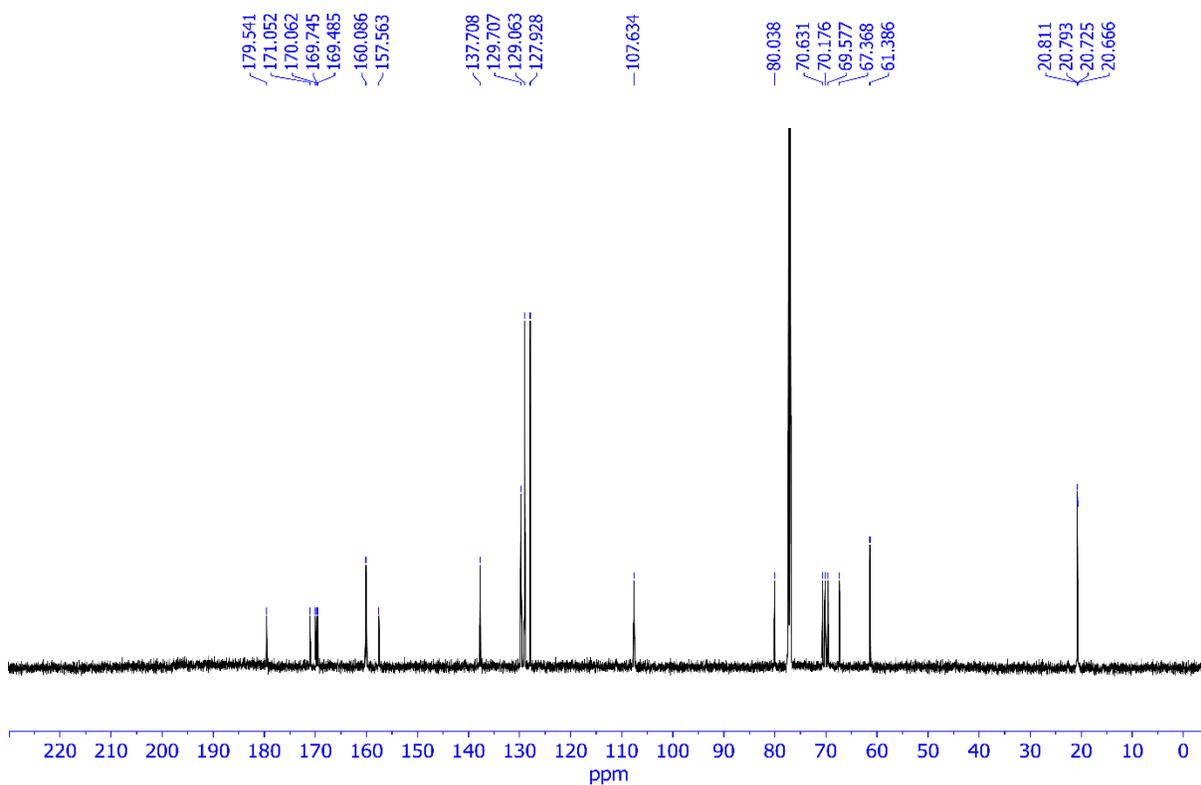
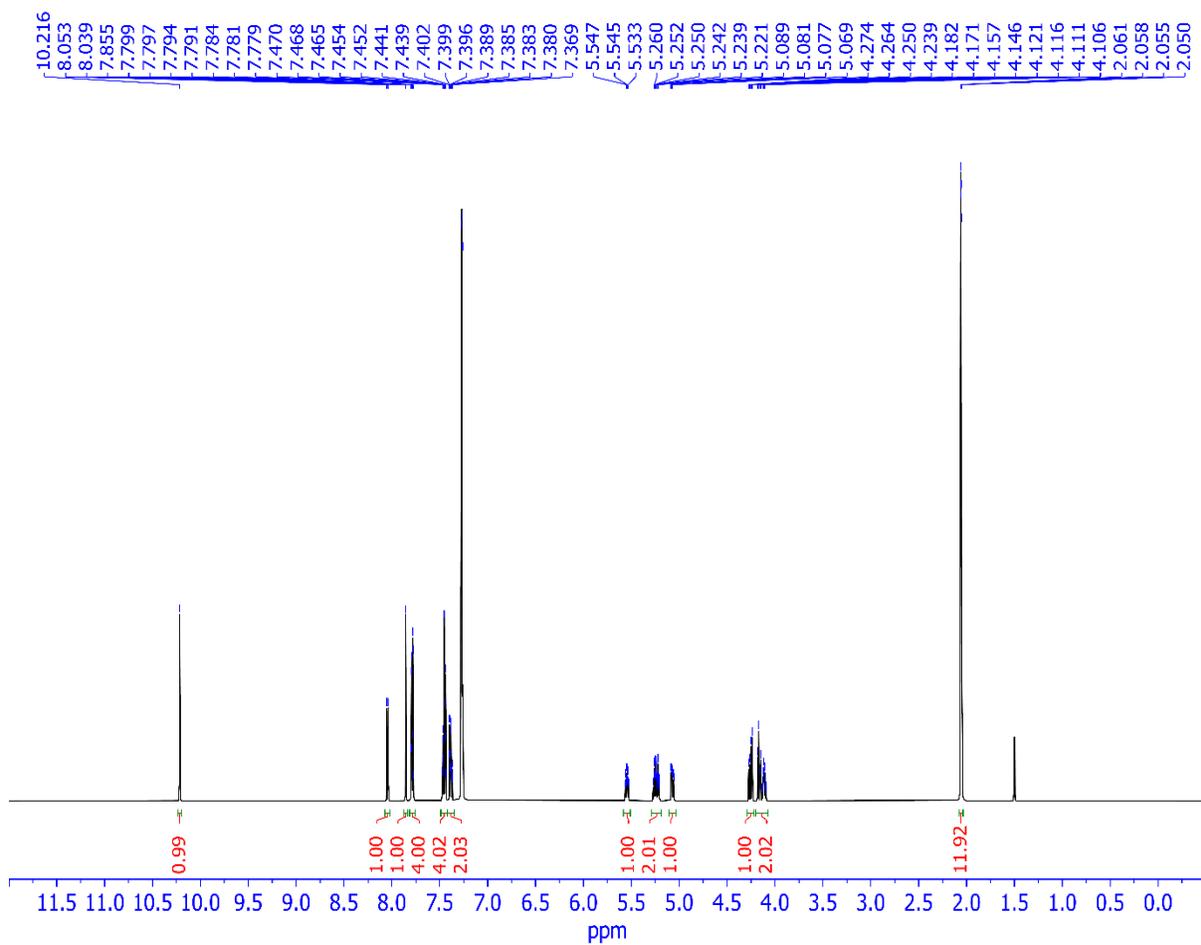
Faculty of Chemistry, Thai Nguyen University of Education, 20 Luong Ngoc Quyen, Phan Dinh Phung, Thai Nguyen, Viet Nam Faculty of Chemical Technology, Viet Tri University of Industry, 9 Tien Son, Thanh Mieu, Phu Tho, Viet Nam

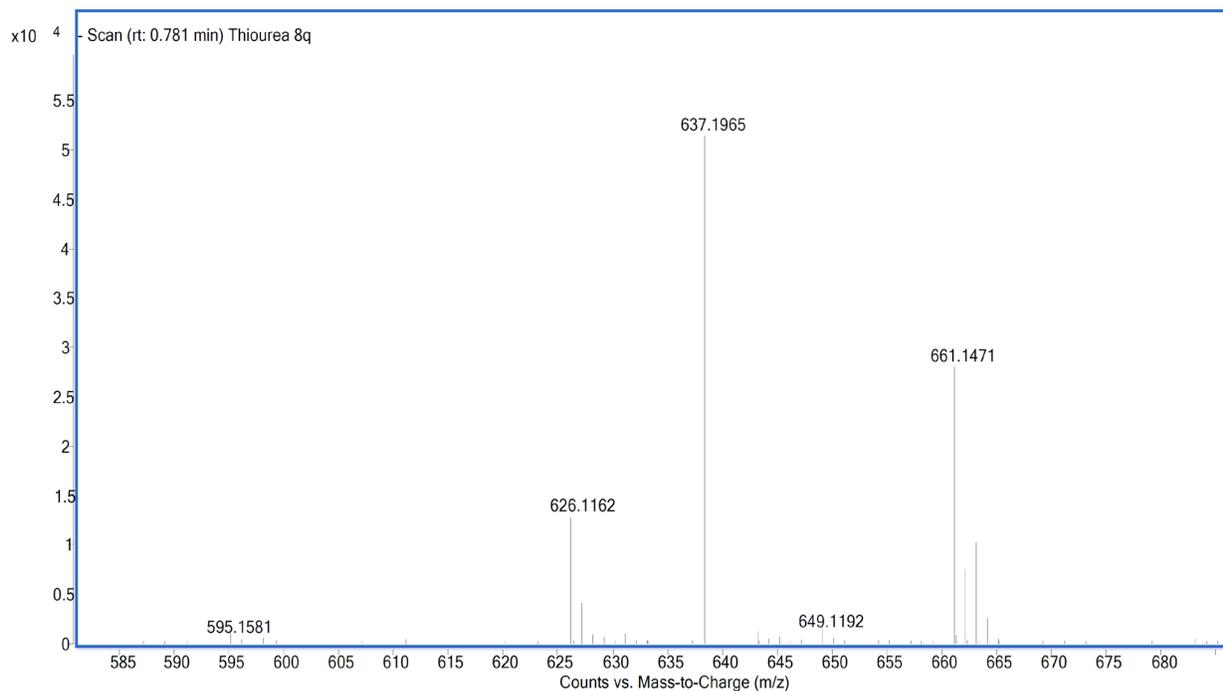
E-mail address of the corresponding author: nguyendinhthanh@hus.edu.vn

IR, ¹H & ¹³C NMR, and mass spectra of thioureas (8a-l)

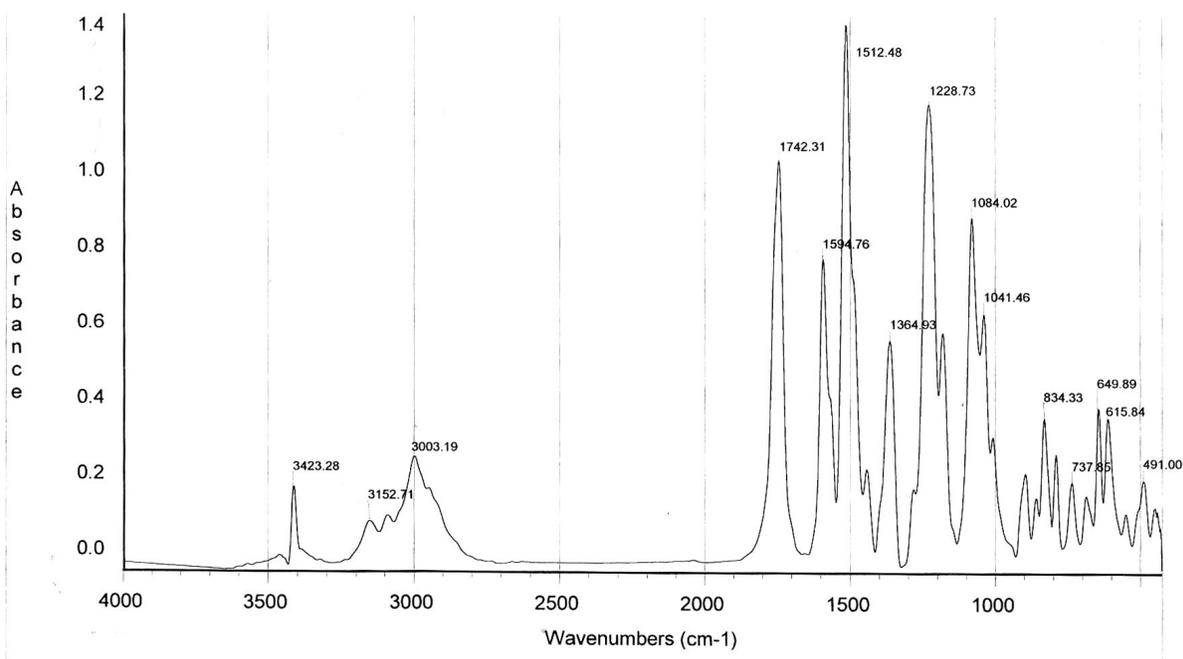
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4,6-diphenylpyrimidin-2-yl)thiourea (8a)

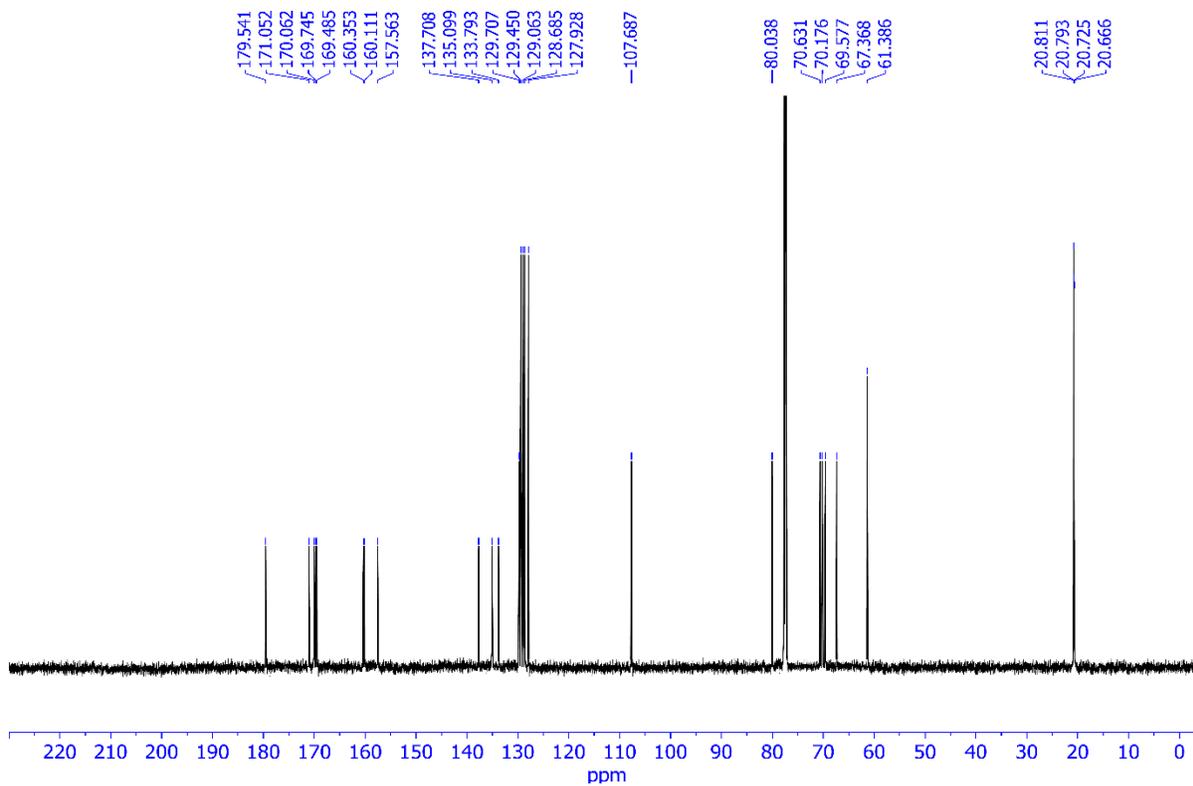
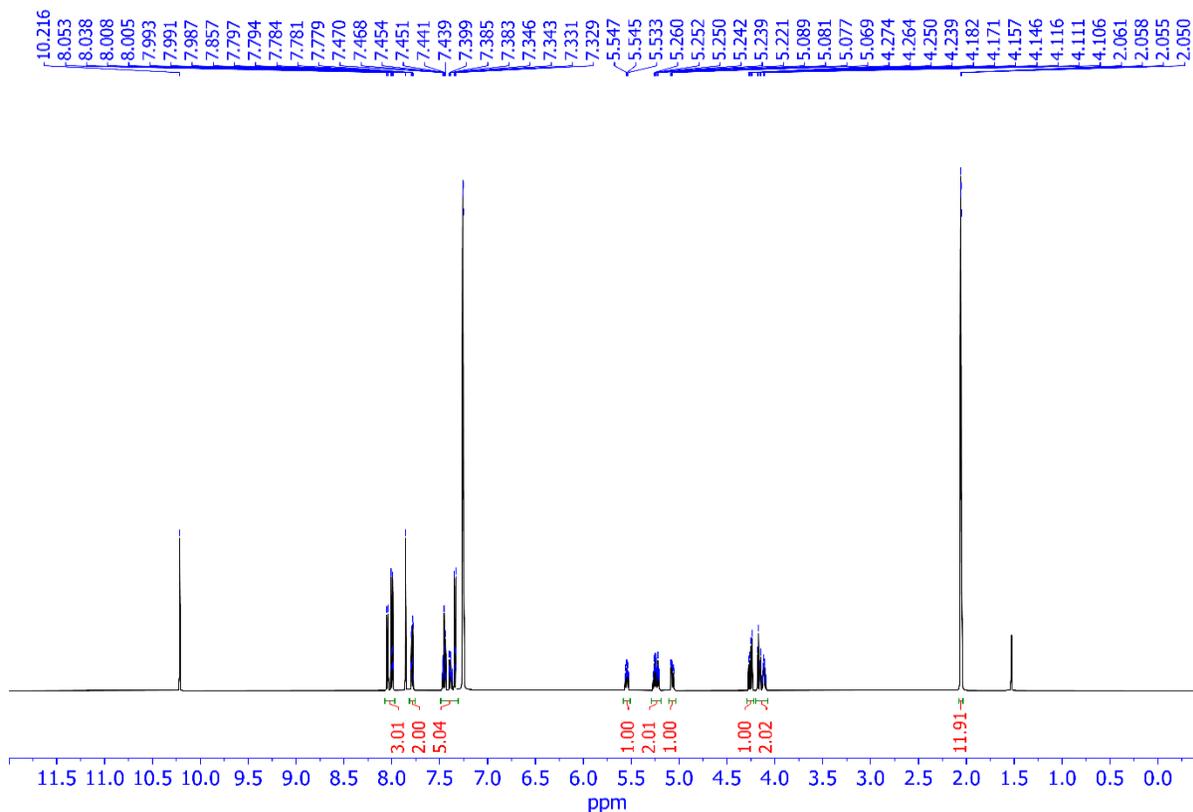


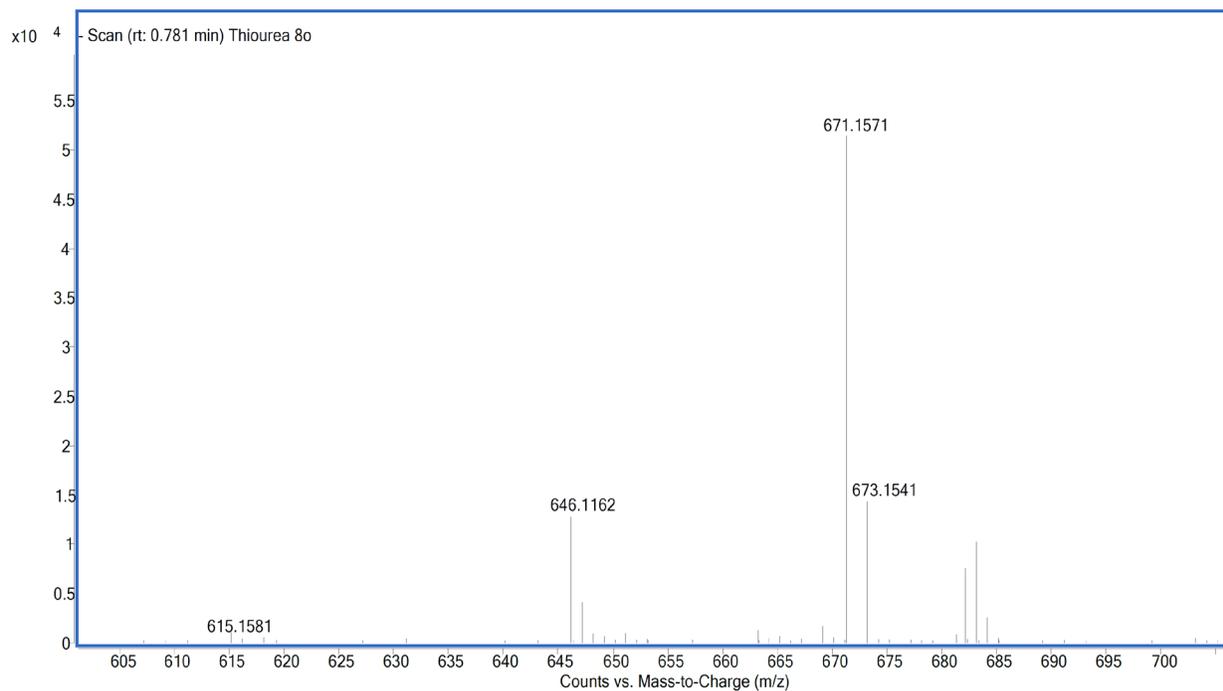




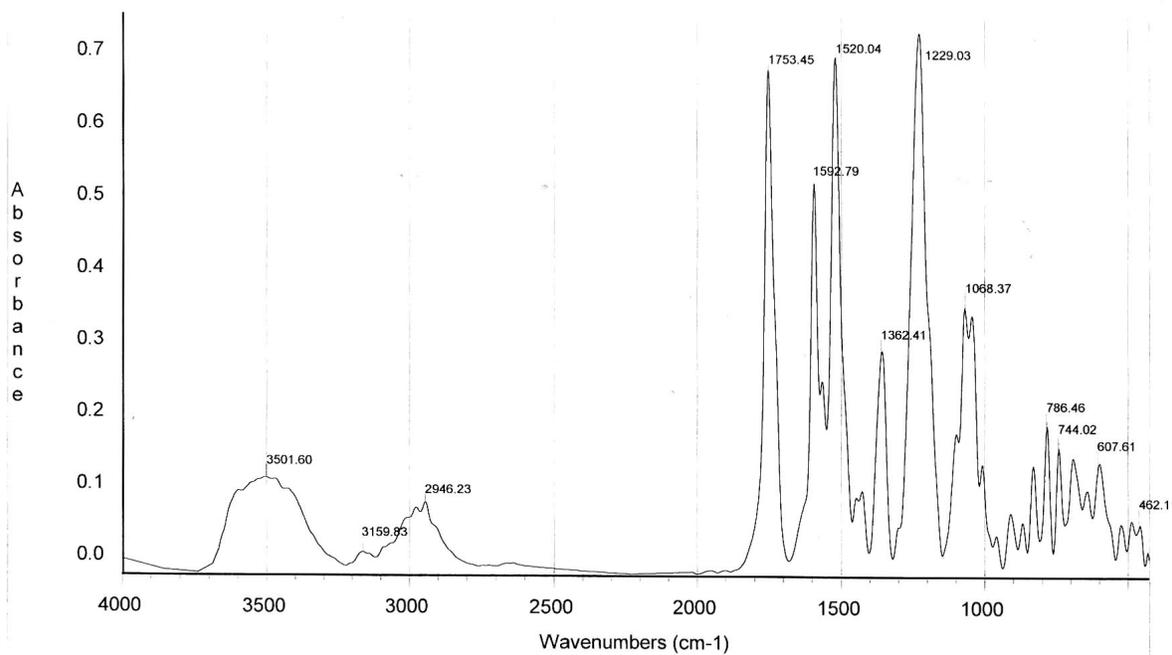
1-(2,3,4,6-Tetra-O-acetyl- β -D-galactopyranosyl)-3-(4-phenyl-6-(4-chlorophenyl)pyrimidin-2-yl)thiourea (8b)

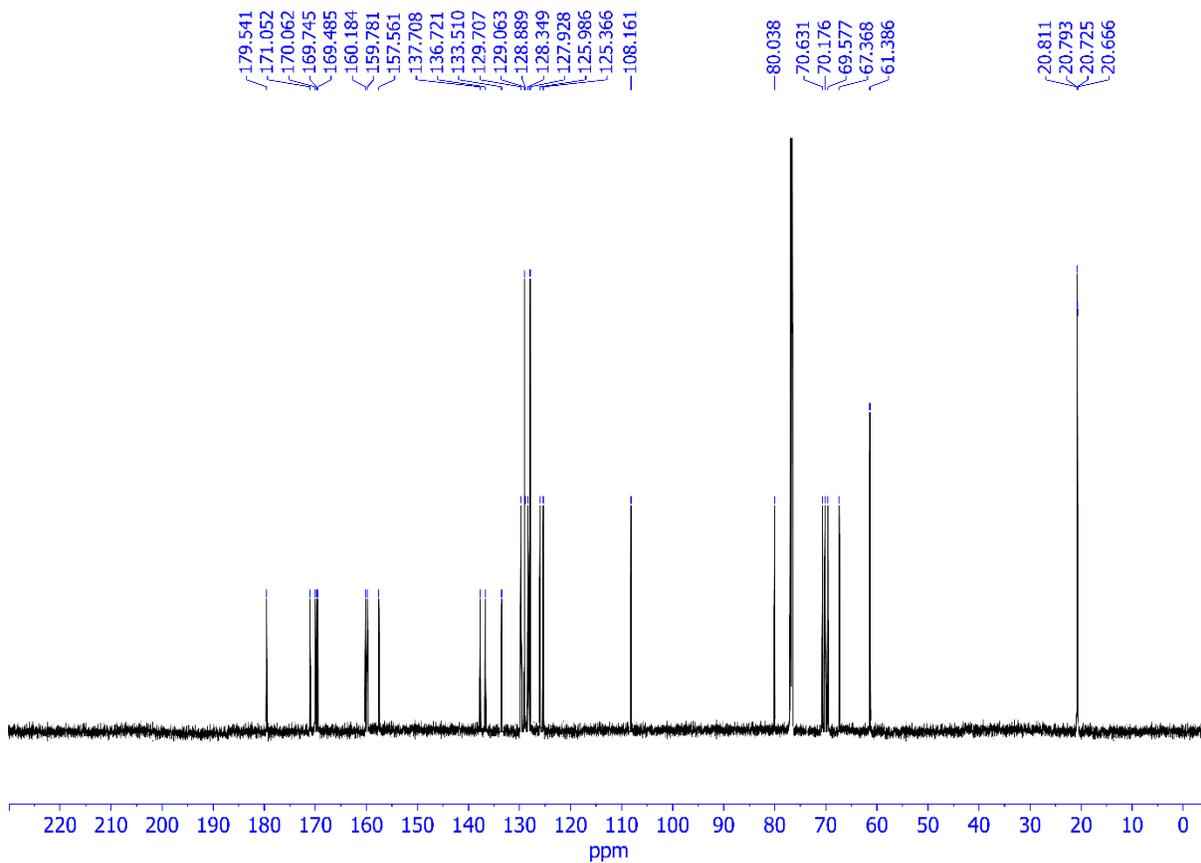
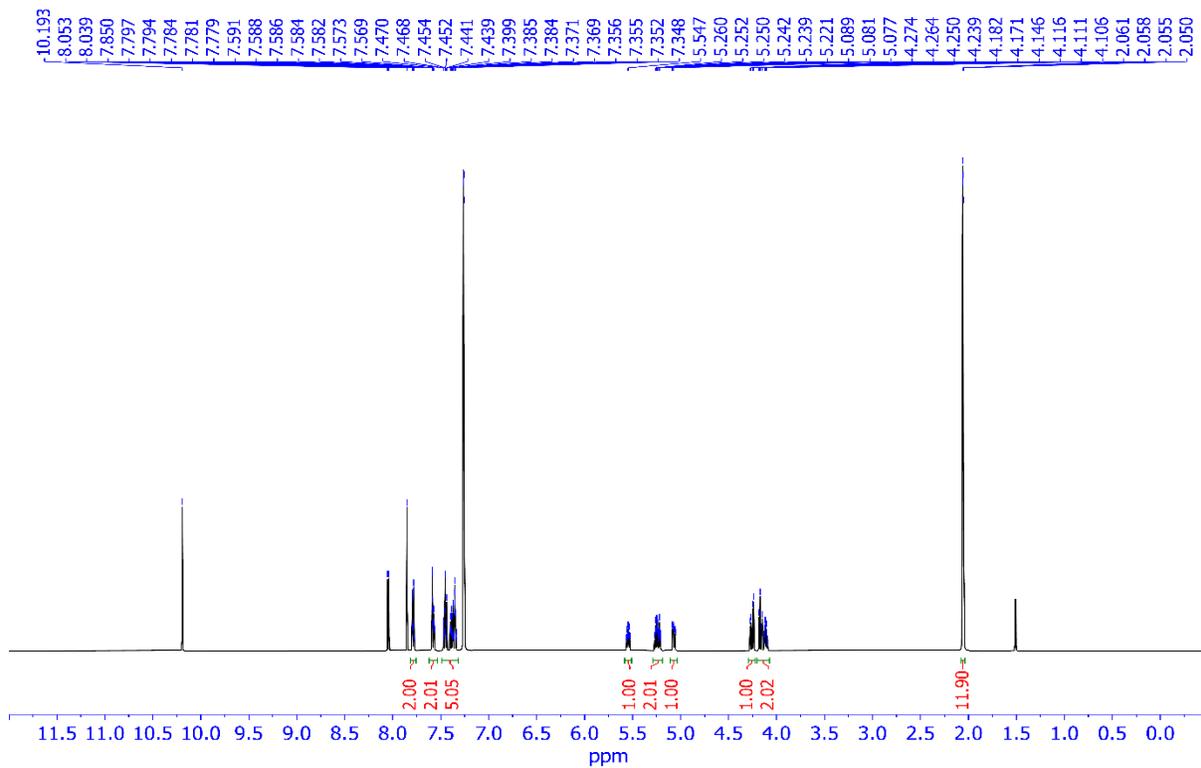


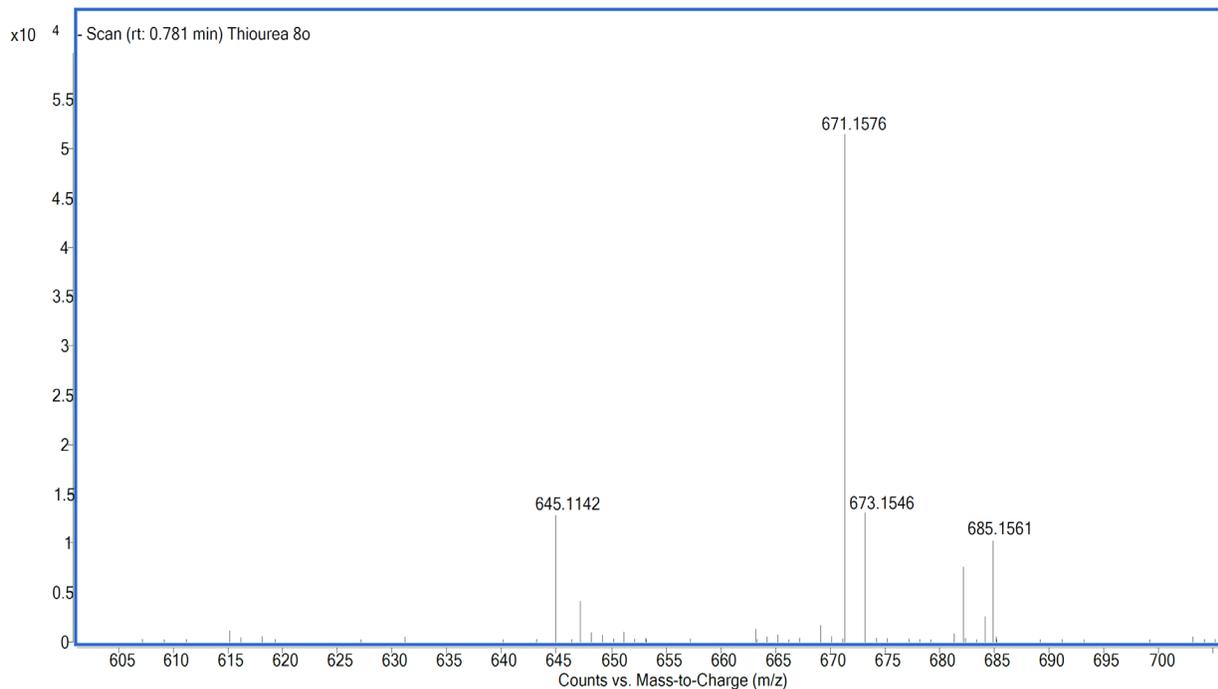




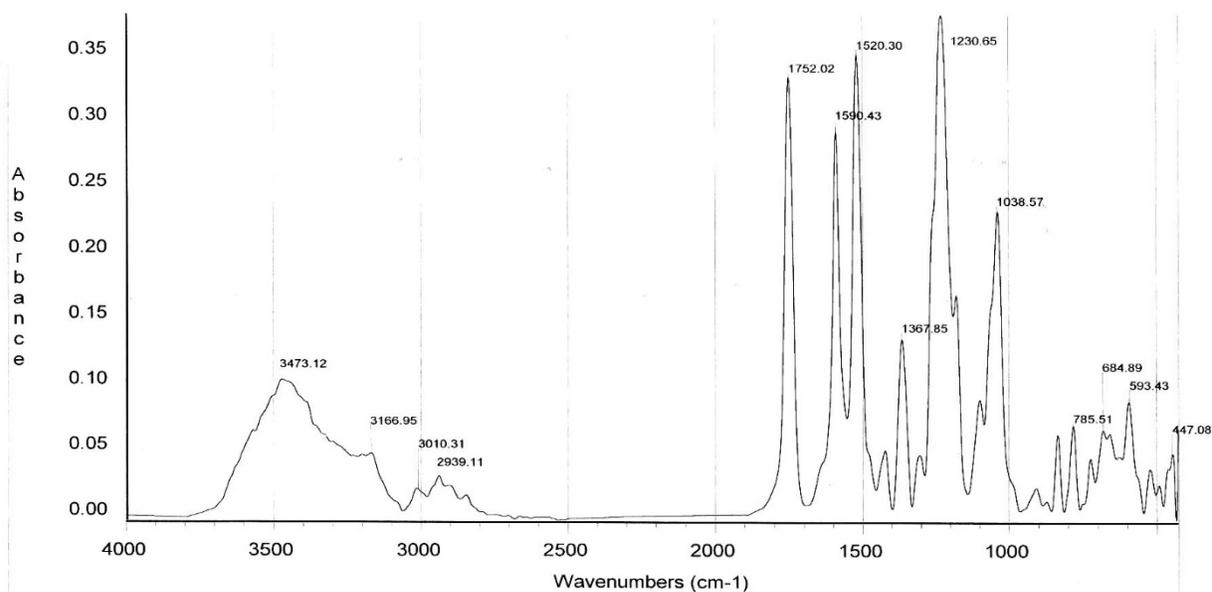
1-(2,3,4,6-Tetra-O-acetyl- β -D-galactopyranosyl)-3-(4-phenyl-6-(3-chlorophenyl)pyrimidin-2-yl)thiourea (8c)







1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(2-chlorophenyl)pyrimidin-2-yl)thiourea (8d)

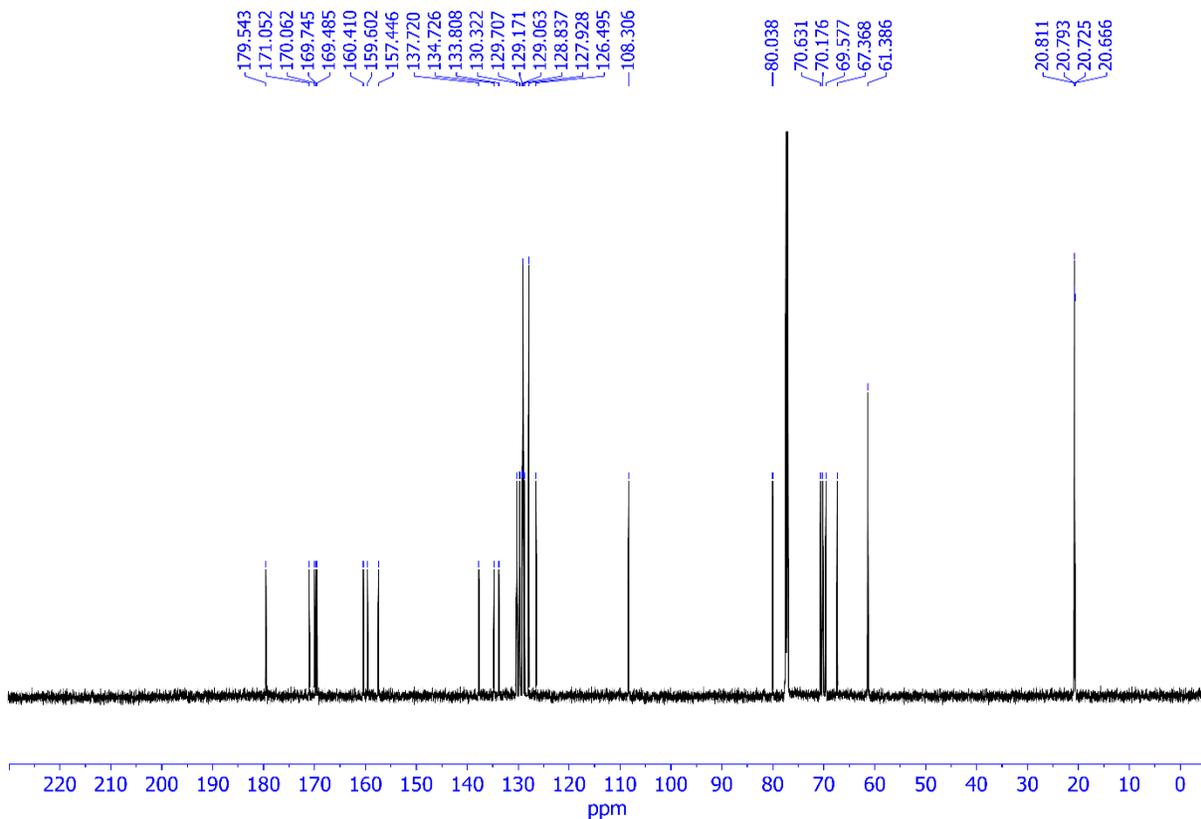
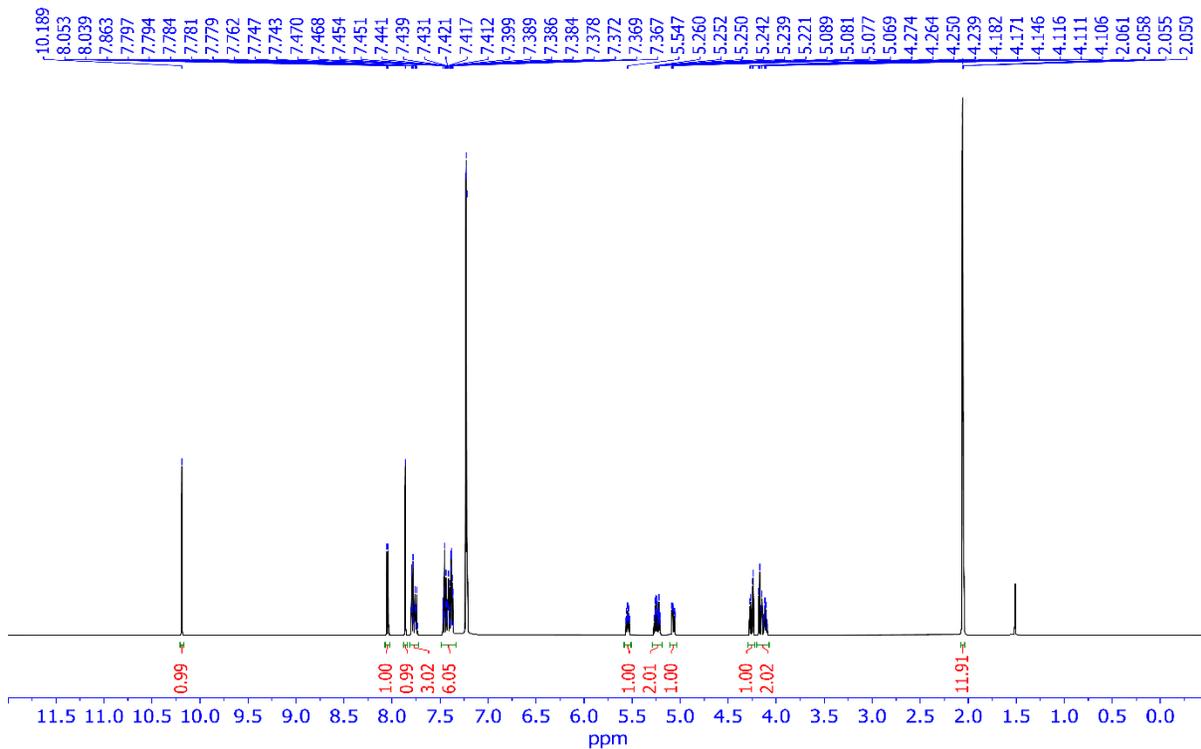


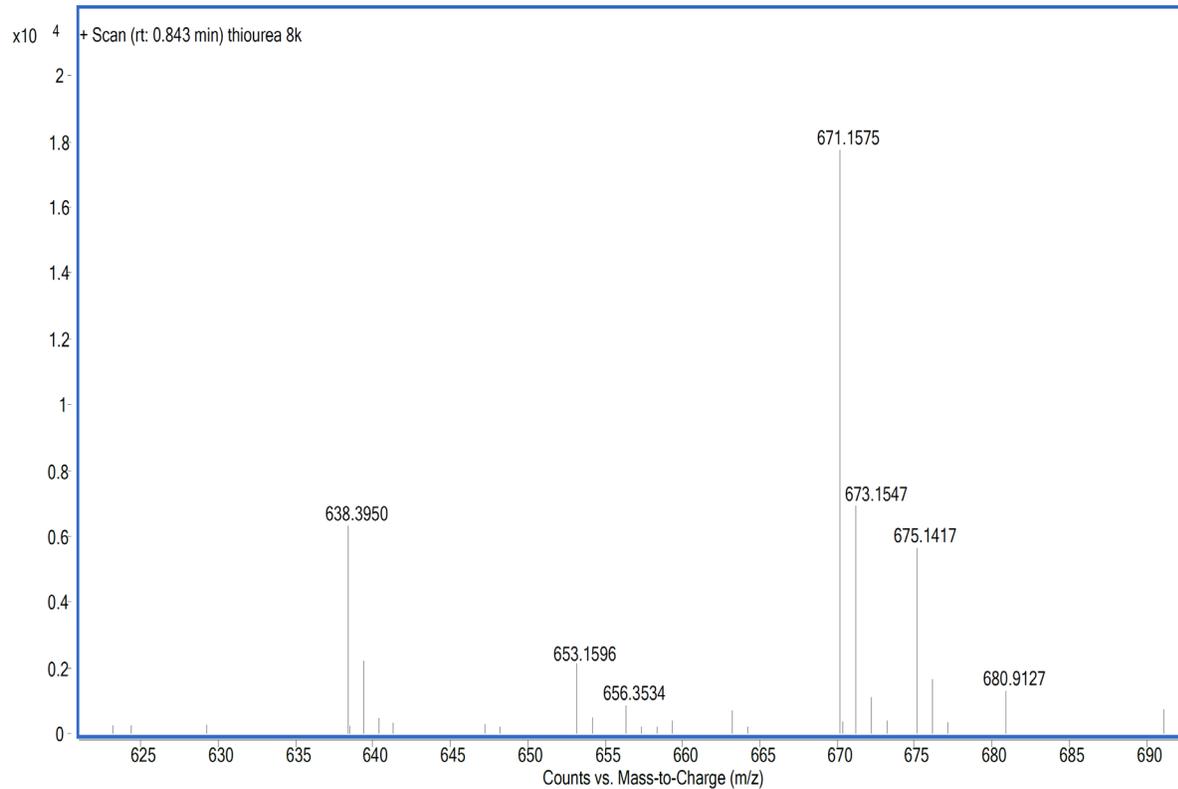
Date: Fri Mar 20 04:13:33 2009

T mCl 2. KBr

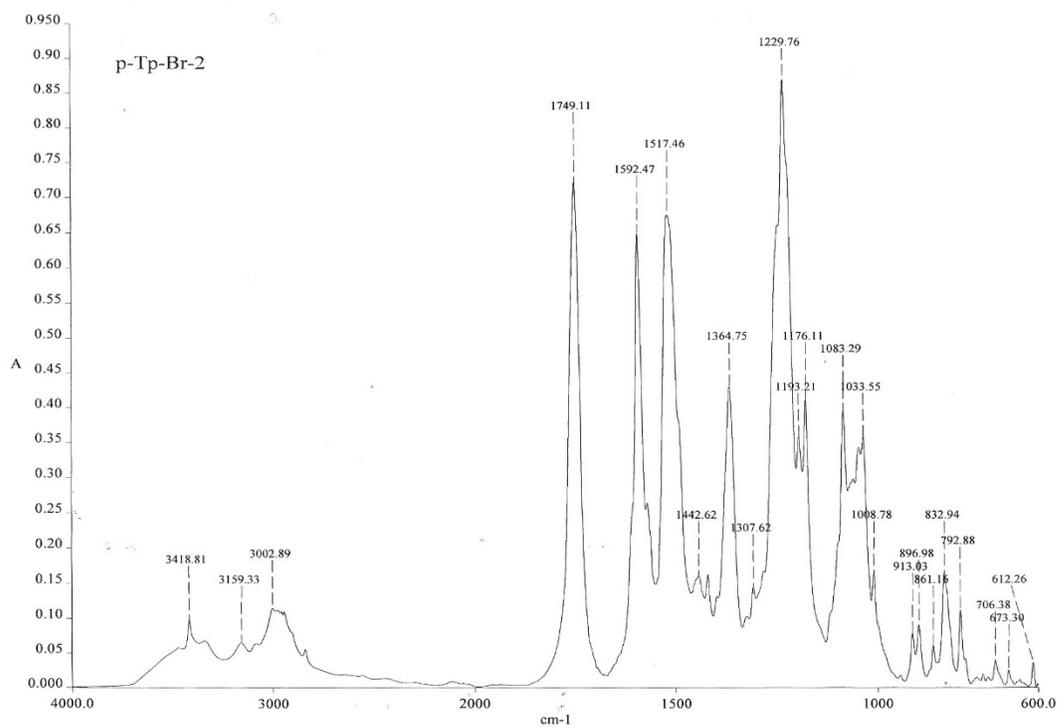
Scans: 64

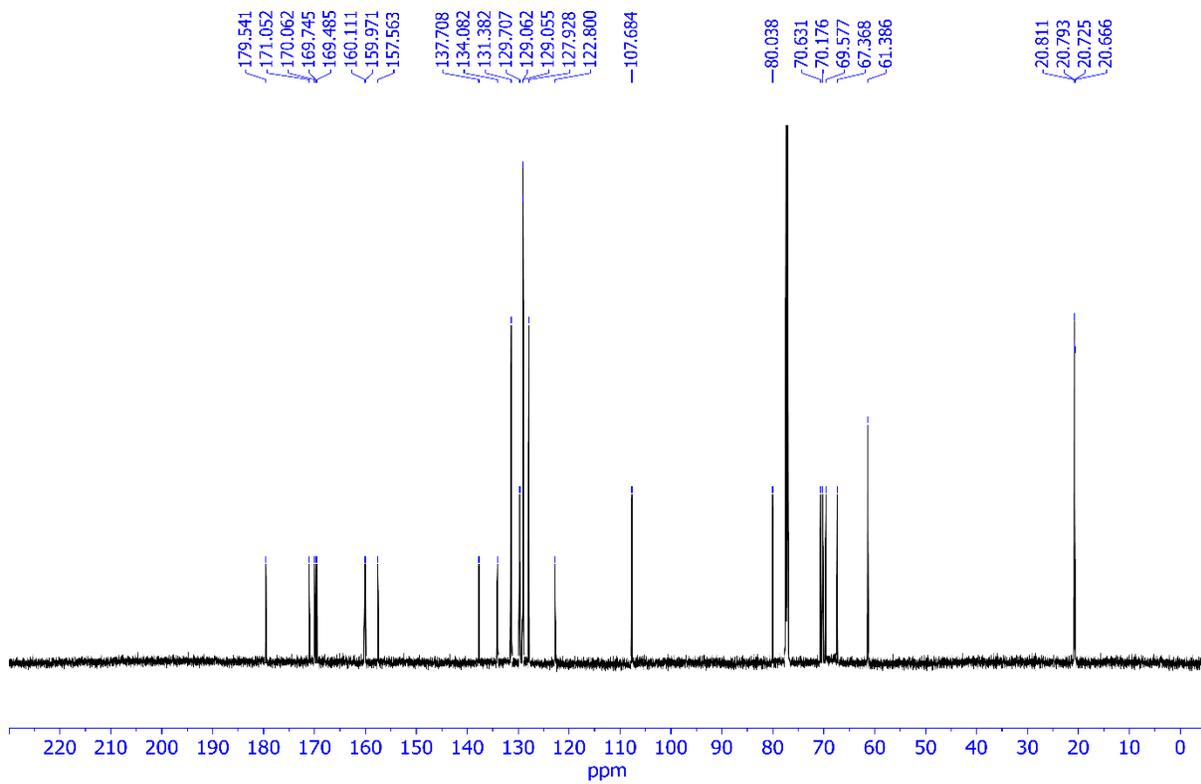
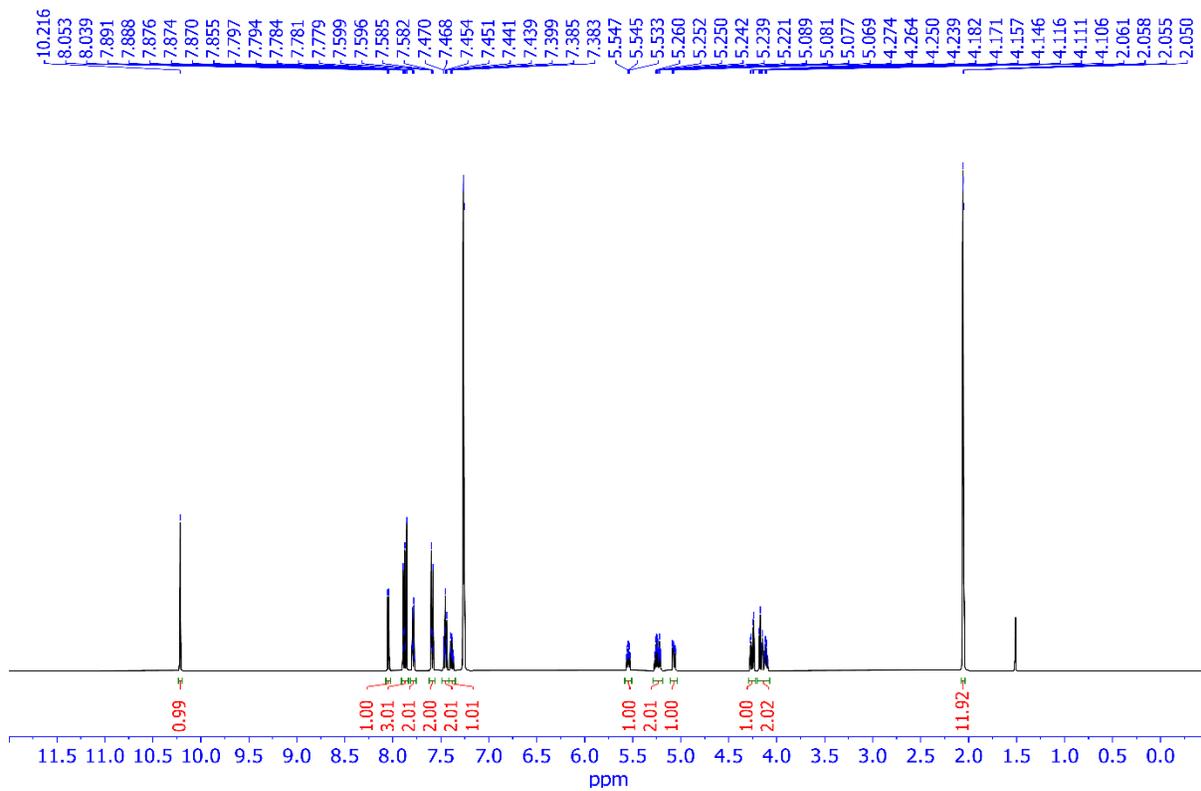
Resolution: 4.000

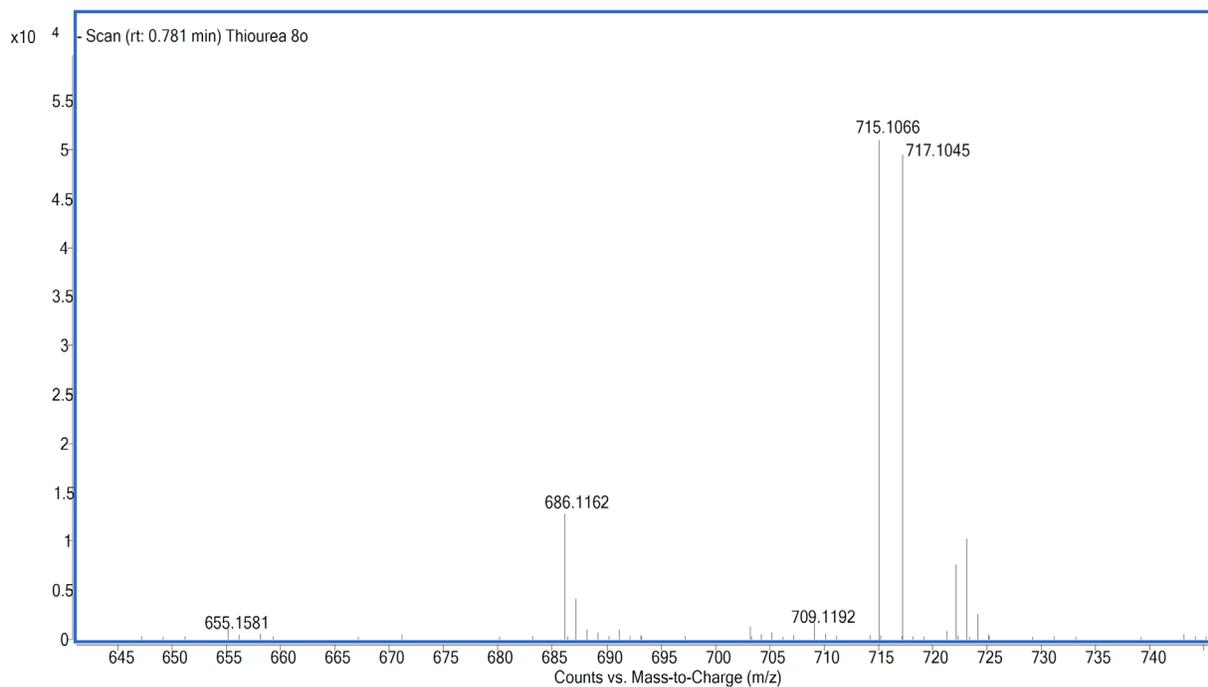




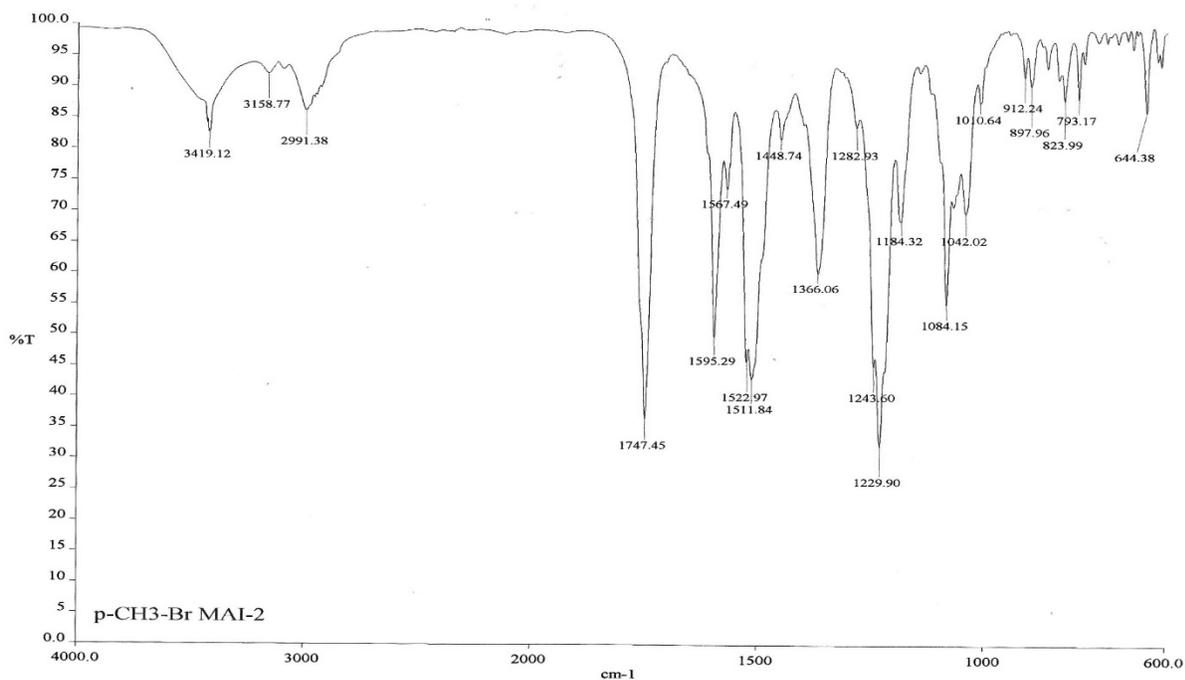
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(4-bromophenyl)pyrimidin-2-yl)thiourea (8e)

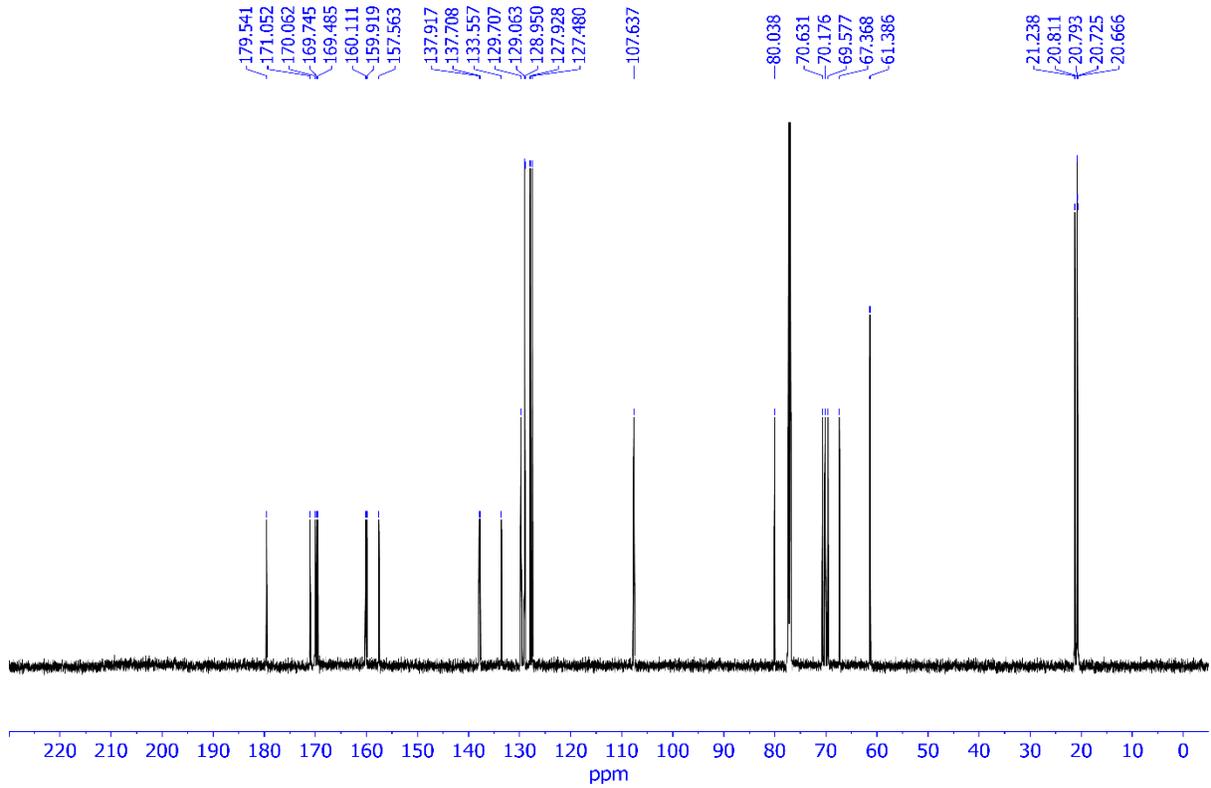
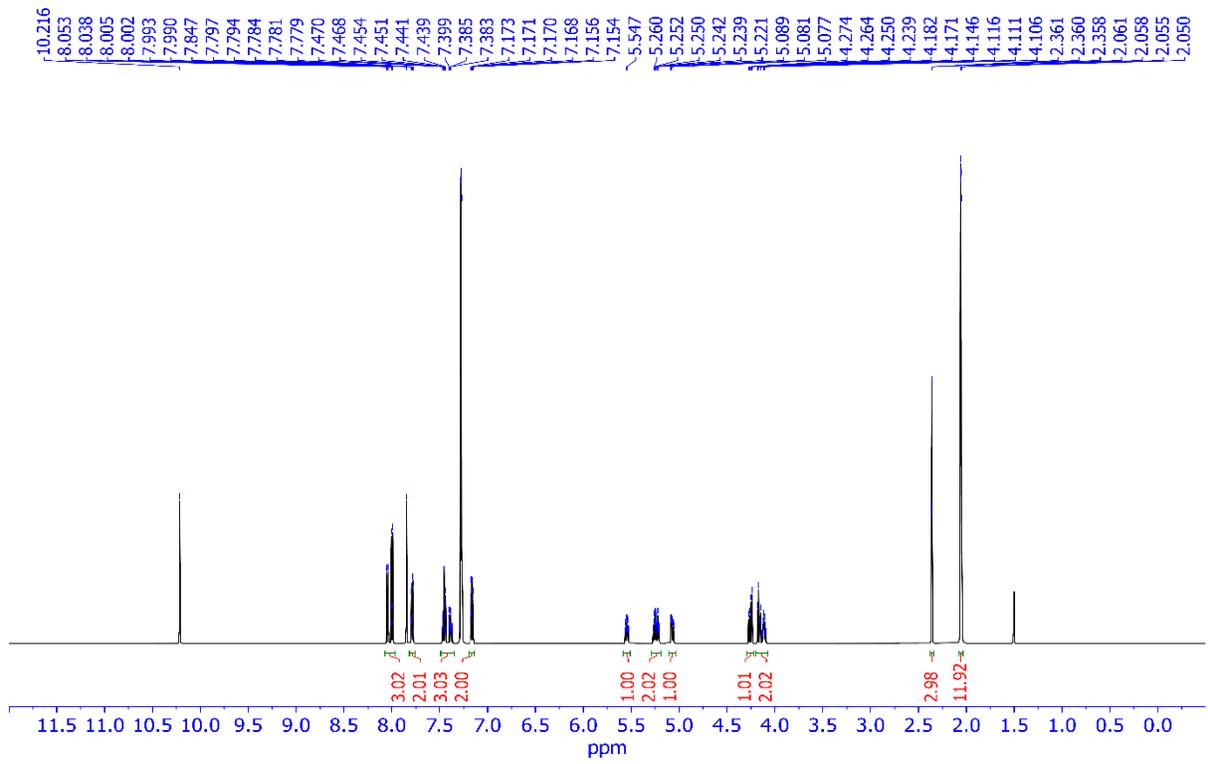


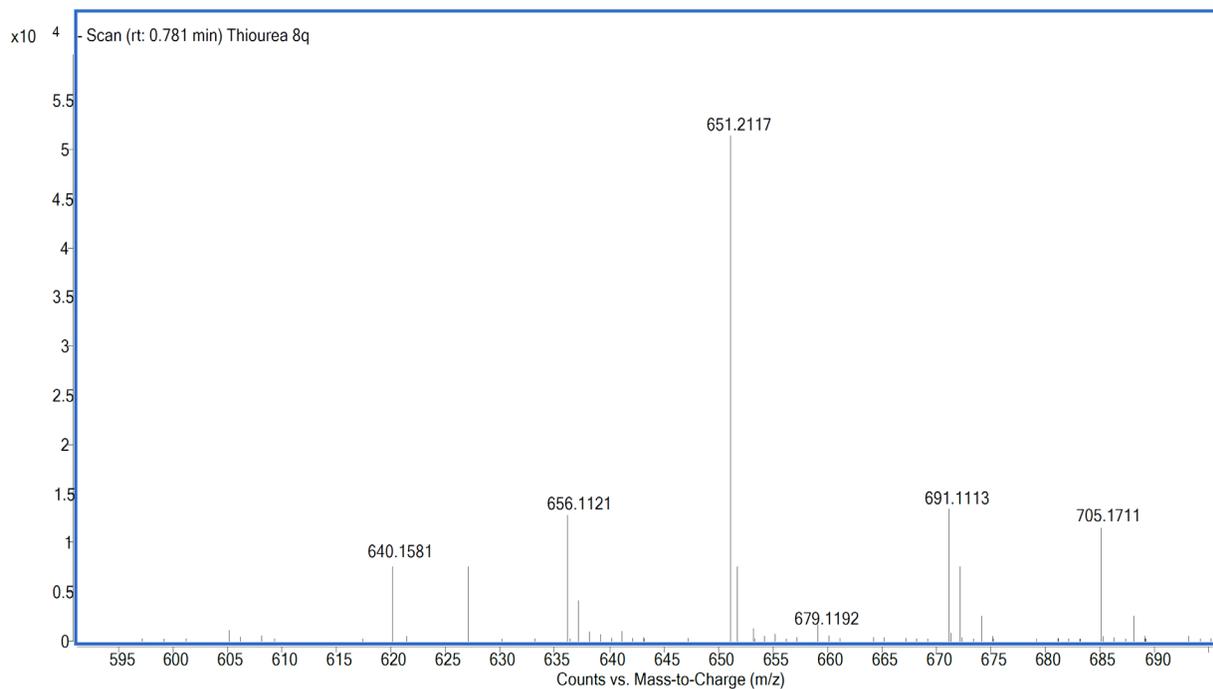




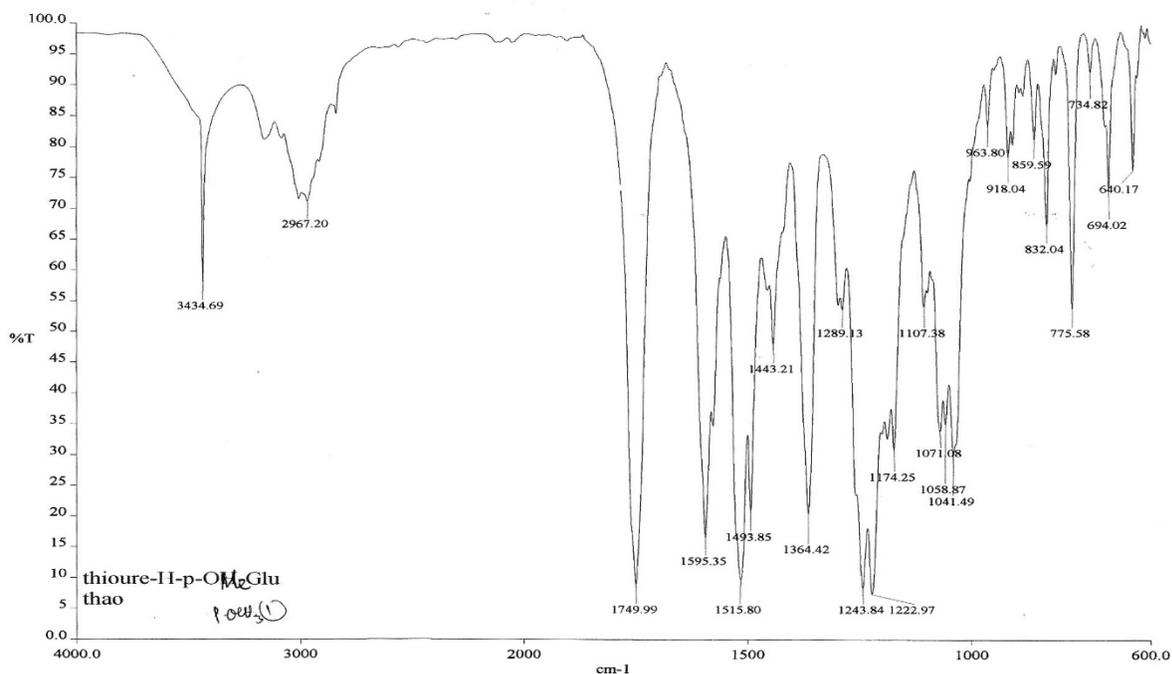
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(4-methylphenyl)pyrimidin-2-yl)thiourea (8f)

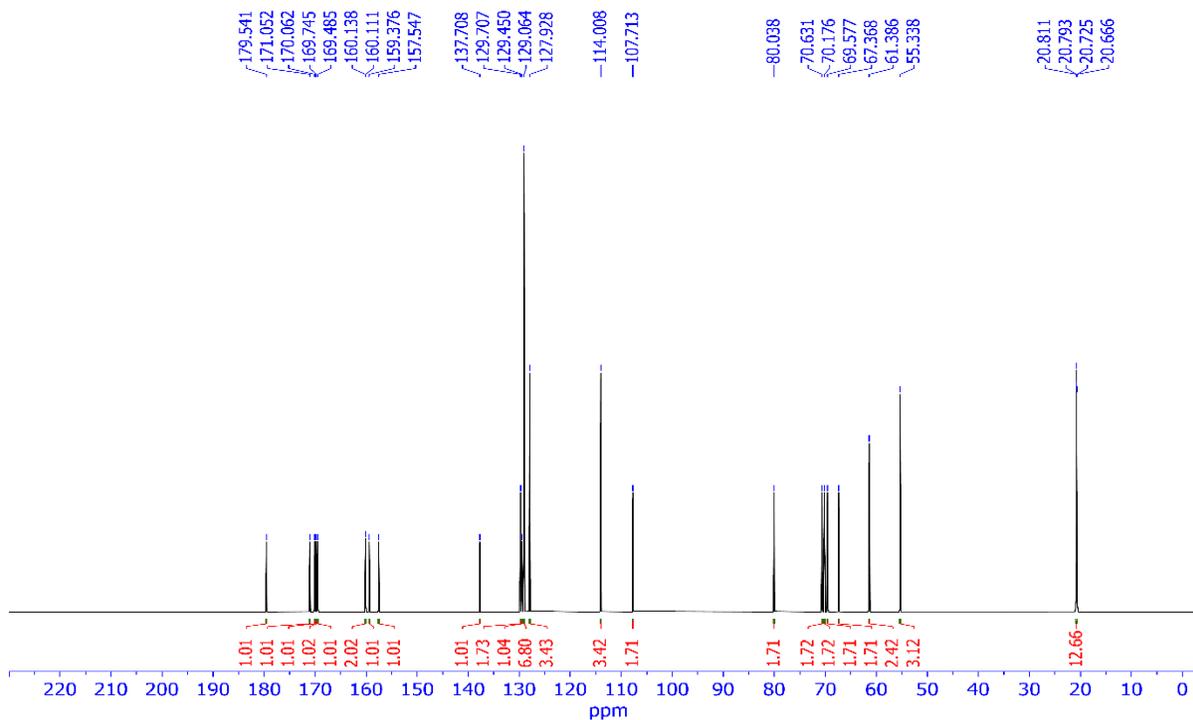
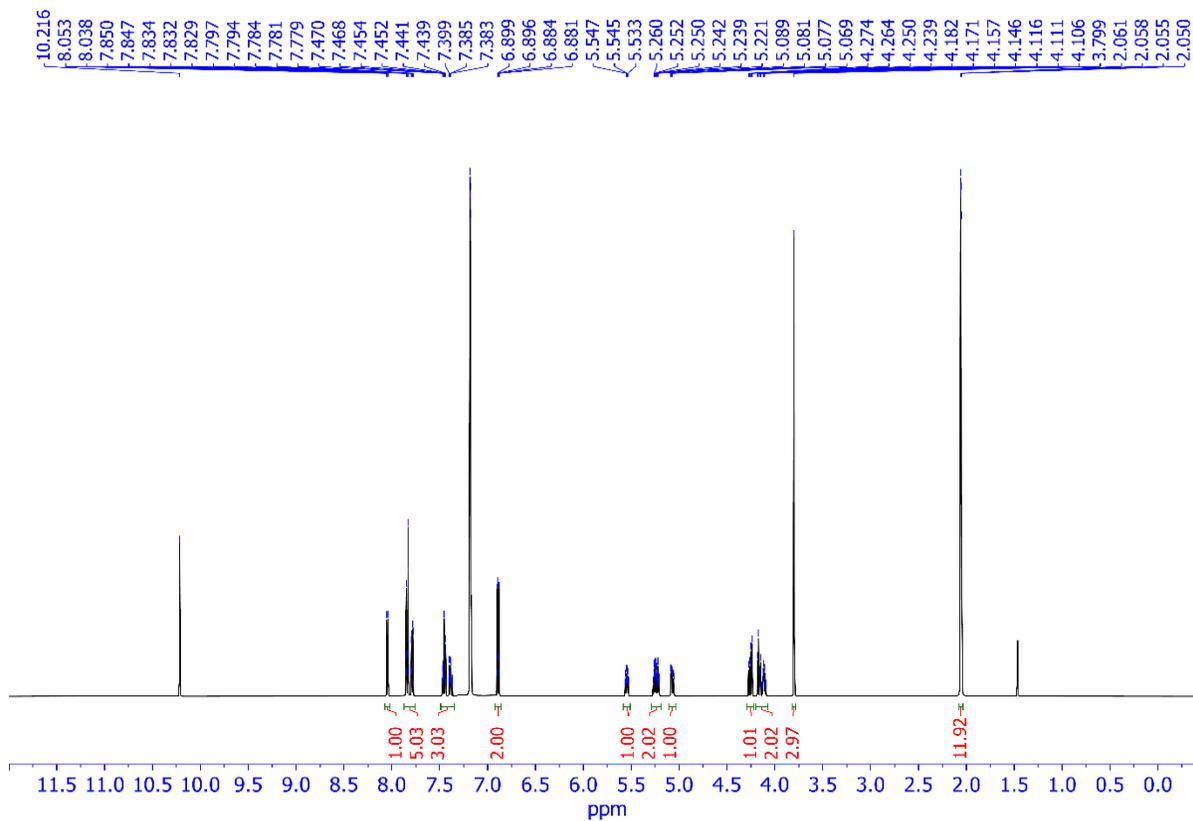


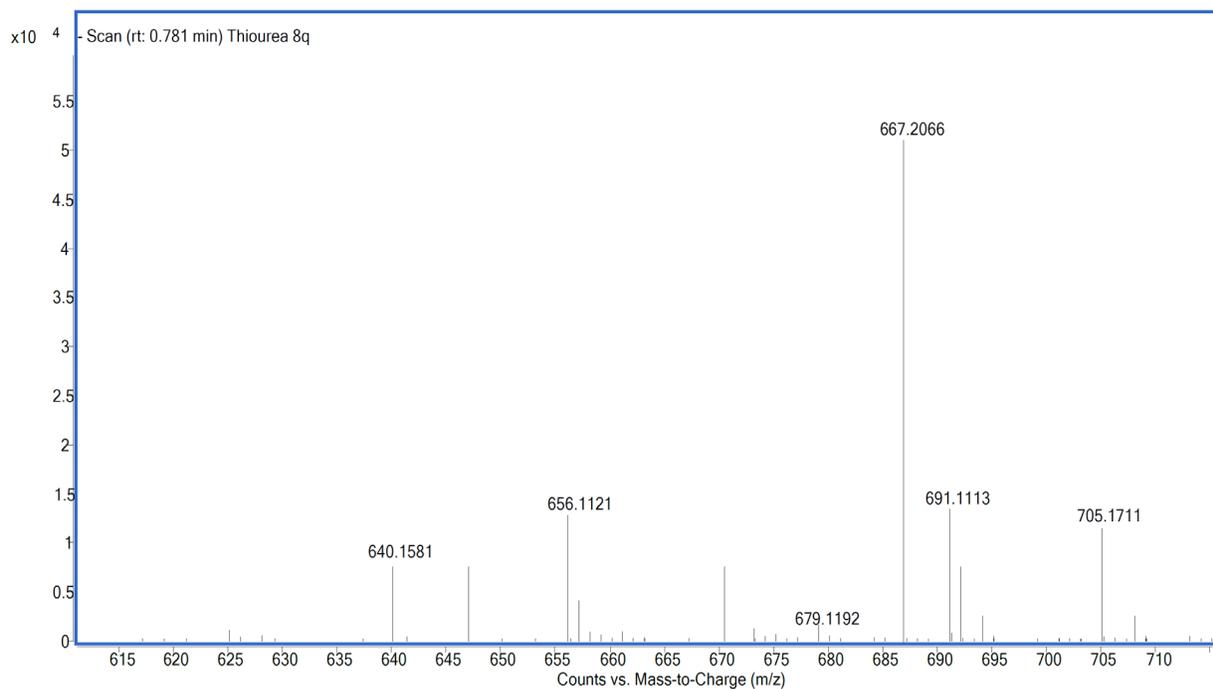




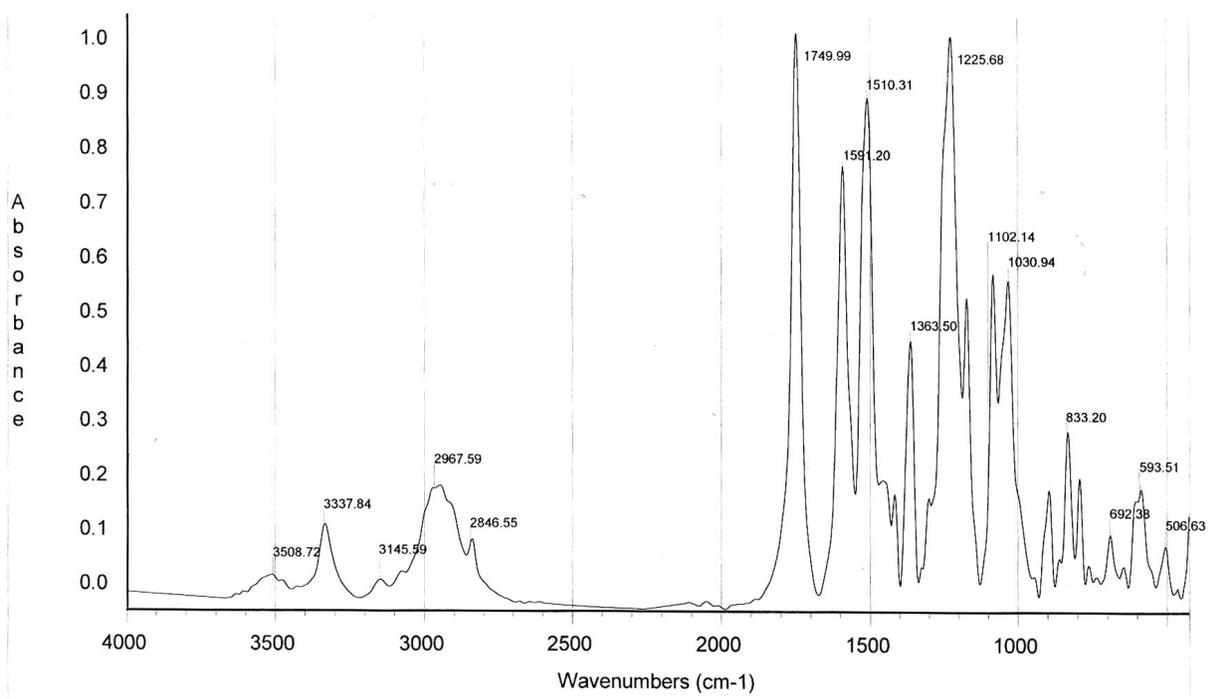
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(4-methoxyphenyl)pyrimidin-2-yl)thiourea (8g)

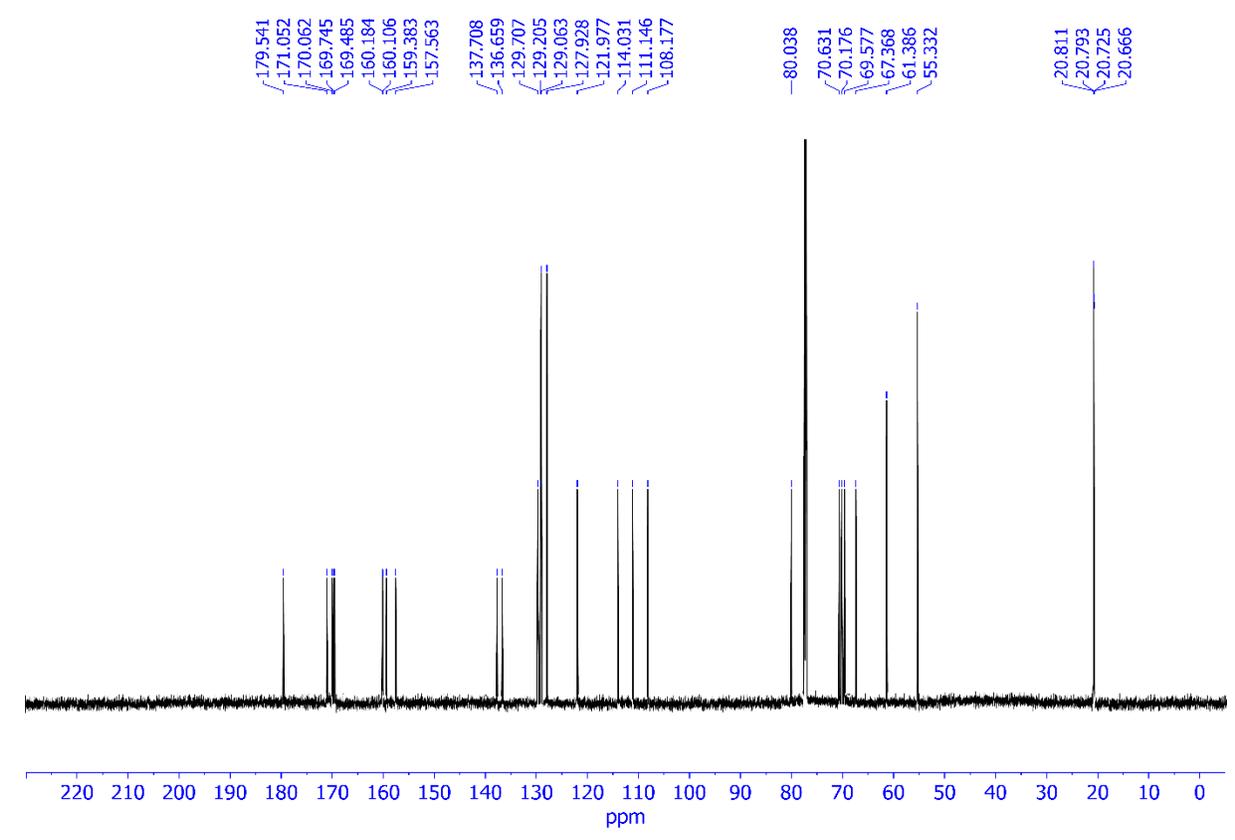
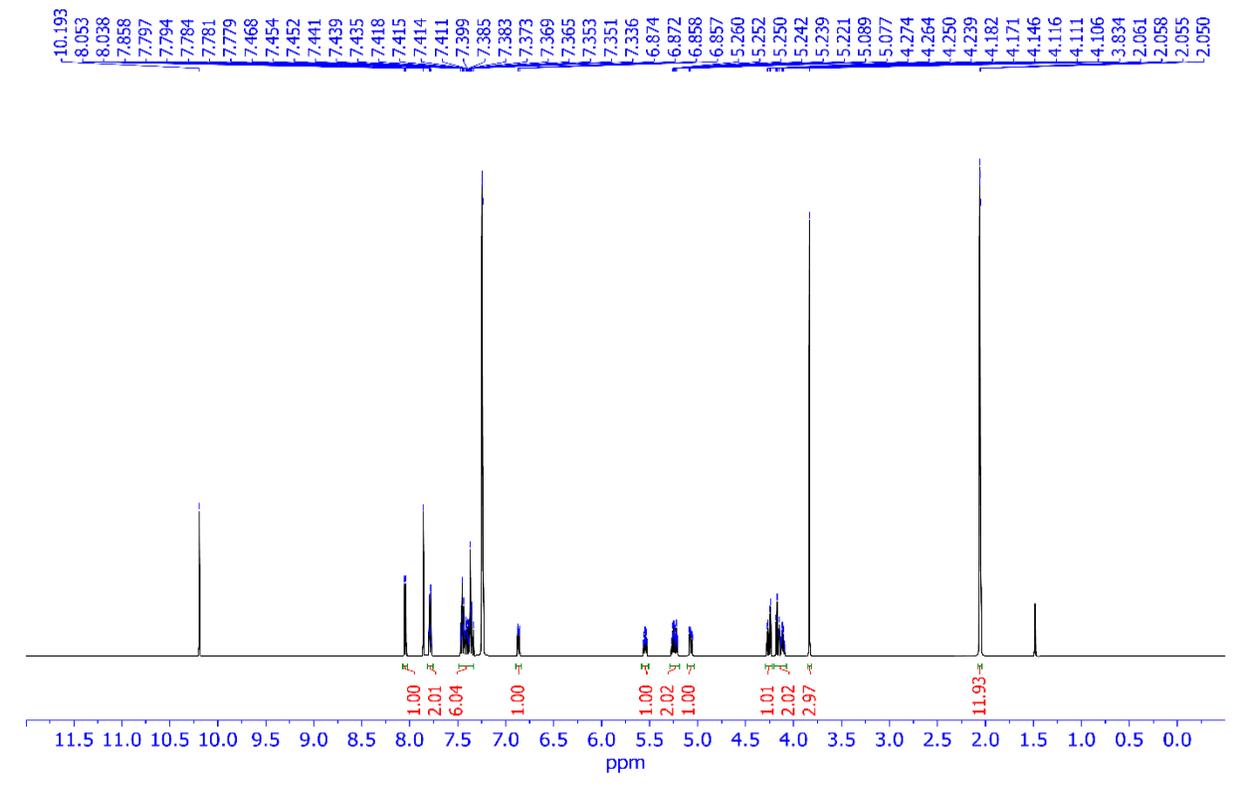


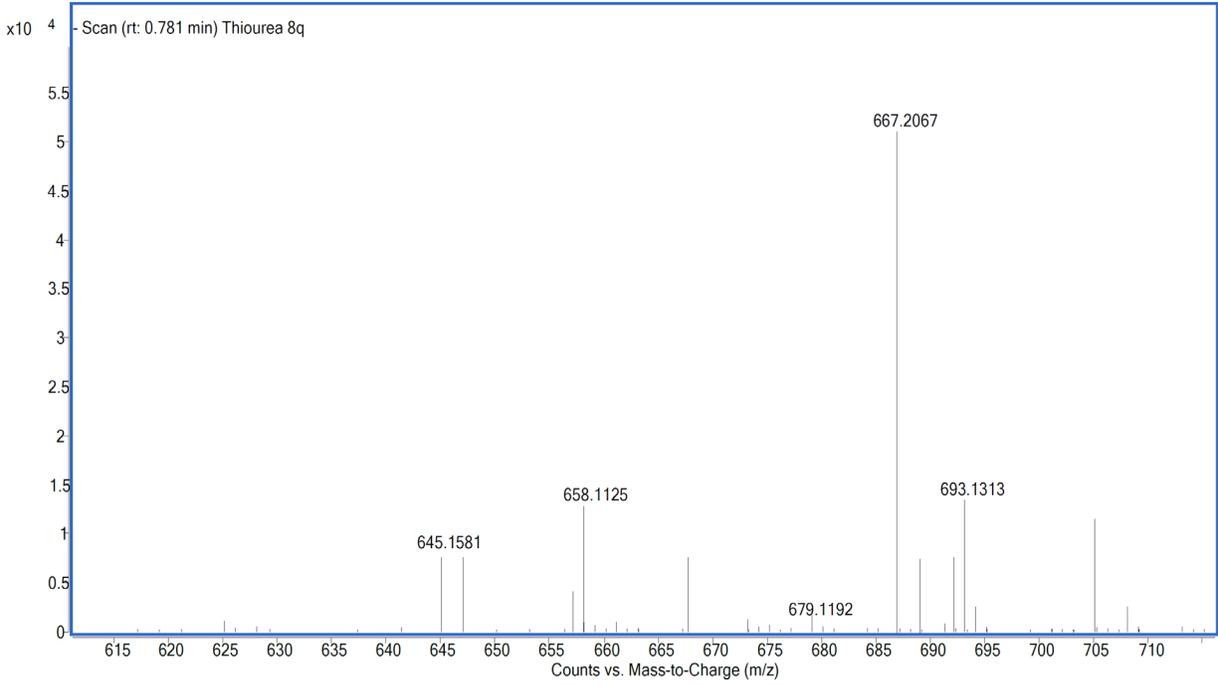




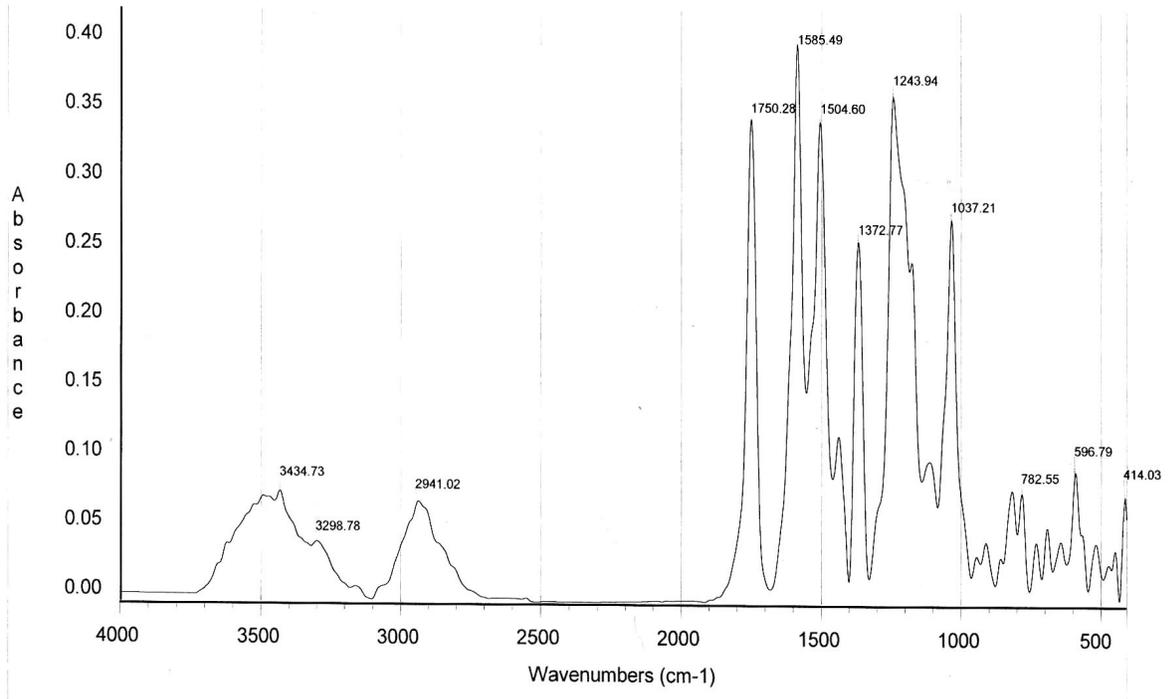
1-(2,3,4,6-Tetra-O-acetyl- β -D-galactopyranosyl)-3-(4-phenyl-6-(3-methoxyphenyl)pyrimidin-2-yl)thiourea (8h)

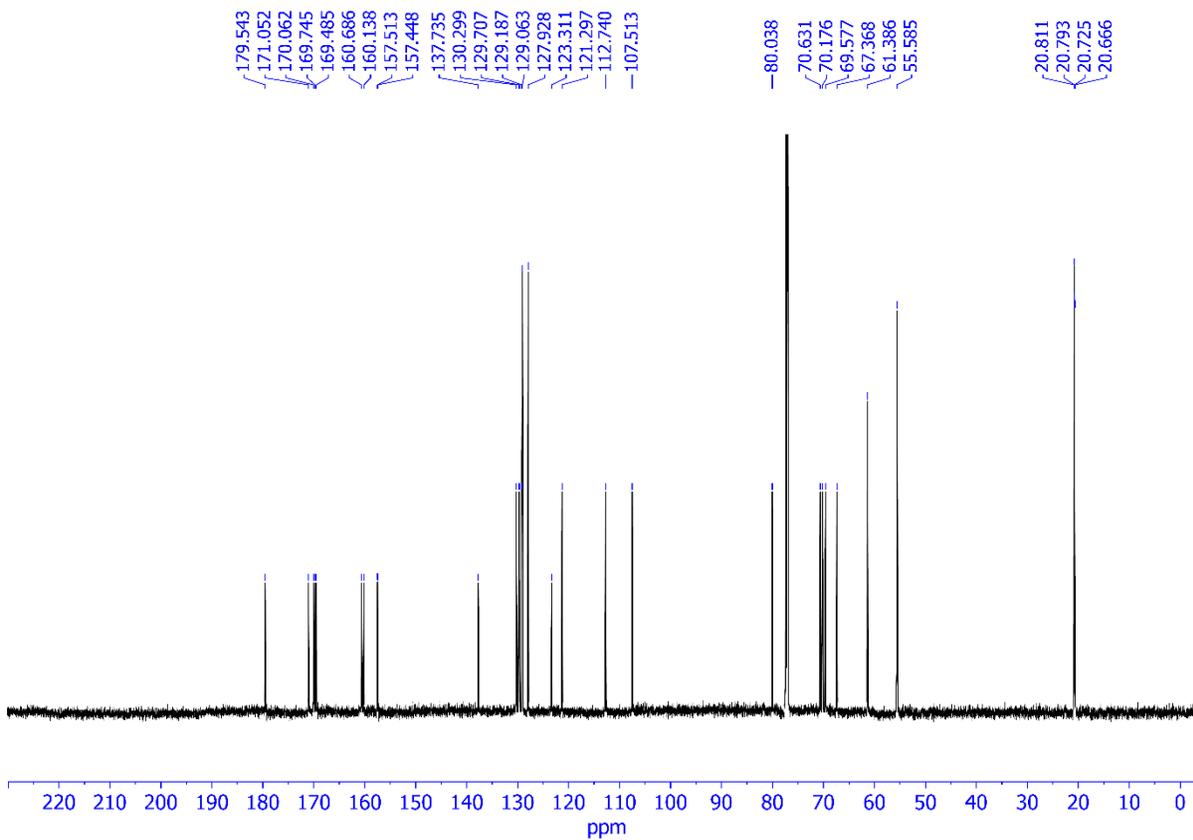
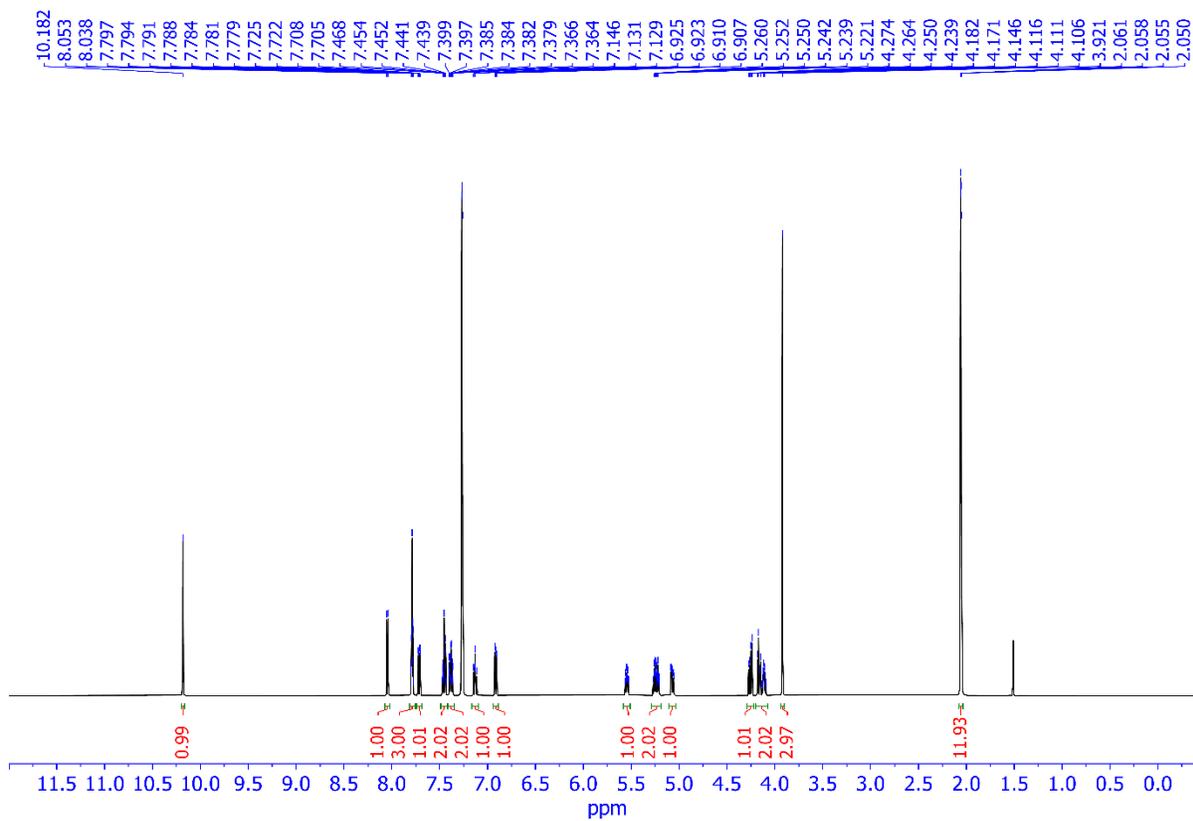


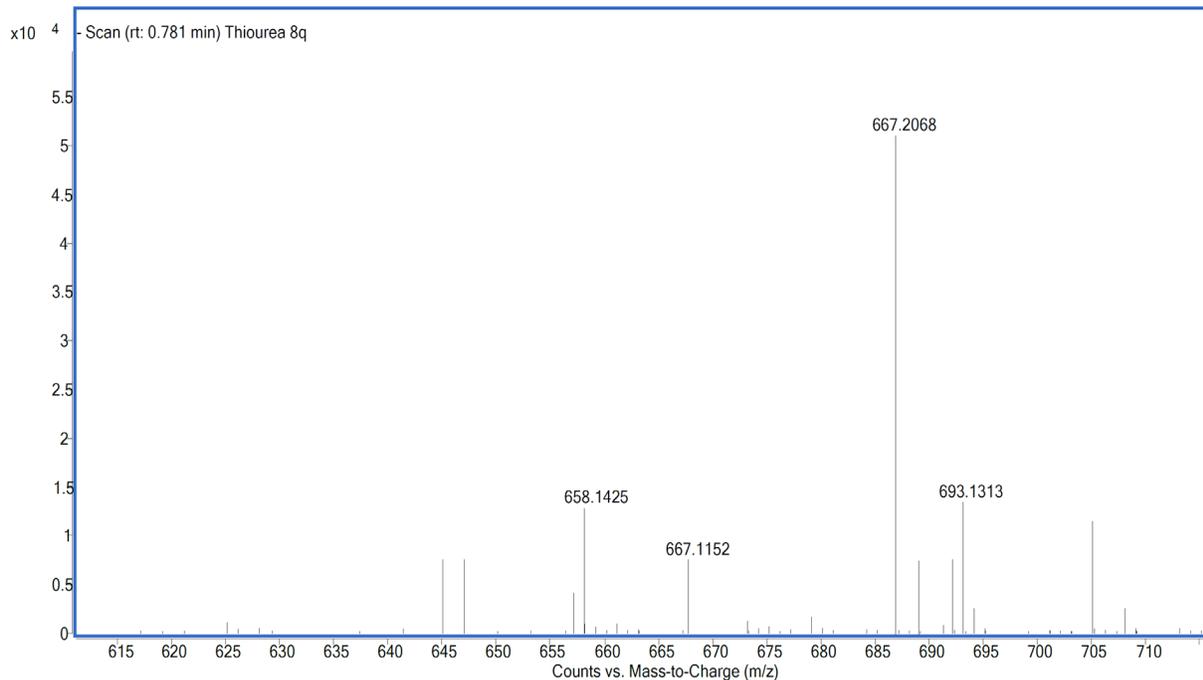




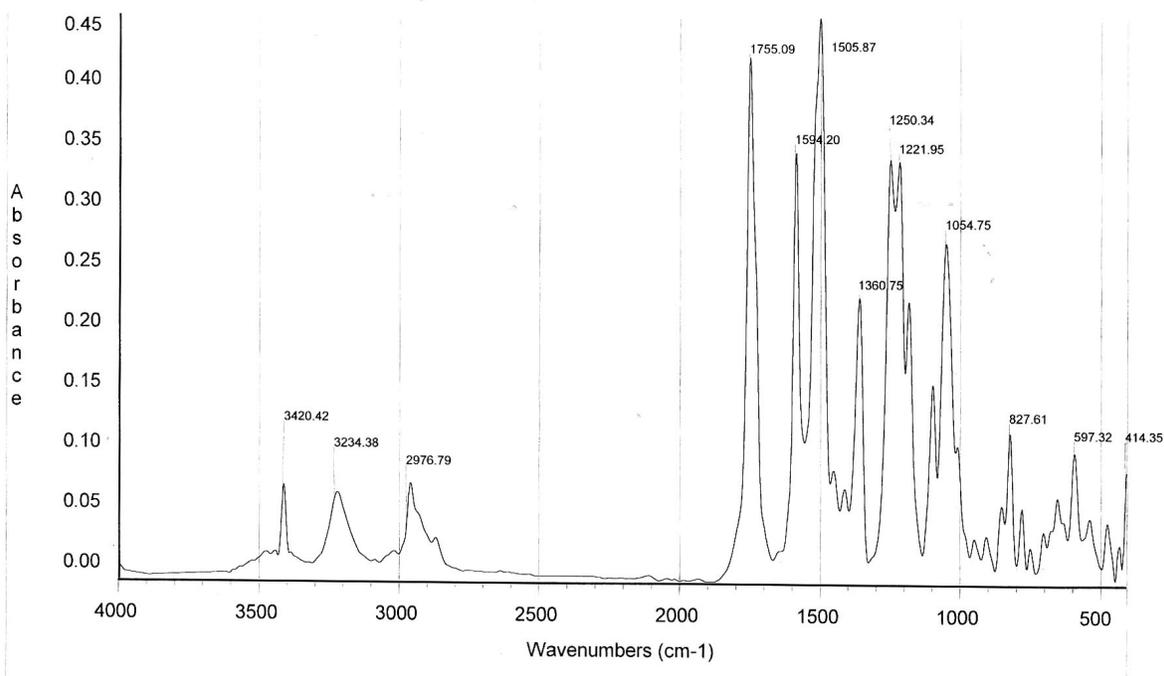
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(2-methoxyphenyl)pyrimidin-2-yl)thiourea (8i)

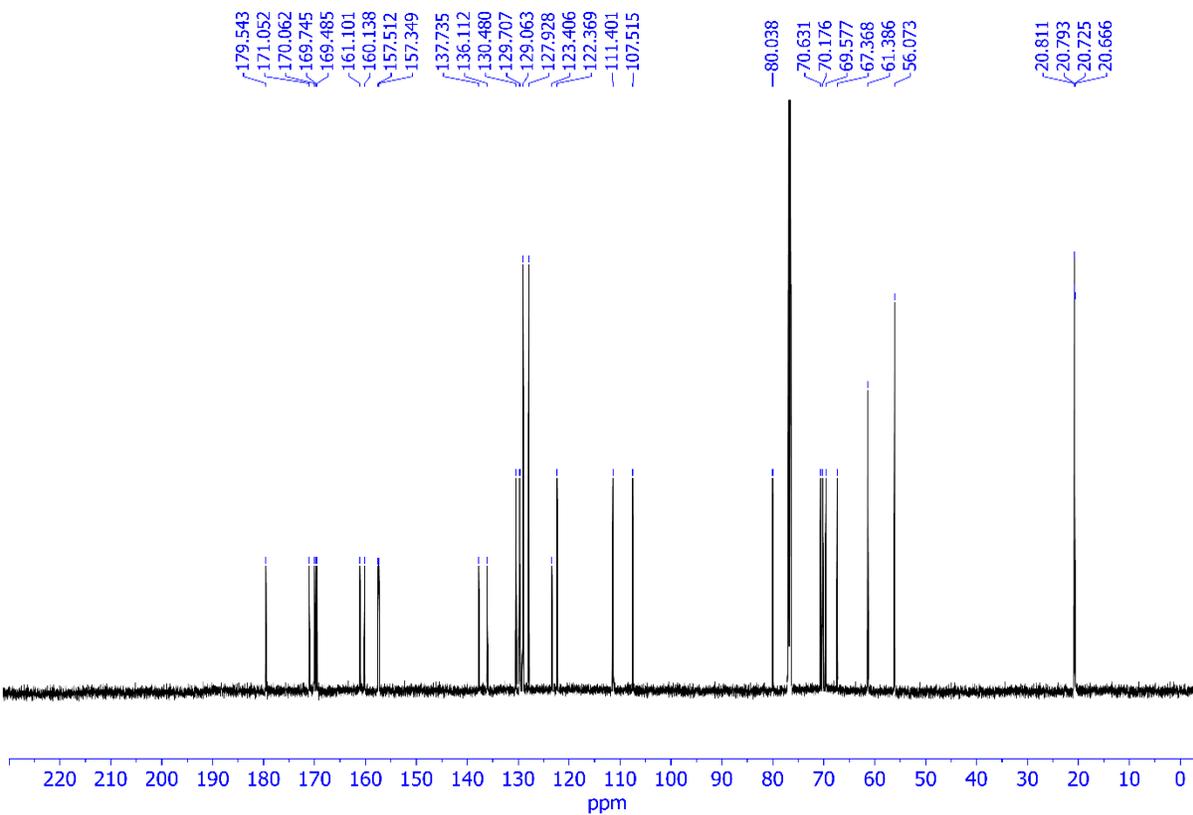
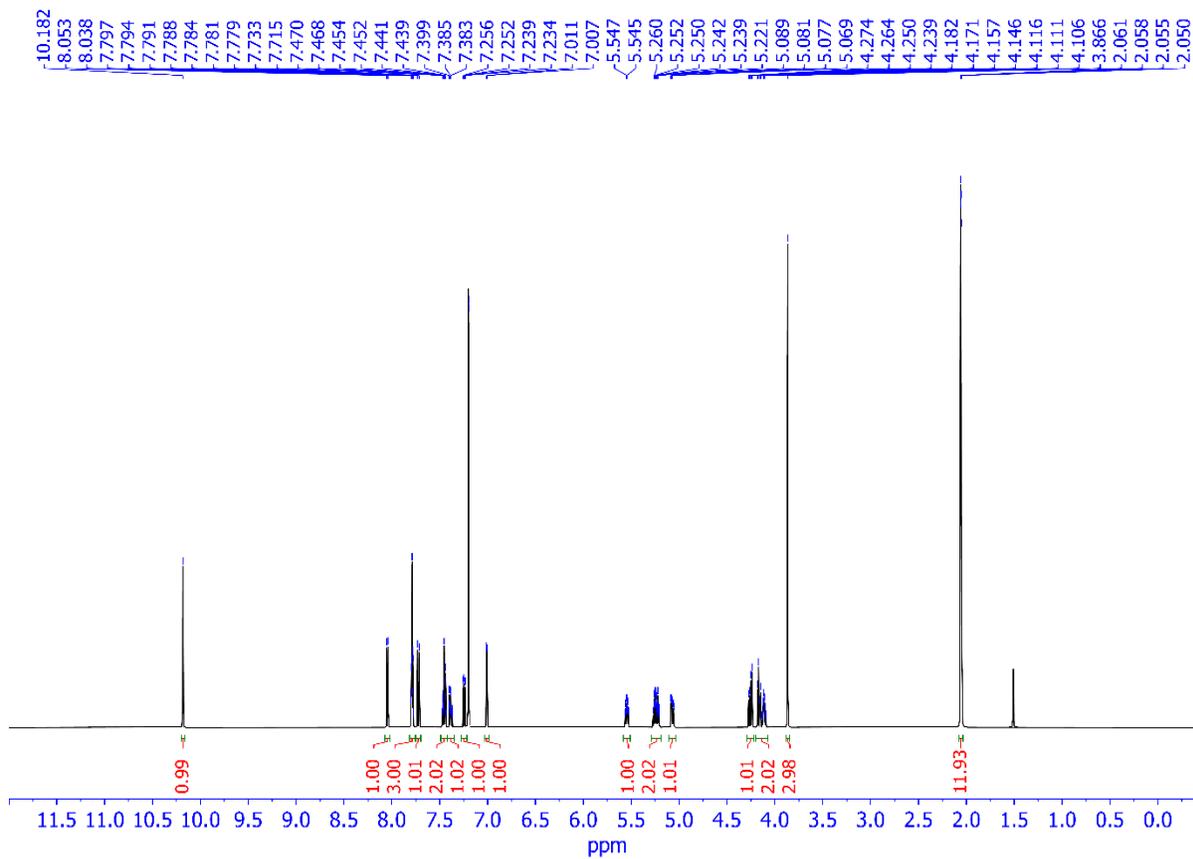


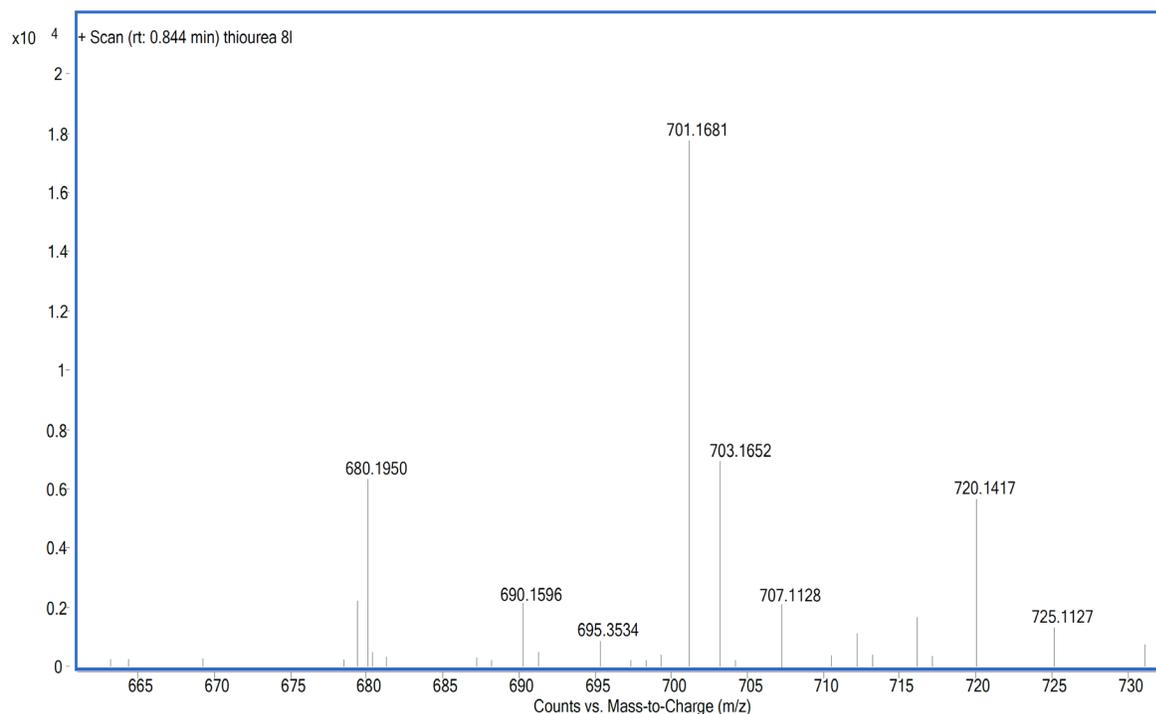




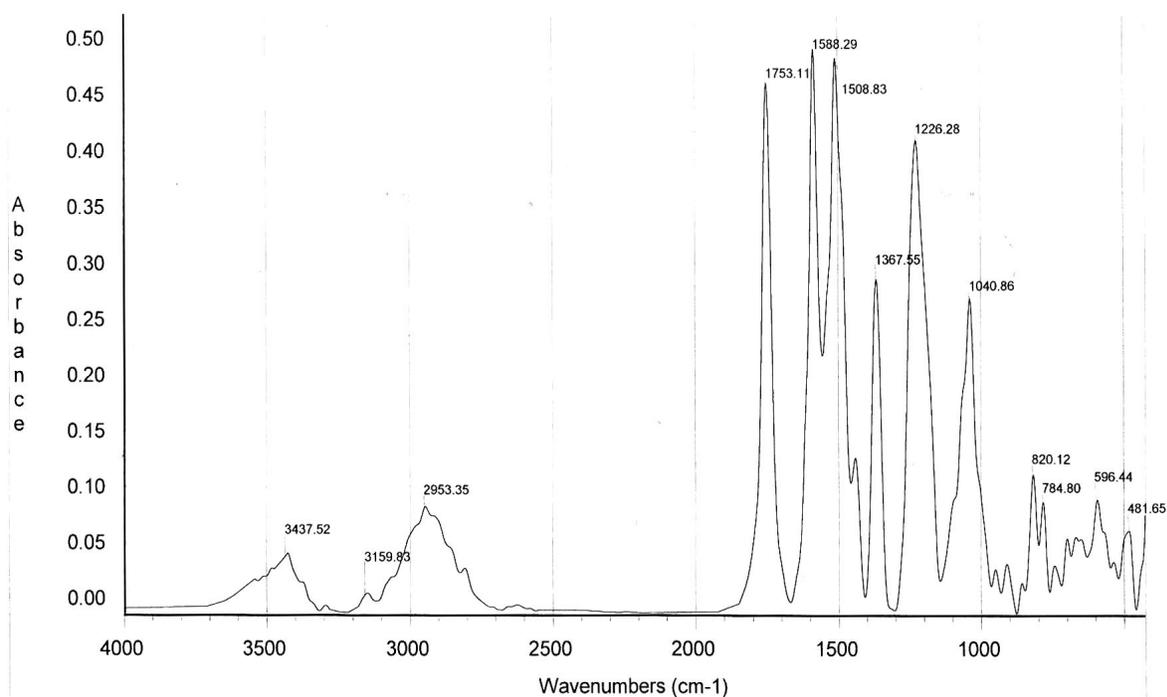
1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(4-chloro-2-methoxyphenyl)pyrimidin-2-yl)thiourea (8j)

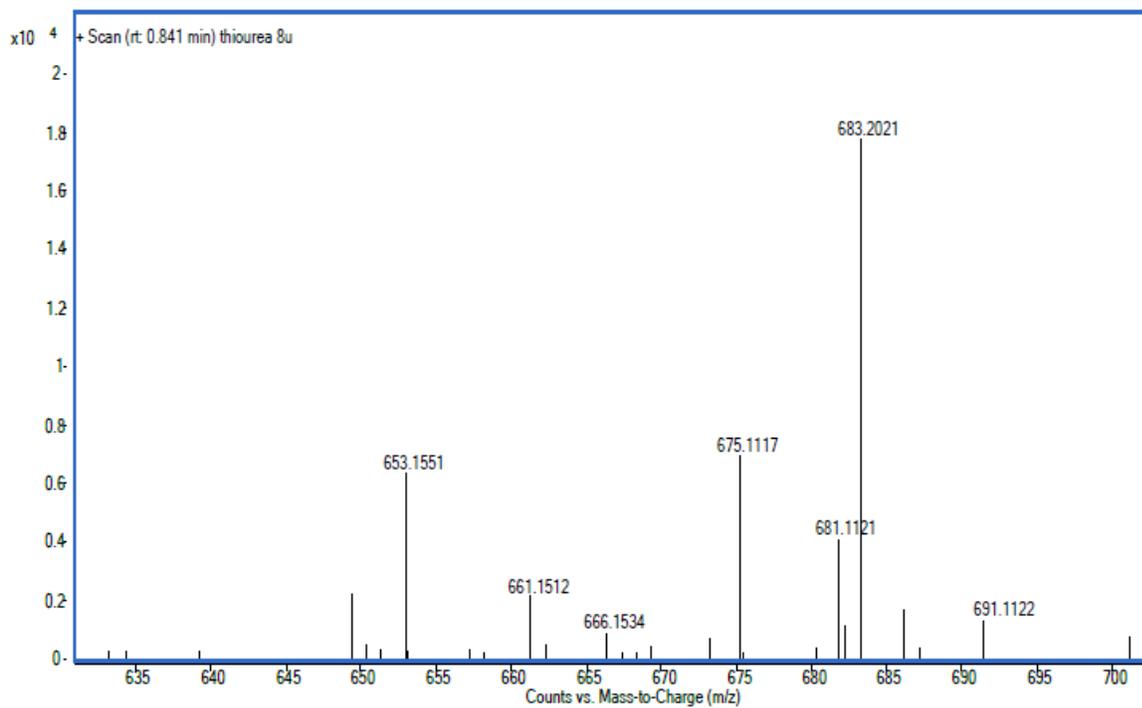






1-(2,3,4,6-Tetra-O-acetyl-β-D-galactopyranosyl)-3-(4-phenyl-6-(2-hydroxy-3-methoxyphenyl)pyrimidin-2-yl)thiourea (8k)





1-(2,3,4,6-Tetra-O-acetyl- β -D-galactopyranosyl)-3-(4-phenyl-6-(2-hydroxy-4-methoxyphenyl)pyrimidin-2-yl)thiourea (8l)

