

Supplementary Material

Green and efficient synthesis of new pyrido[2,3-d]pyrimidine derivatives using Pd/SBA-15 as a nanocatalyst

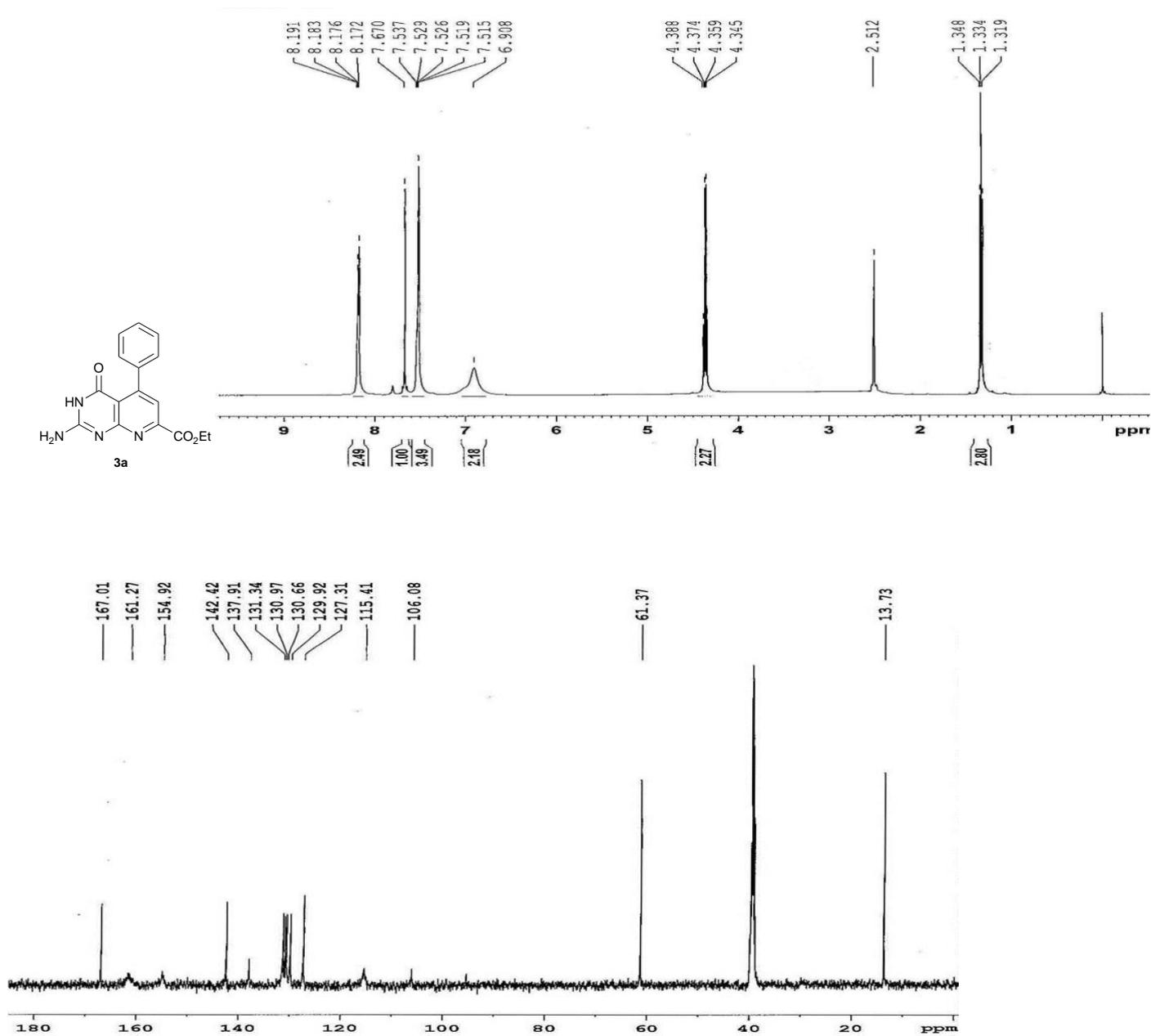
Aseyeh Ghaedi,^a Ghasem Rezanejade Bardajee,^{*a} Akram Sadat Delbari^b, and Shohreh Hekmat^b

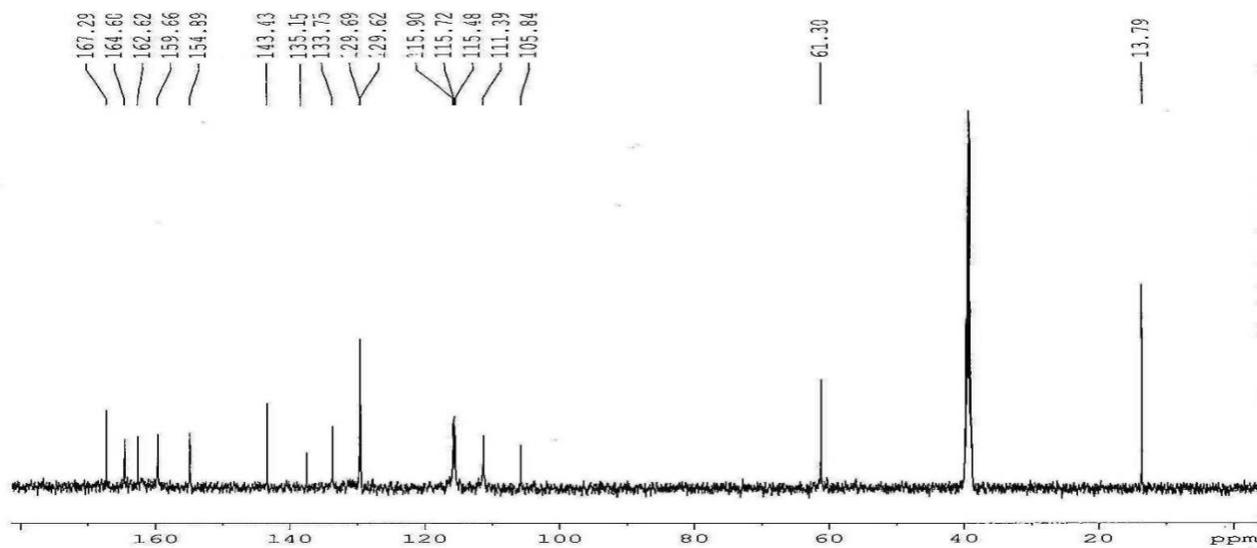
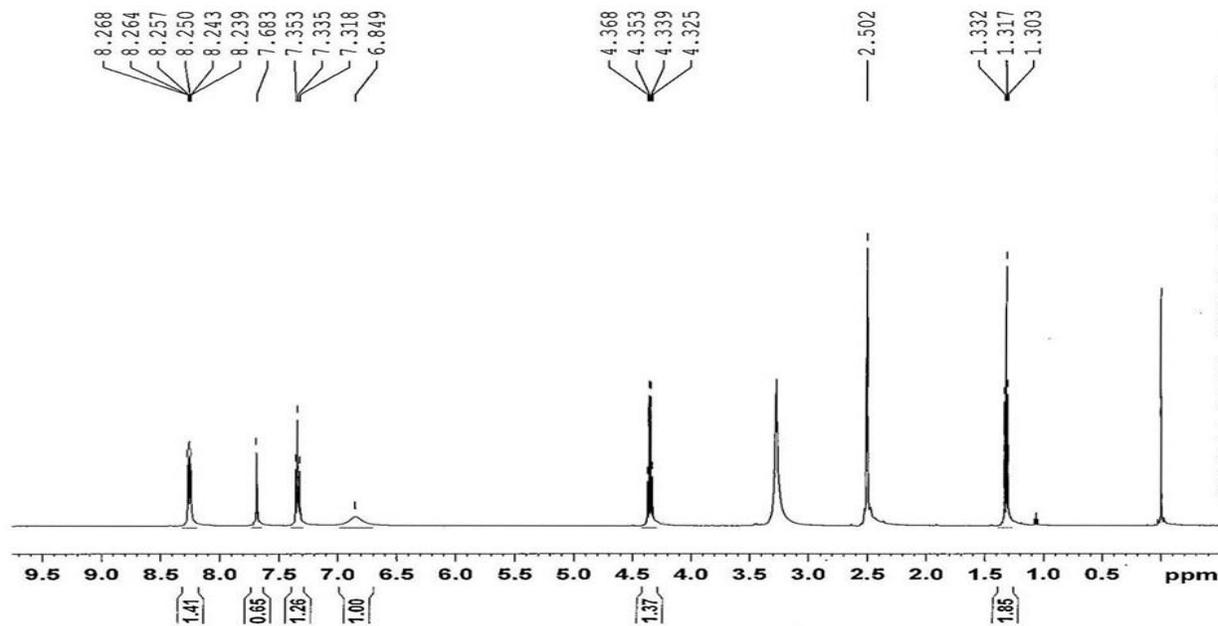
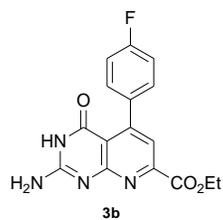
^aDepartment of Chemistry, Payame Noor University (PNU), P.O. BOX 19395-3697, Tehran, Iran.

^b Department of Chemistry, Islamshahr Branch, Islamic Azad University, Islamshahr, Iran. Email: rezanejad@pnu.ac.ir

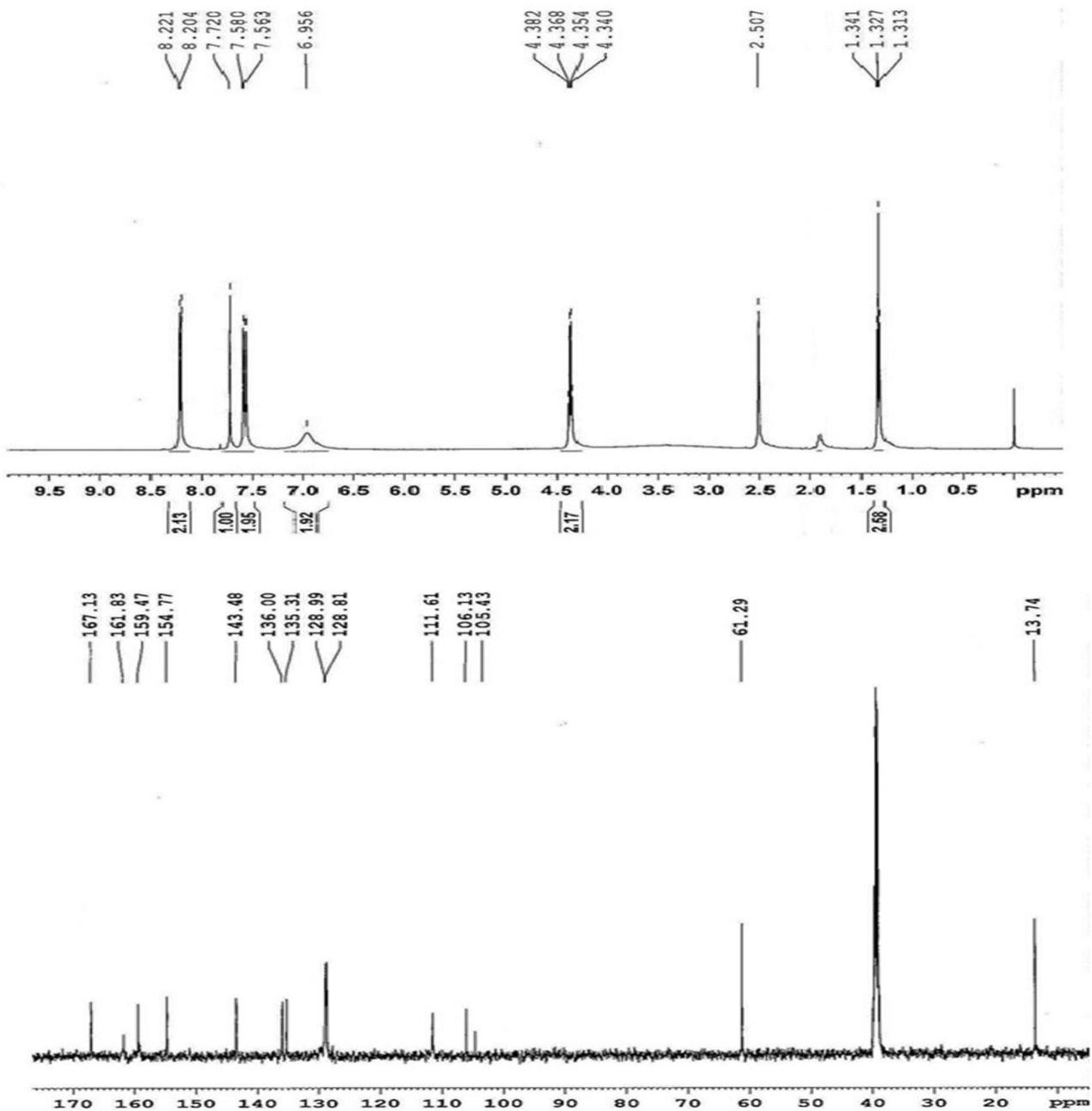
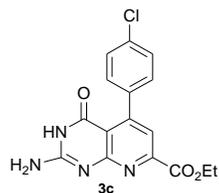
Table of Contents

1. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-phenylpyrido[2,3-d]pyrimidine-7-carboxylate (3a)	S2
2. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-5-(4-fluorophenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3b)	S3
3. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-5-(4-chlorophenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3c)	S4
4. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-5-(4-bromophenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3d)	S5
5. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-5-(2-chlorophenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3e)	S6
6. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-5-(2,4-dichlorophenyl)-3,4-dihydro-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3f)	S7
7. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-p-tolylpyrido[2,3-d]pyrimidine-7-carboxylate (3g)	S8
8. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-m-tolylpyrido[2,3-d]pyrimidine-7-carboxylate (3h)	S9
9. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-3,4-dihydro-5-(4-methoxyphenyl)-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3i)	S10
10. ¹ H-NMR and ¹³ C-NMR spectra of Ethyl-2-amino-3,4-dihydro-5-(3,4-dimethoxyphenyl)-4-oxopyrido[2,3-d]pyrimidine-7-carboxylate (3j)	S11

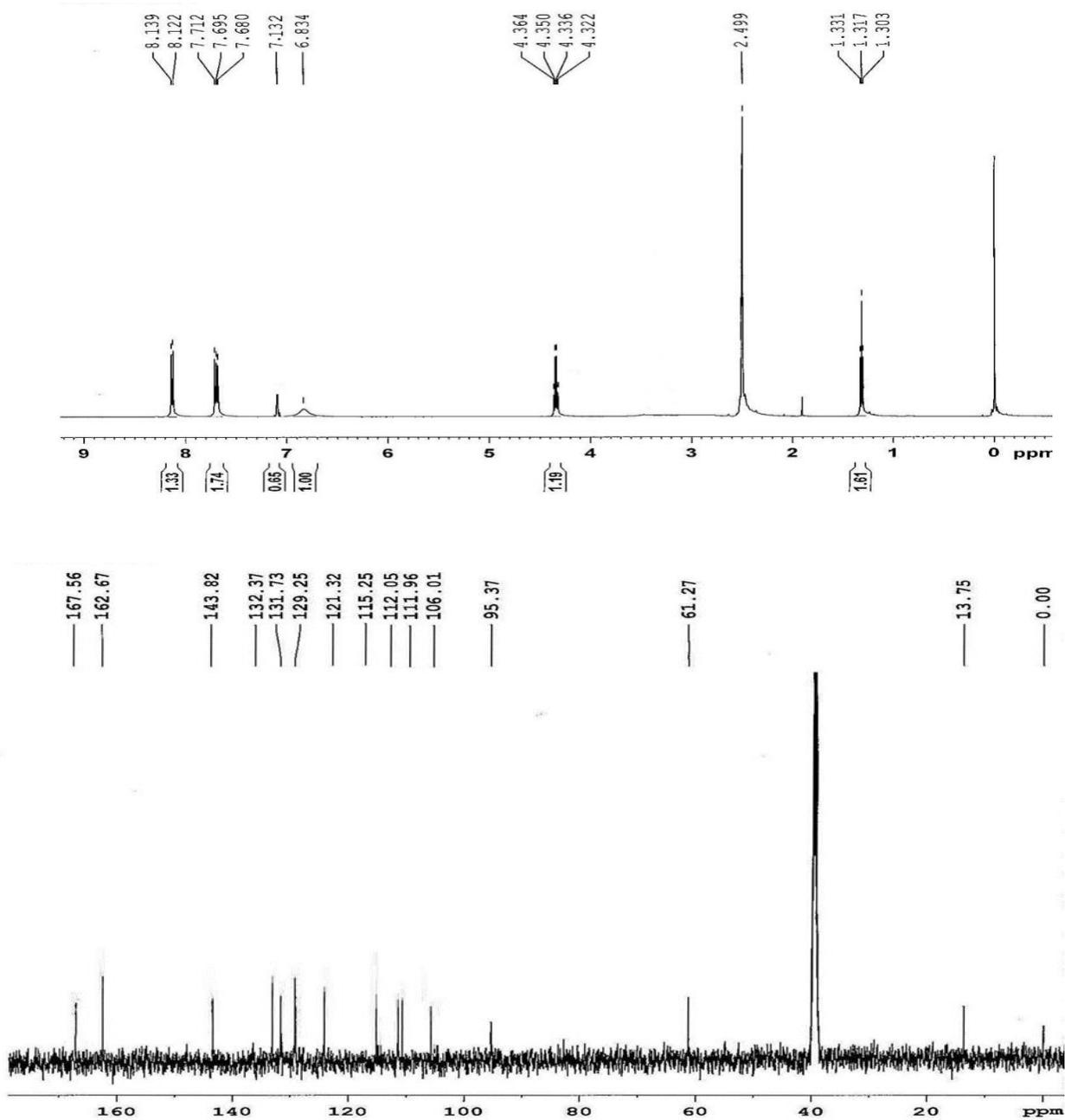
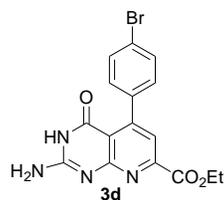
S1. $^1\text{H-NMR}$ and $^{13}\text{C-NMR}$ spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-phenylpyrido[2,3-d] pyrimidine-7-carboxylate (3a)

S2: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-5-(4-fluorophenyl)-3,4-dihydro-4-oxopyrido [2,3-d]pyrimidine-7-carboxylate (3b)

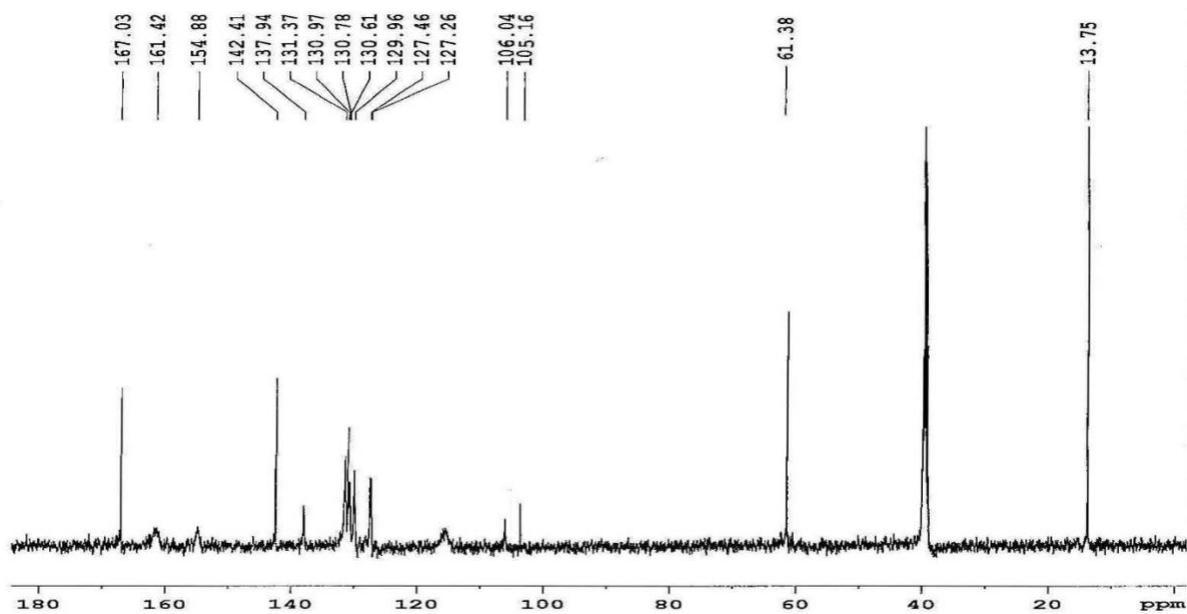
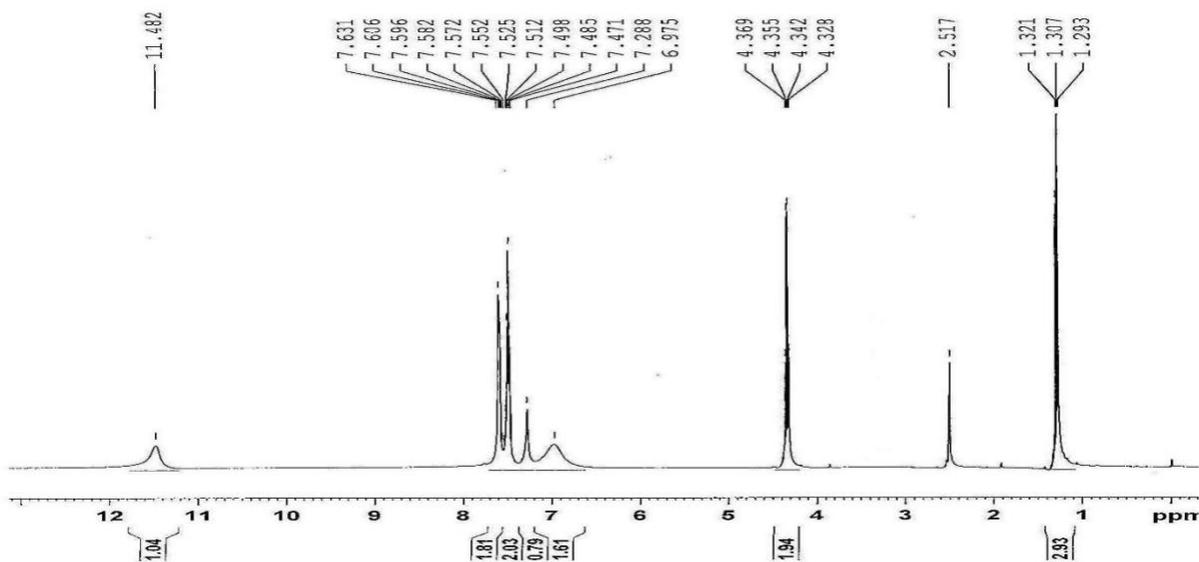
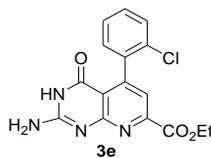
S3: $^1\text{H-NMR}$ and $^{13}\text{C-NMR}$ spectra of Ethyl-2-amino-5-(4-chlorophenyl)-3,4-dihydro-4-oxopyrido [2,3-d]pyrimidine-7-carboxylate (**3c**)



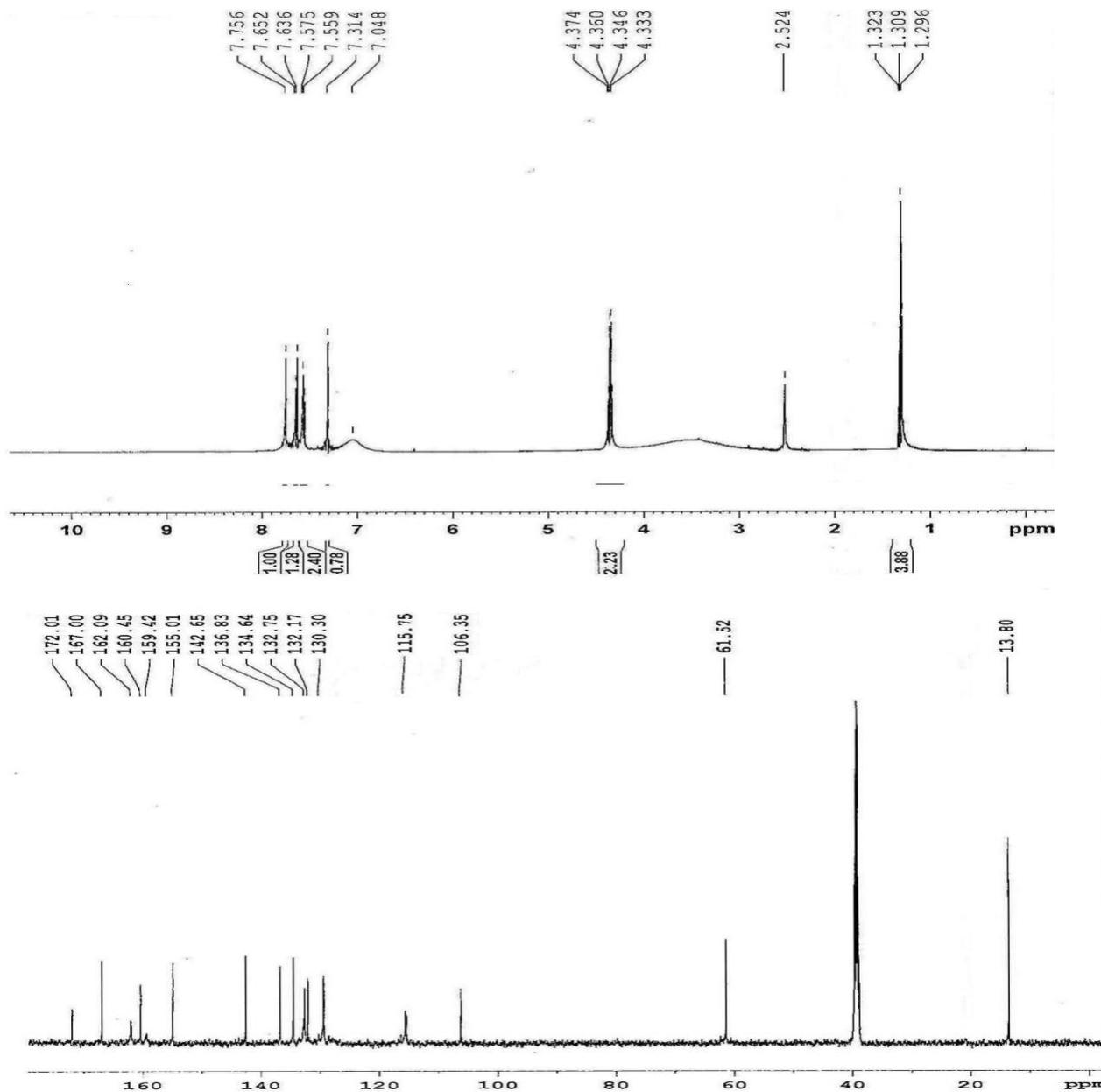
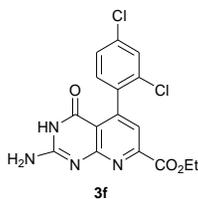
S4: $^1\text{H-NMR}$ and $^{13}\text{C-NMR}$ spectra of Ethyl-2-amino-5-(4-bromophenyl)-3,4-dihydro-4-oxopyrido [2,3-d] pyrimidine-7-carboxylate (**3d**)



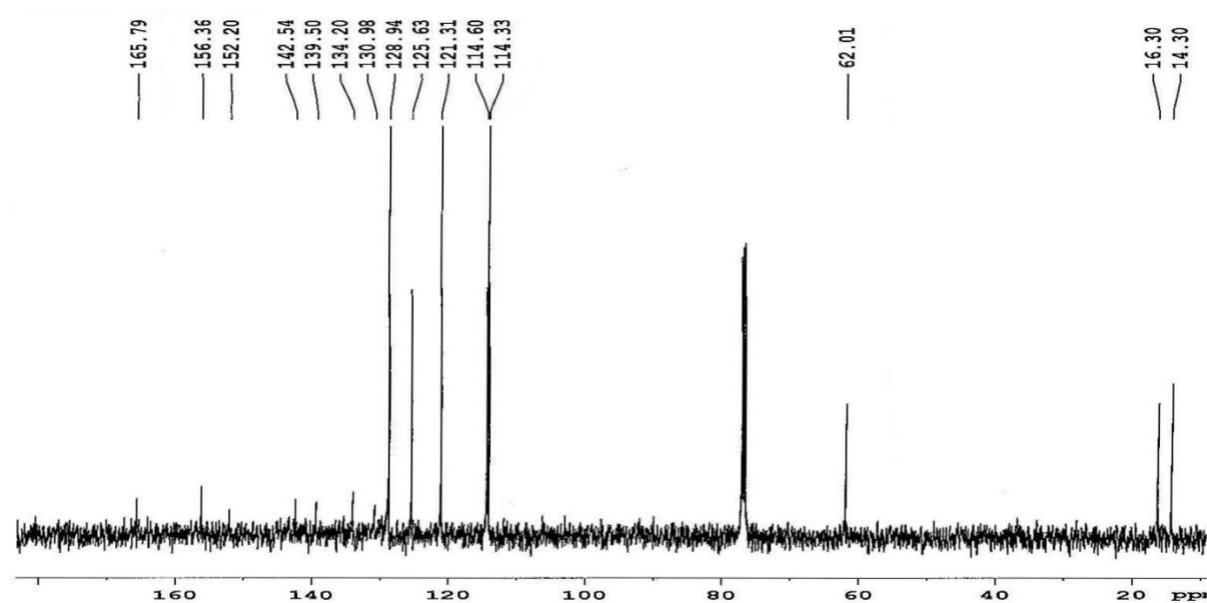
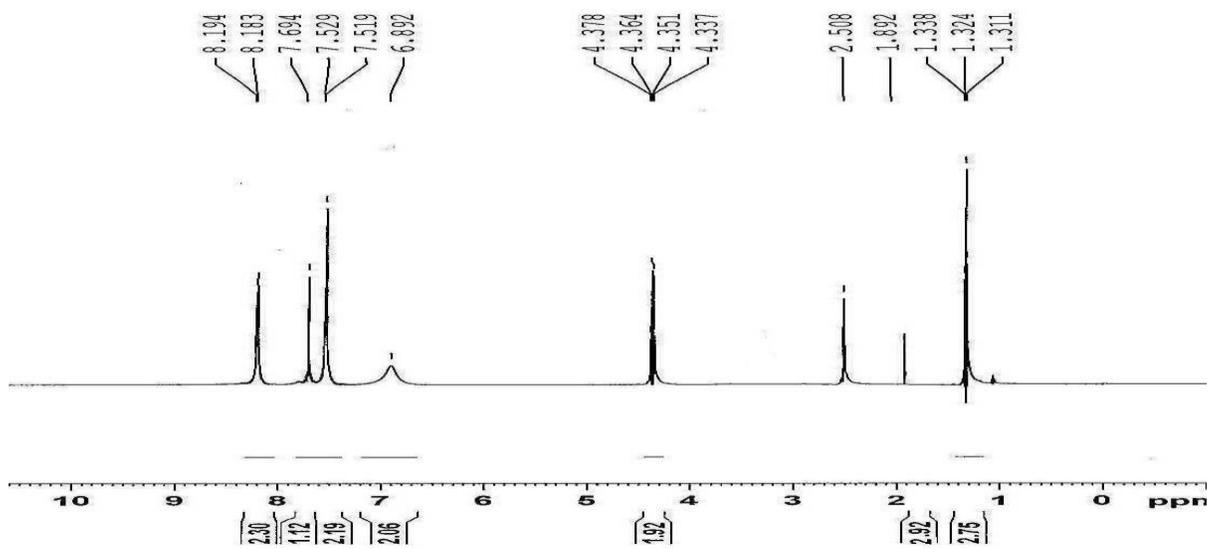
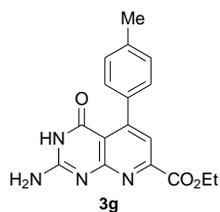
S5: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-5-(2-chlorophenyl)-3,4-dihydro-4-oxopyrido [2,3-d]pyrimidine-7-carboxylate (**3e**)



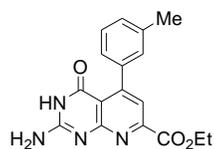
S6: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-5-(2,4-dichlorophenyl)-3,4-dihydro-4-oxopyrido [2,3-d]pyrimidine-7-carboxylate (**3f**)



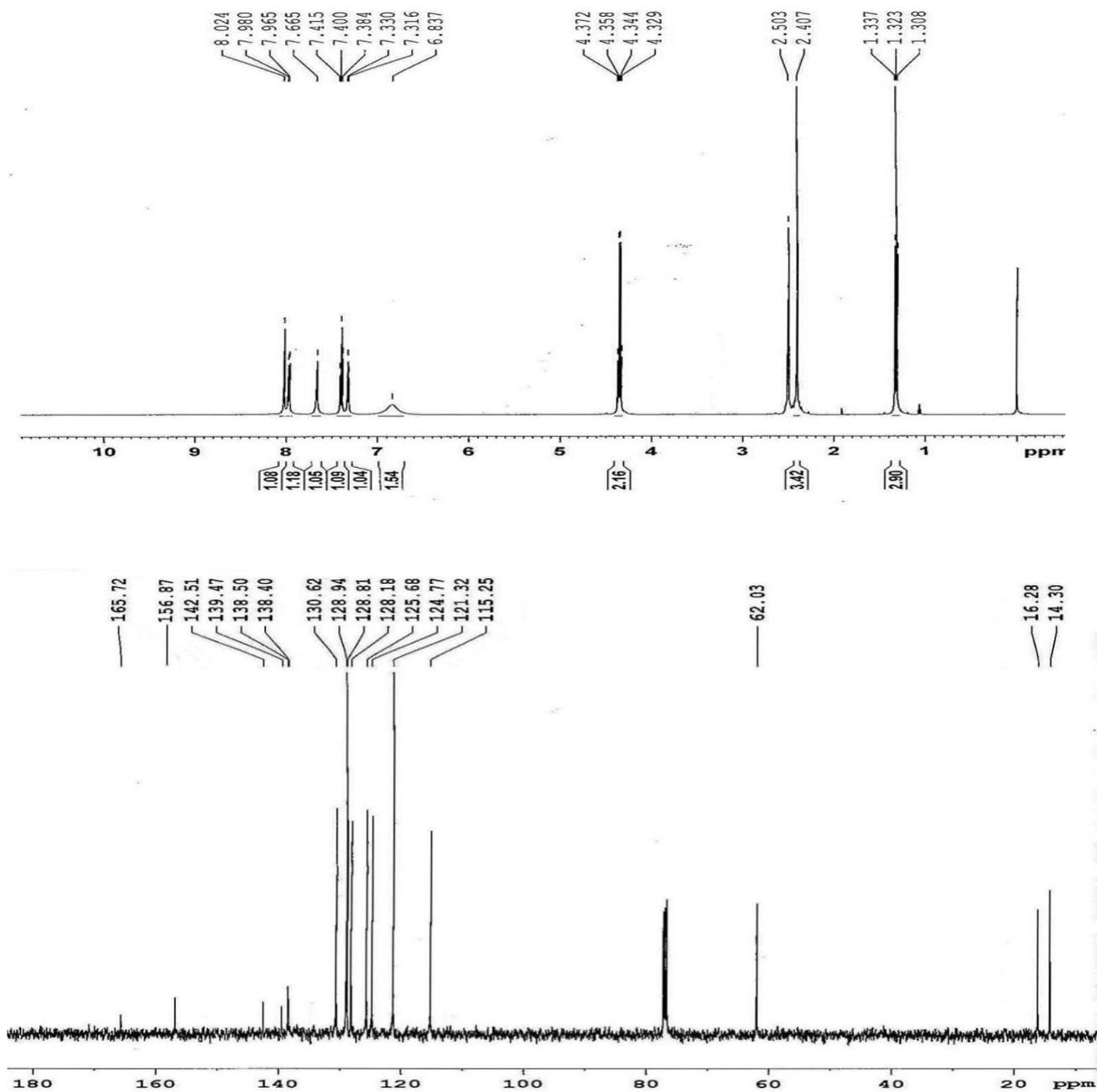
S7: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-p-tolylpyrido[2,3-d] pyrimidine-7-carboxylate (**3g**)



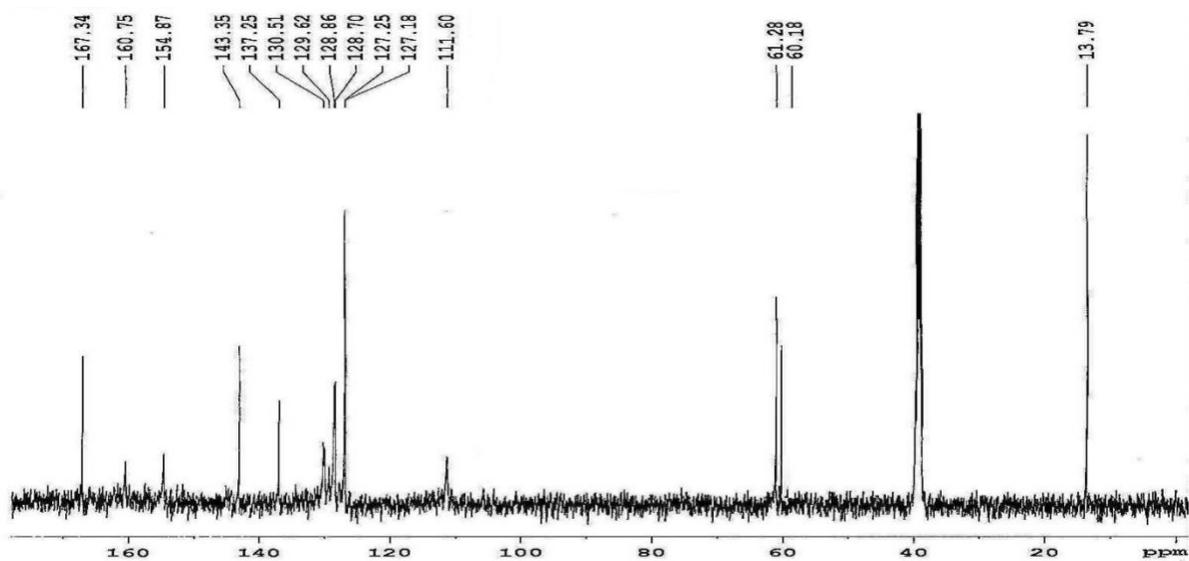
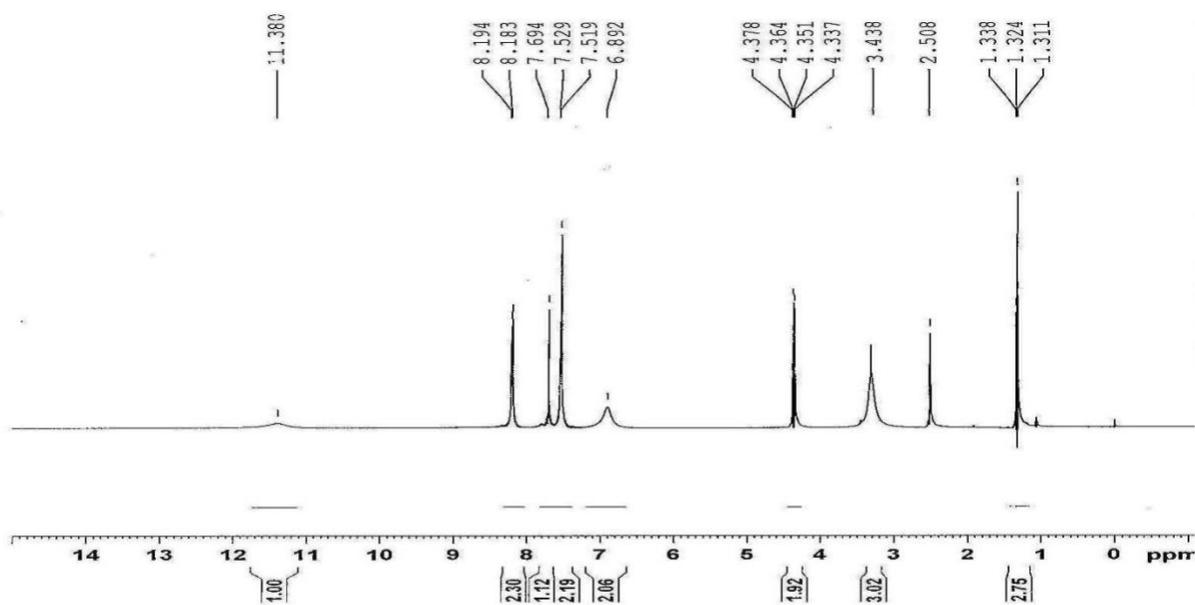
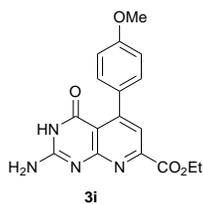
S8: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-3,4-dihydro-4-oxo-5-m-tolylpyrido[2,3-d] pyrimidine-7-carboxylate (**3h**)



3h



S10: ^1H NMR and ^{13}C -NMR spectra of Ethyl-2-amino-3,4-dihydro-5-(4-methoxyphenyl)-4-oxo pyrido[2,3-d]pyrimidine-7-carboxylate (**3i**)



S10: ^1H -NMR and ^{13}C -NMR spectra of Ethyl-2-amino-3,4-dihydro-5-(3,4-dimethoxyphenyl)-4-oxo pyrido[2,3-d]pyrimidine-7-carboxylate (**3j**)

