

Supplementary Information

Design, synthesis and biological evaluation of indole and N-benzylated indole Mannich bases as potent antitubercular agents

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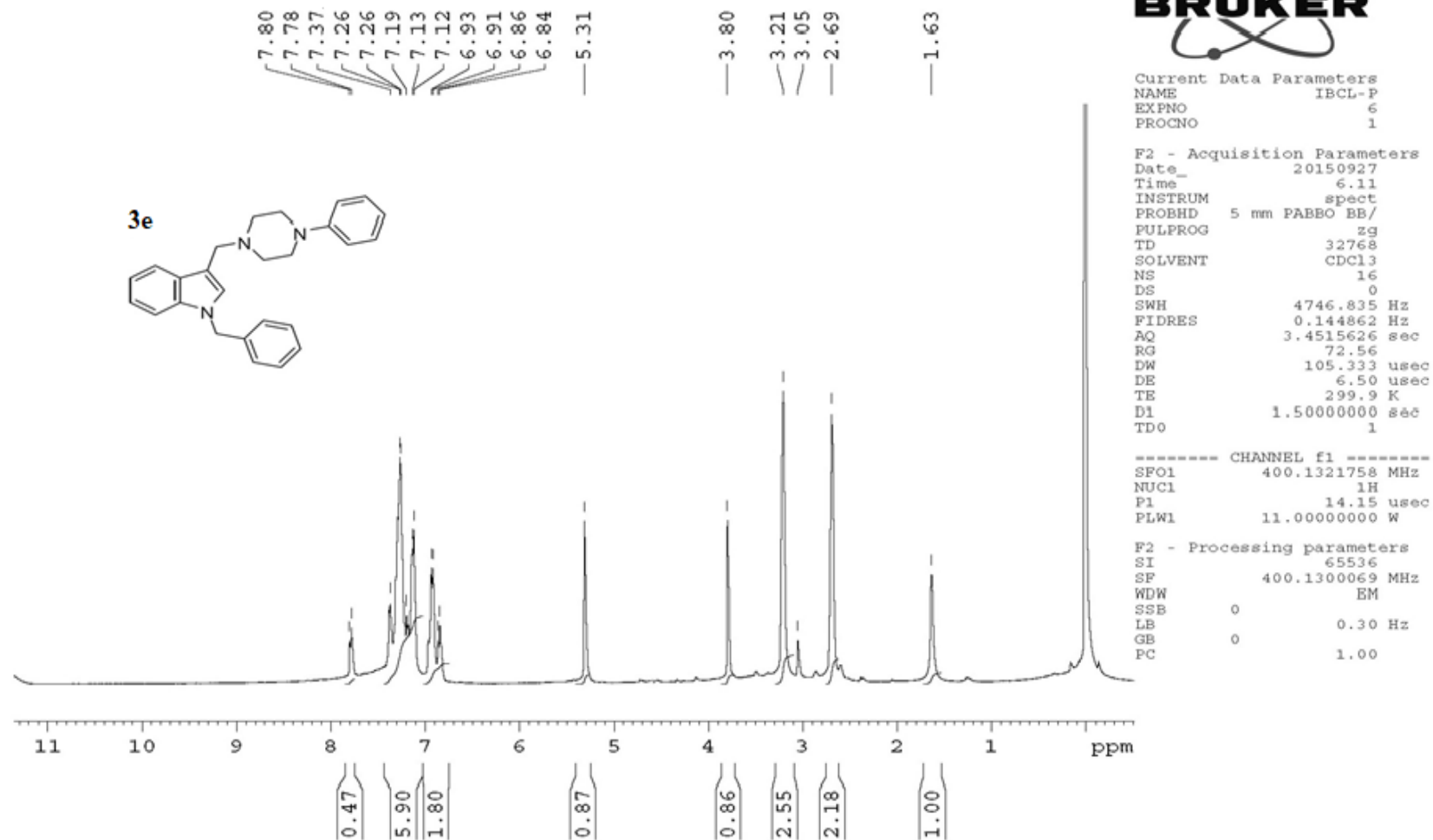
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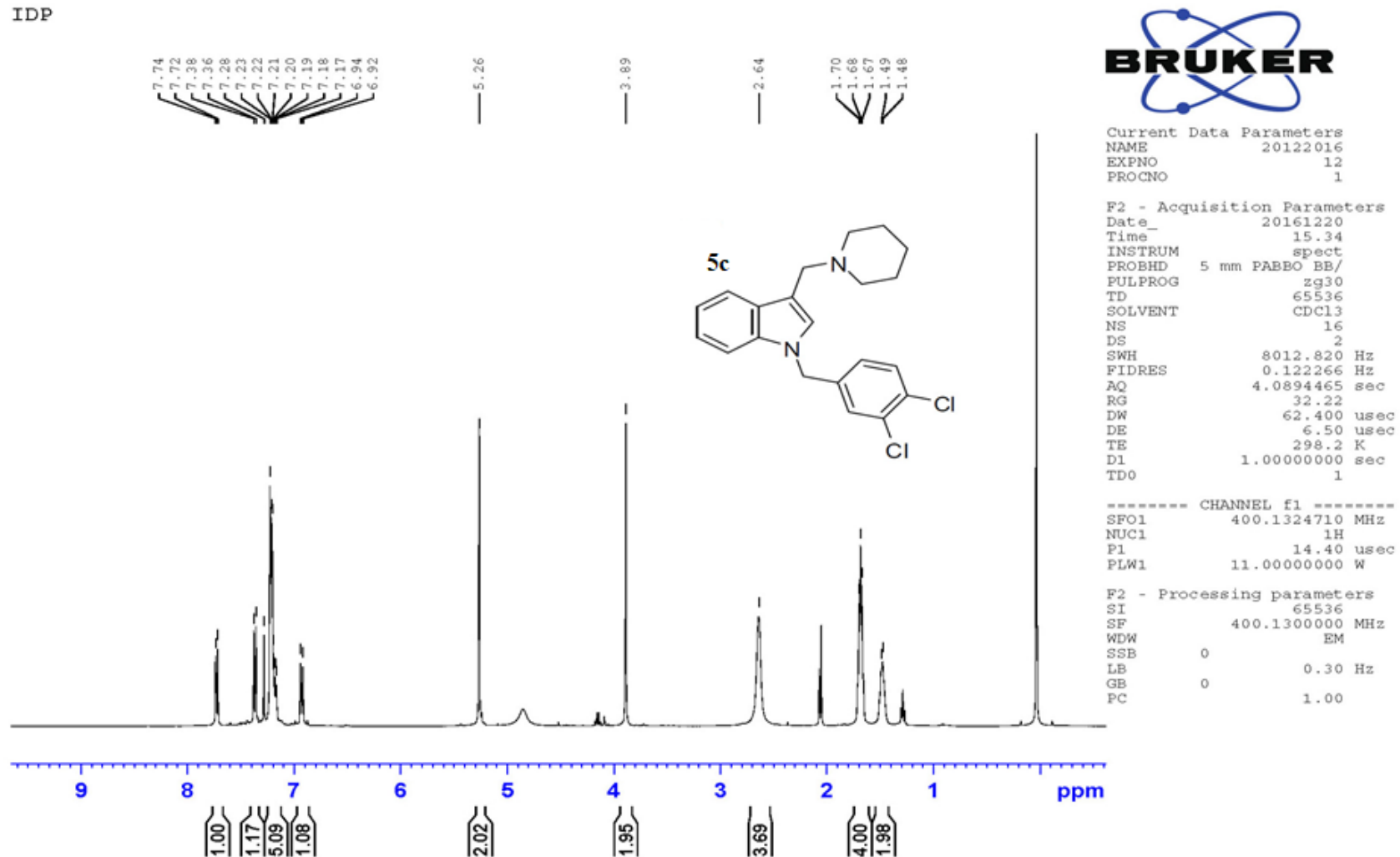
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IBCL-PPZ-2 CDCl3



¹H NMR SPECTRUM OF 1-benzyl-3-((4-phenylpiperazin-1-yl)methyl)-1H-indole (3e)

IDP



¹H NMR SPECTRUM OF 1-(3,4-dichlorobenzyl)-3-((4-phenylpiperazin-1-yl)methyl)-1H-indole (5c)

BB-PZ in CDCl₃

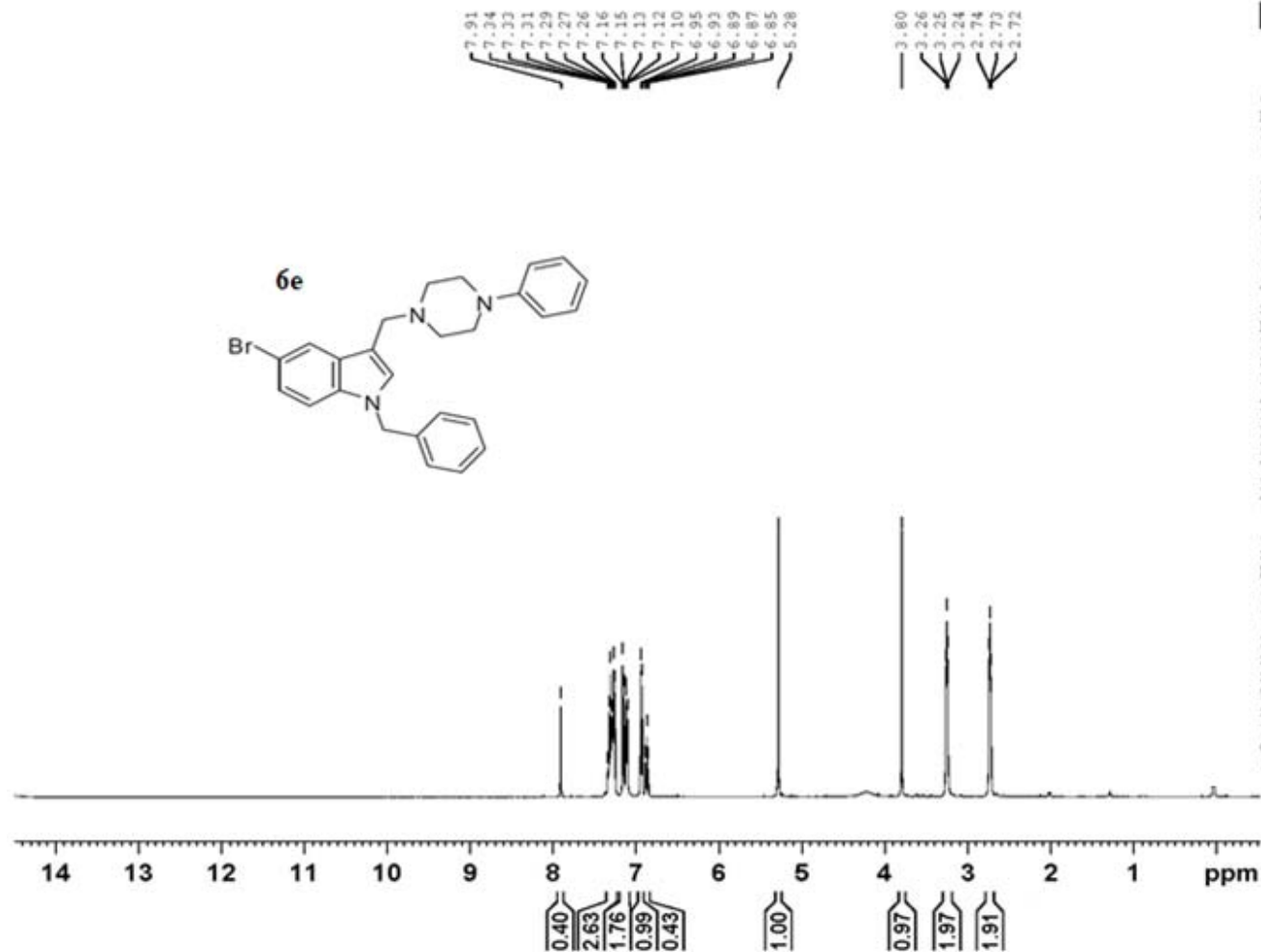
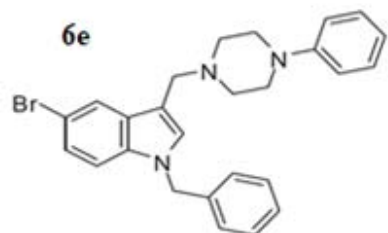


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PROCNO 1

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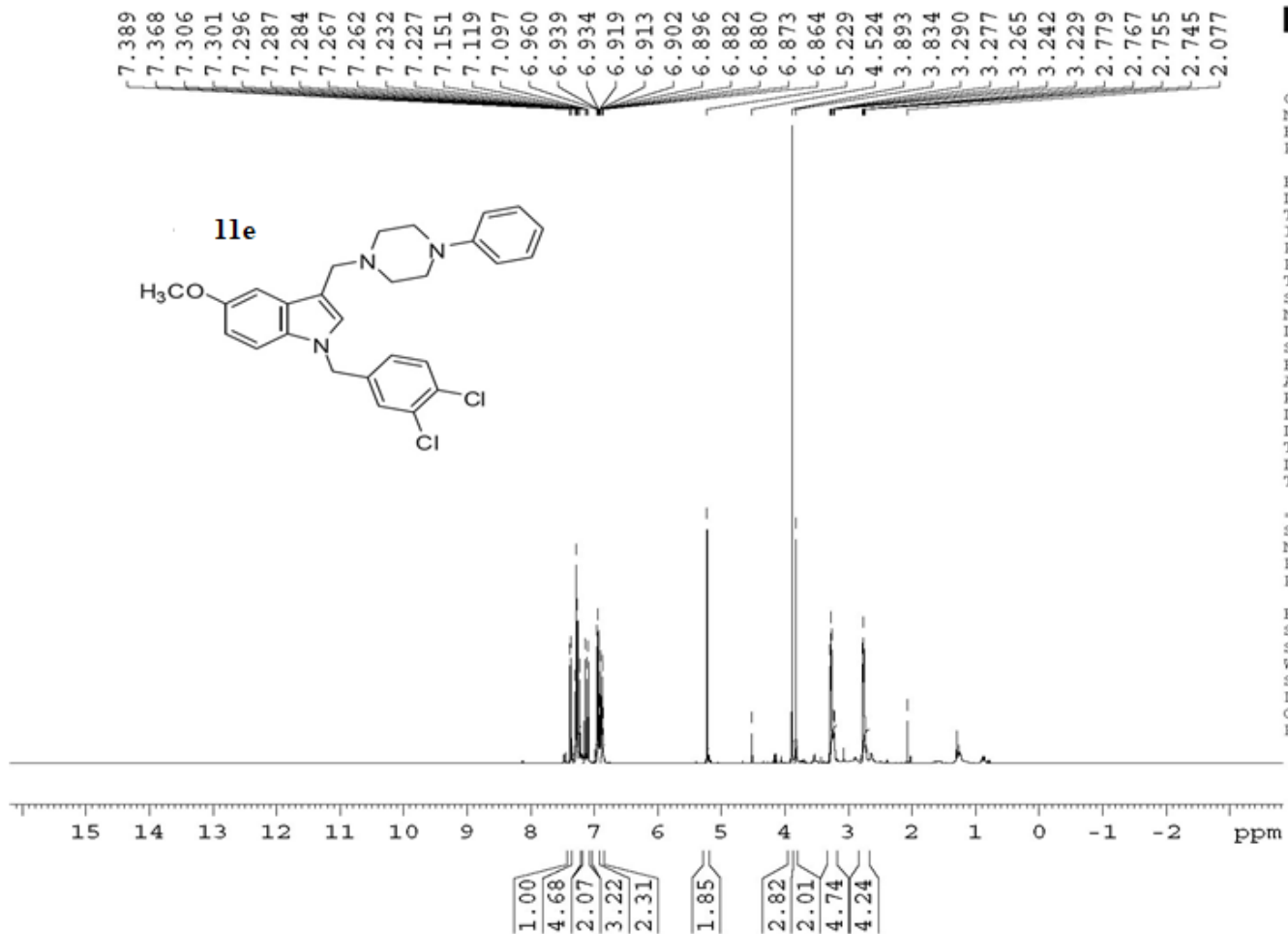
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¹H NMR SPECTRUM OF 1-benzyl-3-((4-phenylpiperazin-1-yl)methyl)-5-bromo-1H-indole (6e)

SMD-PZ



Current Data Parameters
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EXPNO 18
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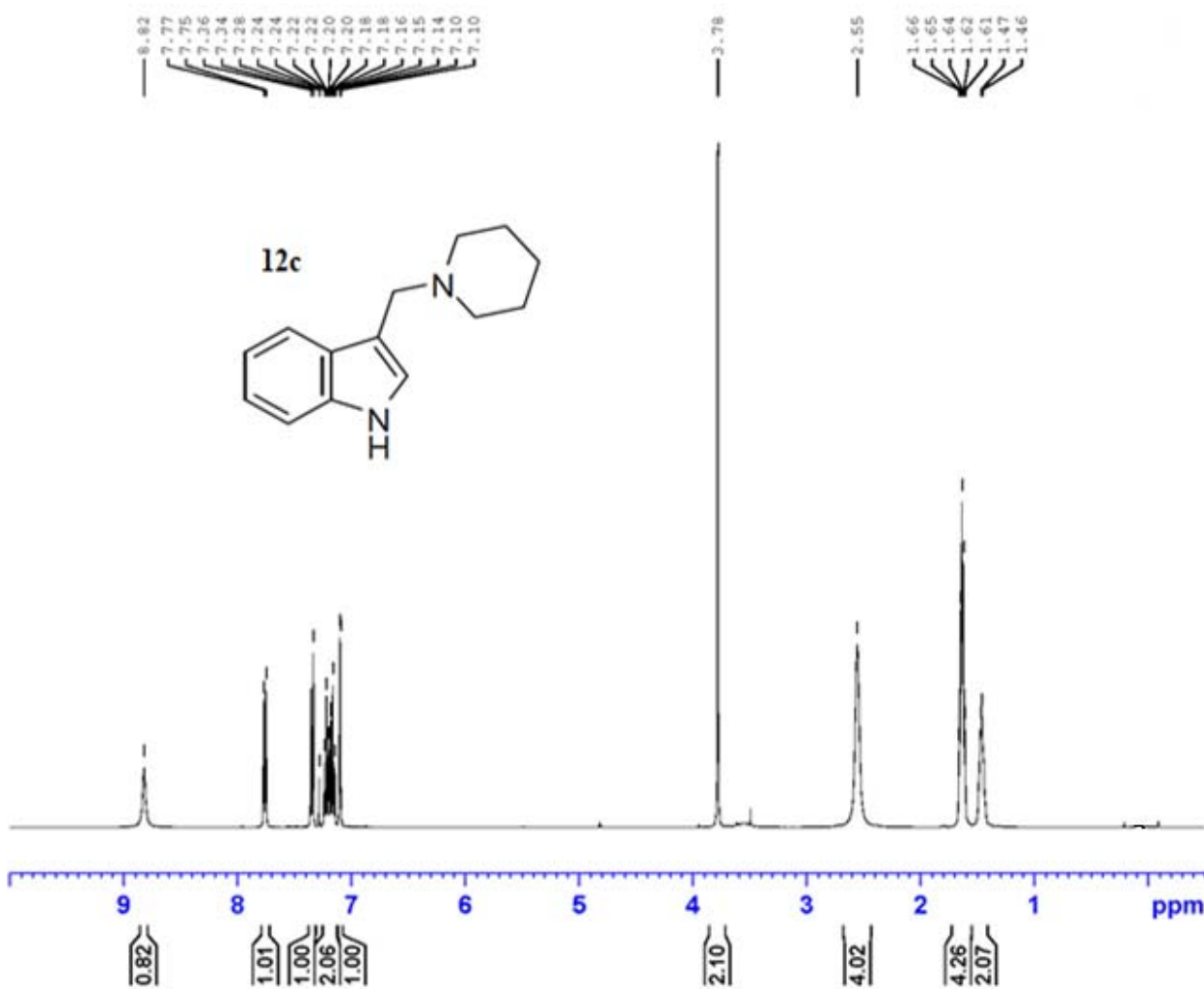
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PLW1 11.00000000 W

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LB 0.30 Hz
GB 0
PC 1.00

¹H NMR SPECTRUM OF 1-(3,4-dichlorobenzyl)-5-methoxy-3-((4-phenylpiperazin-1-yl)methyl)-1H-indole (11e)

1F



Current Data Parameters
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 EXPNO 13
 PROCNO 1

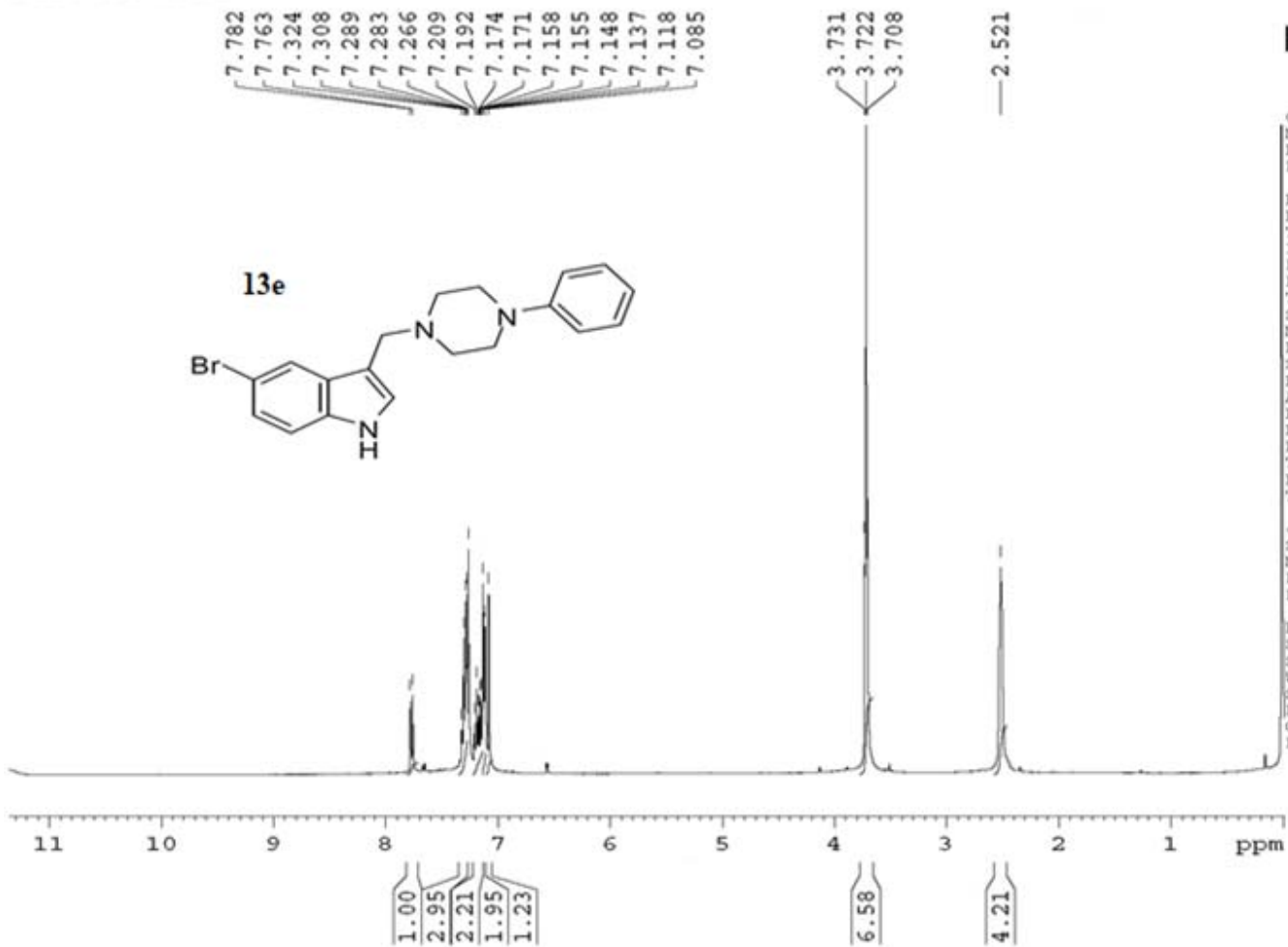
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 TE 298.1 K
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 TDO 1

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 PLW1 11.00000000 W

F2 - Processing parameters
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 WDW EM
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¹H NMR SPECTRUM OF 3-(piperidin-1-yl-methyl)-1H-indole (12c)

5BrI-PPZ CDCl₃



Current Data Parameters
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EXPNO 3
PROCNO 1

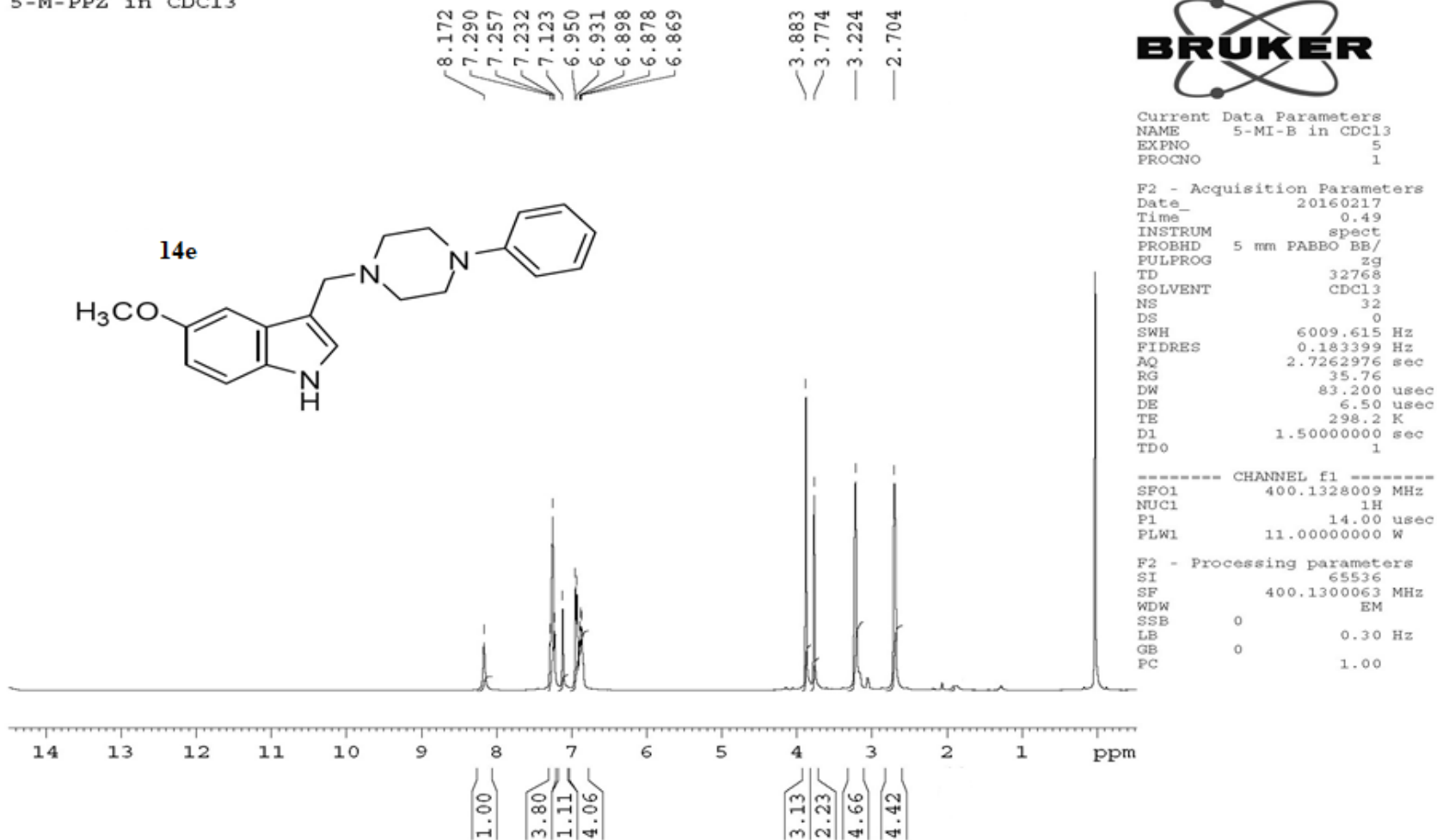
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PC 1.00

¹H NMR SPECTRUM OF 5-bromo-3-((4-phenylpiperazin-1-yl)methyl)-1H-indole (13e)

5-M-PPZ in CDCl₃



¹H NMR SPECTRUM OF 5-methoxy-3-((4-phenylpiperazin-1-yl)methyl)-1H-indole (14e)

Table No 3. Antimicrobial activity of synthesized compounds at (100µg) of 3a-e to 14a-e series

Code	Zone of inhibition (in mm)*		Code	Zone of inhibition (in mm)*		Code	Zone of inhibition (in mm)*	
	<i>S.aureus</i>	<i>E.coli</i>		<i>S.aureus</i>	<i>E.coli</i>		<i>S.aureus</i>	<i>E.coli</i>
3a	11±1.83	12±0.11	6a	12±1.72	NI	9a	12±0.85	13±0.39
3b	11±1.59	13±0.49	6b	12±0.91	13±1.36	9b	12±0.94	13±0.29
3c	NI	11±0.95	6c	NI	NI	9c	11±0.78	13±0.58
3d	NI	NI	6d	11±0.15	13±0.79	9d	14±0.27	NI
3e	13±0.17	11±0.59	6e	12±0.72	13±0.49	9e	NI	14±1.79
4a	12±1.94	13±0.58	7a	12±1.44	13±0.84	10a	12±1.09	NI
4b	12±0.38	11±0.27	7b	13±0.82	NI	10b	11±0.84	12±0.72
4c	NI	NI	7c	12±0.49	13±2.42	10c	12±0.89	NI
4d	11±0.87	13±0.73	7d	NI	NI	10d	12±0.42	NI
4e	12±0.93	13±1.82	7e	14±1.39	13±1.58	10e	11±0.88	13±0.17
5a	NI	NI	8a	NI	NI	11a	NI	NI
5b	NI	NI	8b	NI	NI	11b	NI	NI
5c	NI	NI	8c	NI	NI	11c	NI	NI
5d	NI	NI	8d	NI	NI	11d	NI	NI
5e	NI	NI	8e	NI	NI	11e	NI	NI
12a	16±0.47	14±1.20	13a	15±1.14	14±0.38	14a	15±1.72	14±0.93
12b	15±0.74	16±0.39	13b	14±1.03	16±0.08	14b	17±0.37	14±0.82
12c	18±1.39	16±0.02	13c	16±0.39	14±0.22	14c	18±1.02	16±0.57
12d	14±0.27	15±0.44	13d	15±2.07	16±0.86	14d	15±0.34	14±1.17
12e	16±0.99	14±0.42	13e	14±0.48	15±0.92	14e	14±0.26	15±0.44
Rifampicin (Standard)	28±0.3 6	26±0.29				Control (DMSO)	-	-
* Mean±S.D. of Three replications						*NI= No Inhibition		