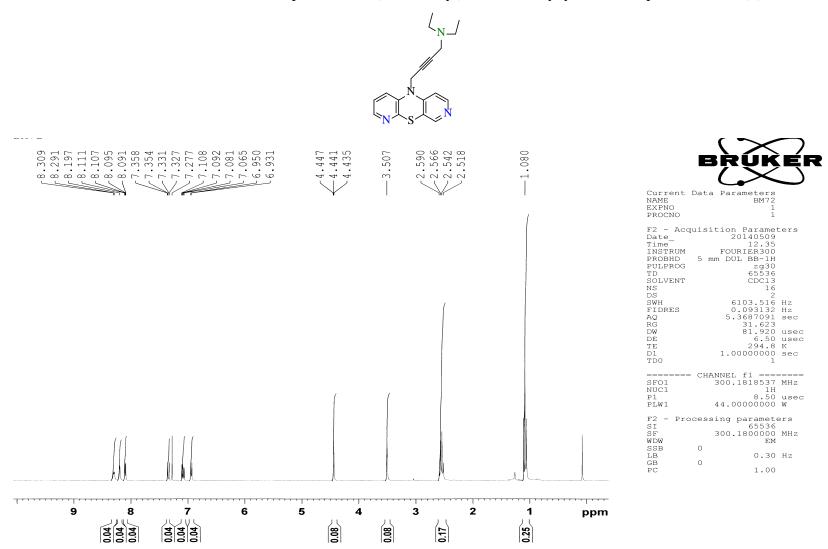
# **Supplementary Material** SYNTHESIS, ANTICANCER ACTIVITY AND APOPTOSIS INDUCTION OF NOVEL 3,6-DIAZAPHENOTHIAZINES #

### Beata Morak-Młodawska<sup>1\*</sup>, Krystian Pluta<sup>1</sup>, Małgorzata Latocha<sup>2</sup>, Małgorzata Jeleń<sup>1</sup>,

#### Dariusz Kuśmierz<sup>2</sup>

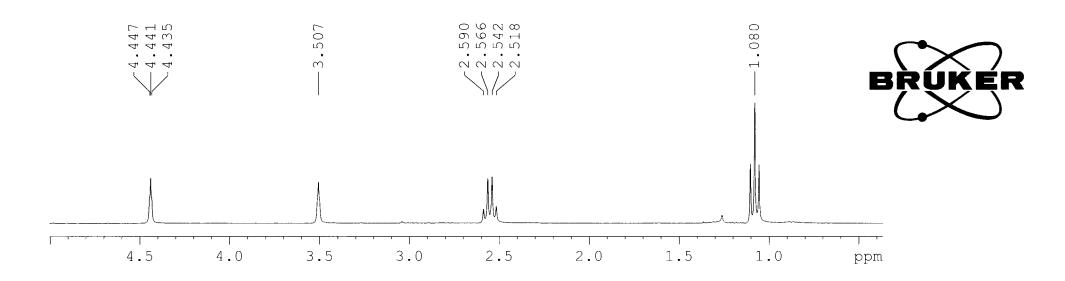
<sup>1</sup>The Medical University of Silesia, School of Pharmacy with the Division of Laboratory Medicine, Department of Organic Chemistry, Jagiellońska 4, 41-200 Sosnowiec, Poland, <sup>2</sup>The Medical University of Silesia, School of Pharmacy with the Division of Laboratory Medicine, Department of Cell Biology, Jedności 8, 41-200 Sosnowiec, Poland.

Cont	Content	
1.	<sup>1</sup> H NMR of the most active compound 10-[4-(N,N-diethyl)amino-but-2-ynyl]-3,6-	-
	diazaphenothiazine (4)	2
2.	<sup>1</sup> H NMR of the compound $(4)$ – aliphatic part	3
3.	<sup>1</sup> H NMR of the compound (4) – aromatic part	4
4.	<sup>13</sup> C NMR of the compound ( <b>4</b> )	5
5.	$^{13}$ C NMR of the compound (4) – aromatic part	6
6.	$^{13}$ C NMR of the compound (4) – aliphatic part	7
7.	FAB MS of the compound (4)	8
8.	HR MS of the compound (4)	9

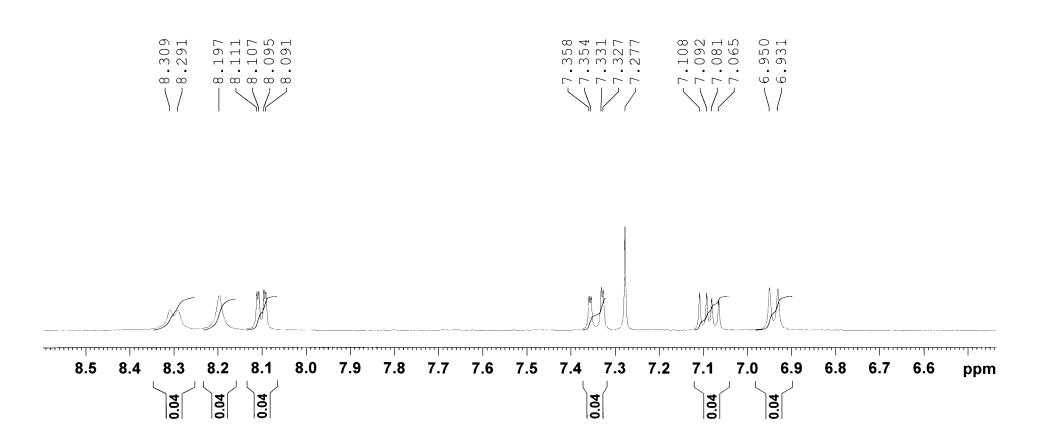


1. <sup>1</sup>H NMR of the most active compound 10-[4-(N,N-diethyl)amino-but-2-ynyl]-3,6-diazaphenothiazine (4)

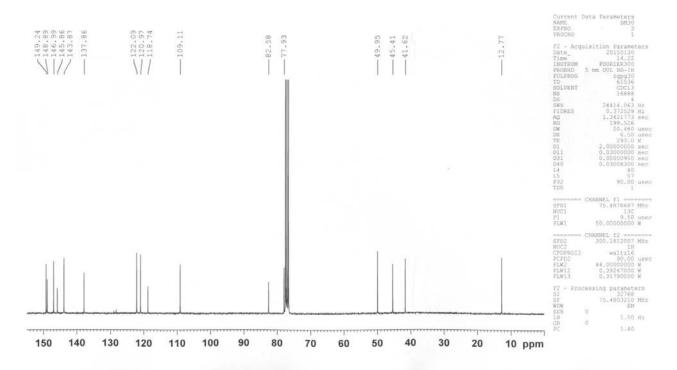
2. <sup>1</sup>H NMR of the compound (4) – aliphatic part



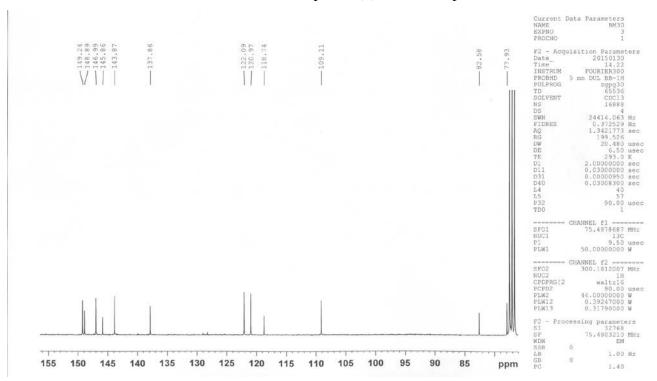
<sup>1</sup>H NMR of the compound (4) – aromatic part



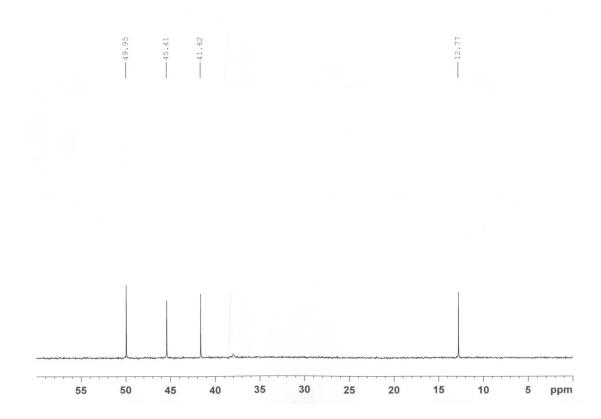
### $^{13}$ C NMR of the compound (4)

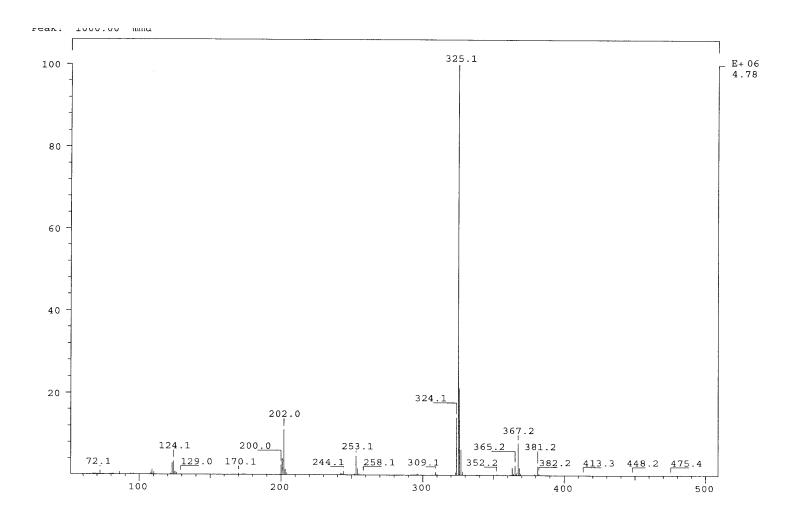


#### $^{13}$ C NMR of the compound (4) – aromatic part



## $^{13}$ C NMR of the compound (4) – aliphatic part





3. FAB MS of the compound (4)

4. HR MS of the compound (4)

#### Mass Spectrum List Report Analysis Info Acquisition Date 3/21/2018 9:11:51 AM D:\Data\PM\_20171204\BA2.d Analysis Name Method low\_mass.m Operator ΚM Sample Name PM\_20171204\_tune high pos before Instrument impact II 1825265.10082 Comment Acquisition Parameter Source Type ESI Ion Polarity Positive 0.3 Bar Set Nebulizer Focus Active Set Capillary 240 °C 4000 V Set Dry Heater Scan Begin Set End Plate Offset 100 m/z -500 V Set Dry Gas 4.0 l/min Scan End 1000 m/z Set Charging Voltage 2000 V Set Divert Valve Source Set Corona Set APCI Heater 0°C 0 nA Intens. x107 201.0334 325.1457 2.0 1.5 1.0 0.5 0.0 300 400 700 800 900 200 500 6Ò0 100 m/z ----- +MS, 0.1-0.4min #3-26 # m/z Res. S/N FWHM 4 1% 1 125.1182 26297 13316.1 4857156 23.8 0.0048 2 163.0758 3520.9 28609 1400232 6.9 0.0057 3 175.0298 26518 468366 866.6 2.3 0.0066 201.0334 4 15895 31412.9 20377586 100.0 0.0126 5 203.0293 31294 2805.6 1809982 8.9 0.0065 6 254.0718 35952 4045.7 2697730 13.2 0.0071 7 273.0775 34220 1820.4 1096647 5.4 0.0080 8 311.1294 39115 3340.8 2909928 14.3 0.0080 9 325.1457 14971 22541.4 20377596 100.0 0.0217