

## Supplementary Material

### A Facile Microwave and SnCl<sub>2</sub> Synthesis of 2,3-Dihydroquinazolin-4(1*H*)ones

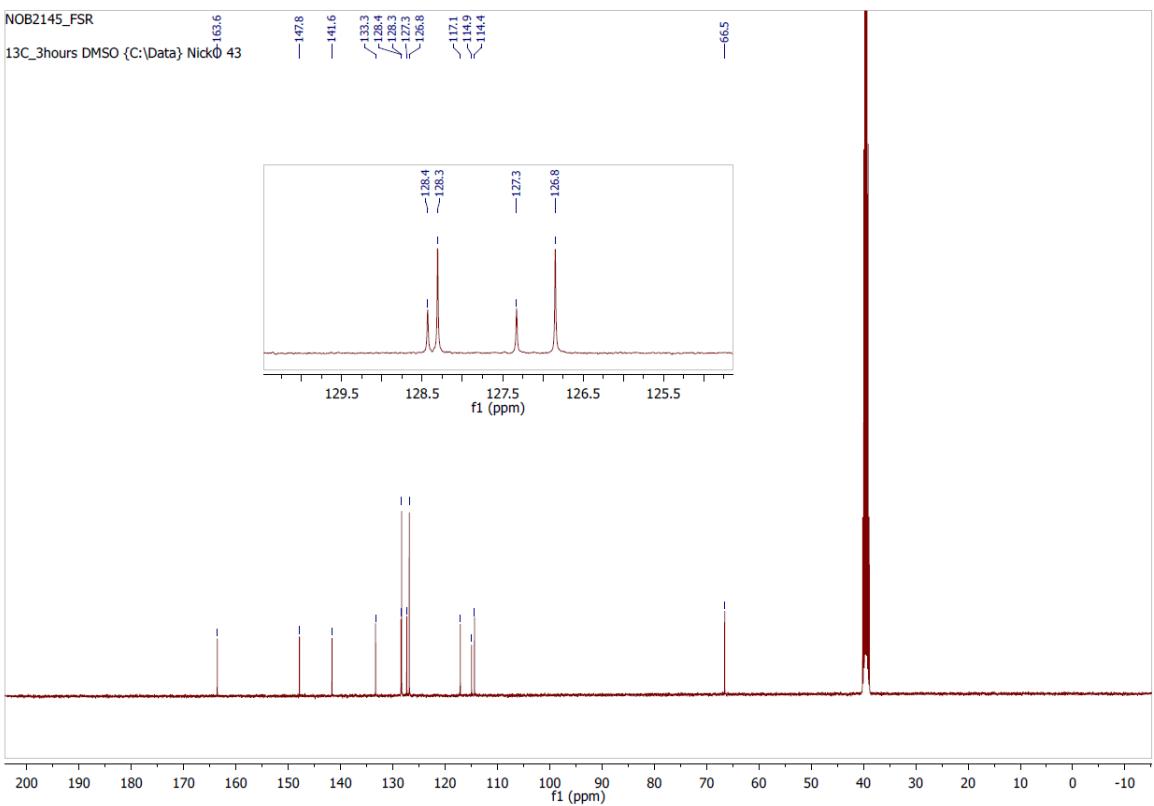
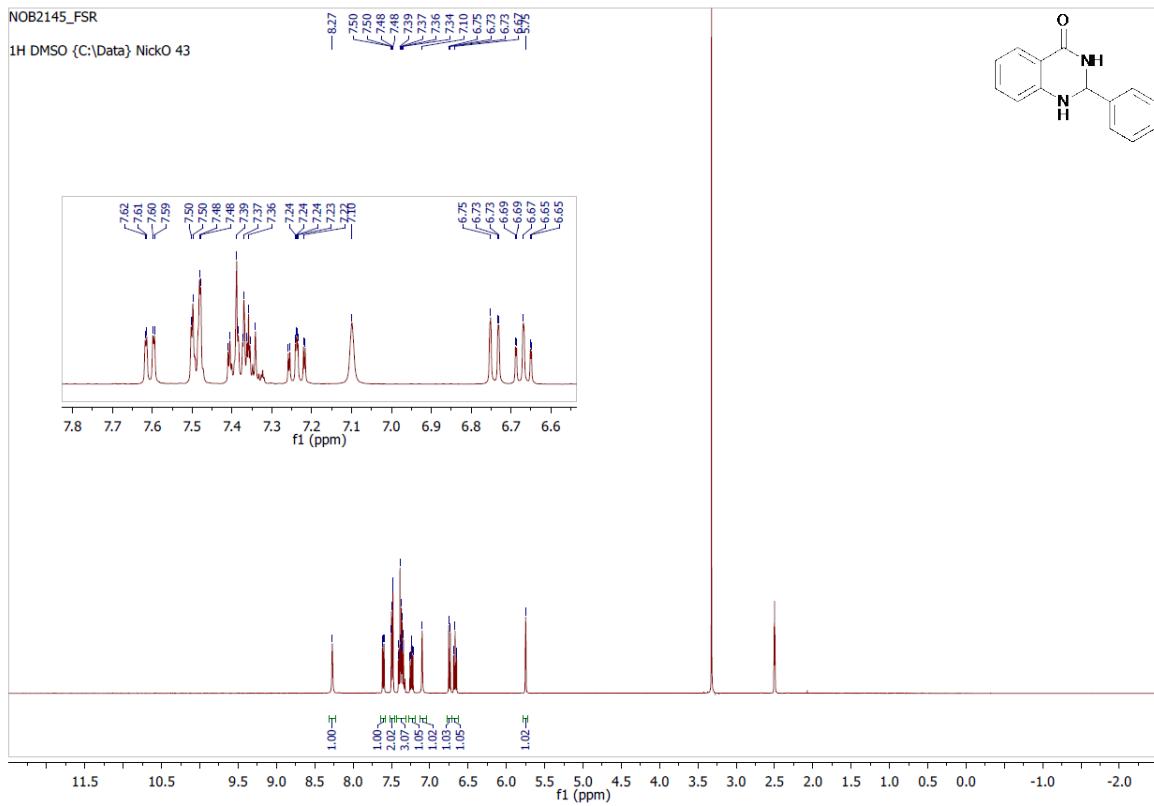
Nicholas S. O'Brien<sup>A</sup> and Adam McCluskey<sup>A,B</sup>

<sup>A</sup>Chemistry, School of Environmental and Life Sciences, The University of Newcastle, University Drive, Callaghan, NSW 2308, Australia.

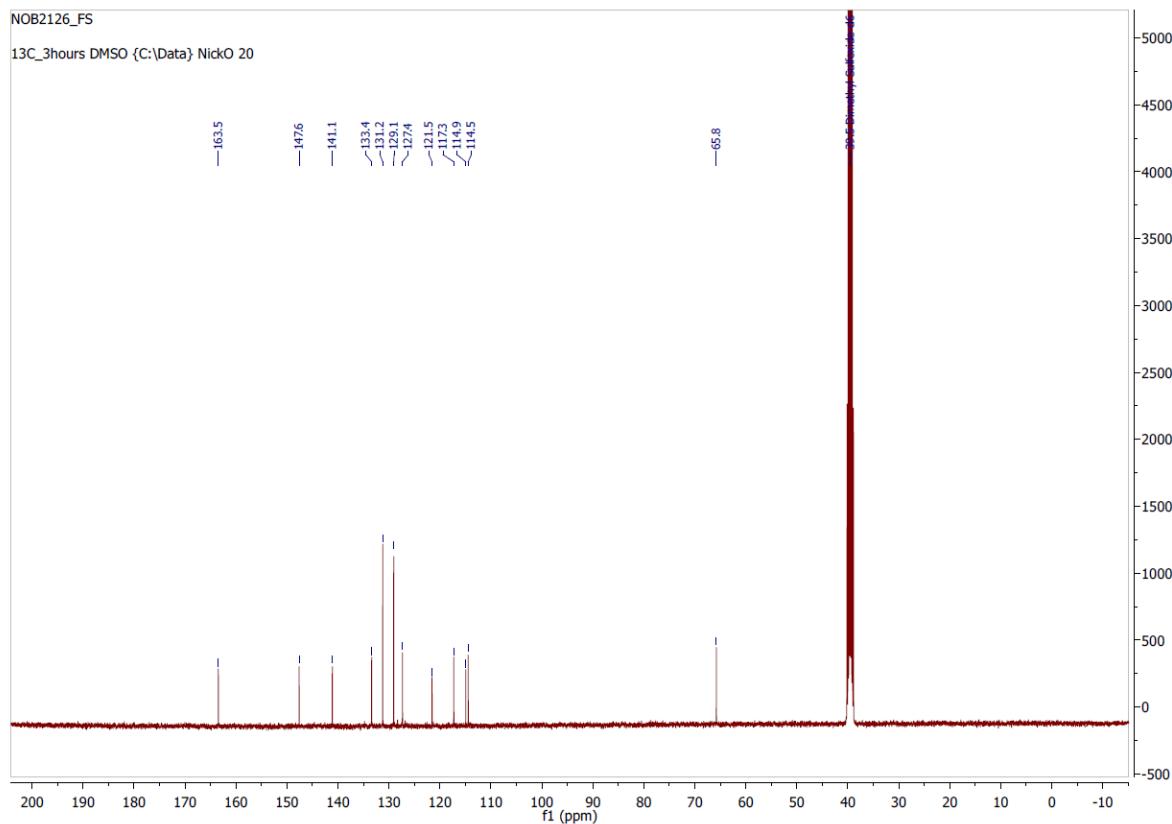
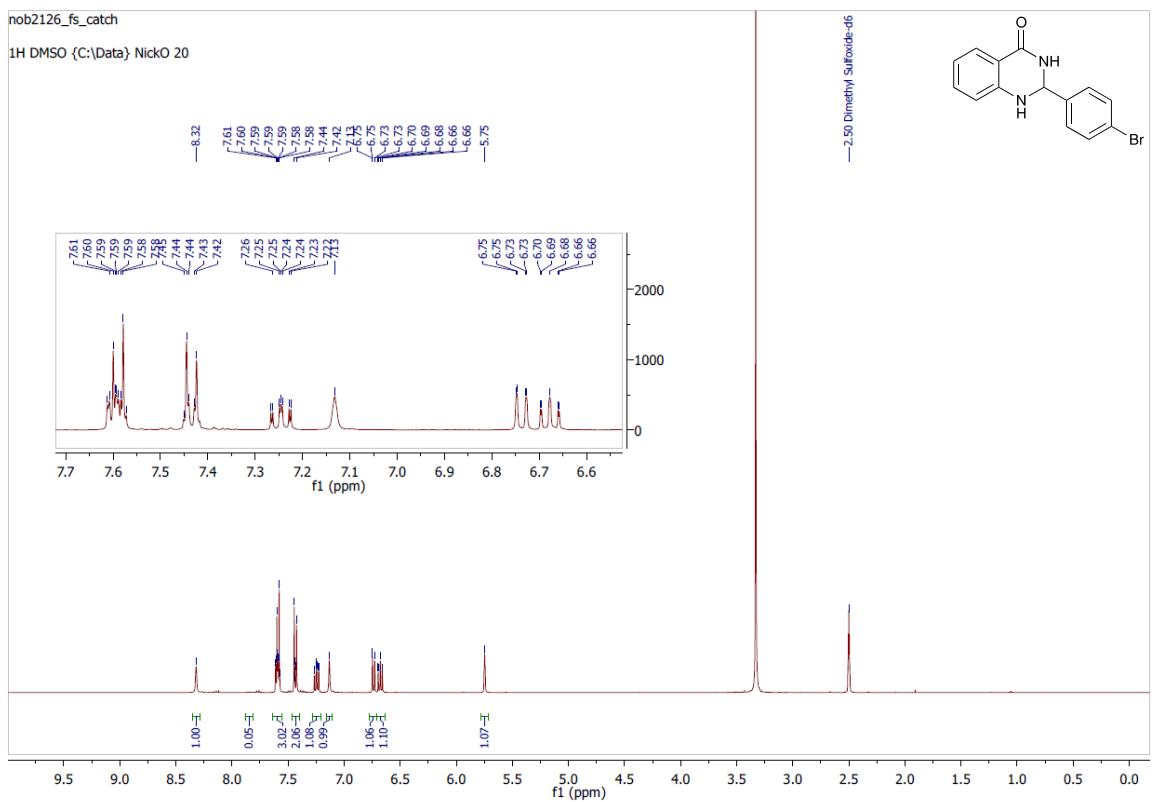
<sup>B</sup>Corresponding author. Email: Adam.McCluskey@newcastle.edu.au

*1H and 13C NMR spectra were recorded at 400 and 101 MHz, respectively*

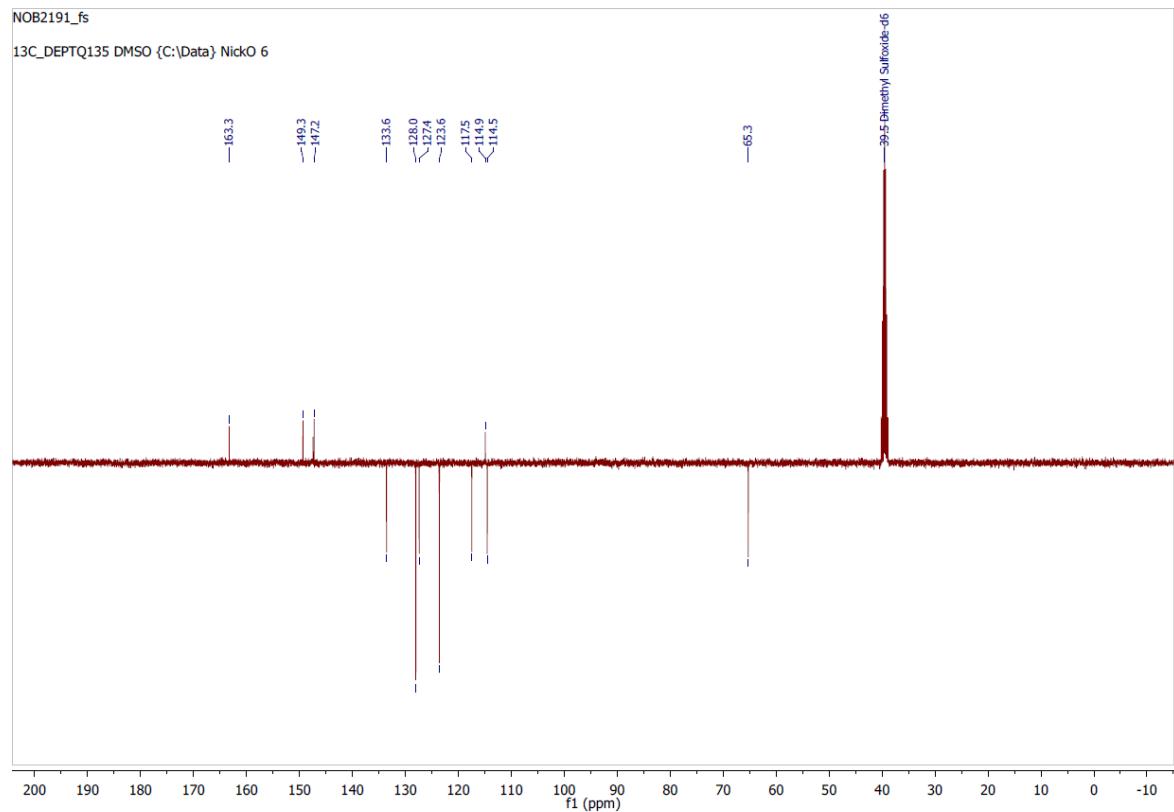
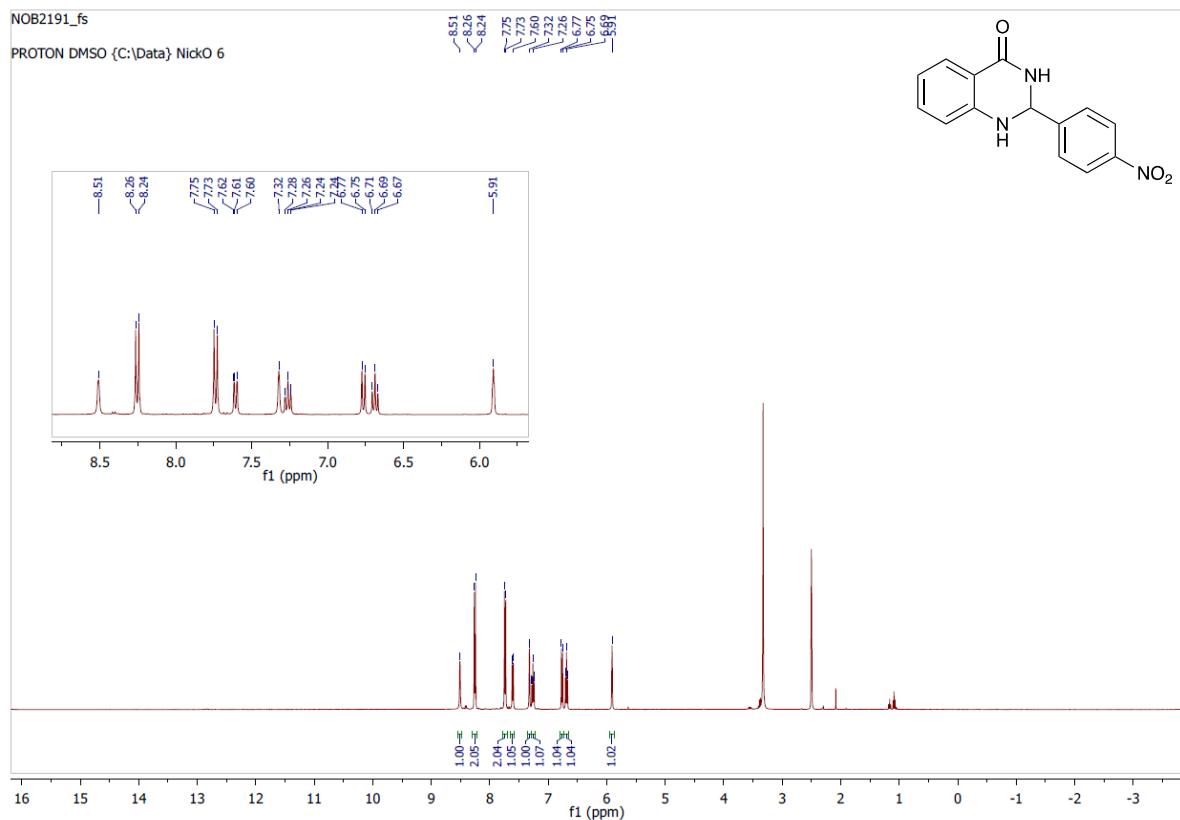
**2-Phenyl-2,3-dihydroquinazolin-4(1H)-one (**10a**)**



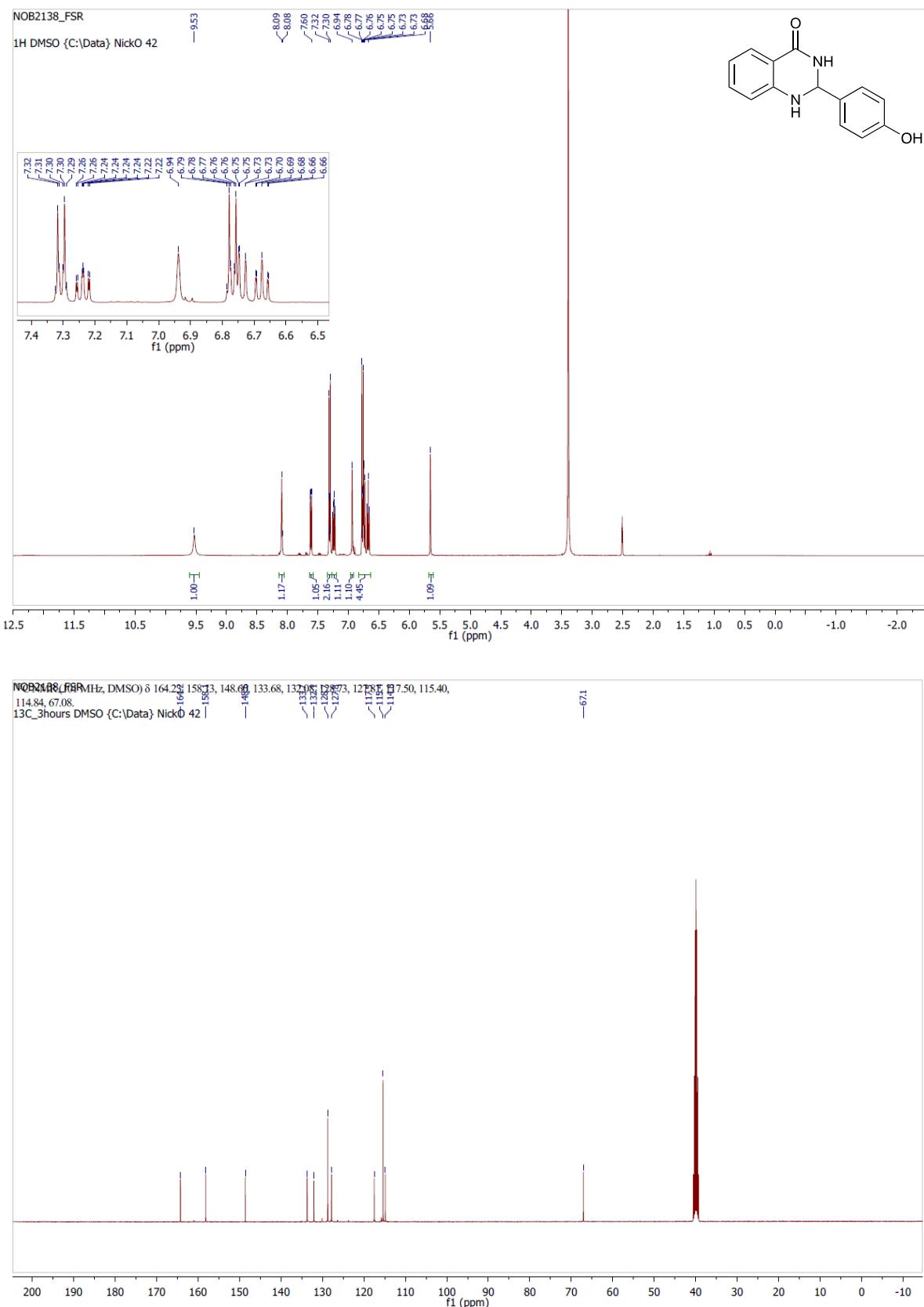
**2-(4-Bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10b**)**



**2-(4-Nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10c**).**



**2-(4-Hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (**10d**)**



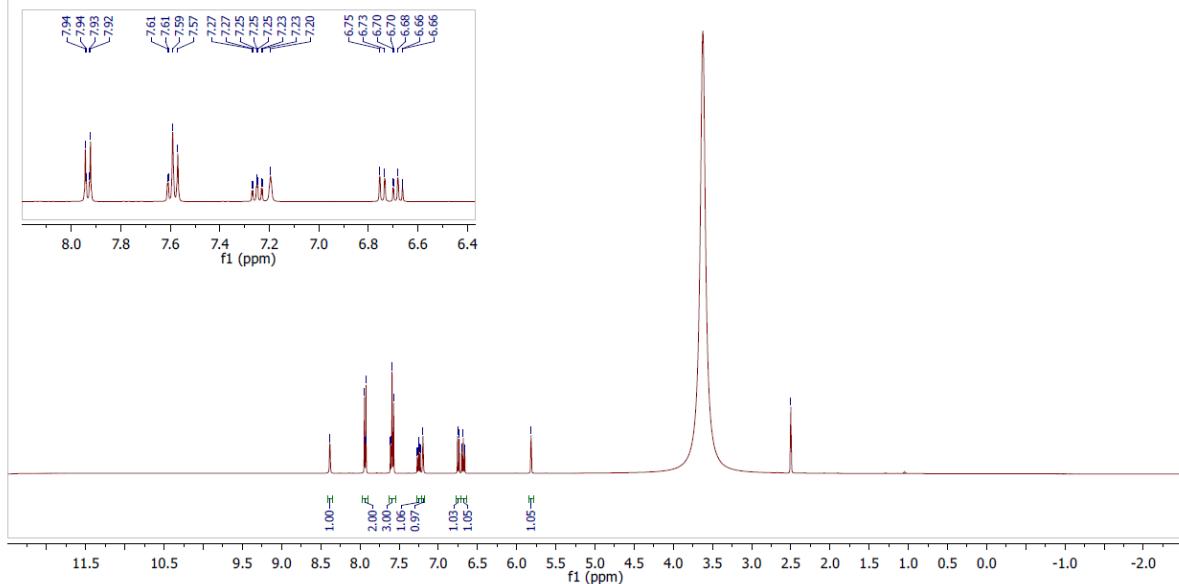
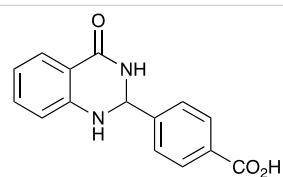
**4-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzoic acid (**10e**)**

NOB2148\_FS

1H DMSO {C:\Data} NickO 55

—8.38  
—7.94  
—7.94  
—7.93  
—7.92  
—7.61  
—7.61  
—7.59  
—7.57  
—7.27  
—7.27  
—7.25  
—7.25  
—7.23  
—7.23  
—7.20  
—6.75  
—6.73  
—6.70  
—6.70  
—6.68  
—6.66  
—6.66  
—6.66  
—6.75  
—6.73  
—6.70  
—5.68

—2.59 Dimethyl Sulfoxide-d6



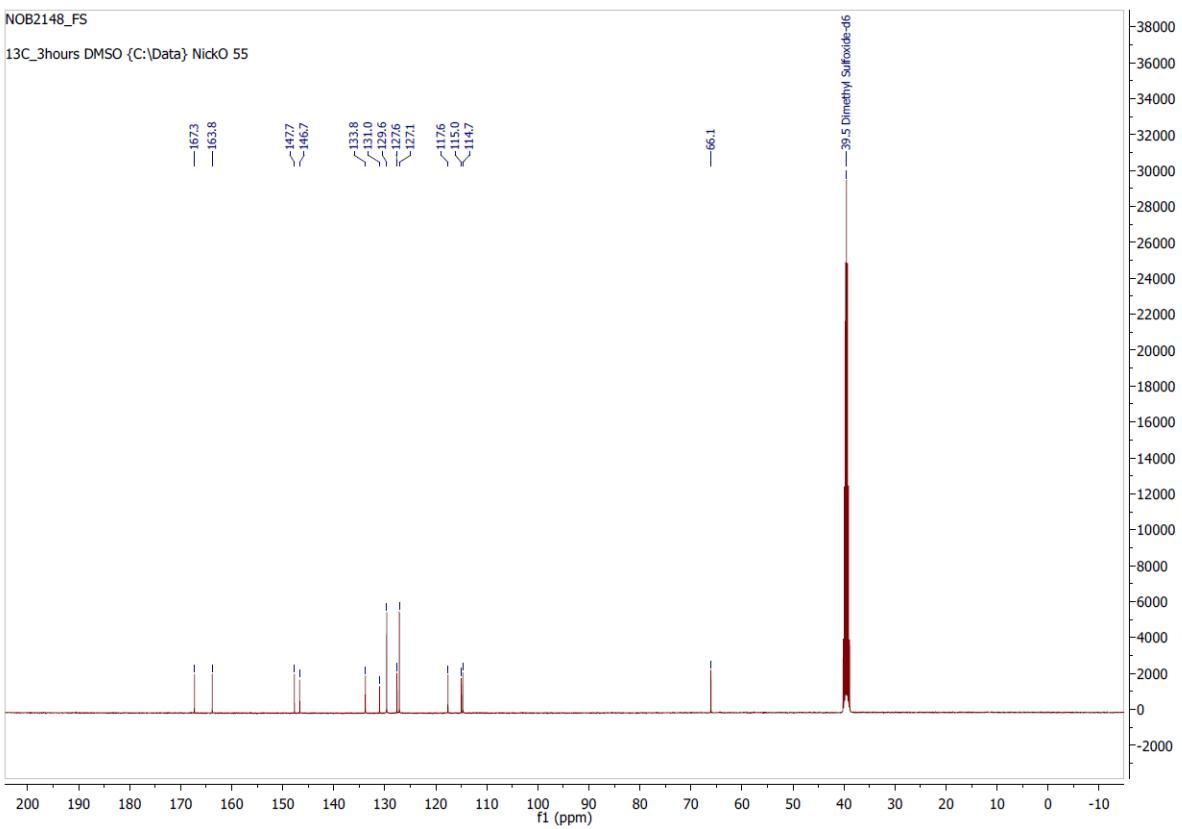
NOB2148\_FS

13C\_3hours DMSO {C:\Data} NickO 55

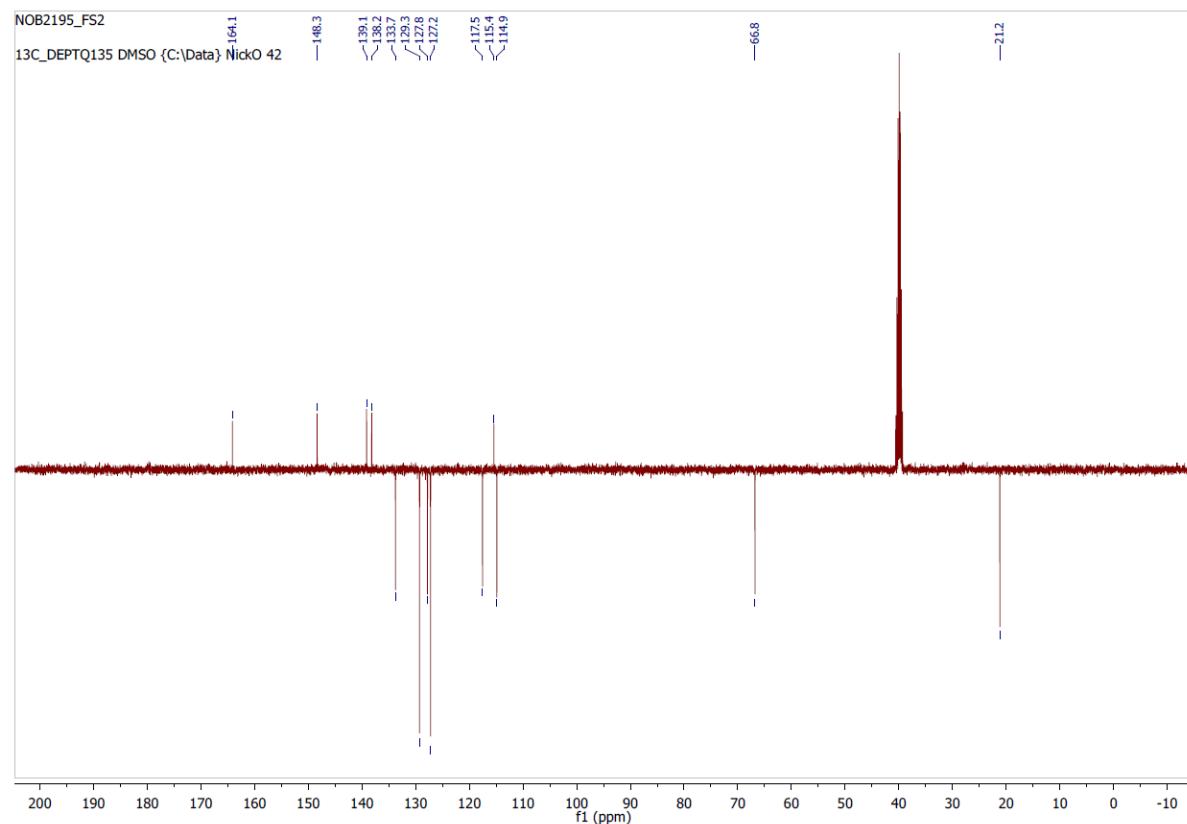
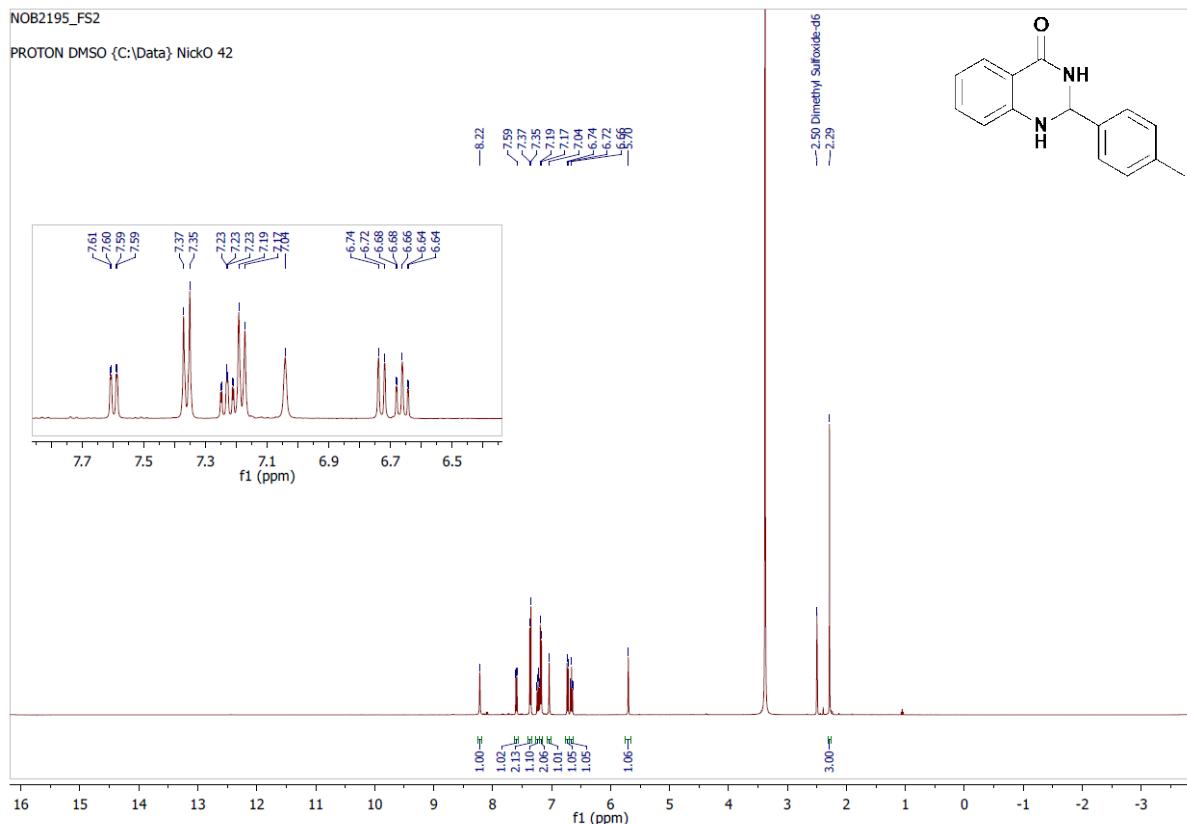
—147.7  
—146.7  
—167.3  
—163.8

—66.1

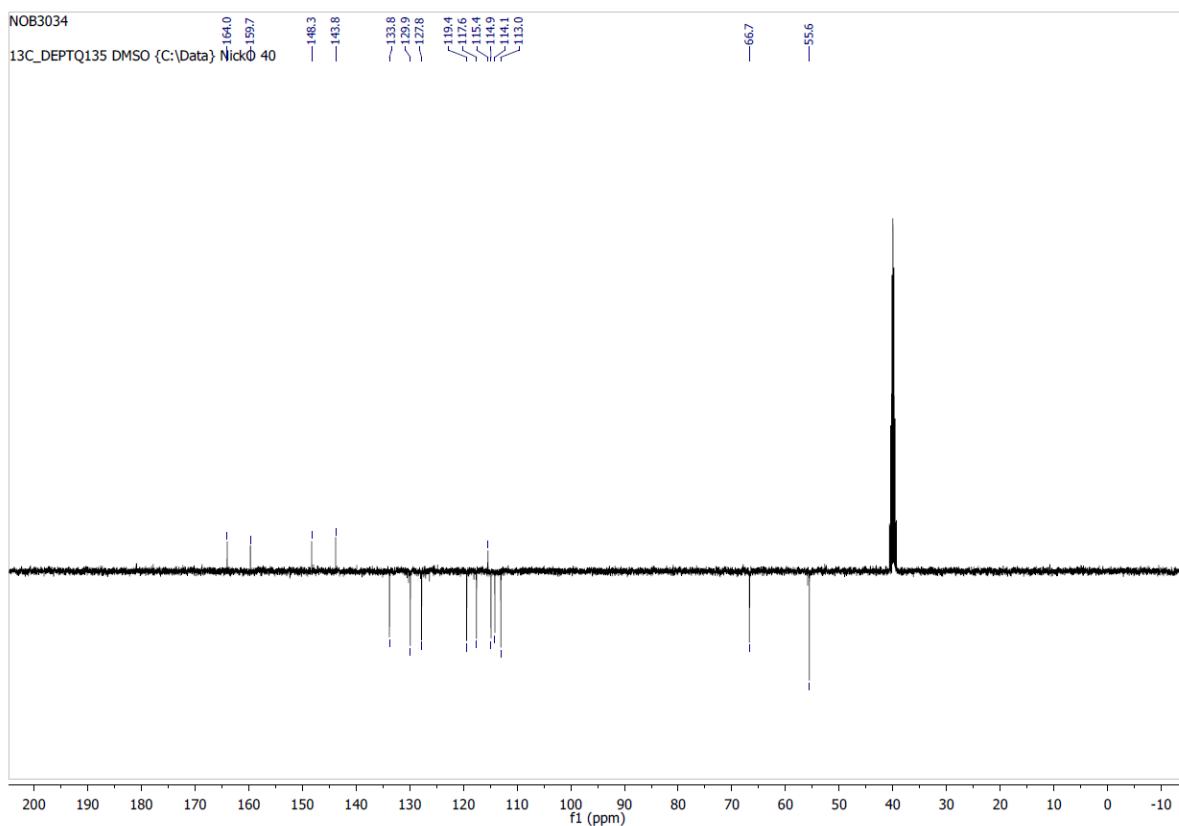
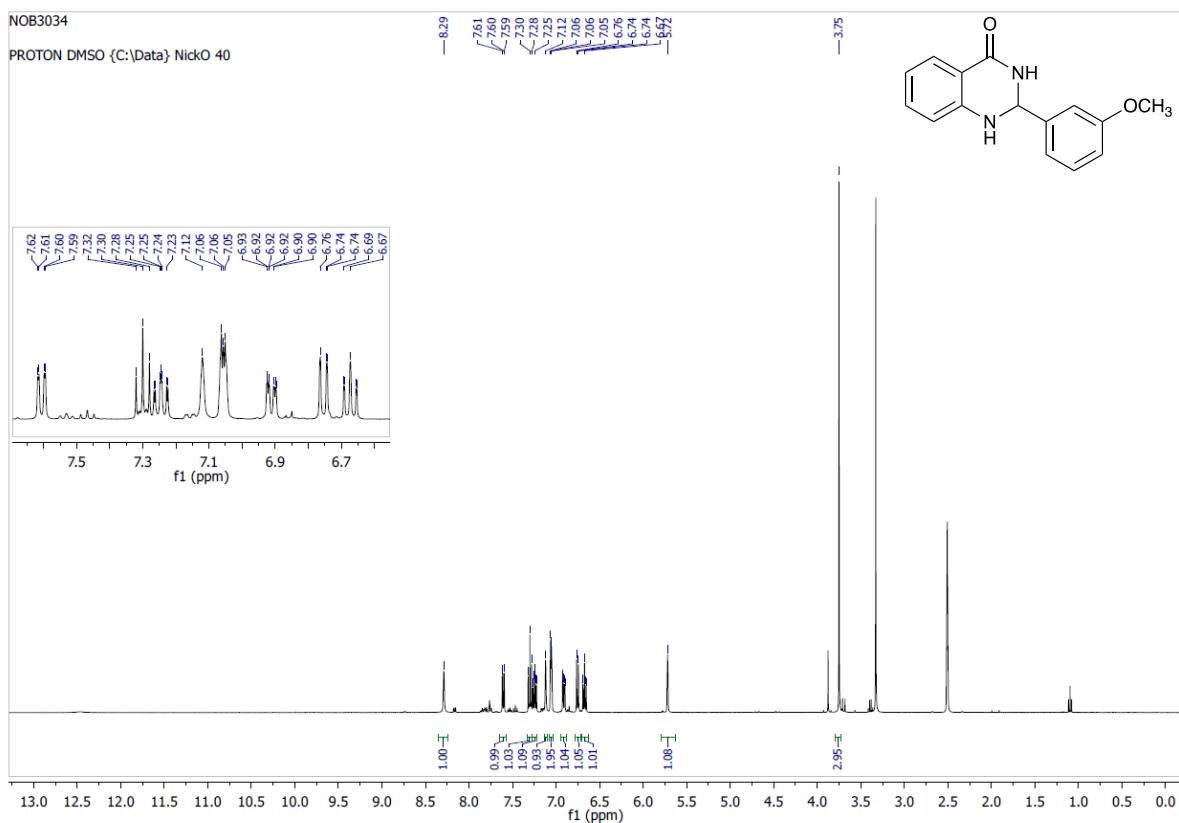
—39.5 Dimethyl Sulfoxide-d6



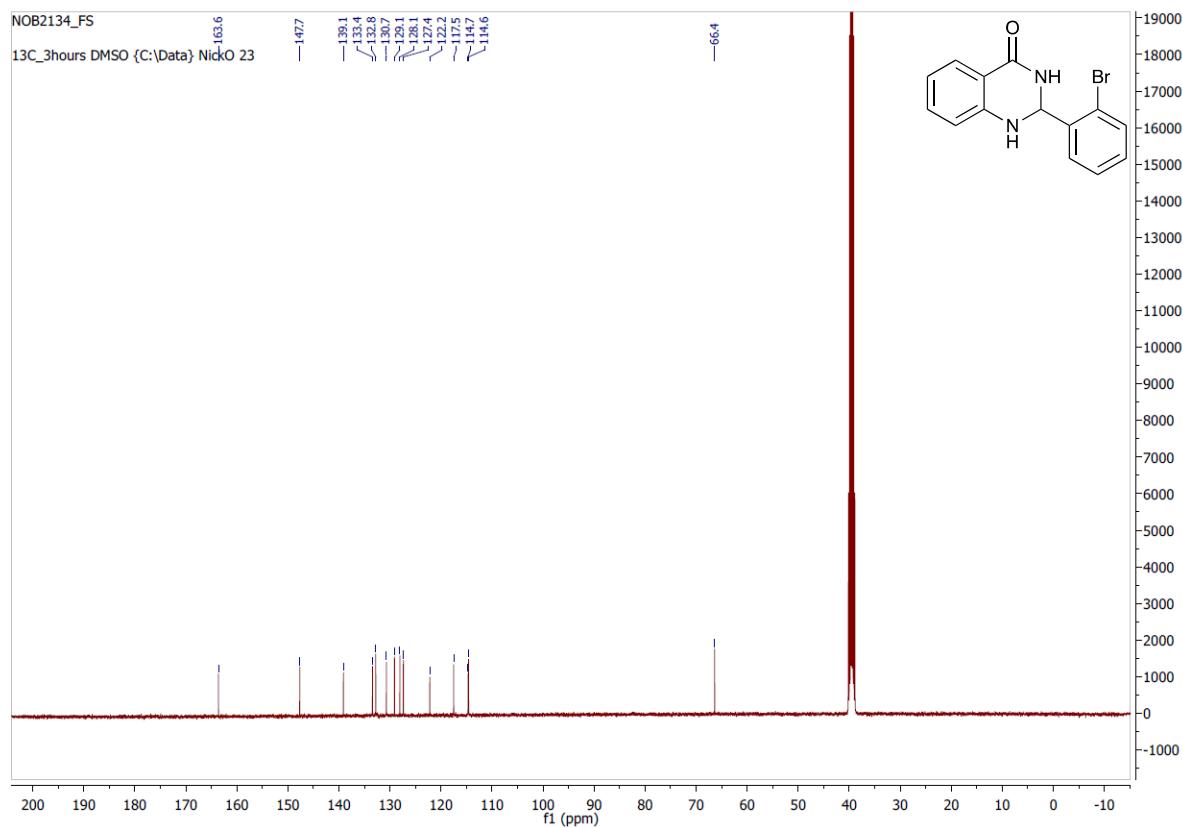
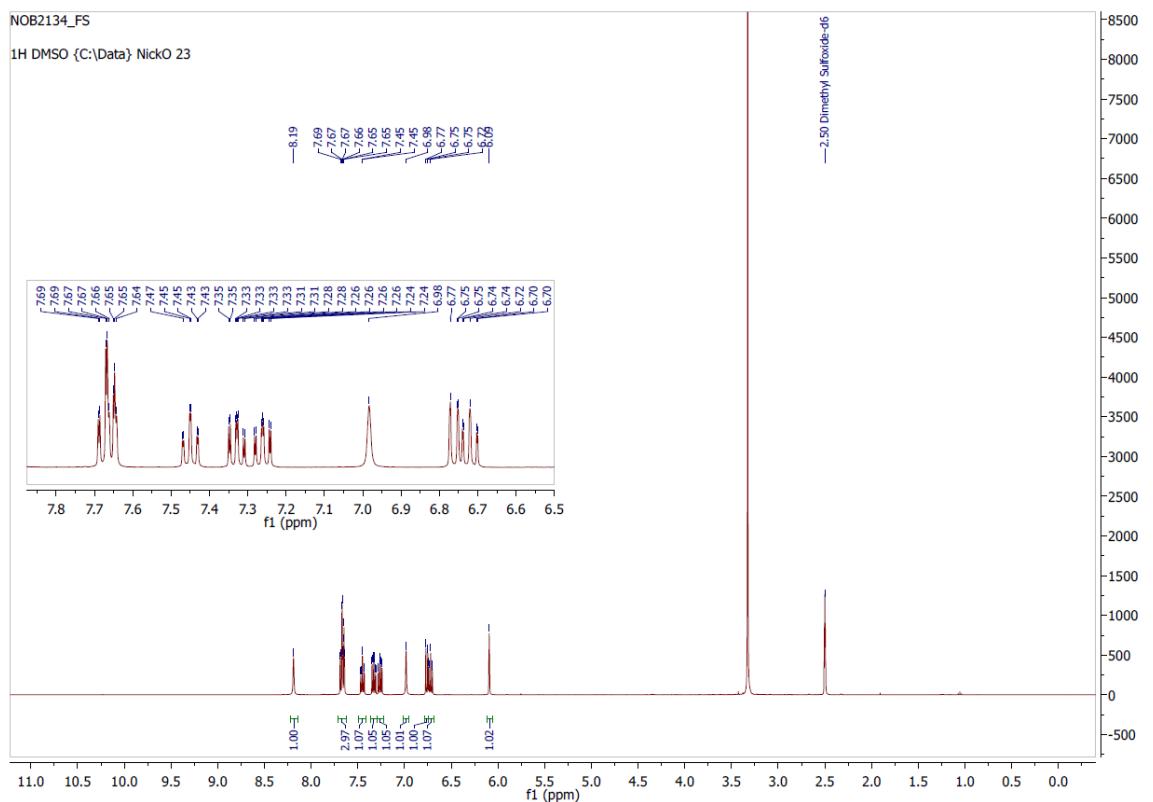
**2-(*p*-Tolyl)-2,3-dihydroquinazolin-4(1H)-one (**10f**)**



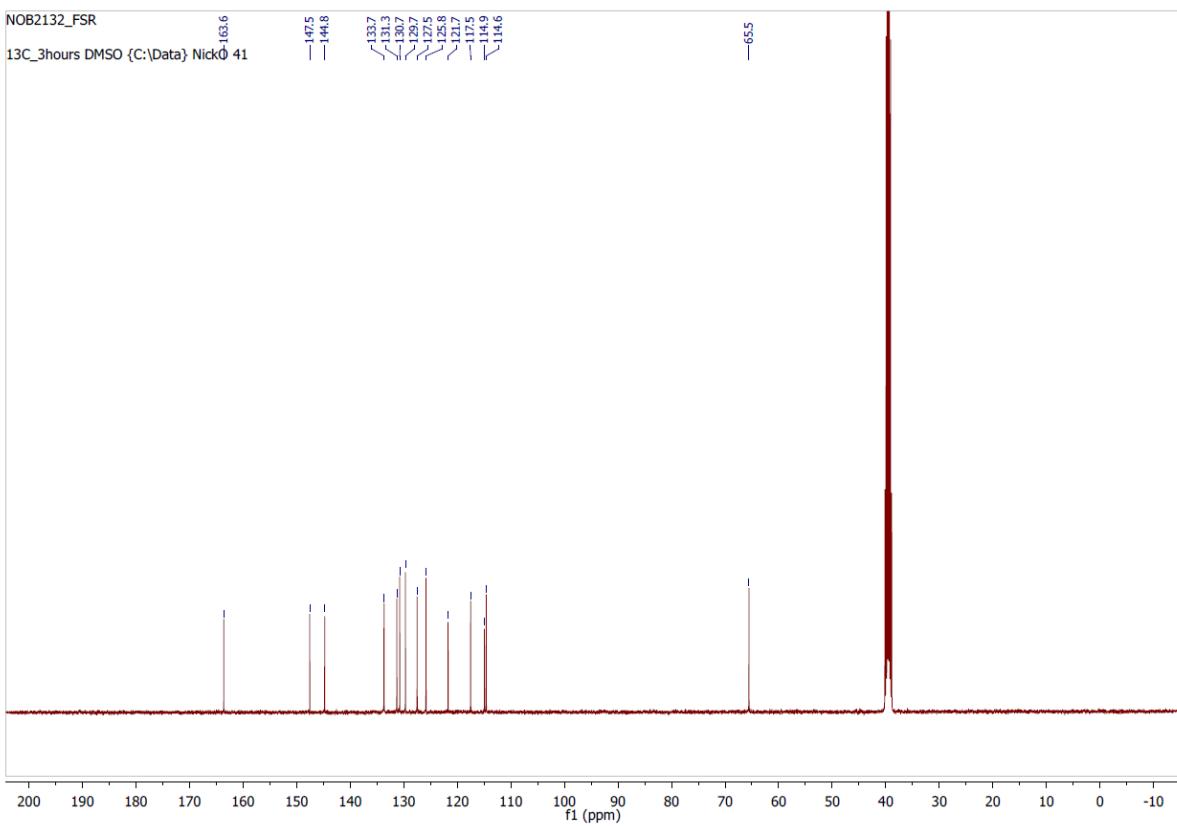
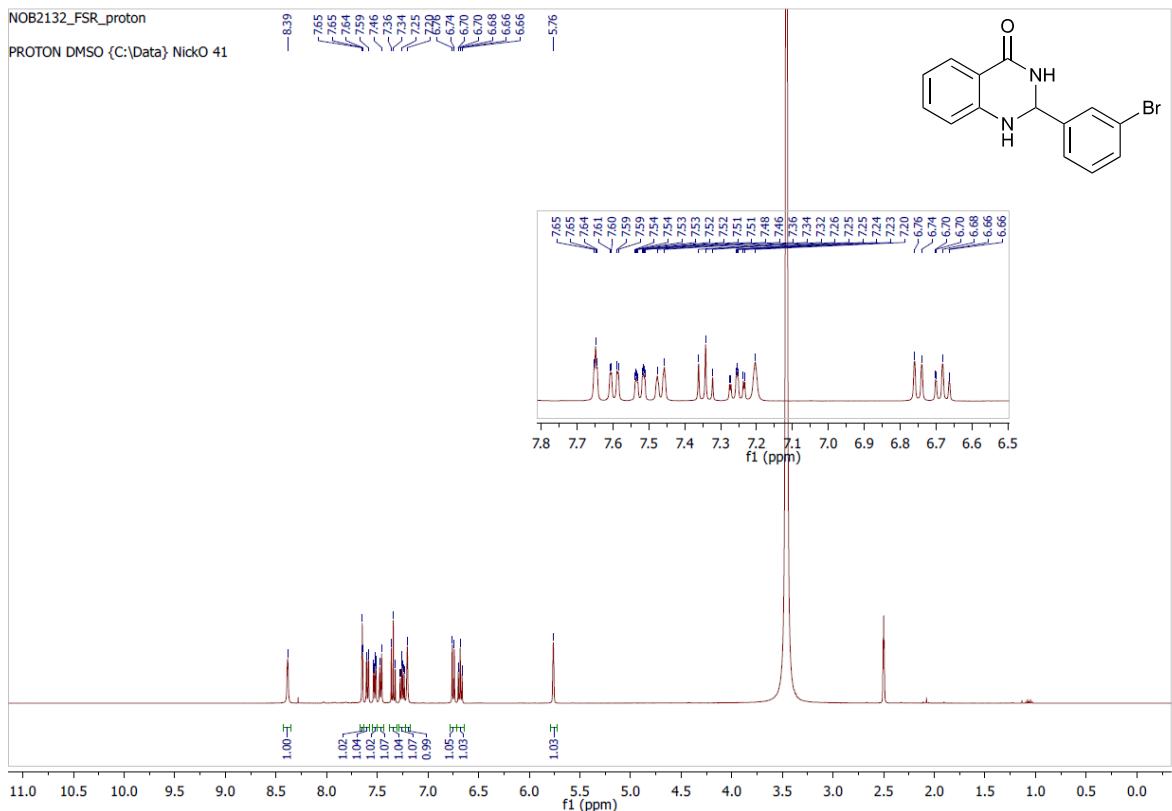
**2-(3-Methoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (**10g**)**



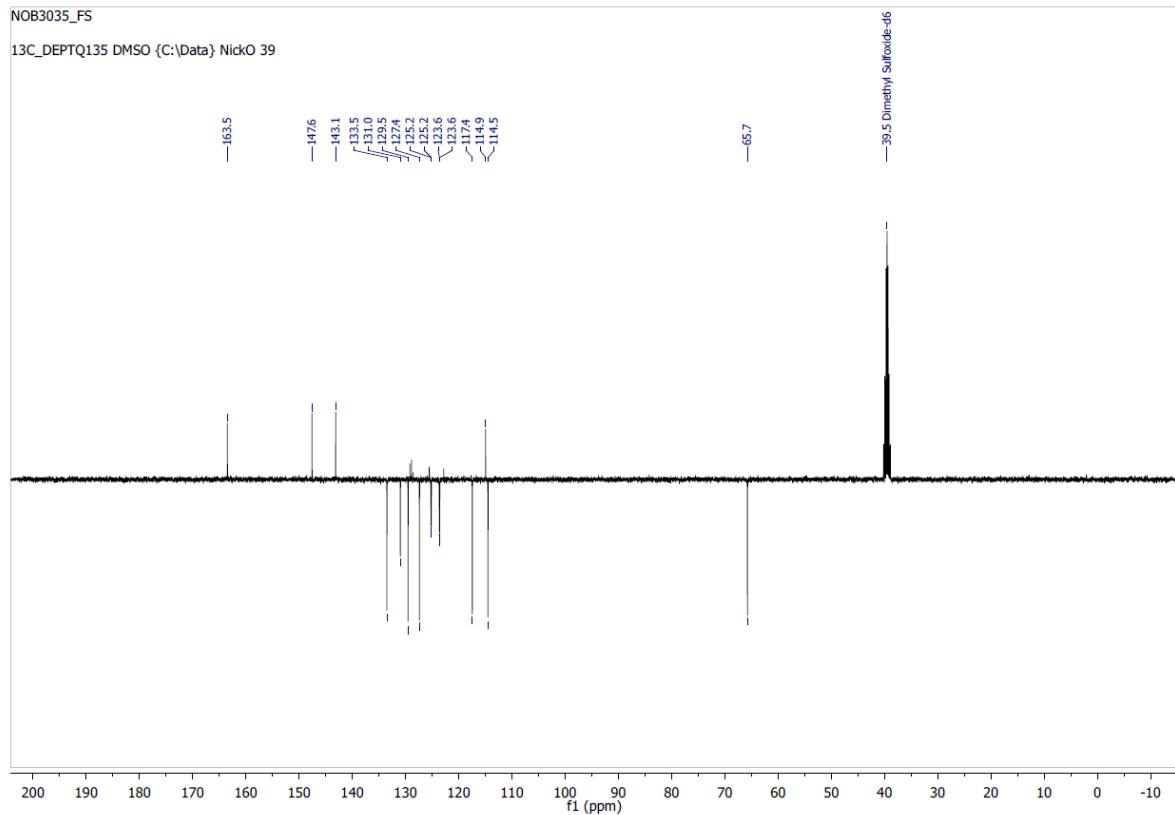
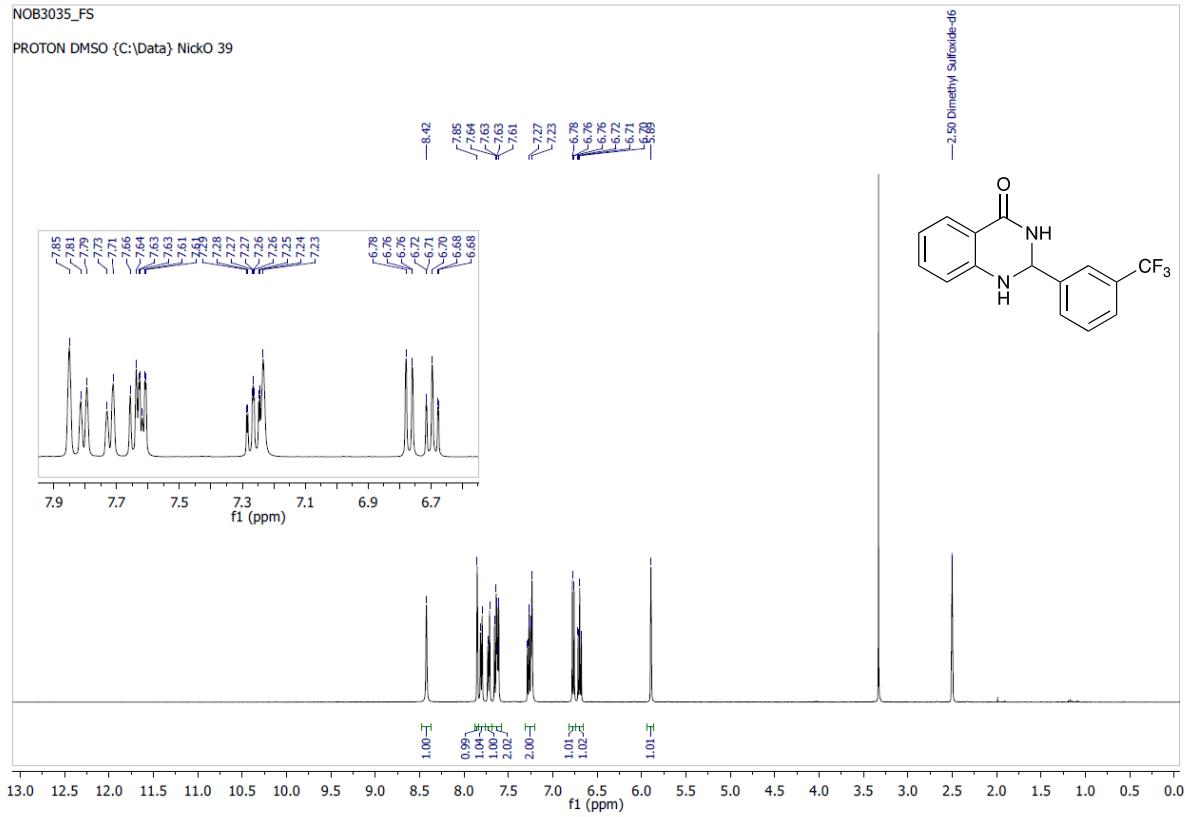
**2-(2-Bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10h**)**



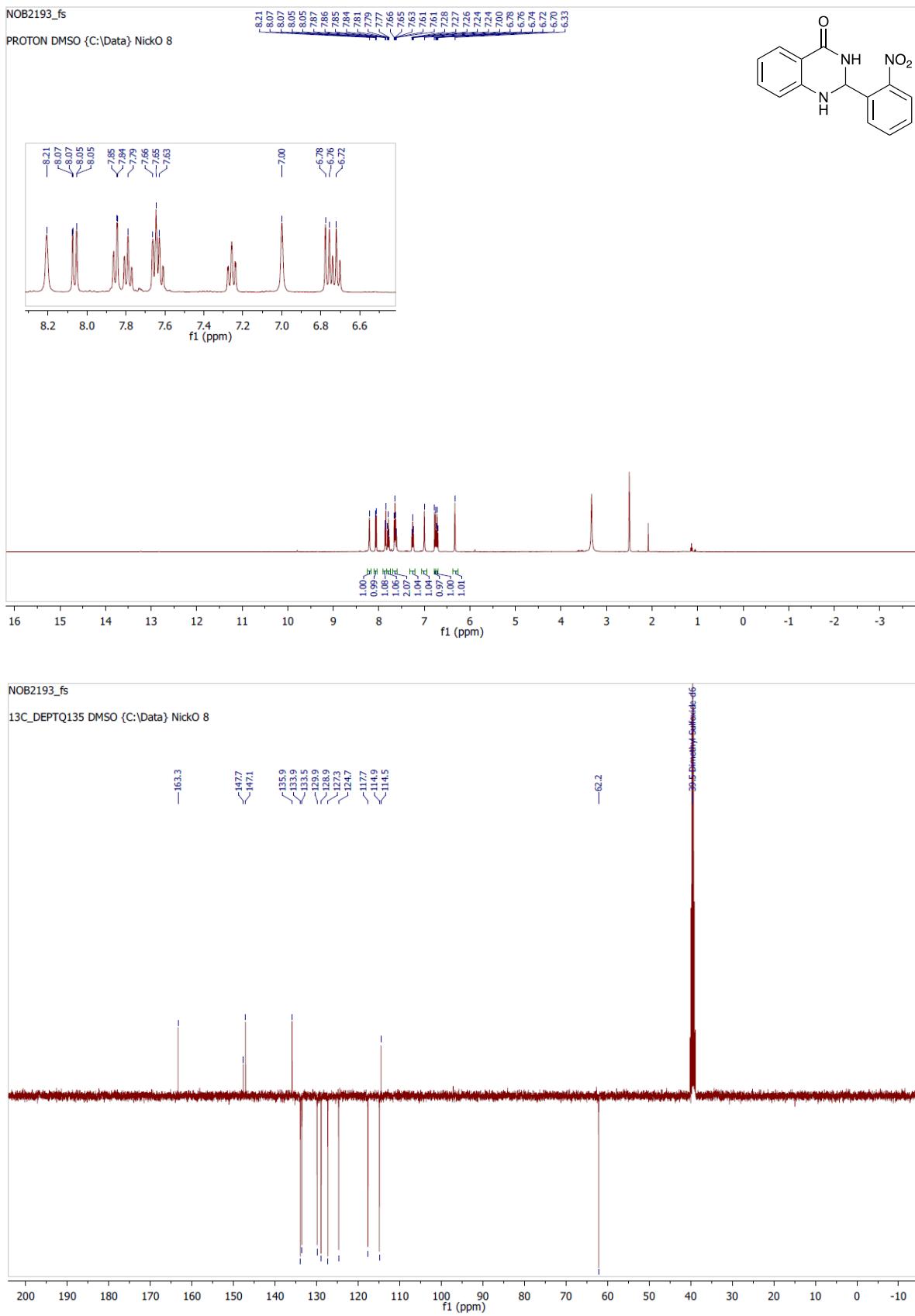
**2-(3-Bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10i**)**



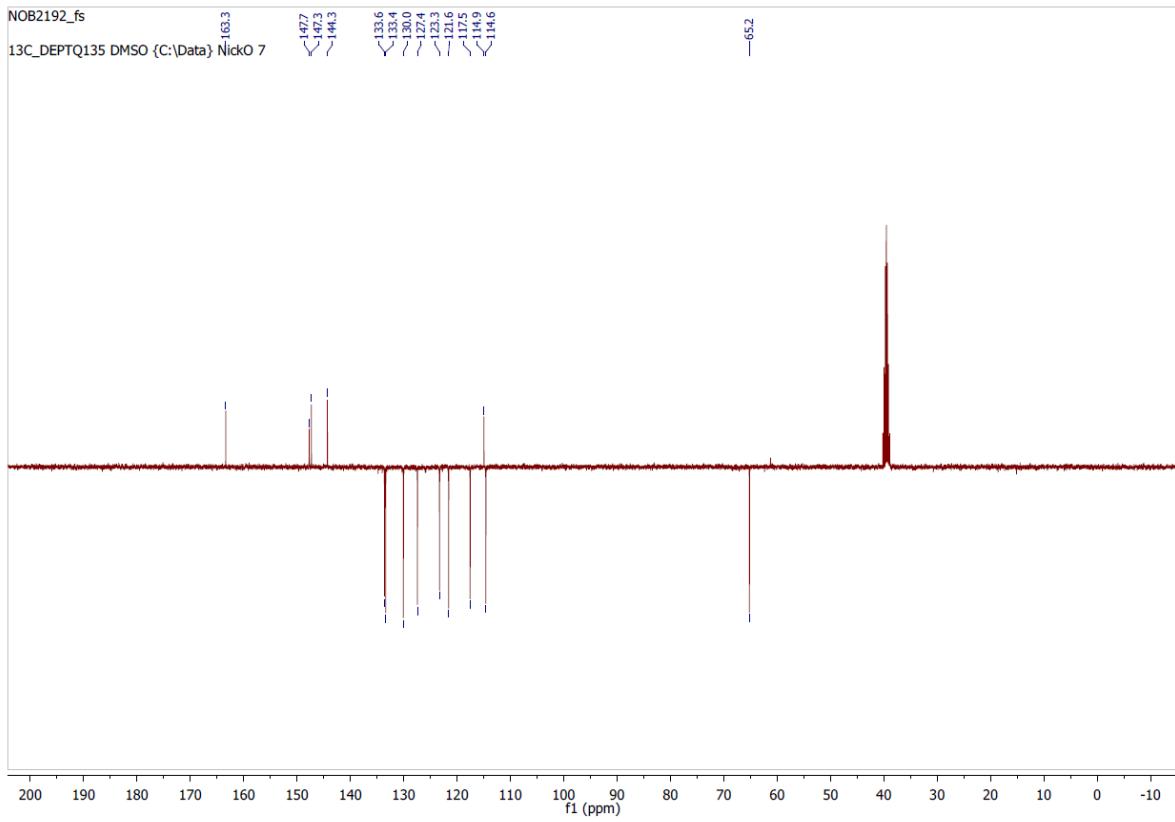
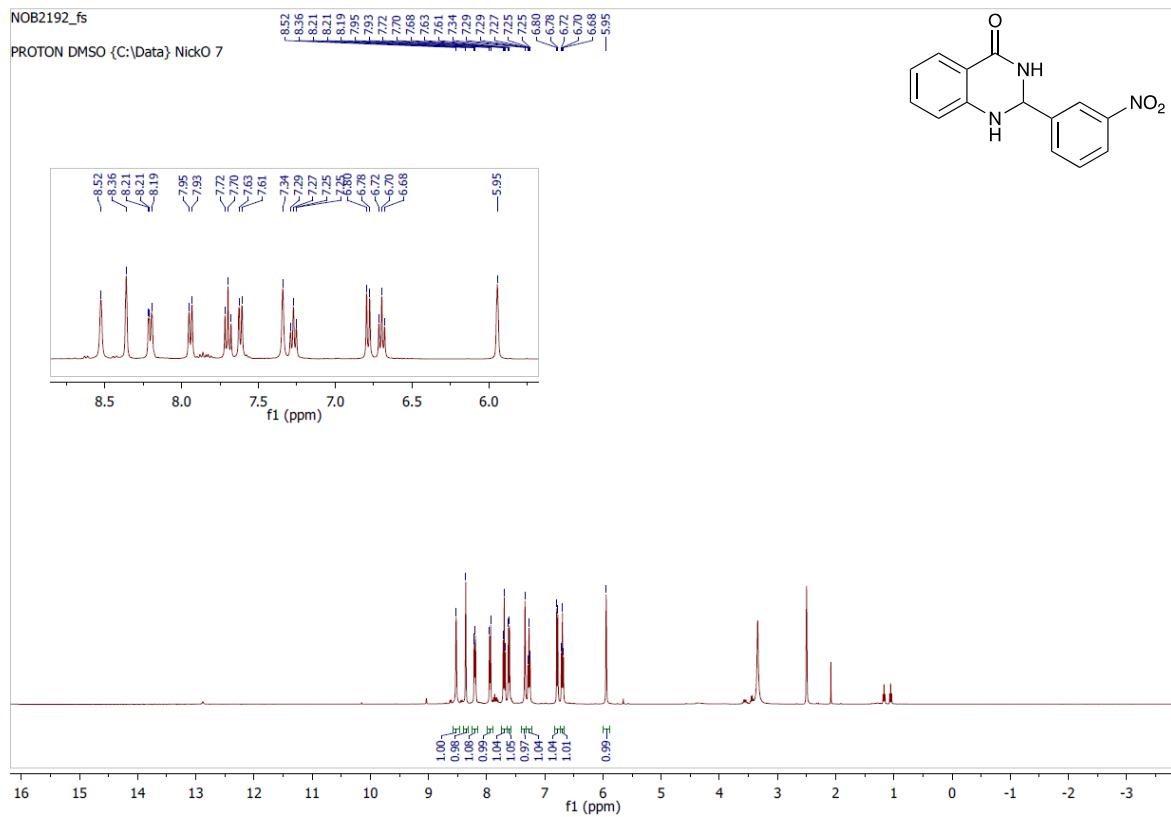
*2-(3-(Trifluoromethyl)phenyl)-2,3-dihydroquinazolin-4(1H)-one (10j)*



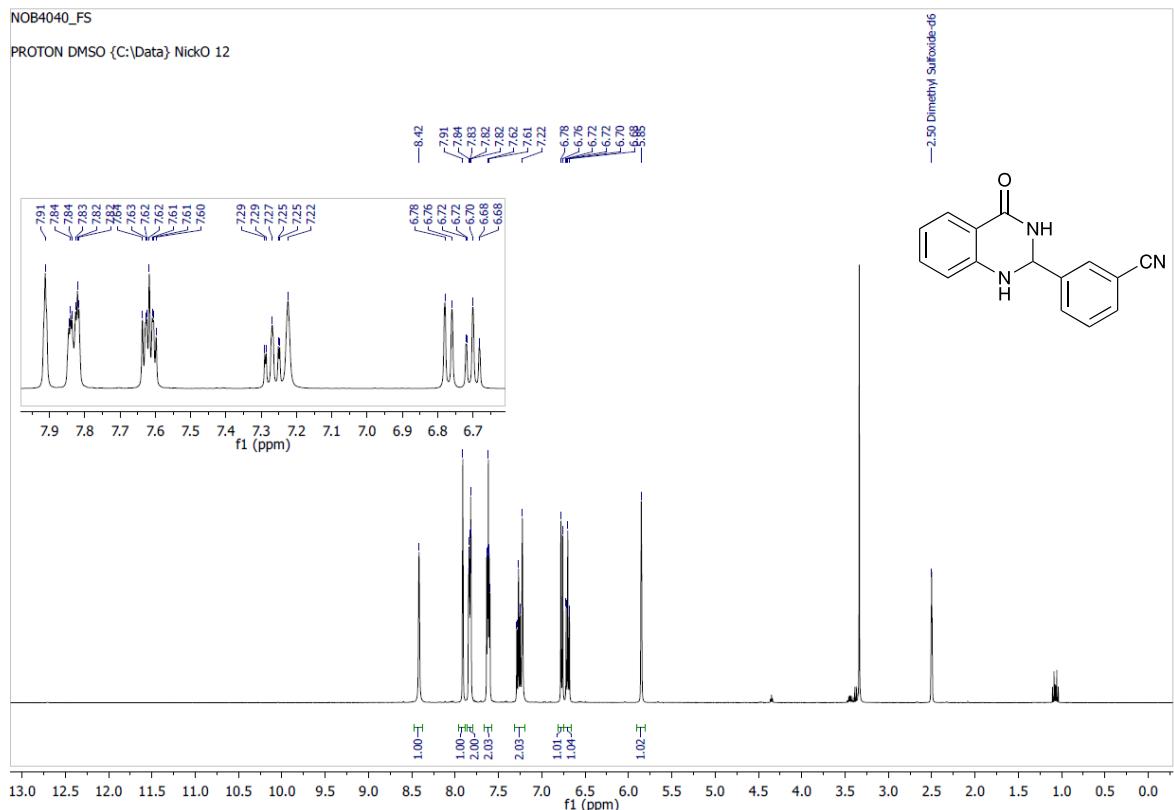
**2-(2-Nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10k**)**



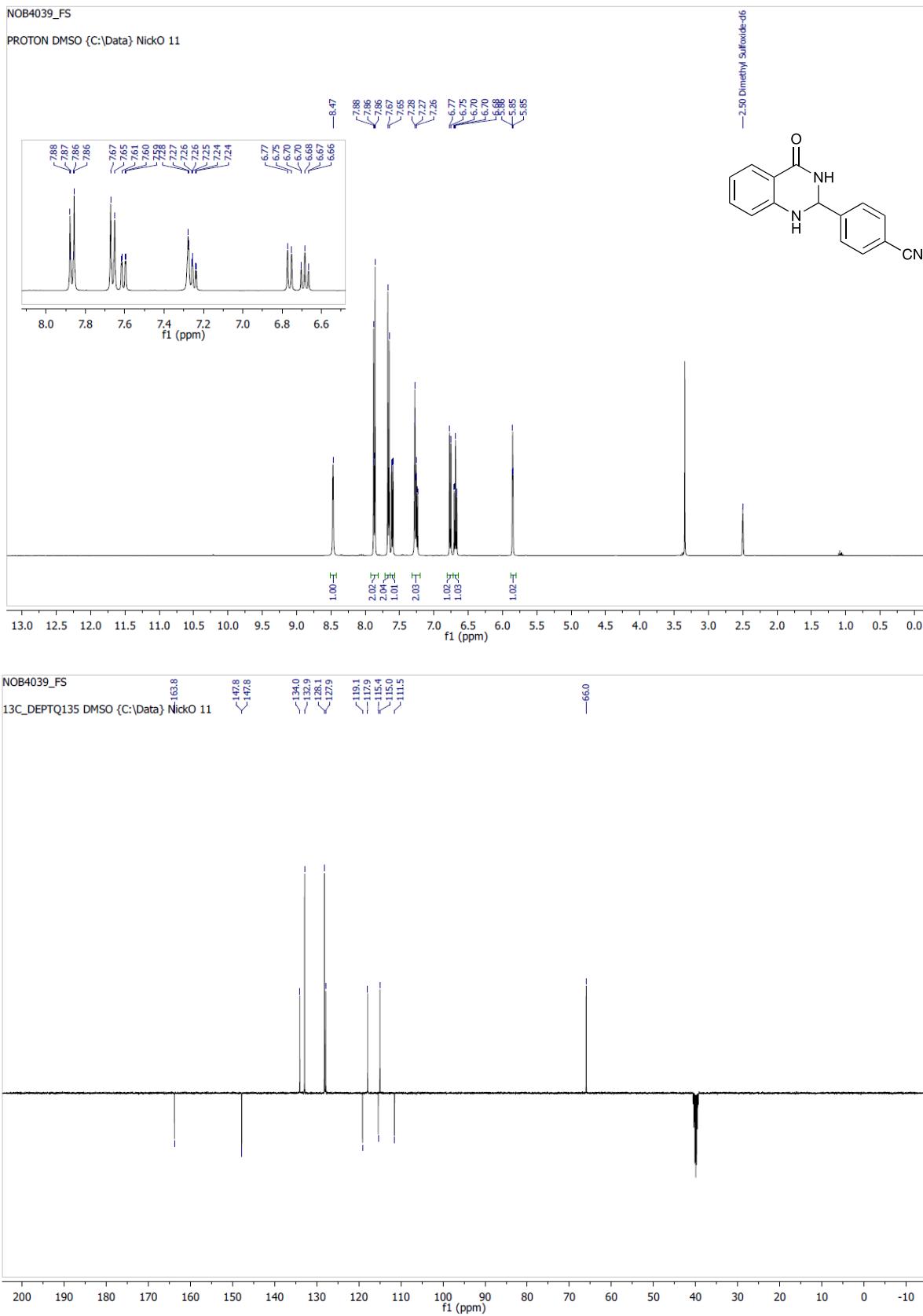
**2-(3-Nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (**10I**)**



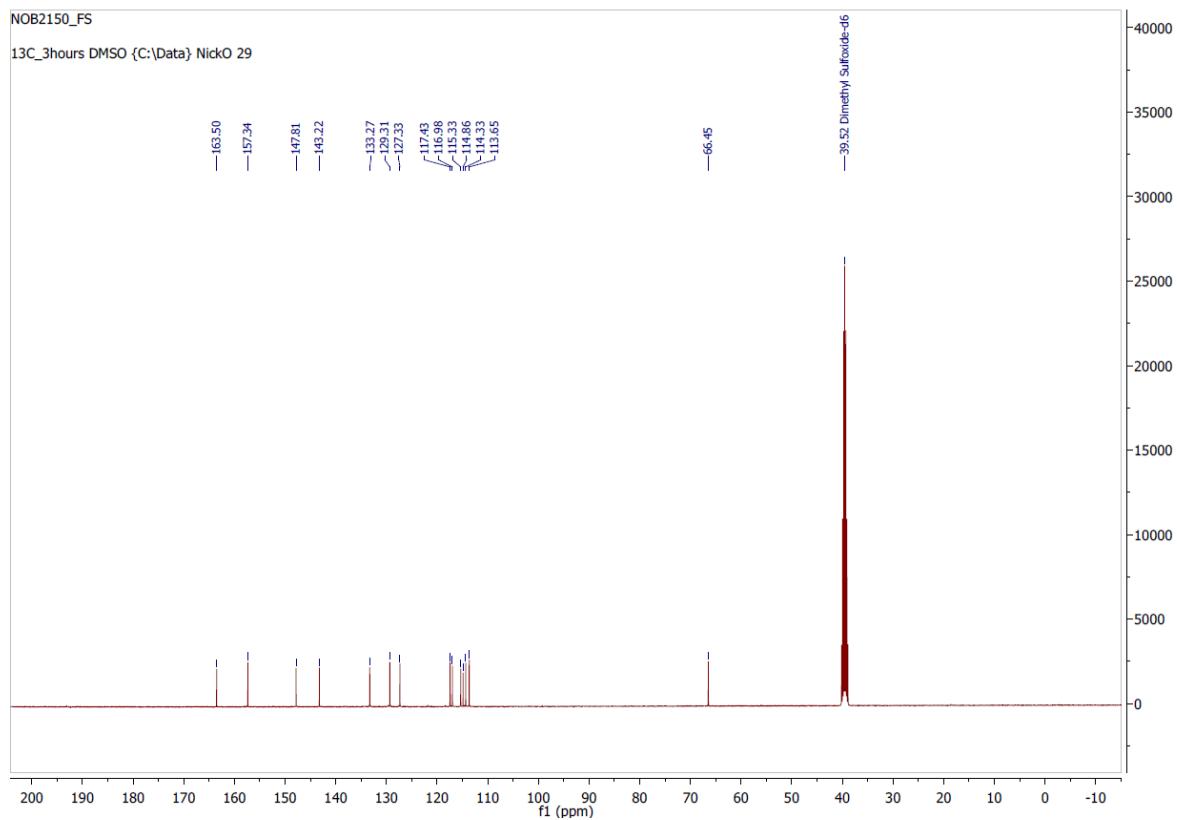
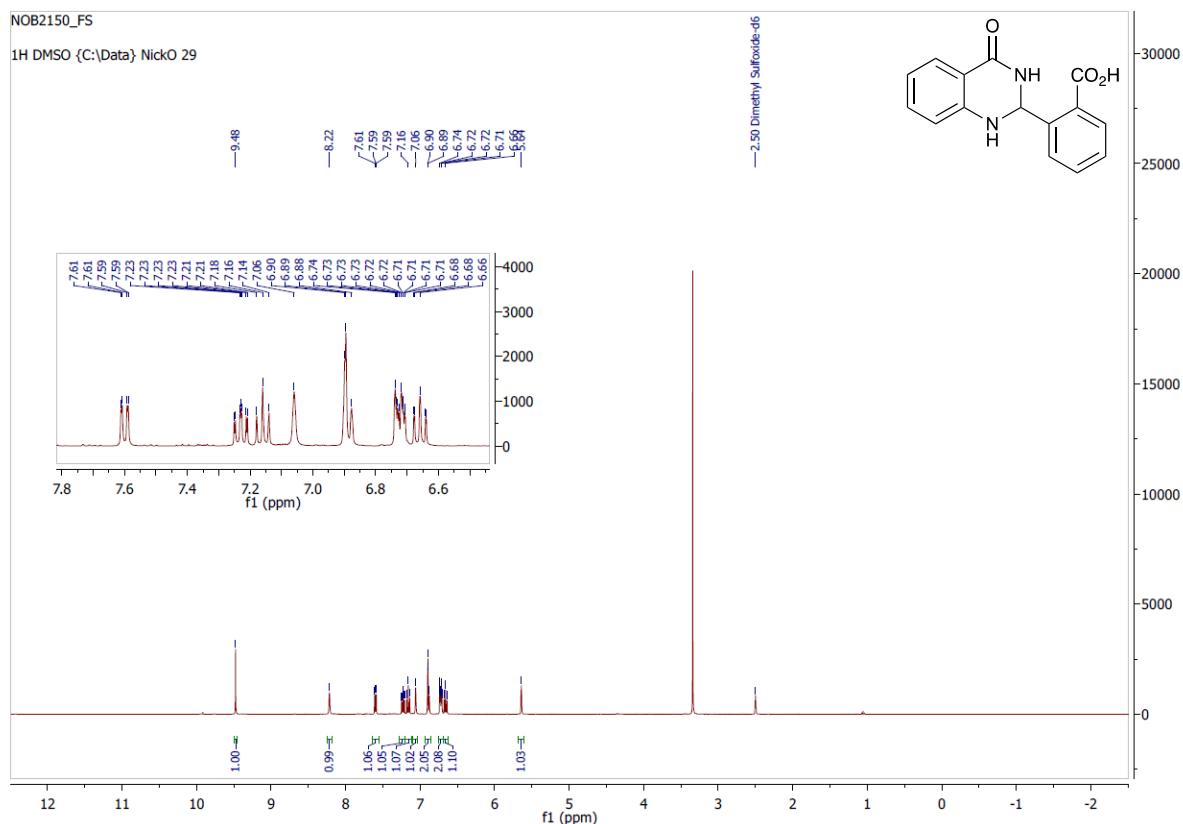
**4-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (**10m**)**



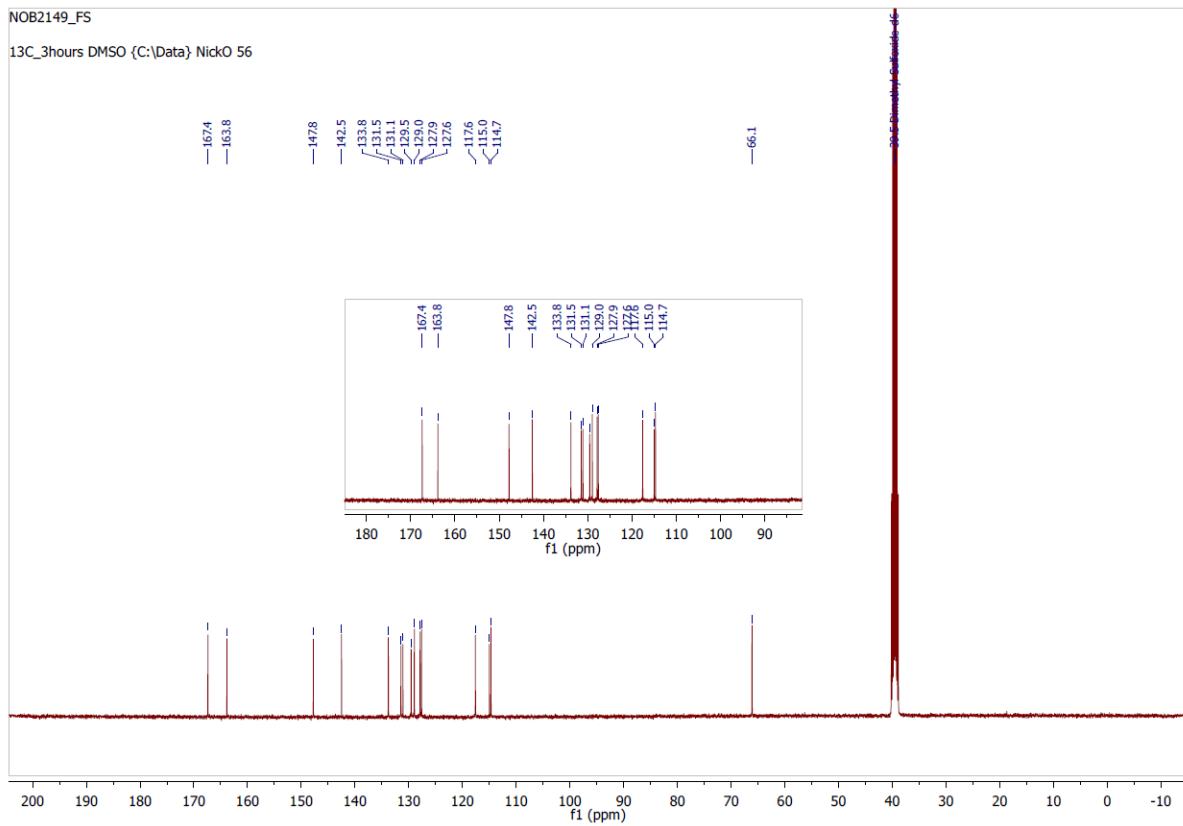
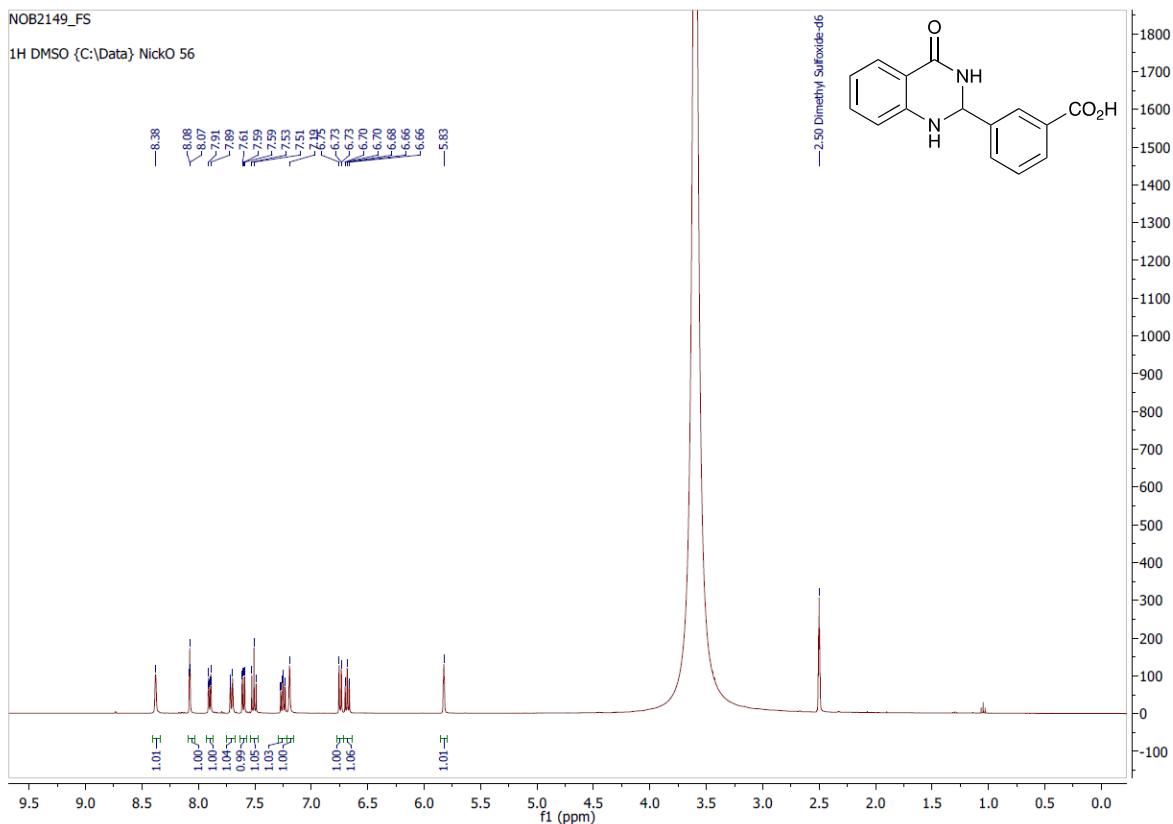
**4-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (**10n**)**



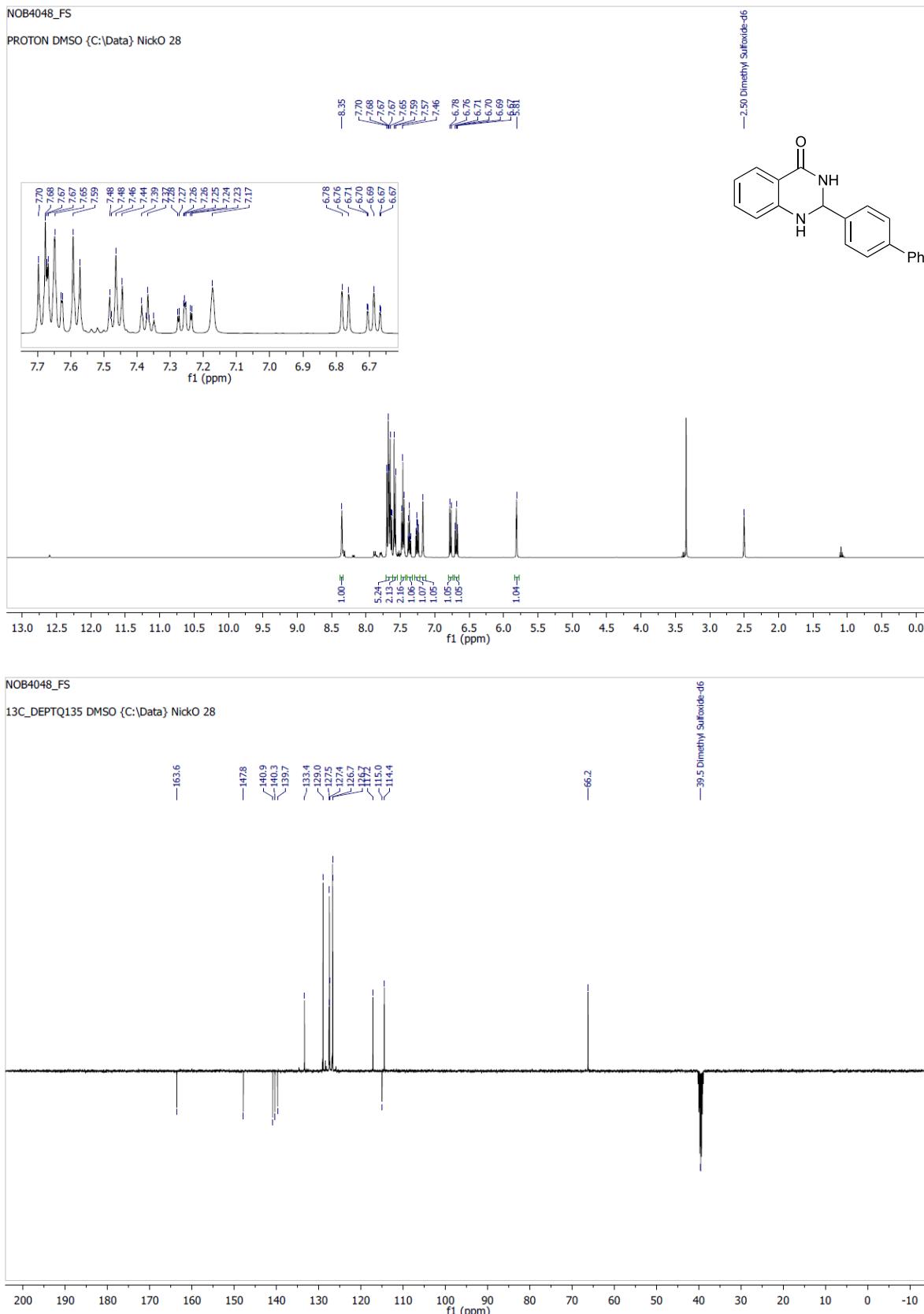
**2-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzoic acid (**10o**)**



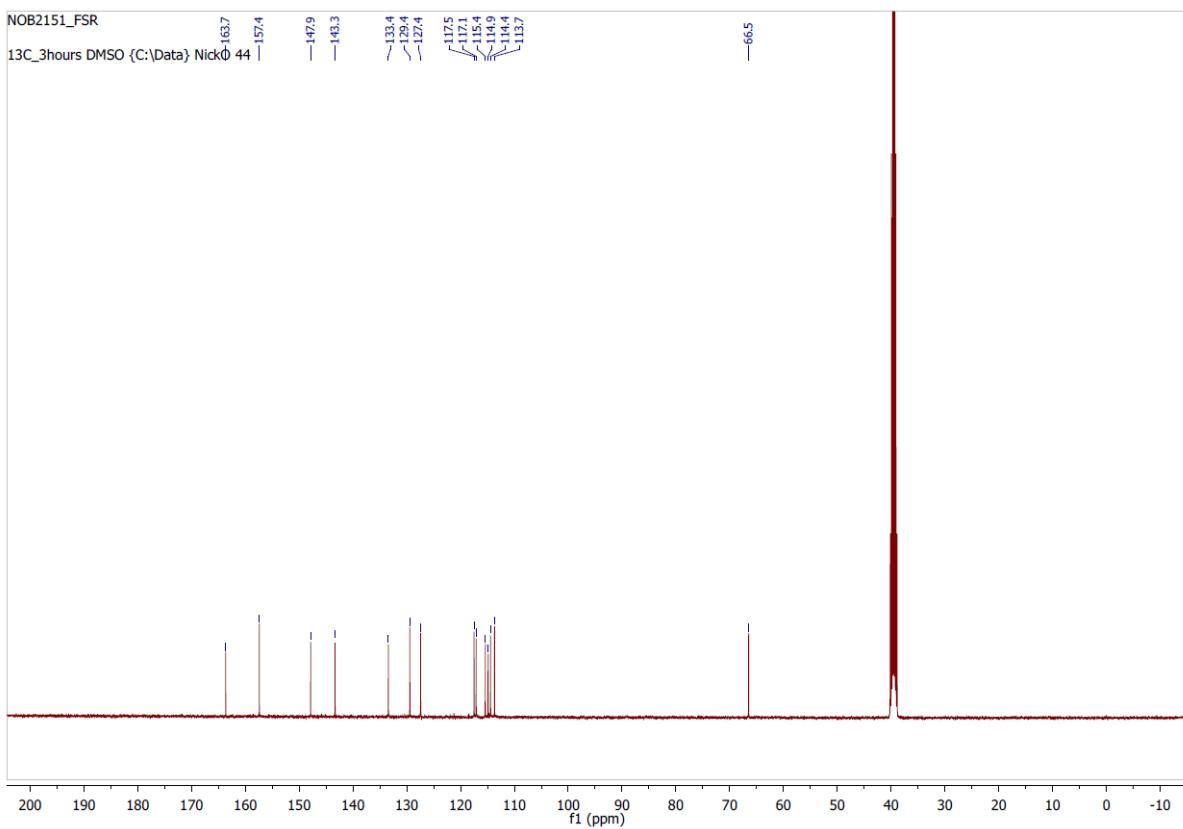
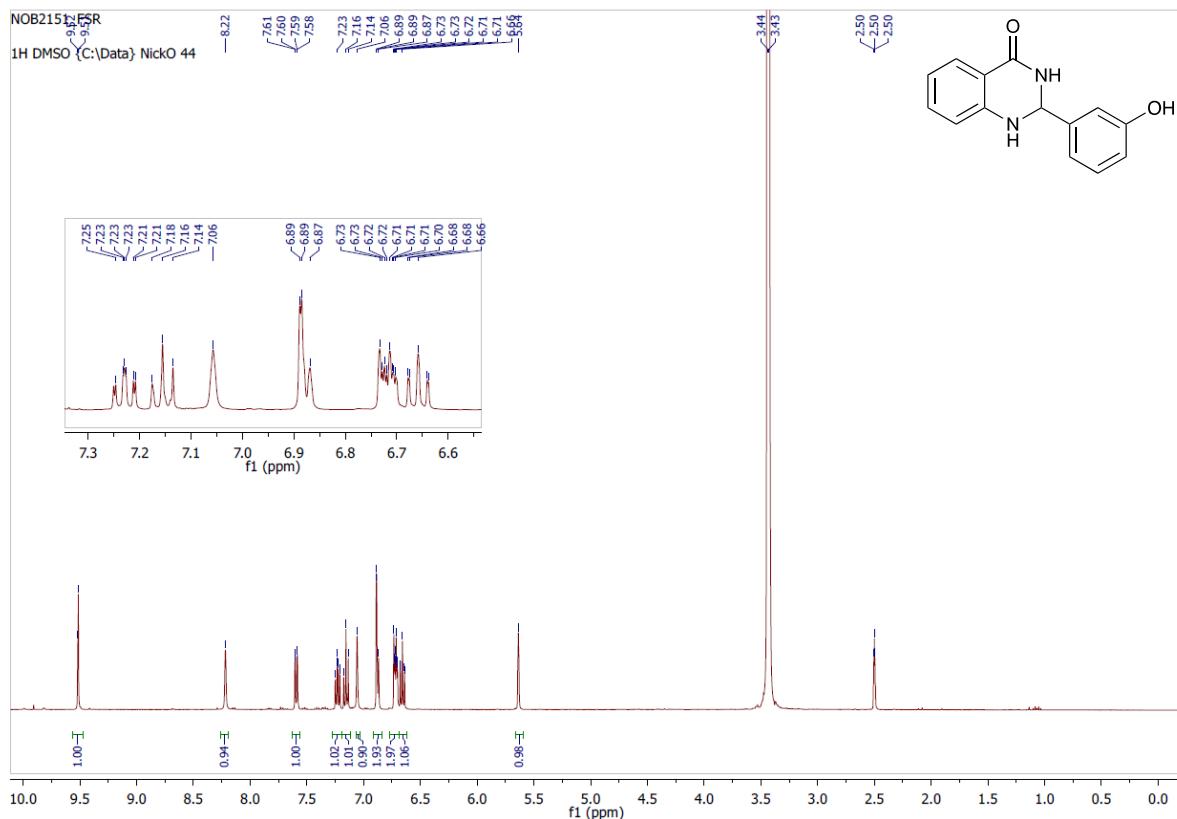
**3-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzoic acid (**10p**)**



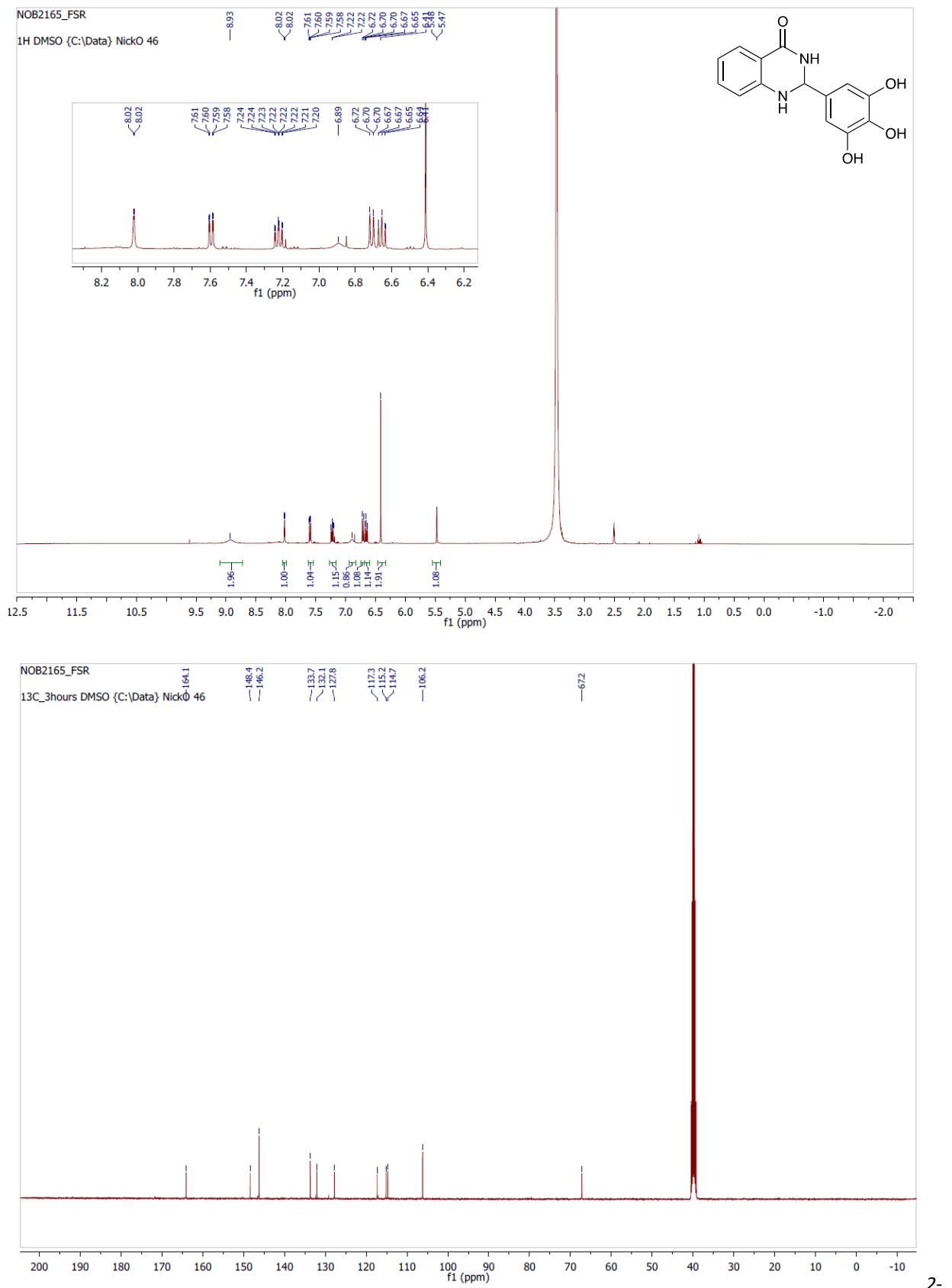
**2-([1,1'-Biphenyl]-4-yl)-2,3-dihydroquinazolin-4(1H)-one (**10q**)**



**2-(3-Hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (**10s**)**

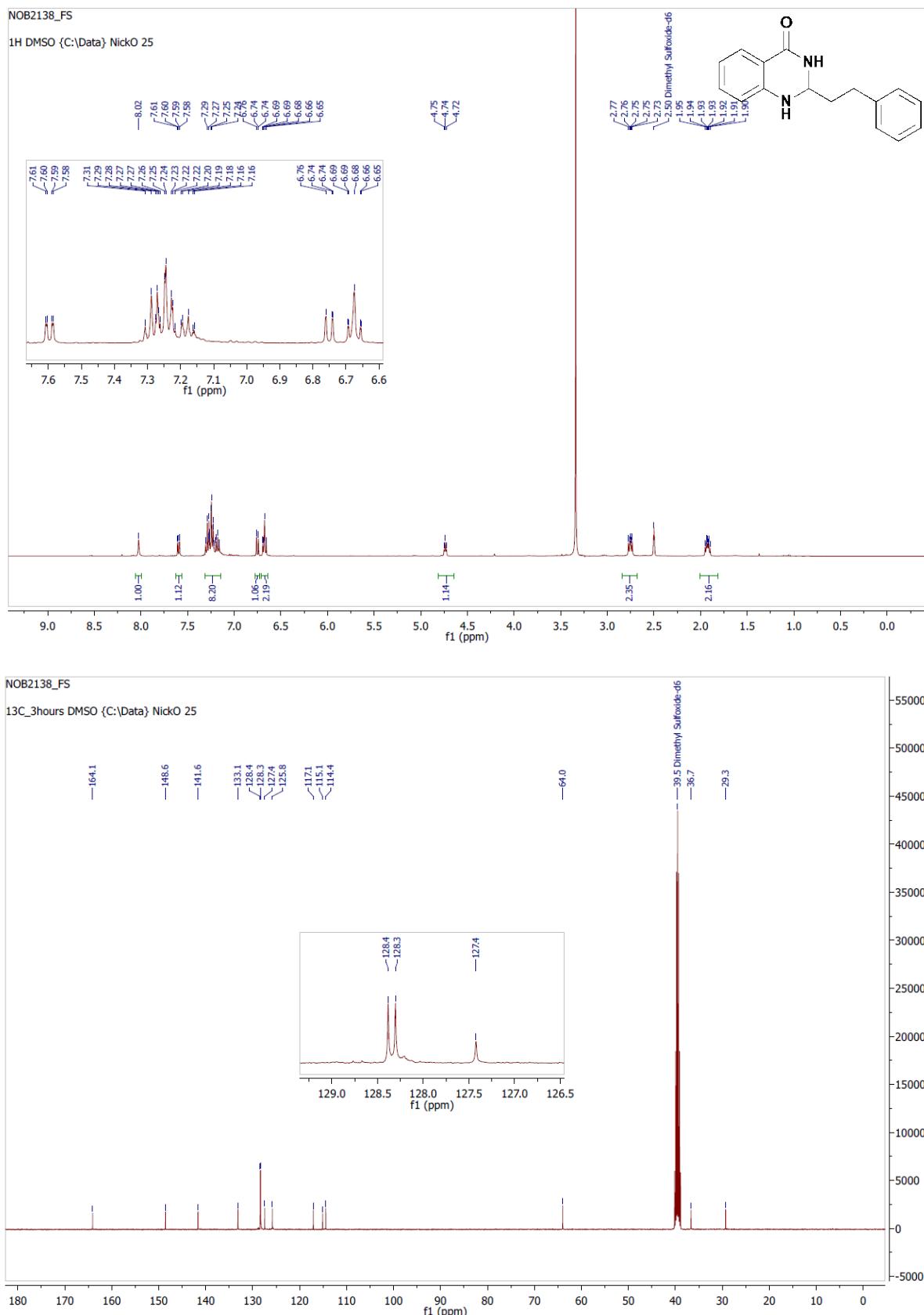


**2-(3,4,5-Trihydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (**10t**)**

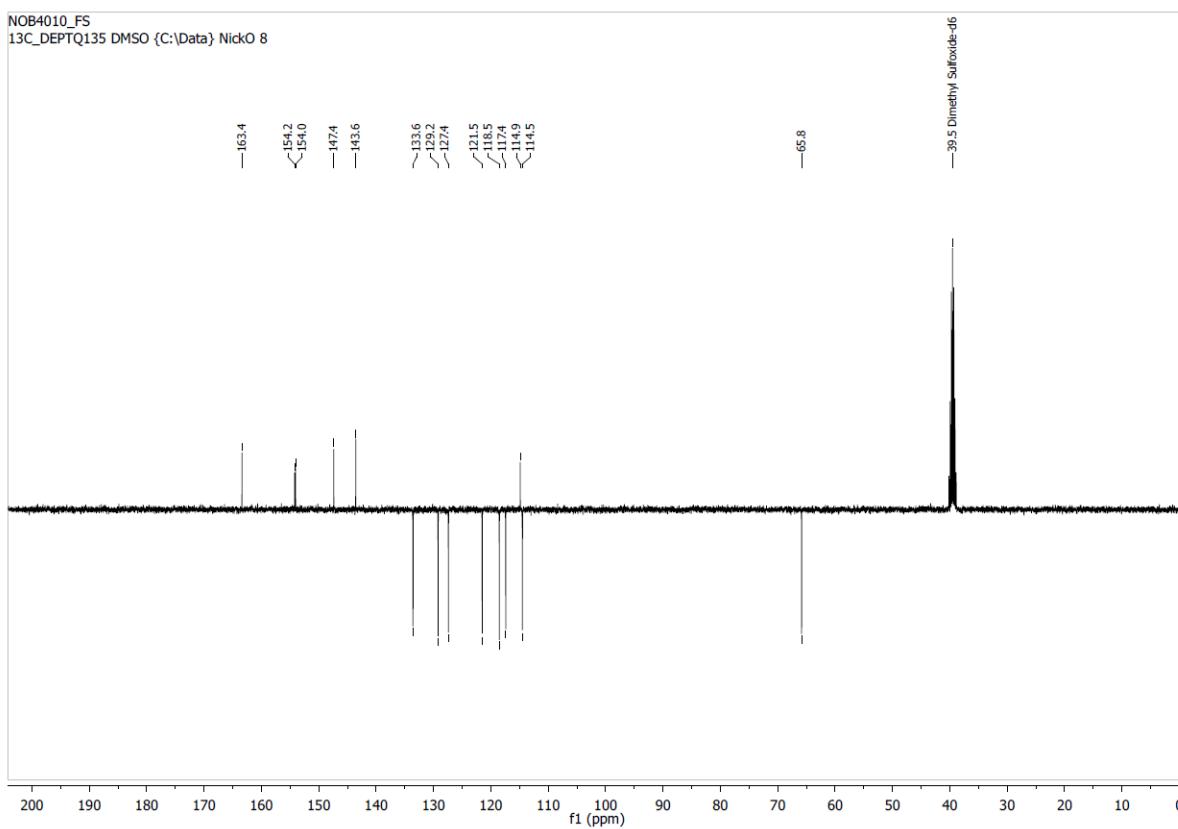
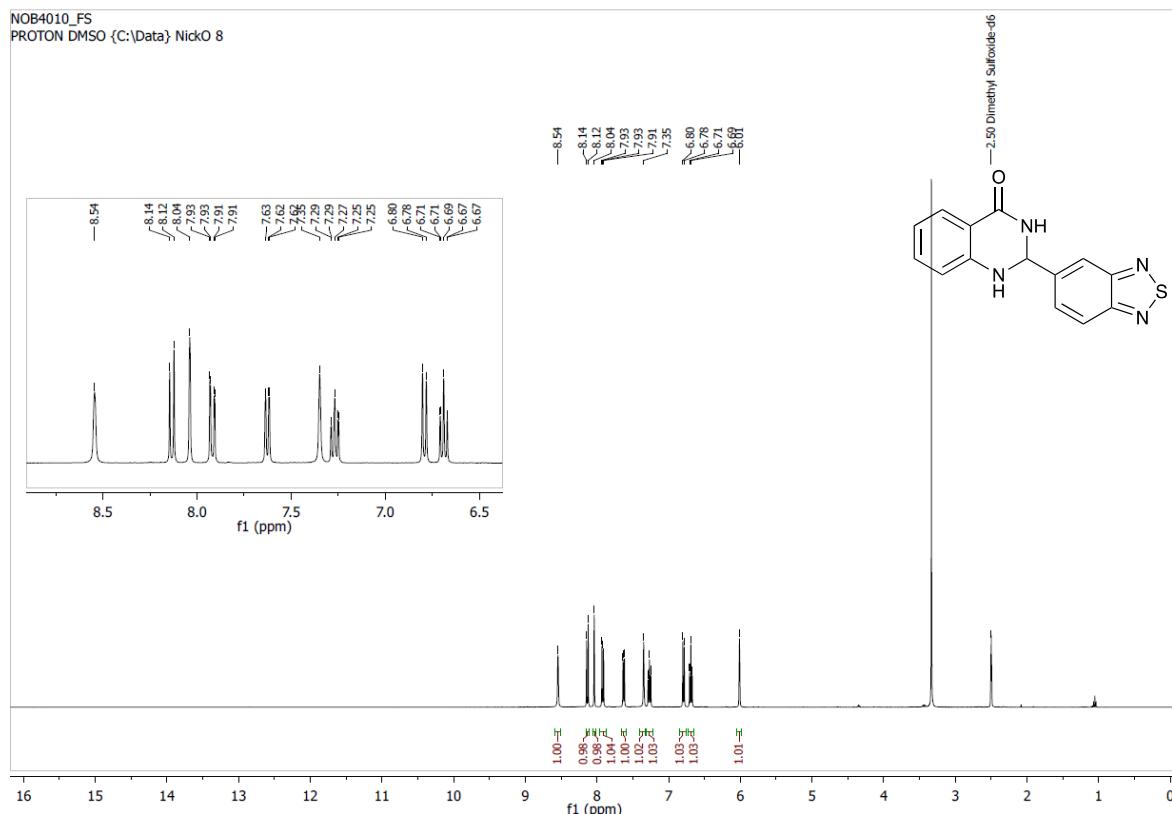


2-

**Phenethyl-2,3-dihydroquinazolin-4(1H)-one (**10u**)**

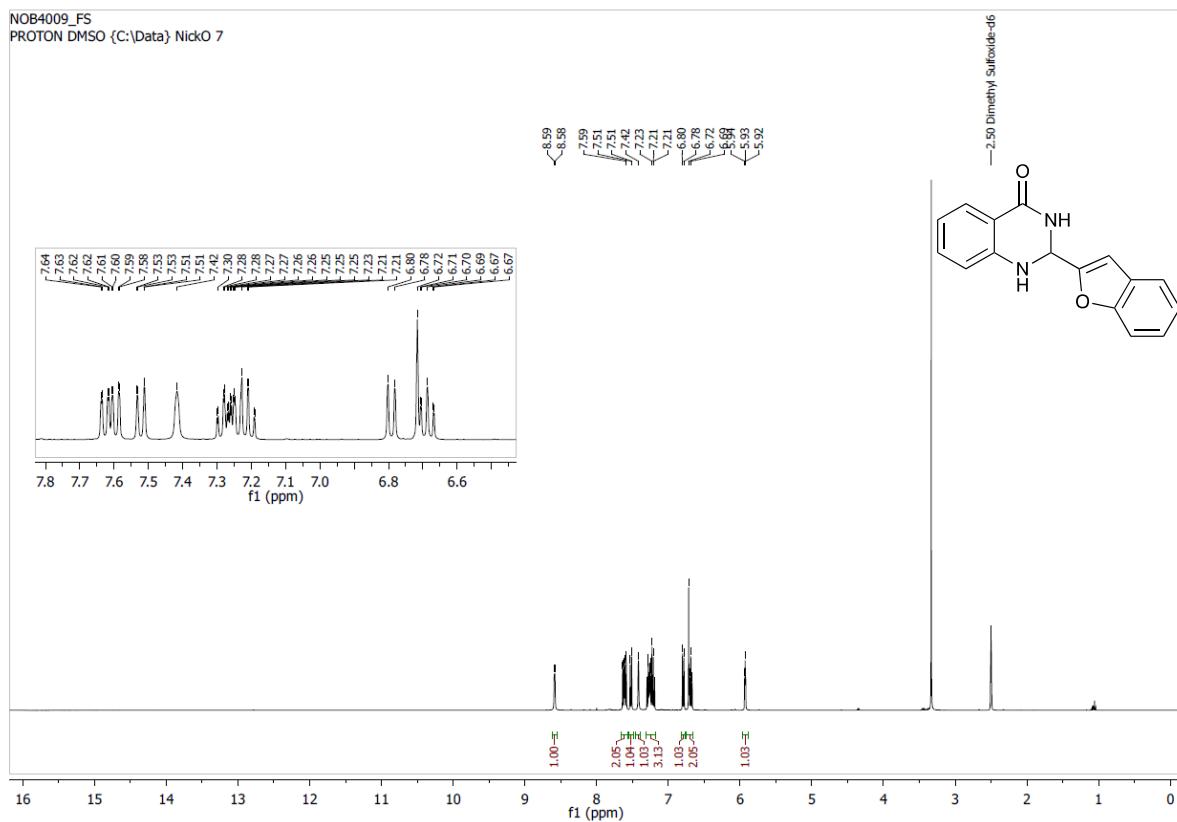


**2-(Benzo[*c*][1,2,5]thiadiazol-5-yl)-2,3-dihydroquinazolin-4(1*H*)-one (**10v**)**

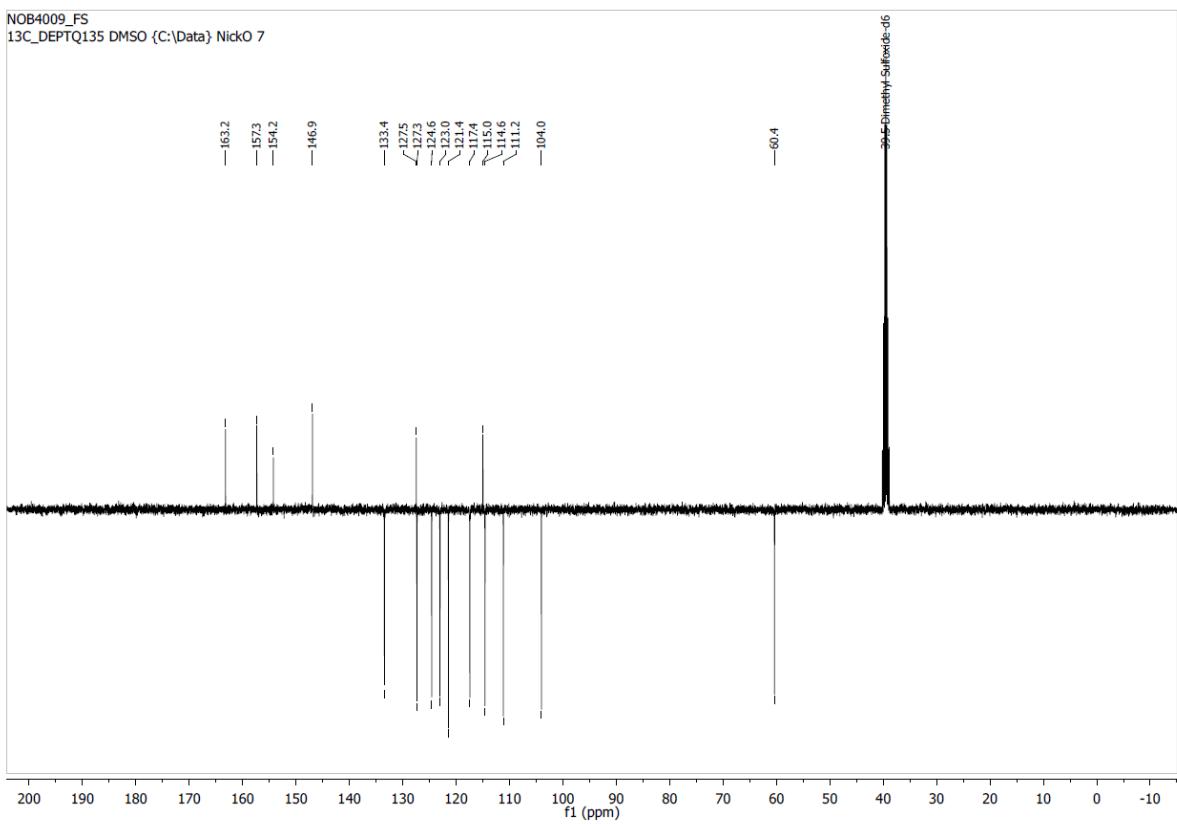


**2-(Benzofuran-2-yl)-2,3-dihydroquinazolin-4(1H)-one (**10w**)**

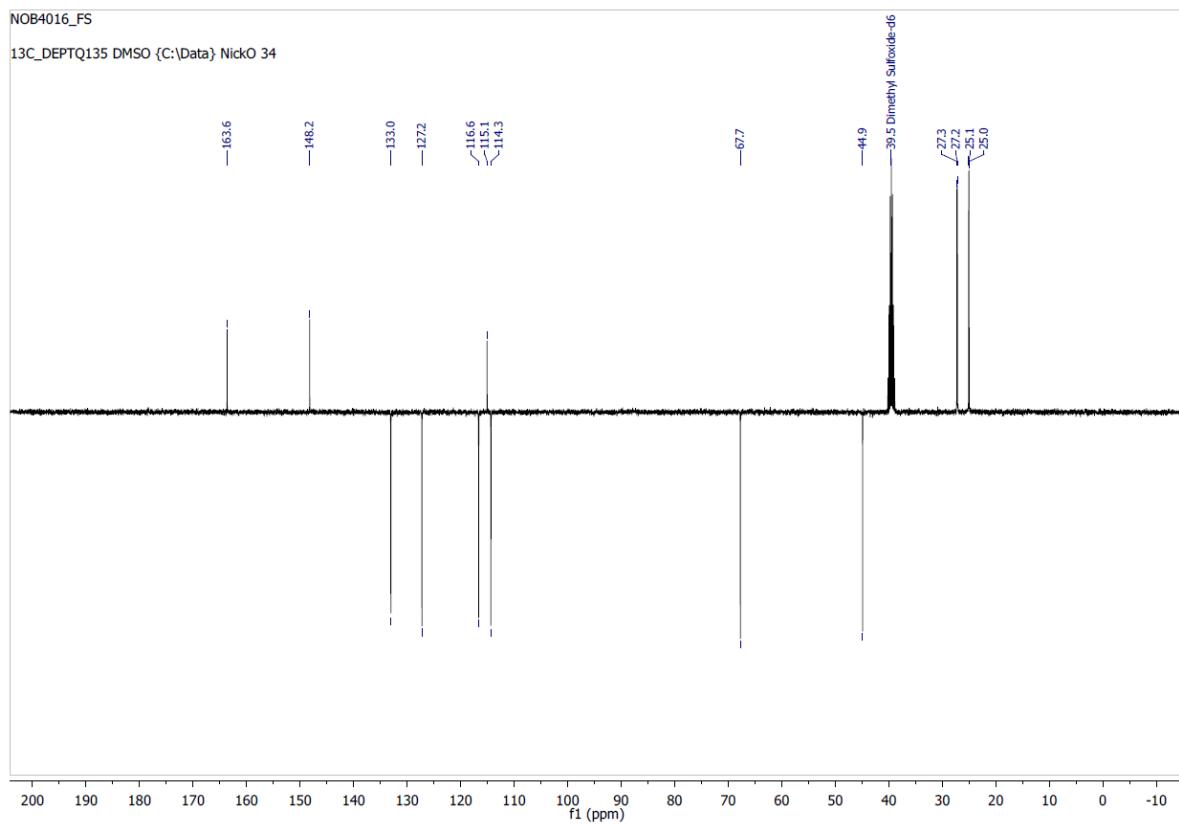
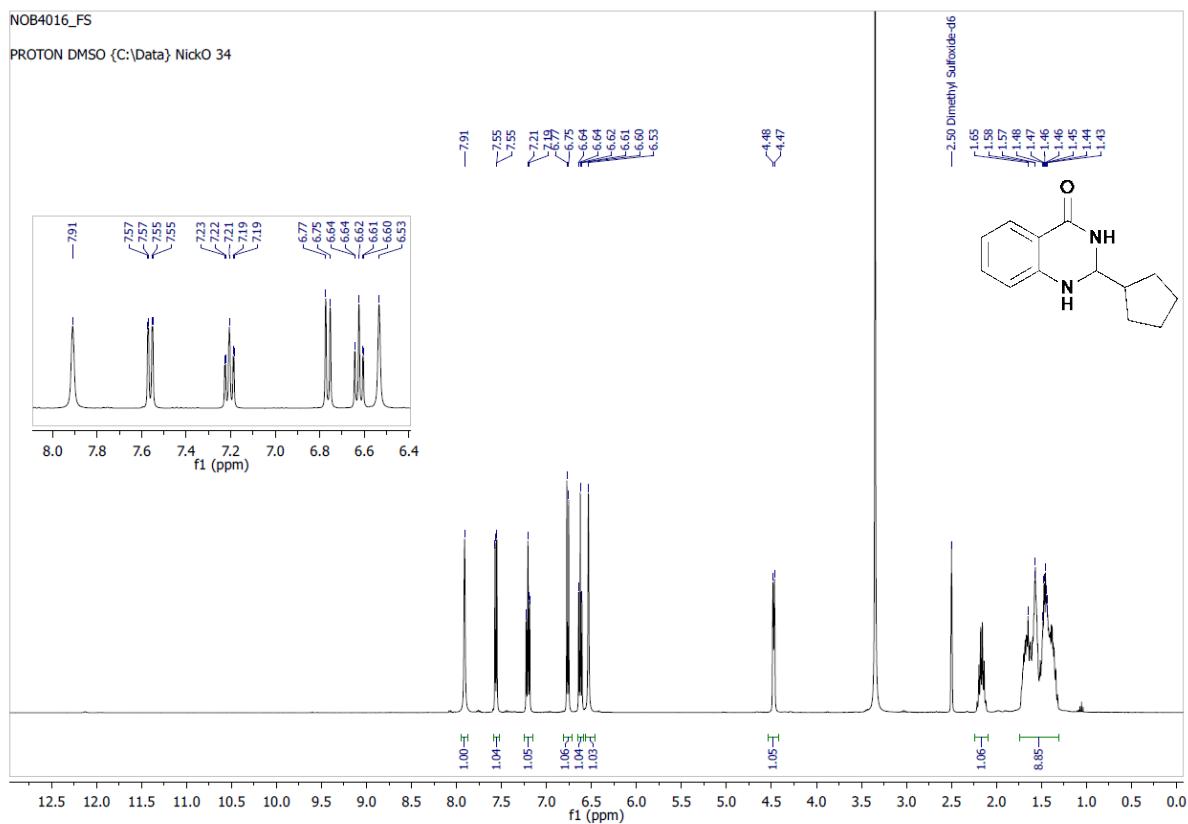
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PROTON DMSO {C:\Data} NickO 7



NOB4009\_FS  
13C\_DEPTQ135 DMSO {C:\Data} NickO 7

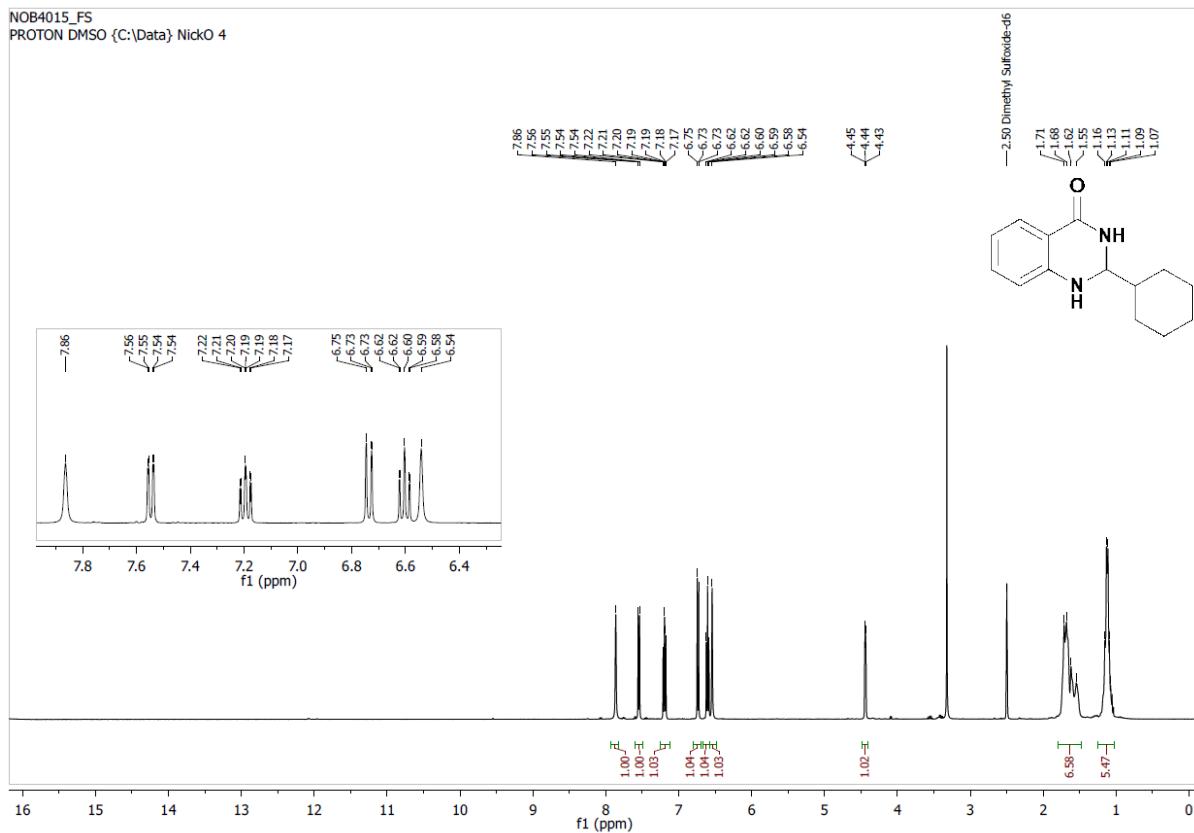


**2-Cyclopentyl-2,3-dihydroquinazolin-4(1H)-one (**10x**) NOB4016**

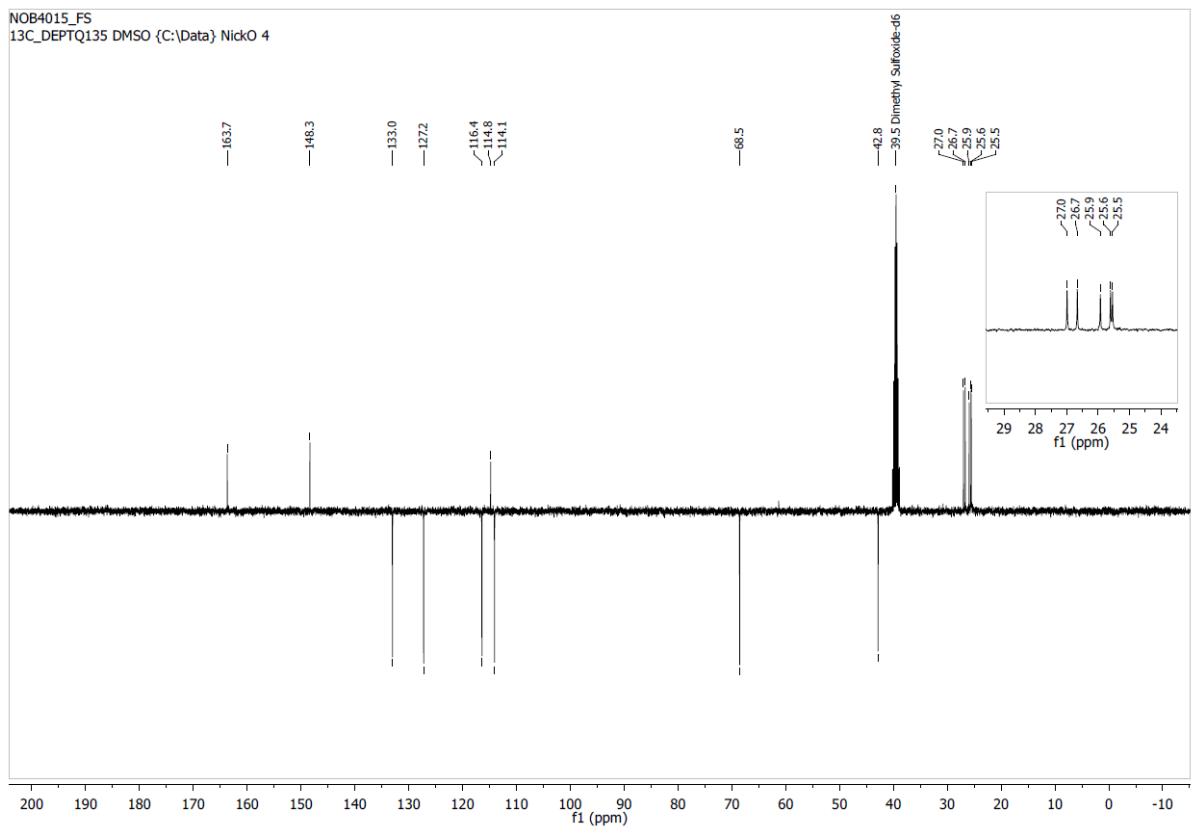


**2-Cyclohexyl-2,3-dihydroquinazolin-4(1H)-one (**10y**)**

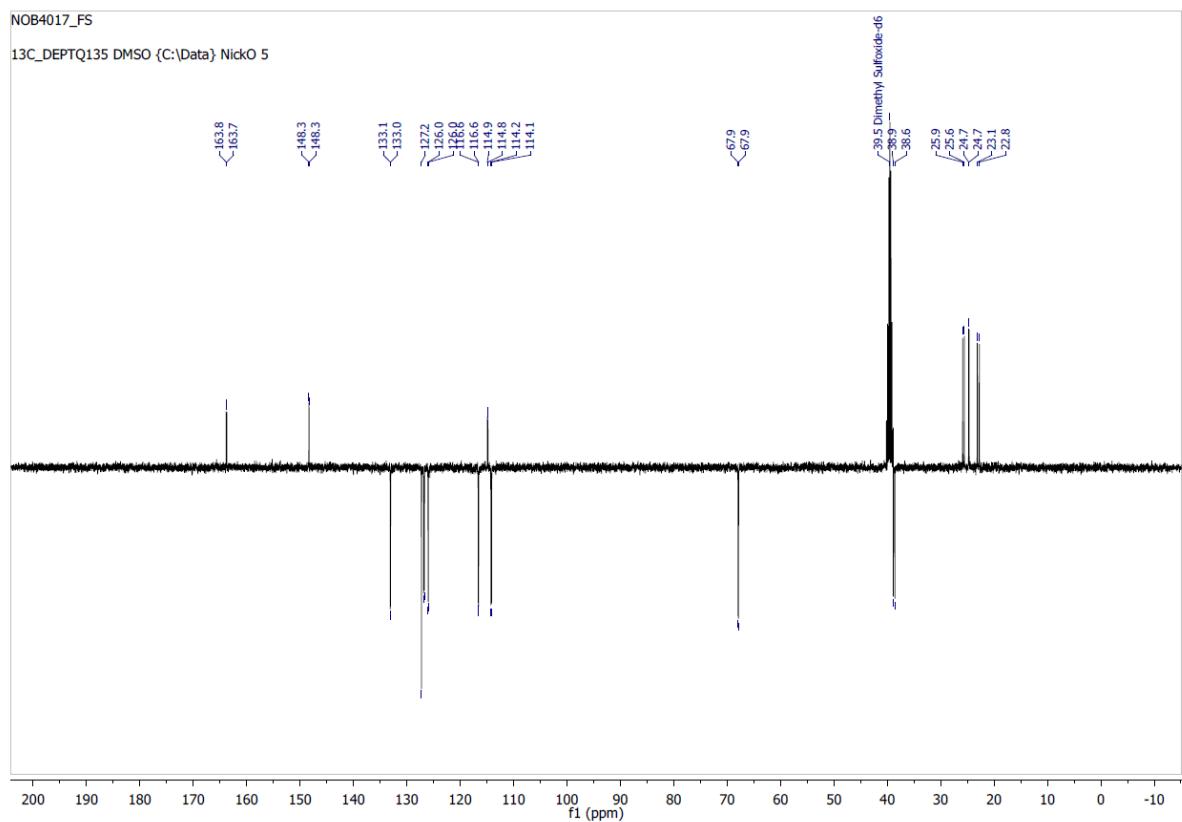
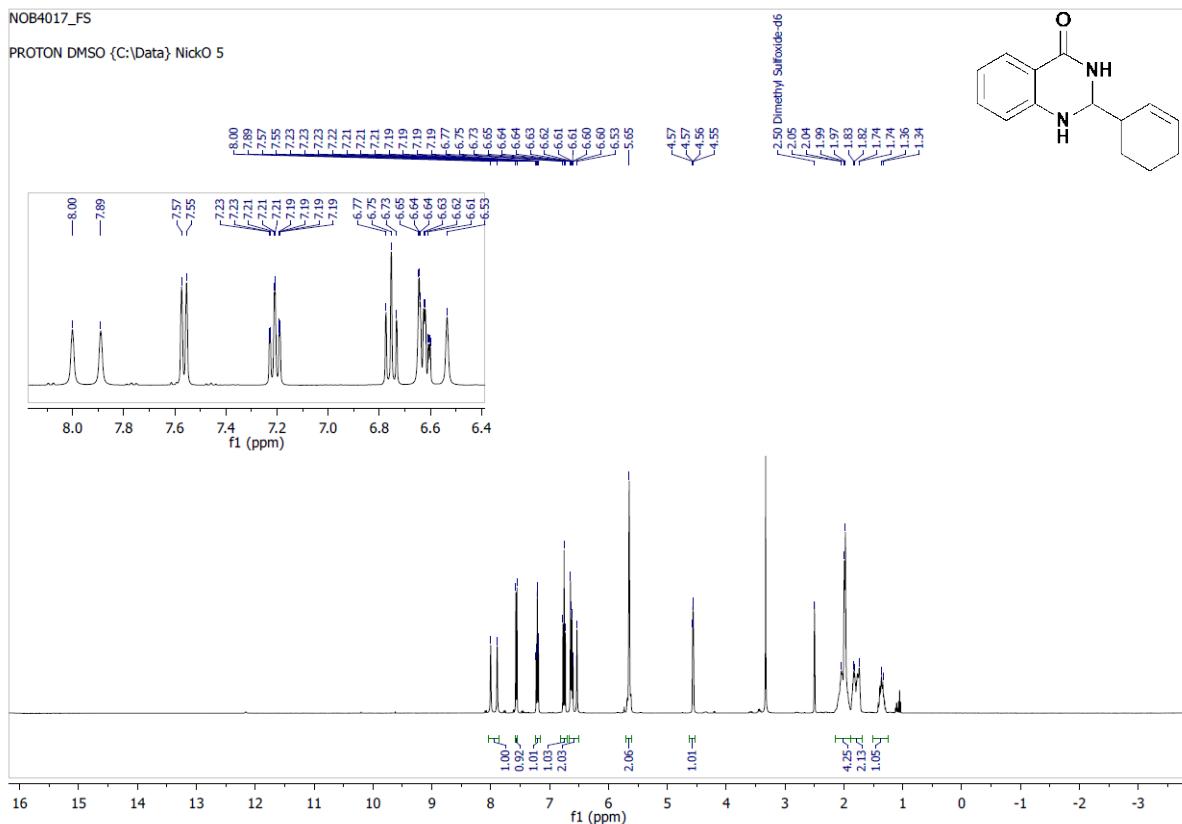
NOB4015\_FS  
PROTON DMSO {C:\Data} NickO 4



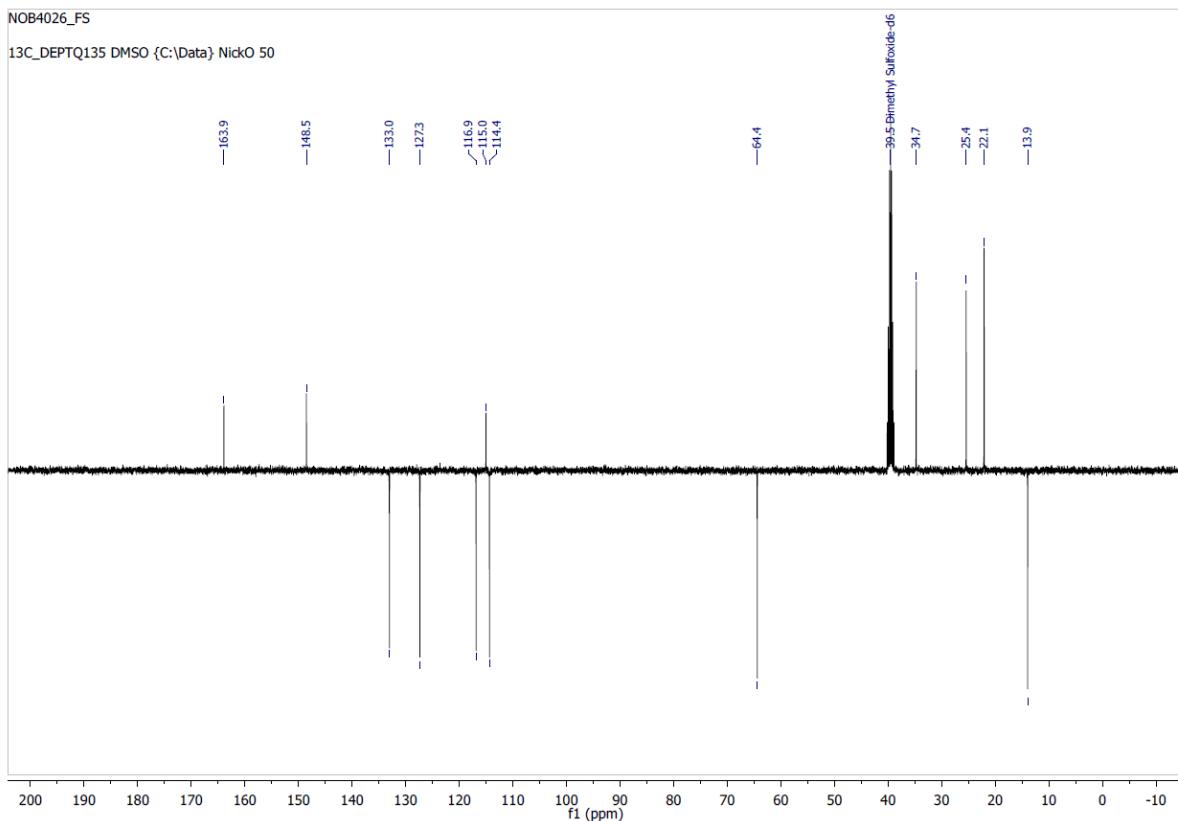
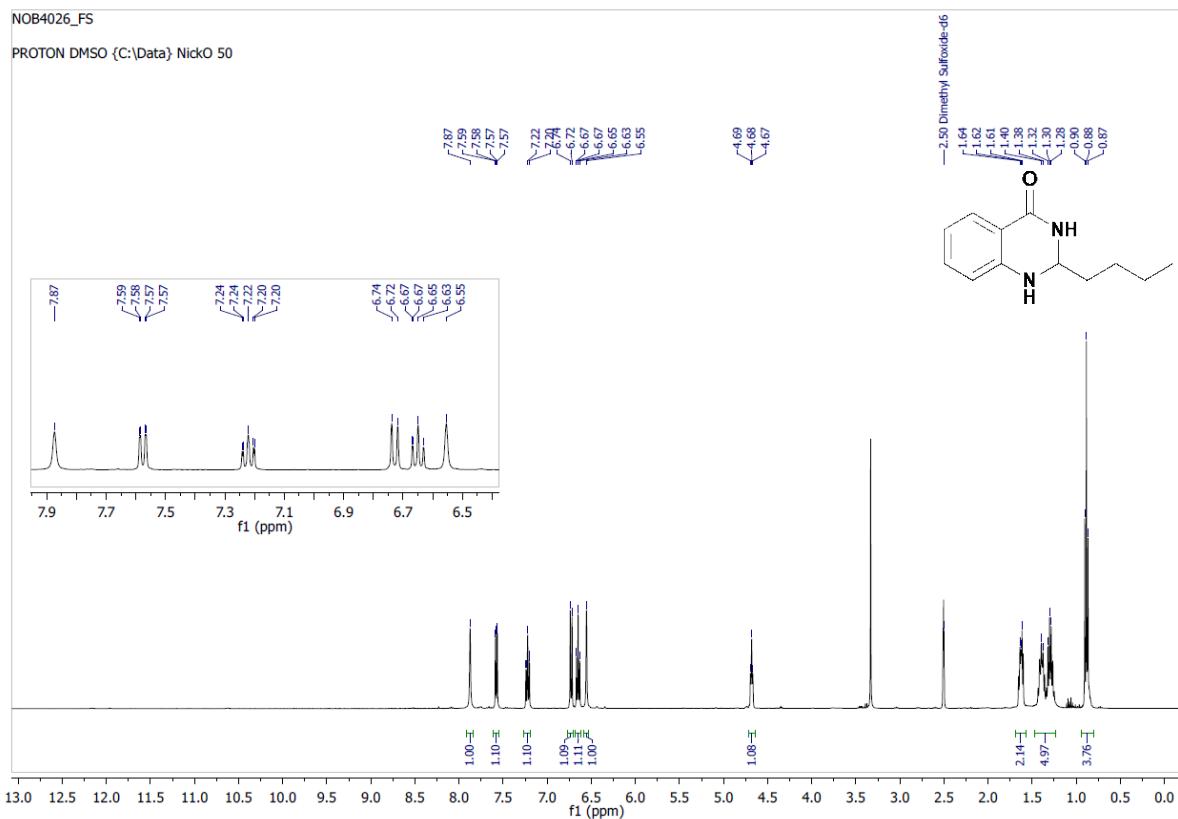
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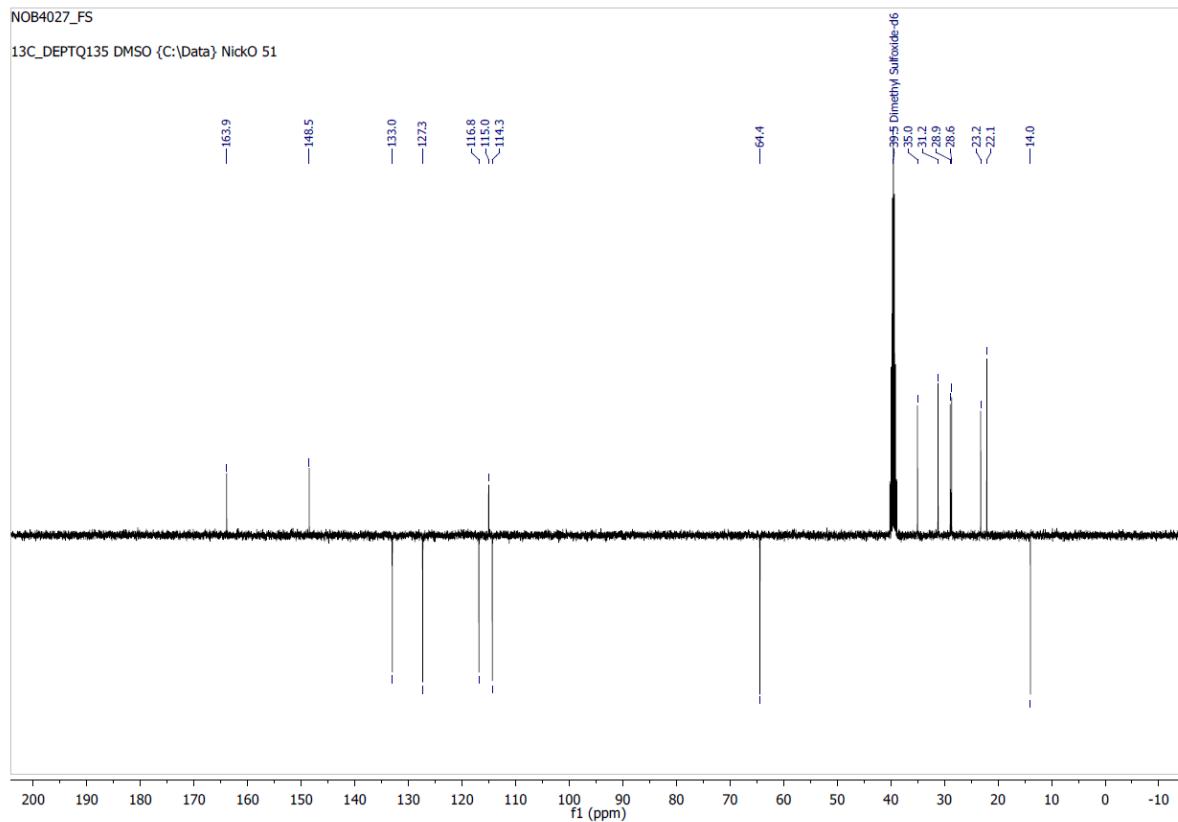
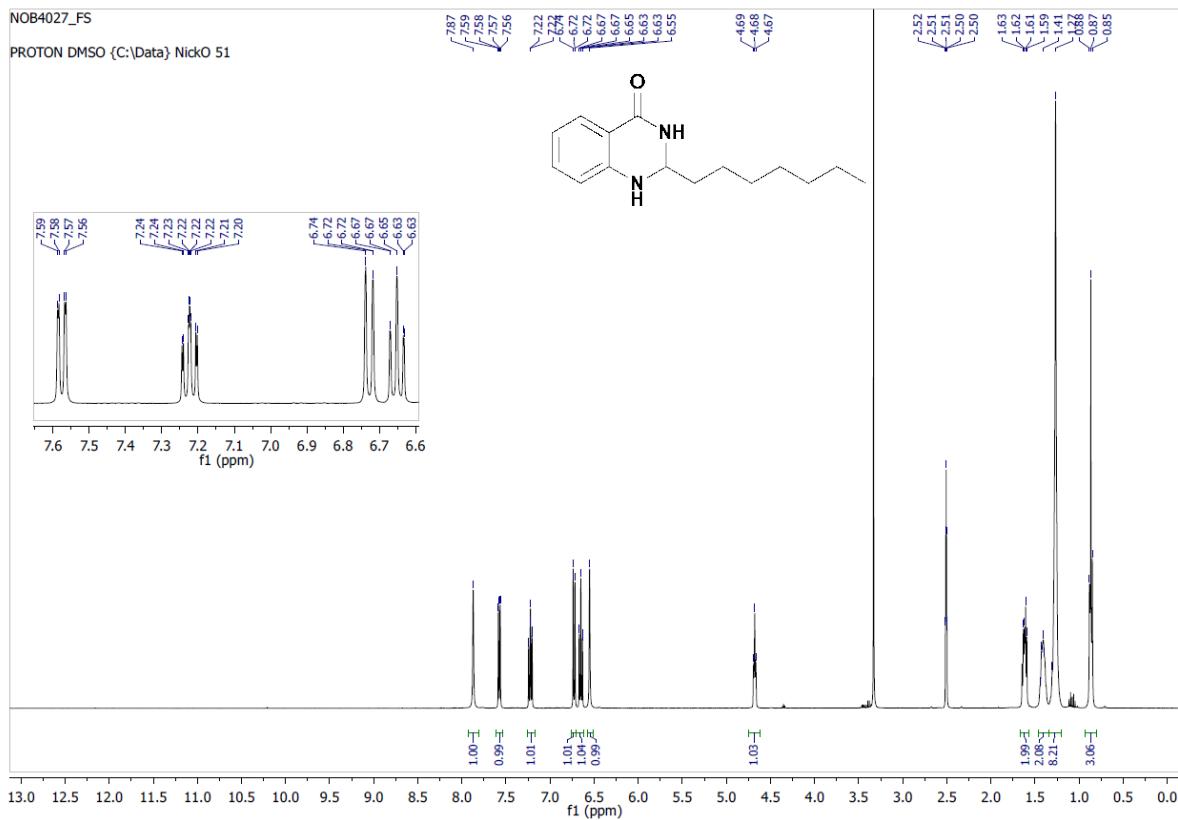
**2-(Cyclohex-2-en-1-yl)-2,3-dihydroquinazolin-4(1H)-one (**10z**)**



**2-Butyl-2,3-dihydroquinazolin-4(1H)-one (**10aa**) NOB4026**

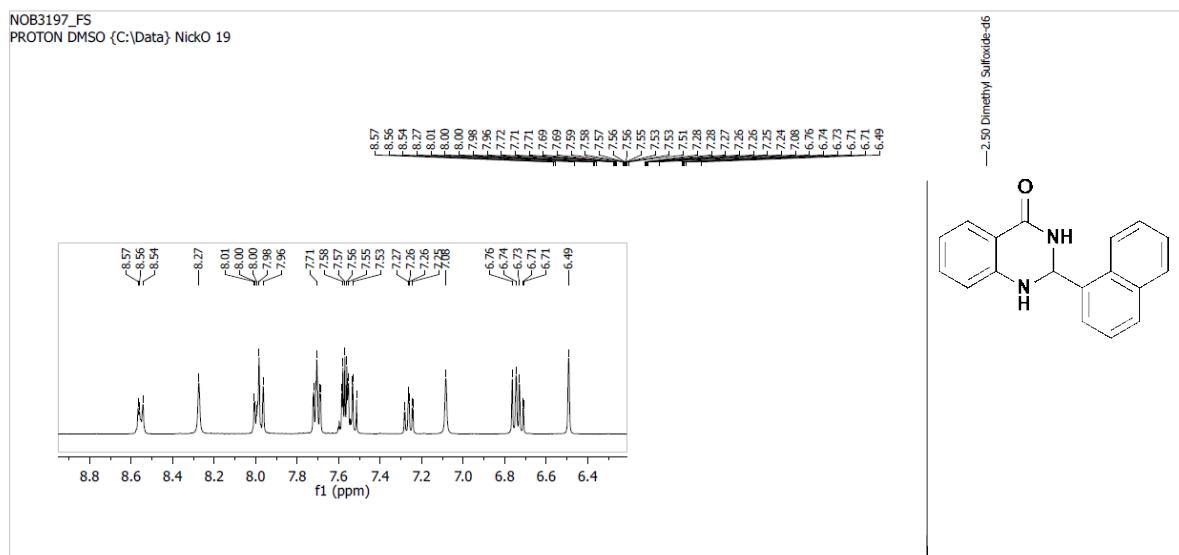


**2-Heptyl-2,3-dihydroquinazolin-4(1H)-one (**10ab**) NOB4027**

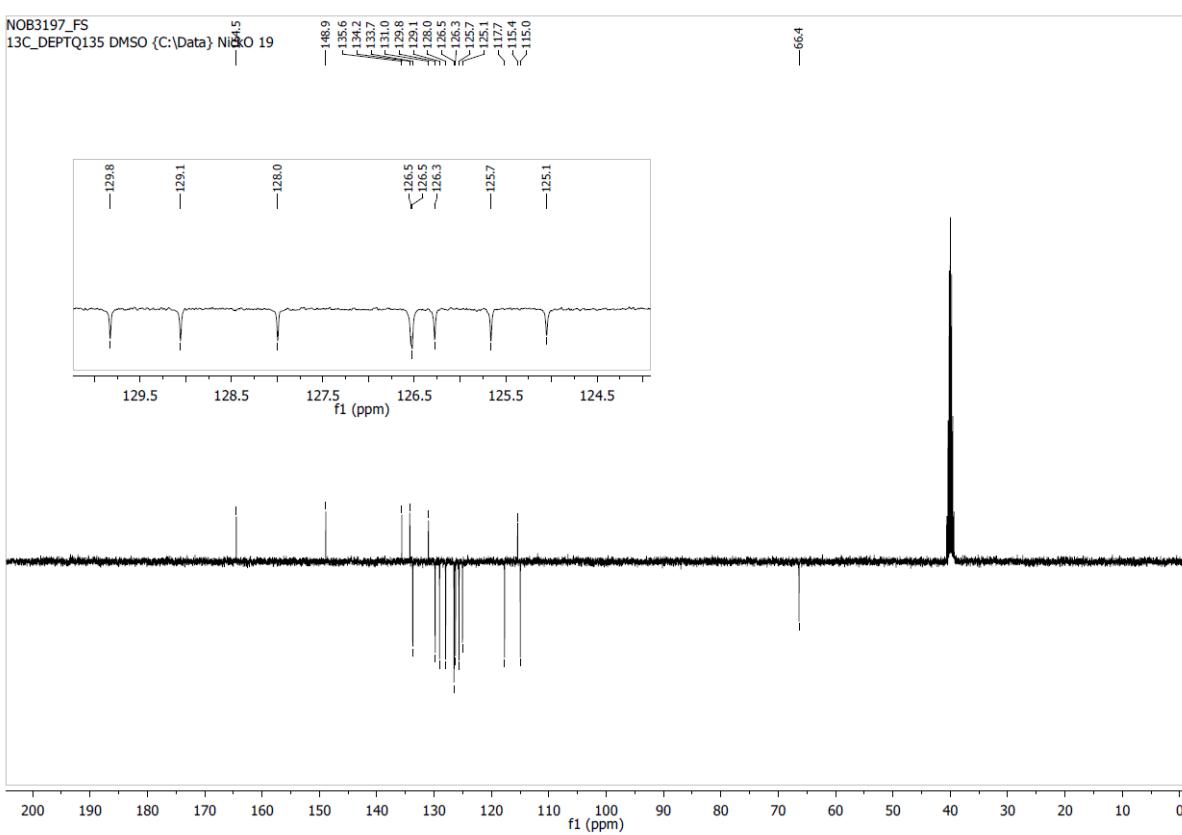


**2-(Naphthalen-1-yl)-2,3-dihydroquinazolin-4(1H)-one (**10ac**)**

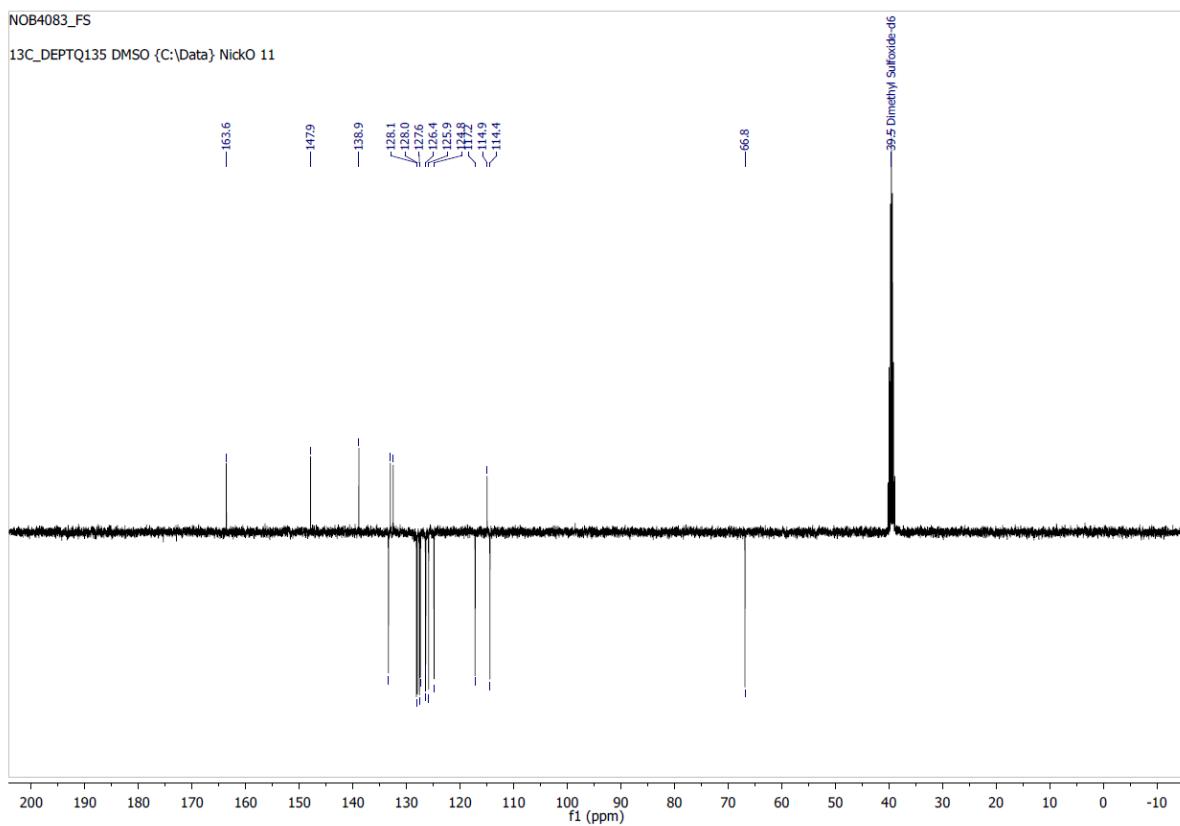
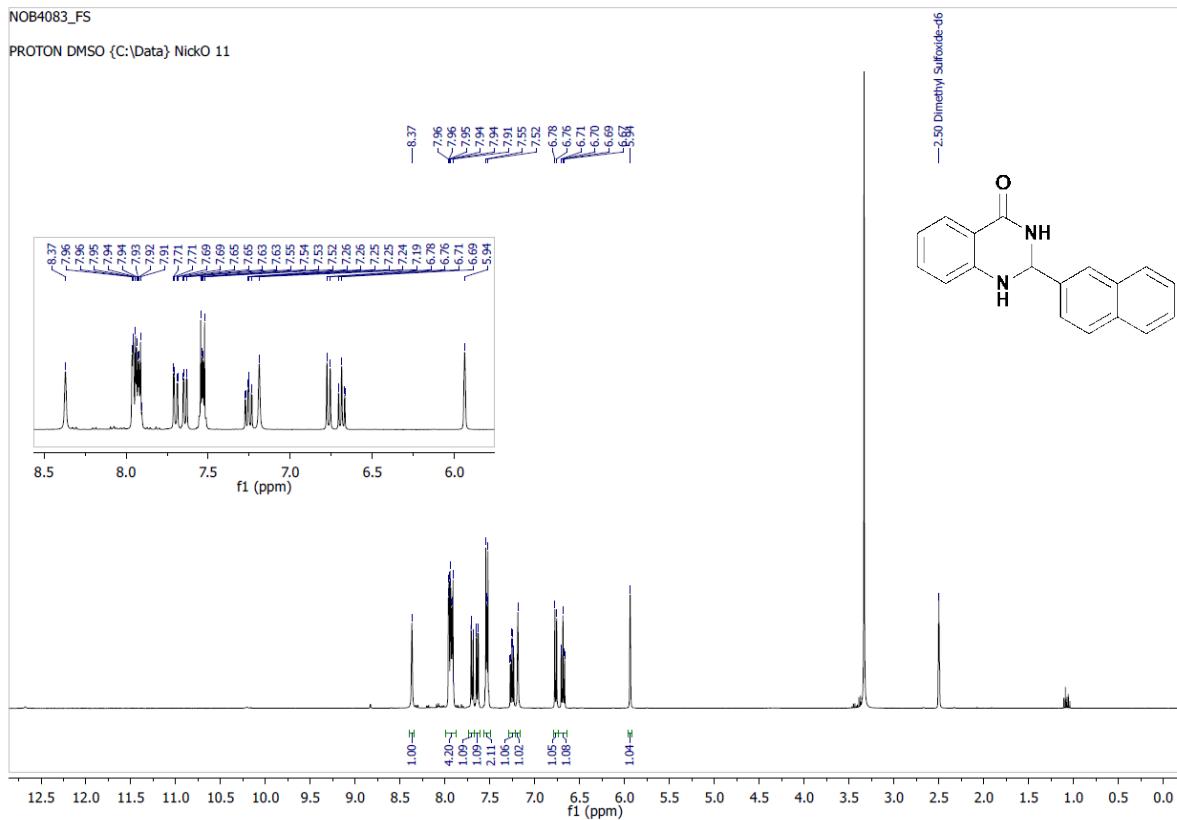
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PROTON DMSO {C:\Data} NickO 19



NOB3197\_FS  
13C\_DEPTQ135 DMSO {C:\Data} NickO 19

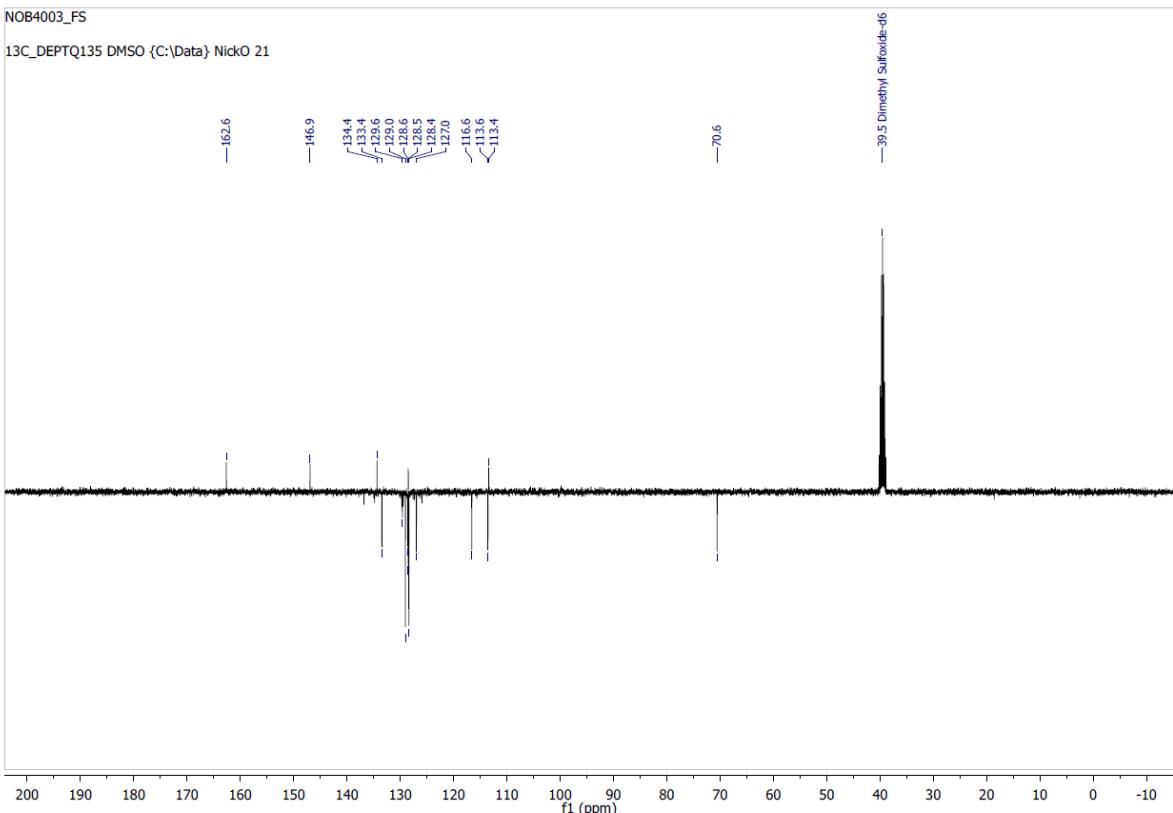
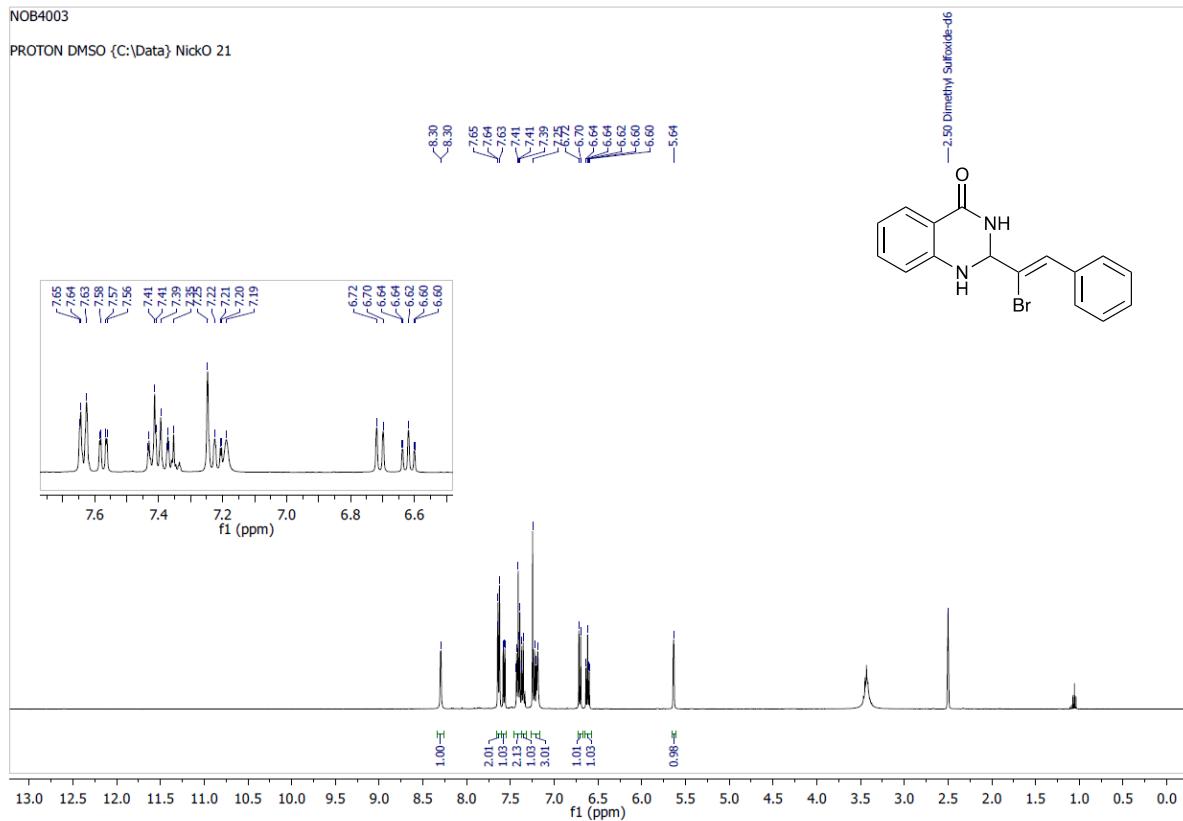


**2-(Naphthalen-2-yl)-2,3-dihydroquinazolin-4(1H)-one (**10ad**)**



**(10ae) no reaction**

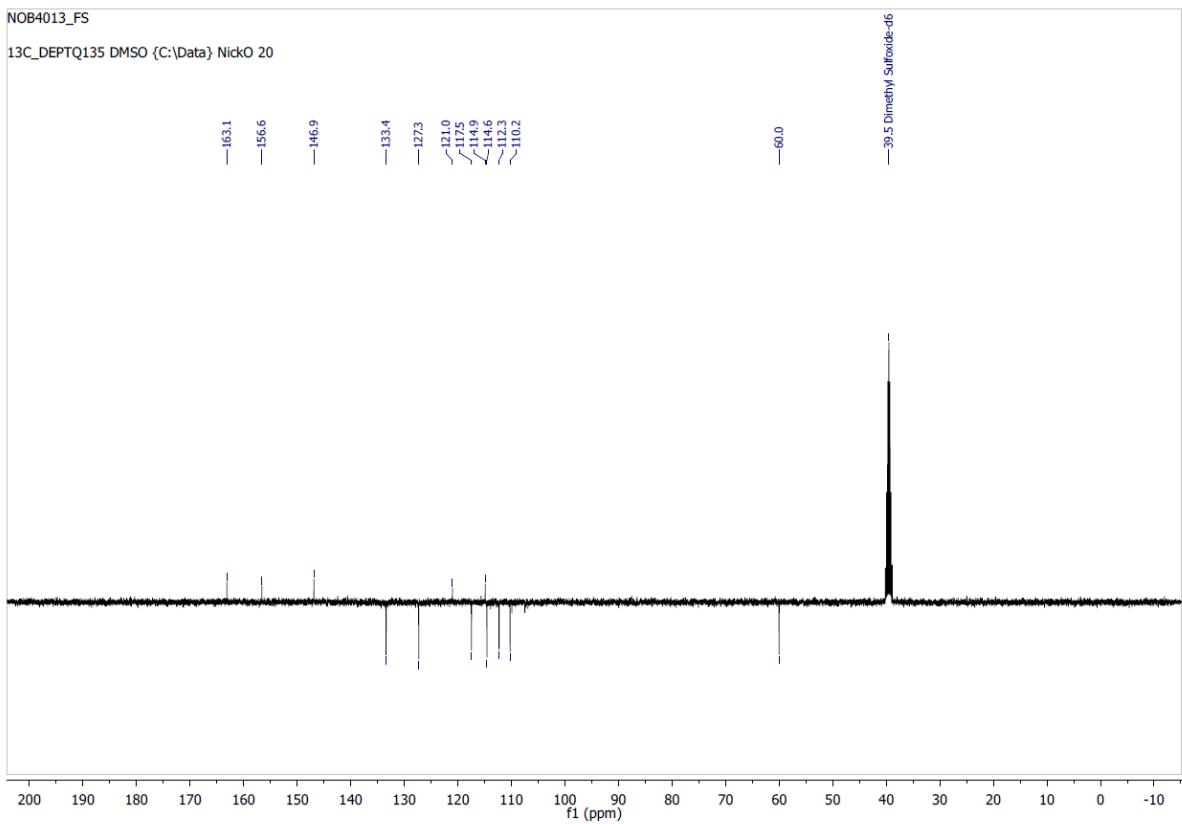
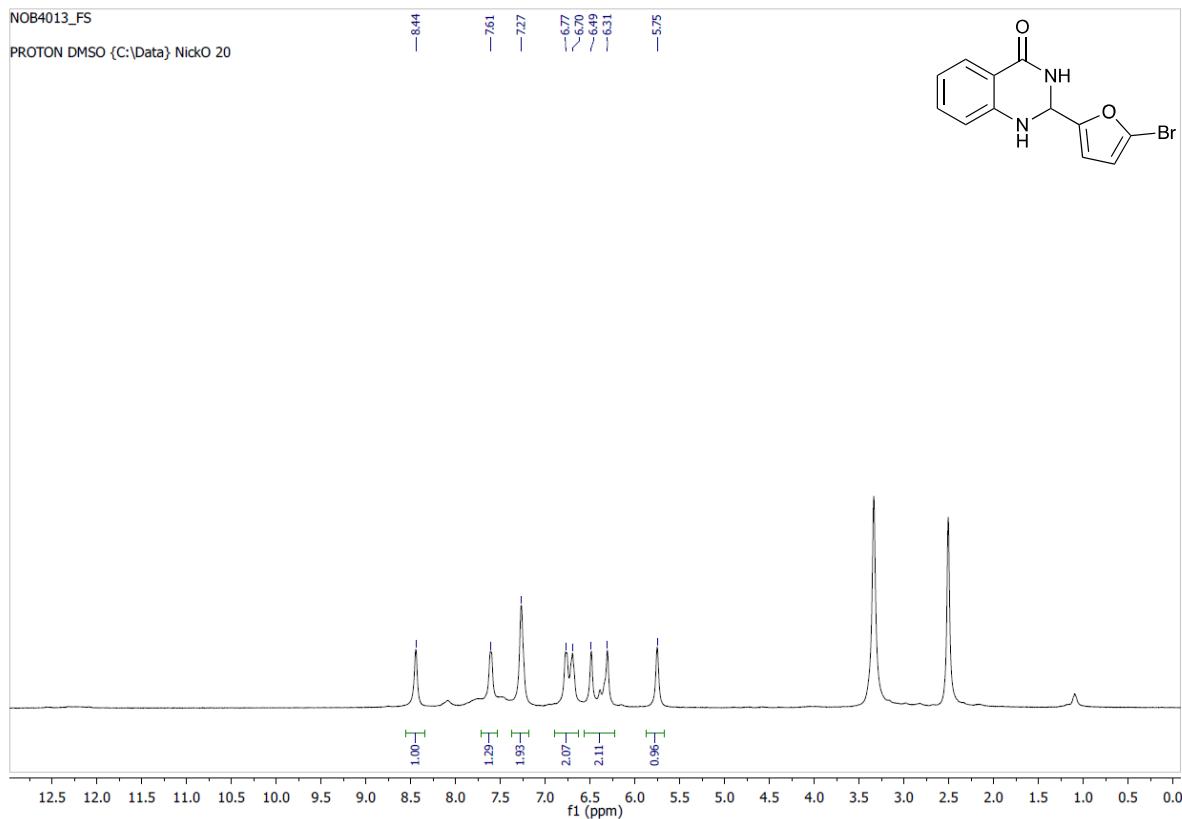
**(Z)-2-(1-Bromo-2-phenylvinyl)-2,3-dihydroquinazolin-4(1H)-one (10af)**



**(10ag) no reaction**

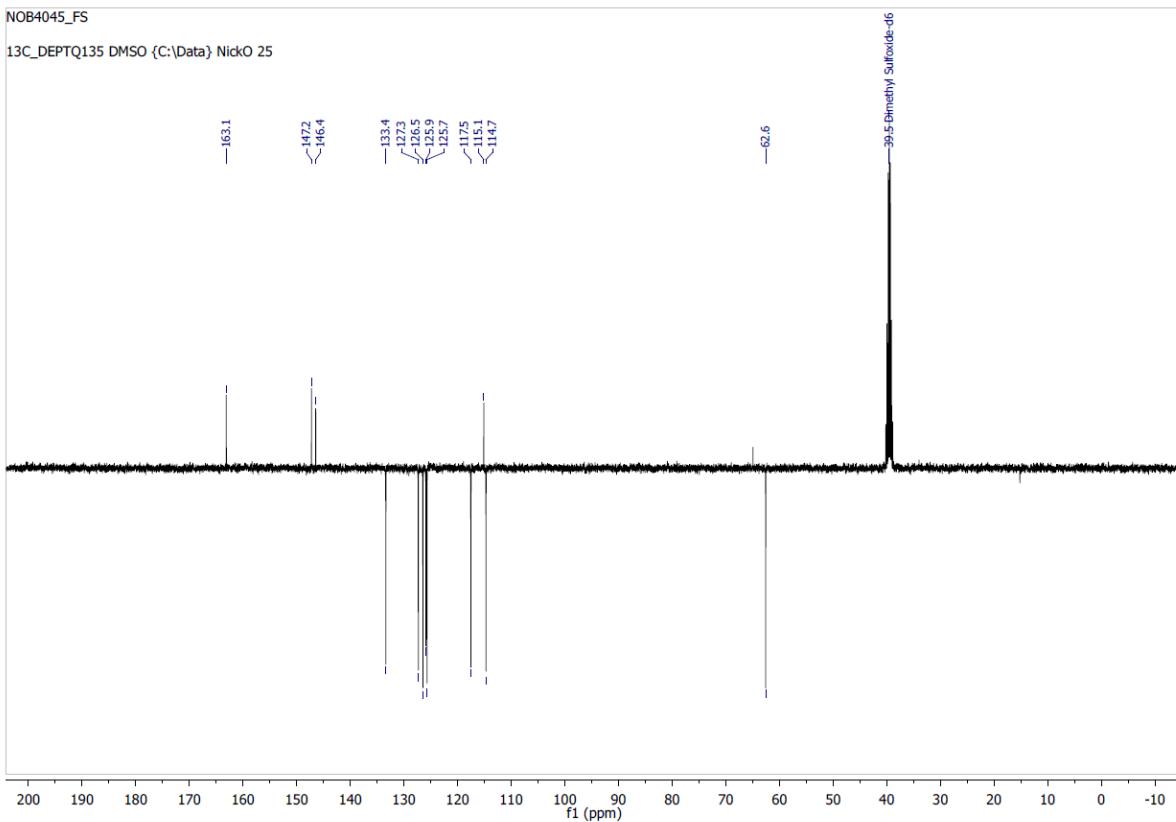
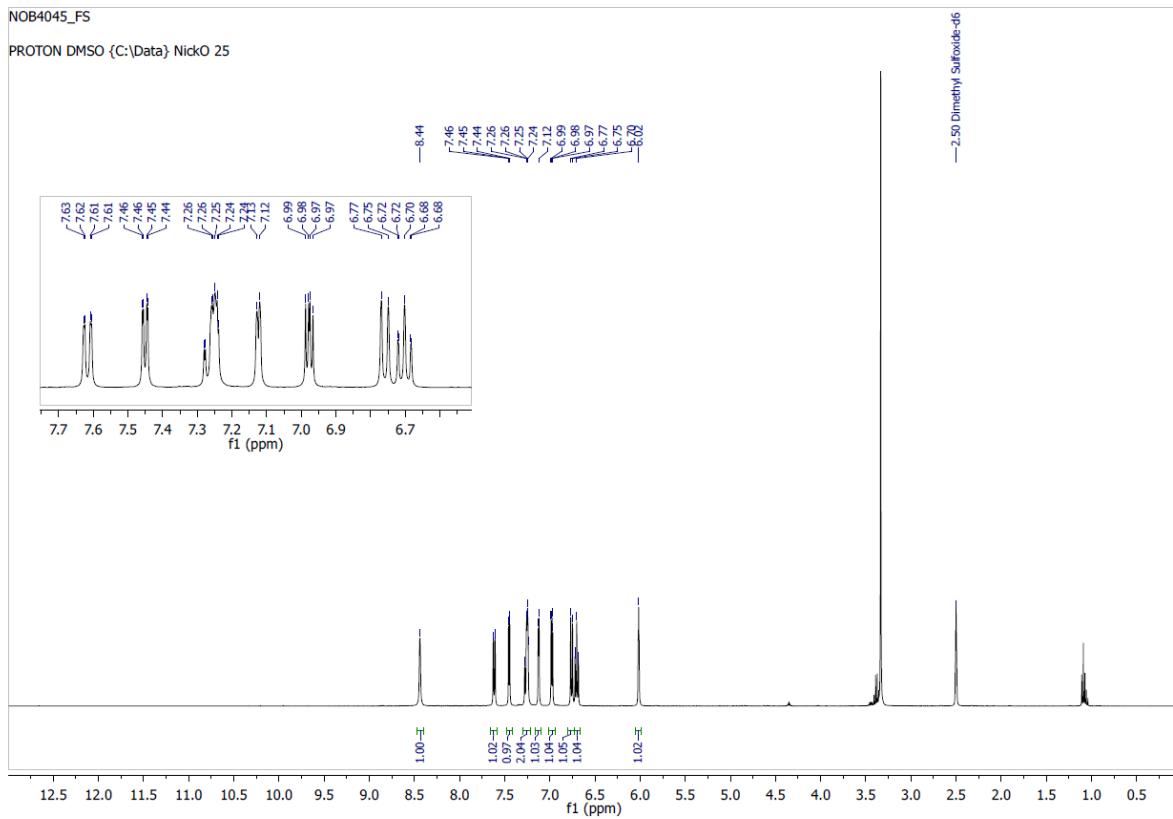
**(10ah) no reaction**

**2-(5-Bromofuran-2-yl)-2,3-dihydroquinazolin-4(1H)-one (**10ai**)**

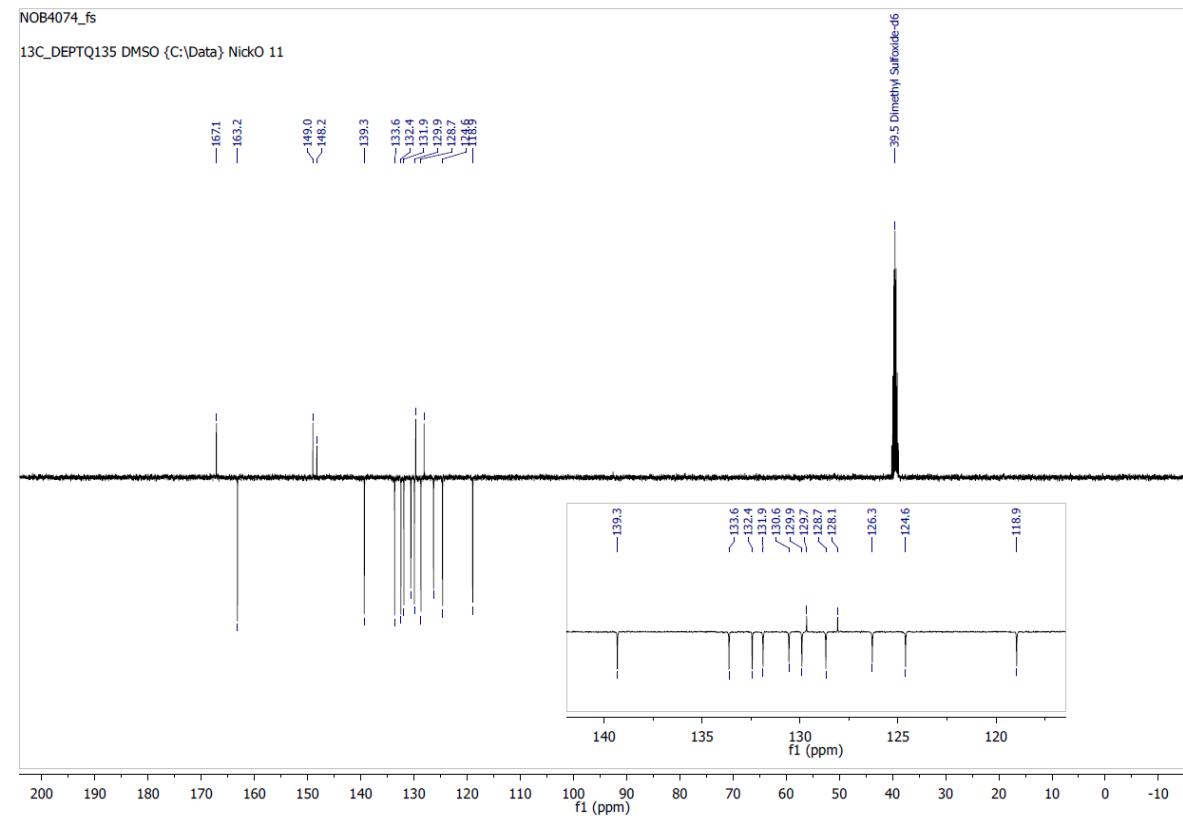
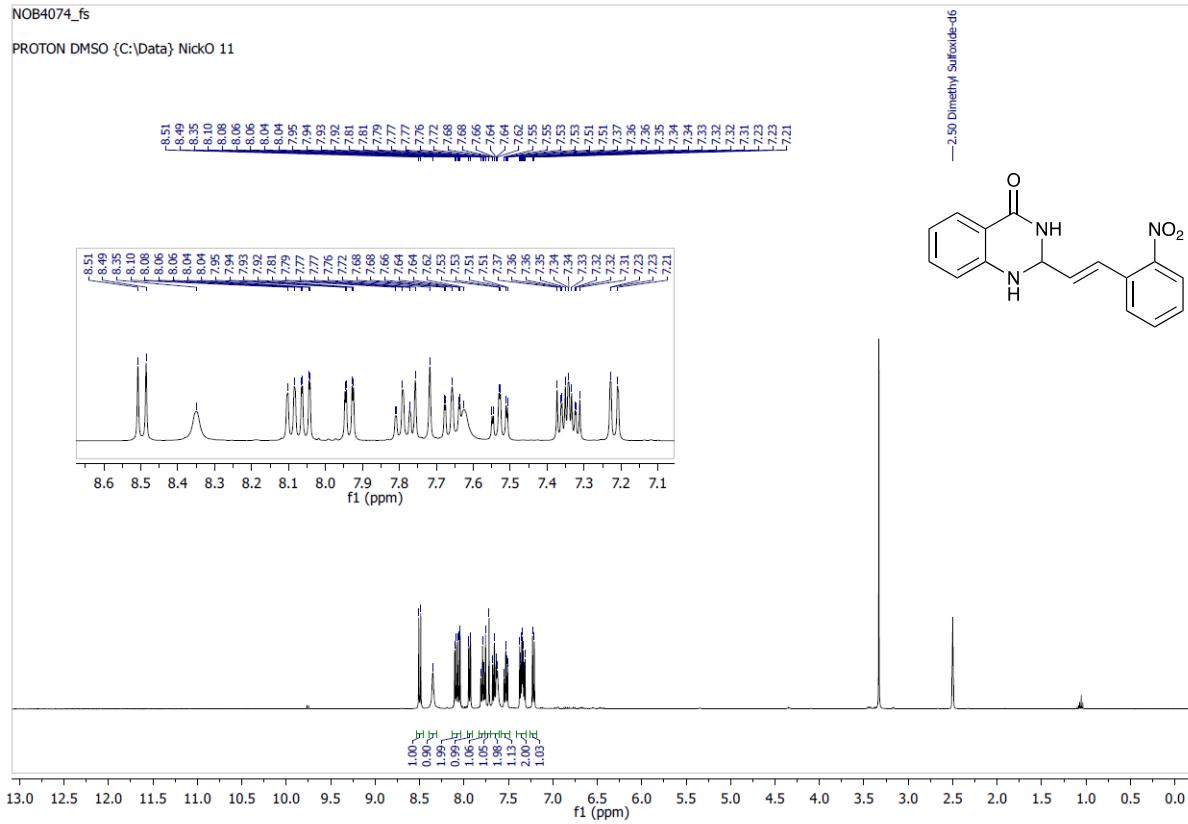


**(10al) no reaction**

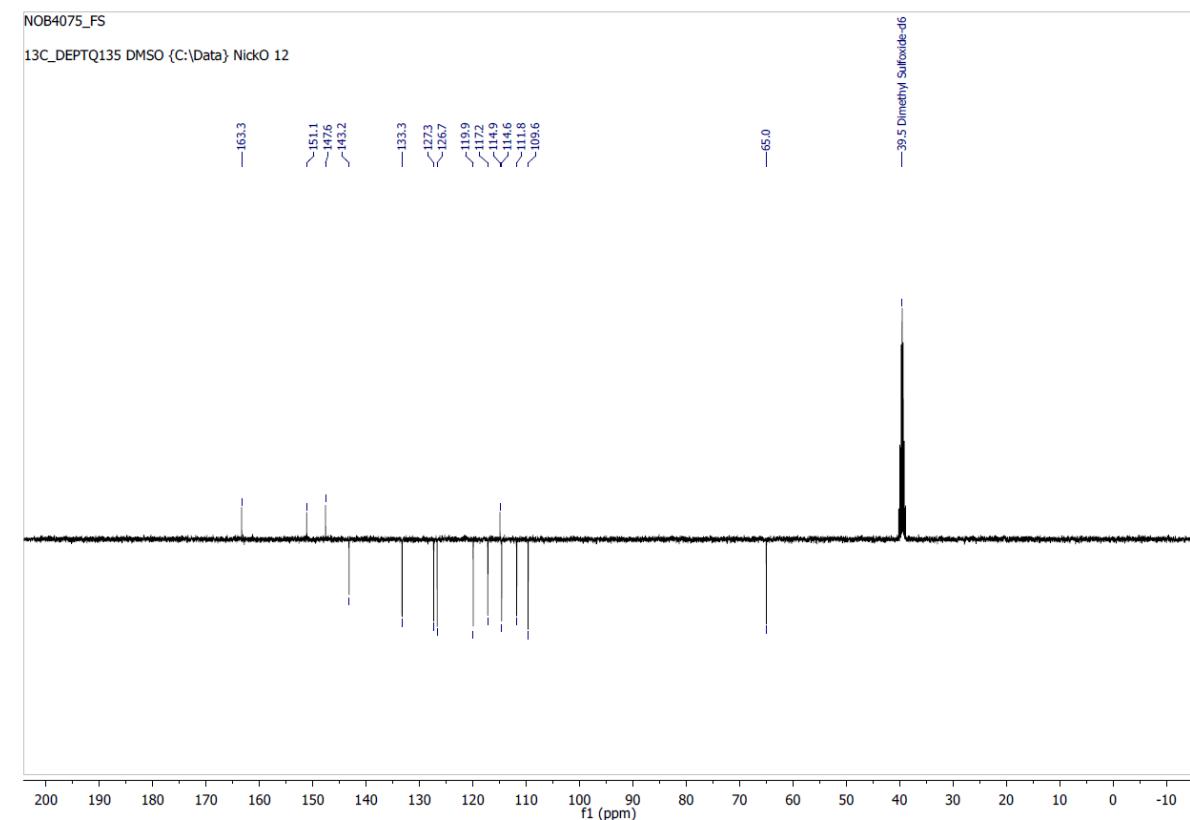
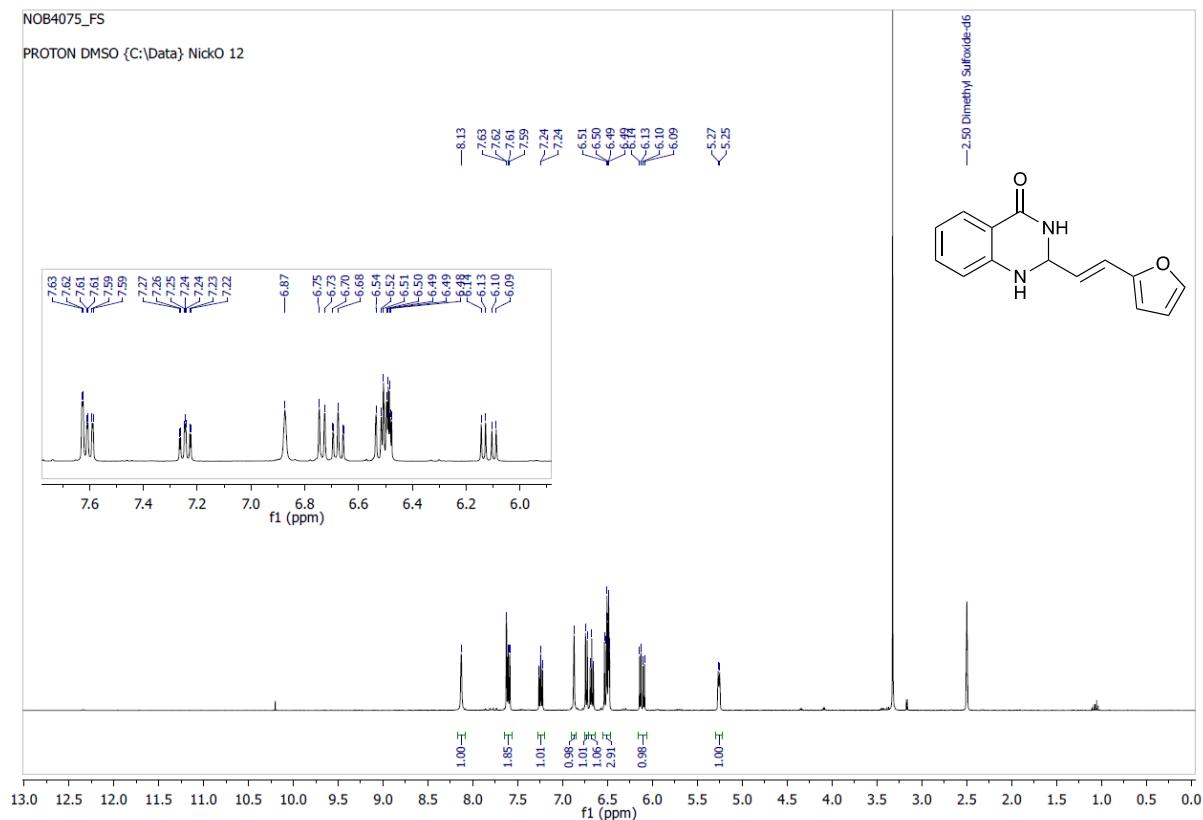
**2-(Thiophen-2-yl)-2,3-dihydroquinazolin-4(1H)-one (**10ak**)**



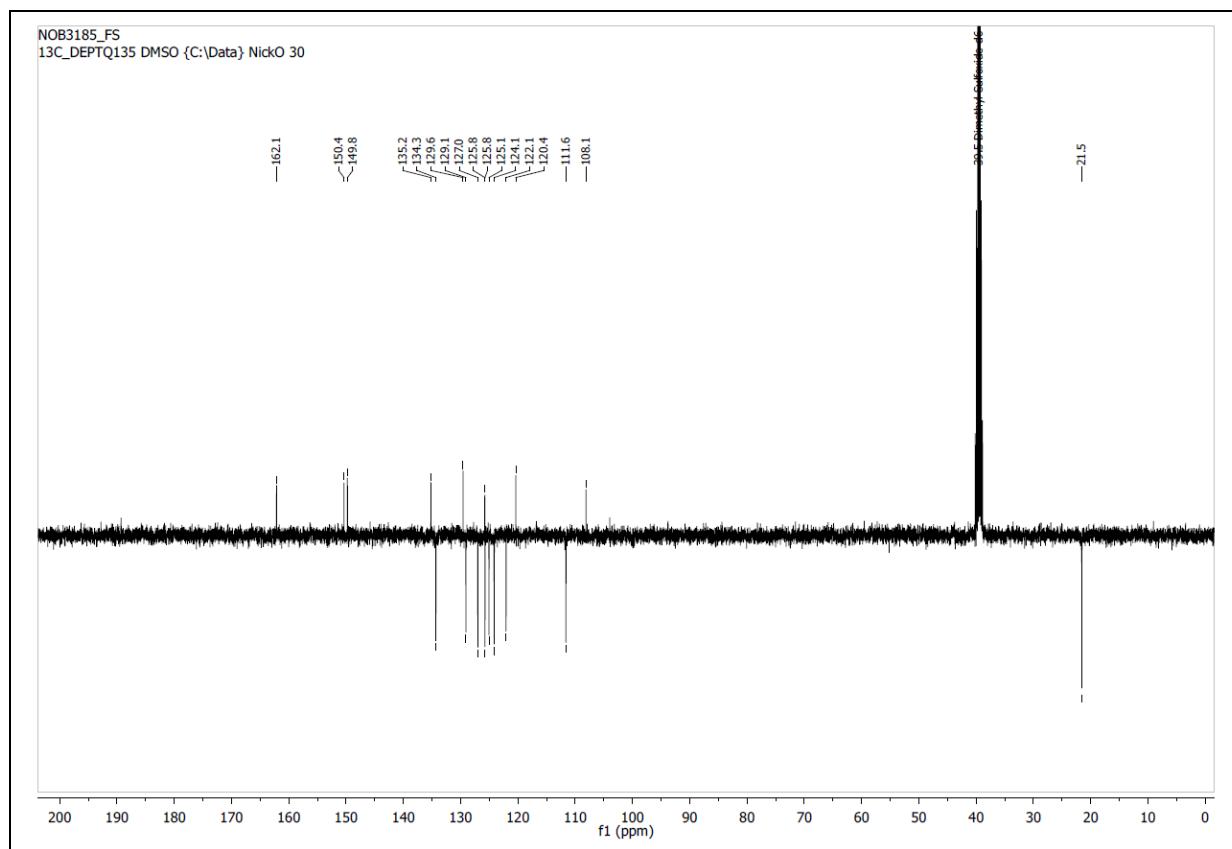
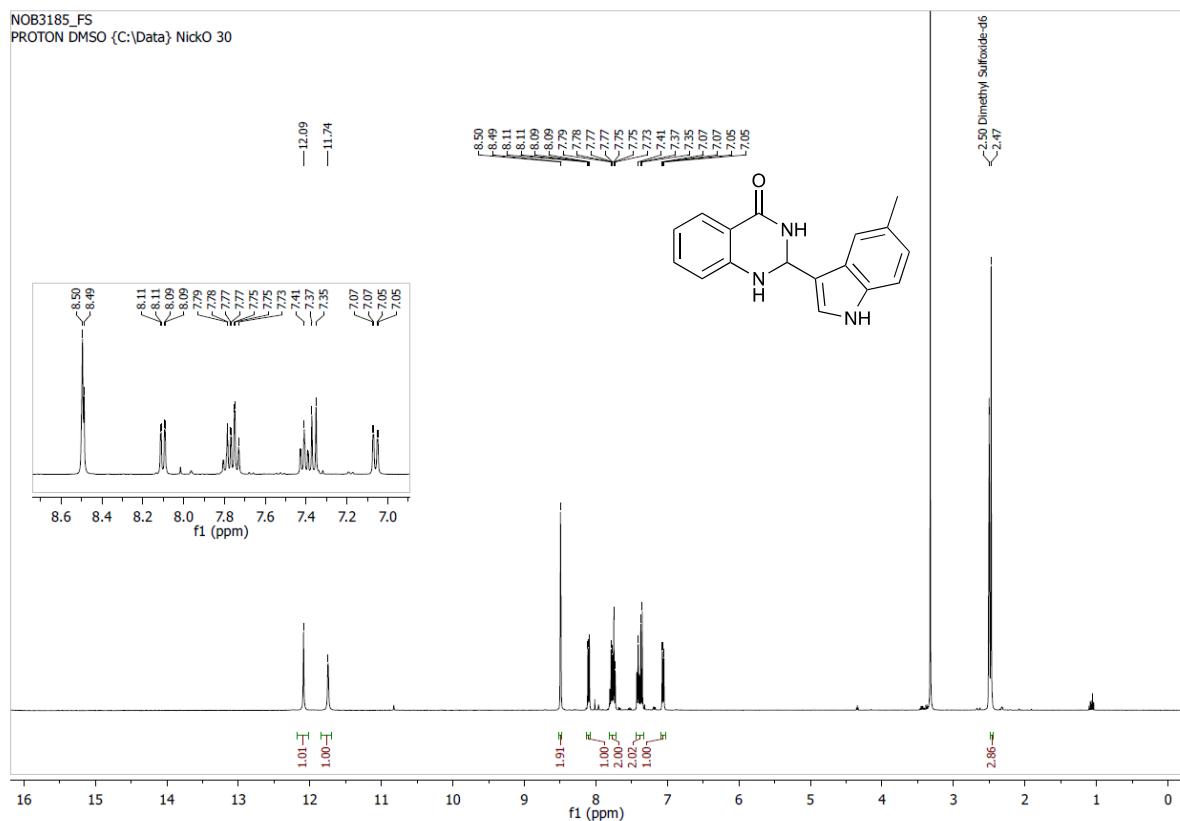
**(E)-2-(2-Nitrostyryl)-2,3-dihydroquinazolin-4(1H)-one (**10al**)**



**(E)-2-(2-(Furan-2-yl)vinyl)-2,3-dihydroquinazolin-4(1H)-one (**10am**)**



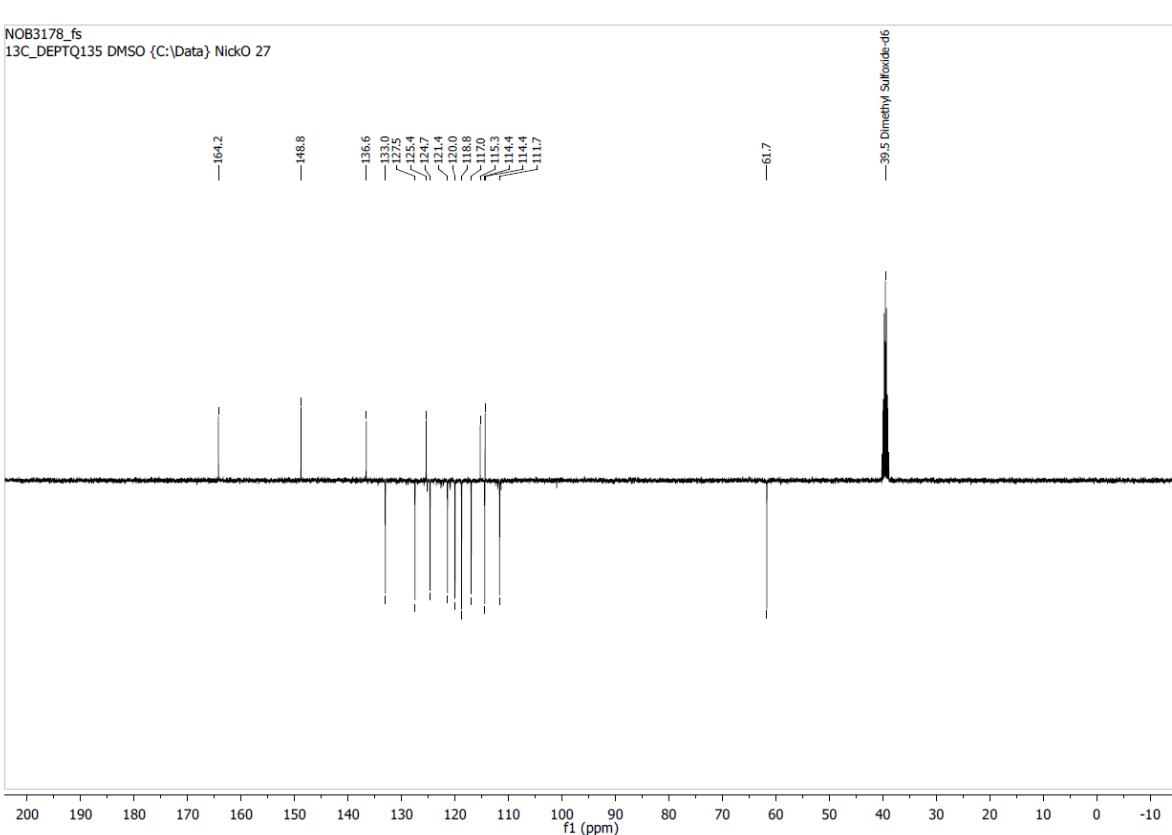
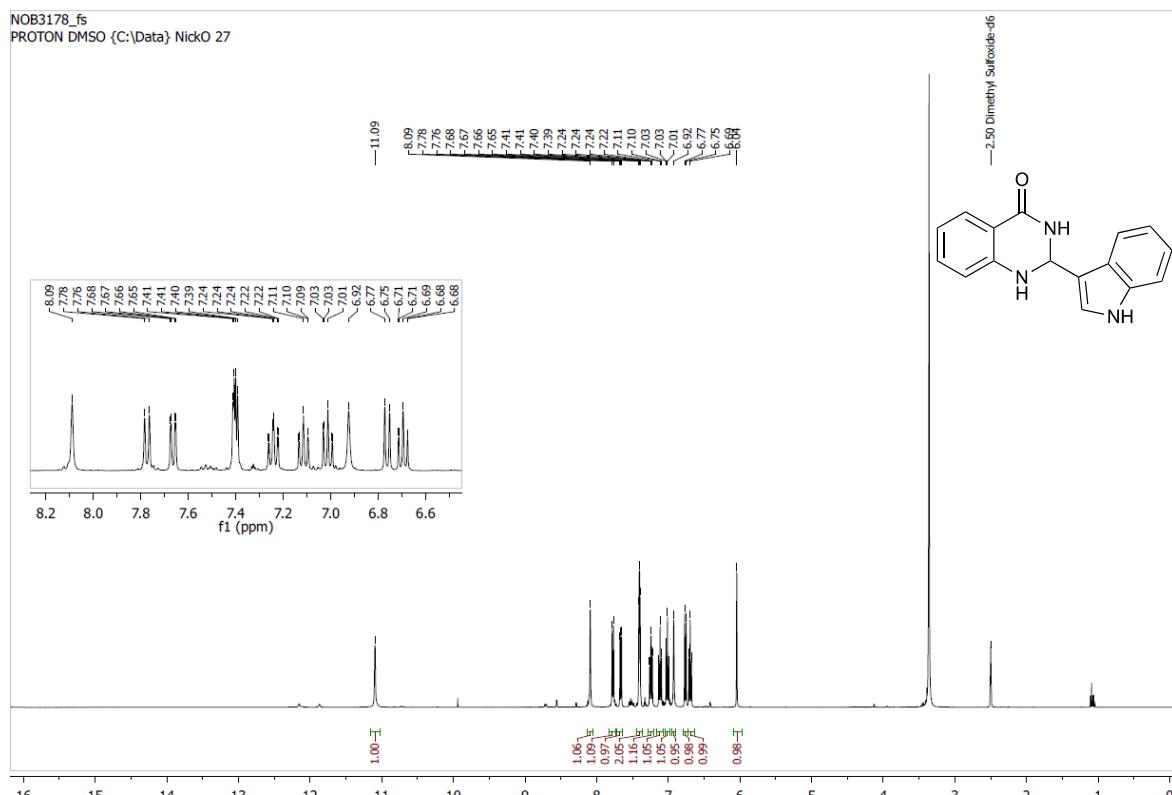
**2-(5-Methyl-1H-indol-3-yl)-2,3-dihydroquinazolin-4(1H)-one (**10an**) NOB3185**



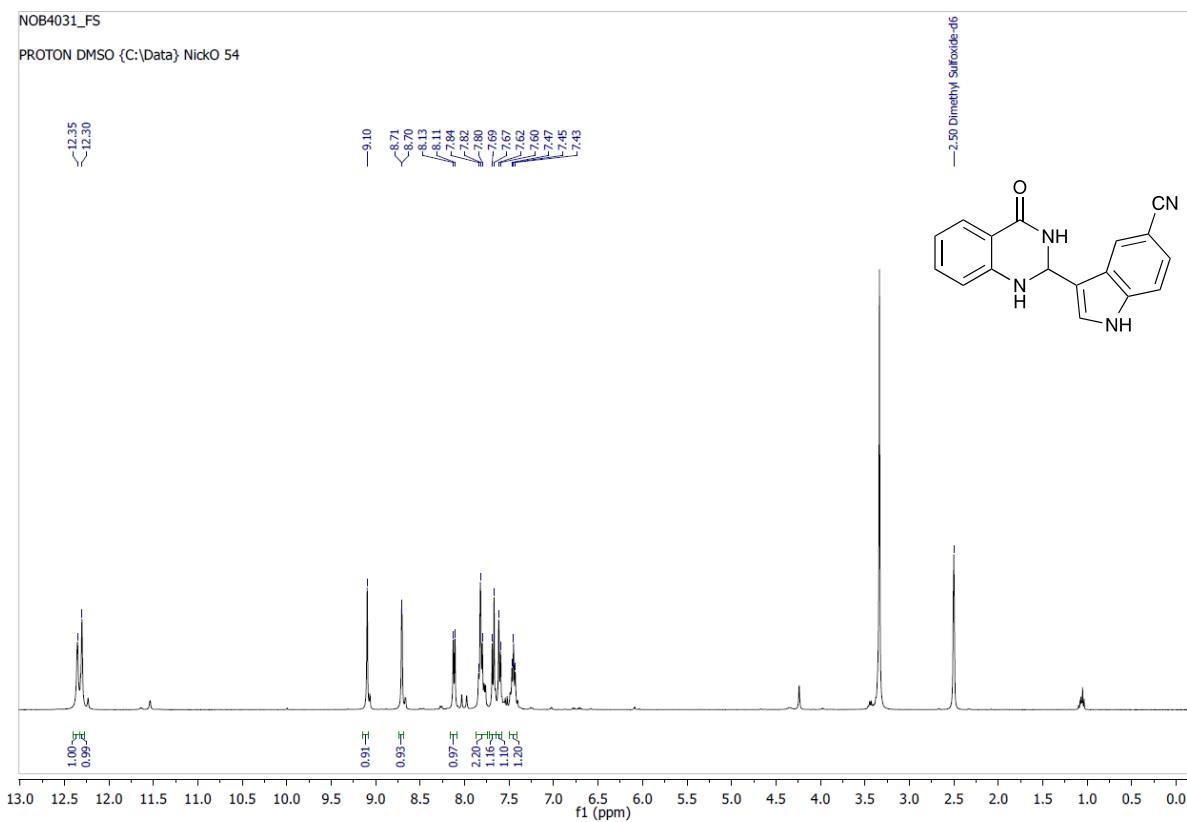
**(10ao) no reaction**

**(10ps) no reaction**

**2-(1H-Indol-3-yl)-2,3-dihydroquinazolin-4(1H)-one (10aq)**

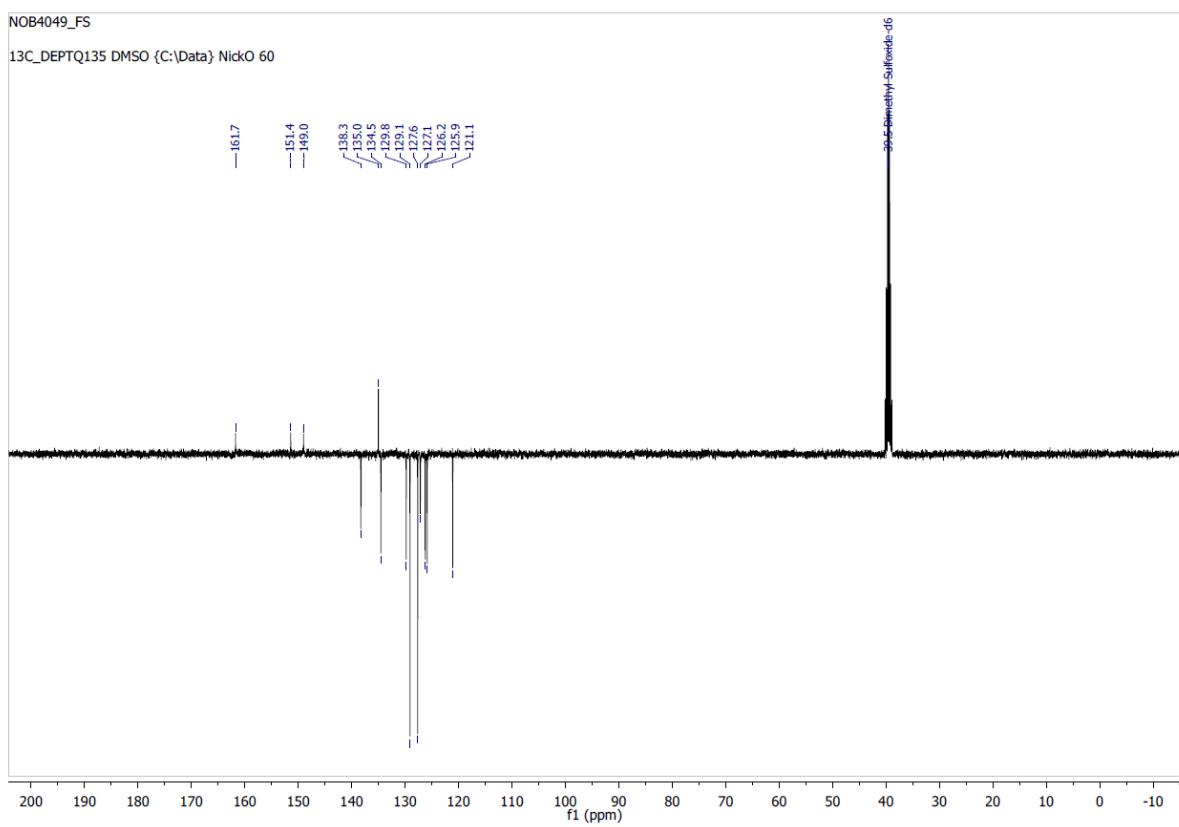
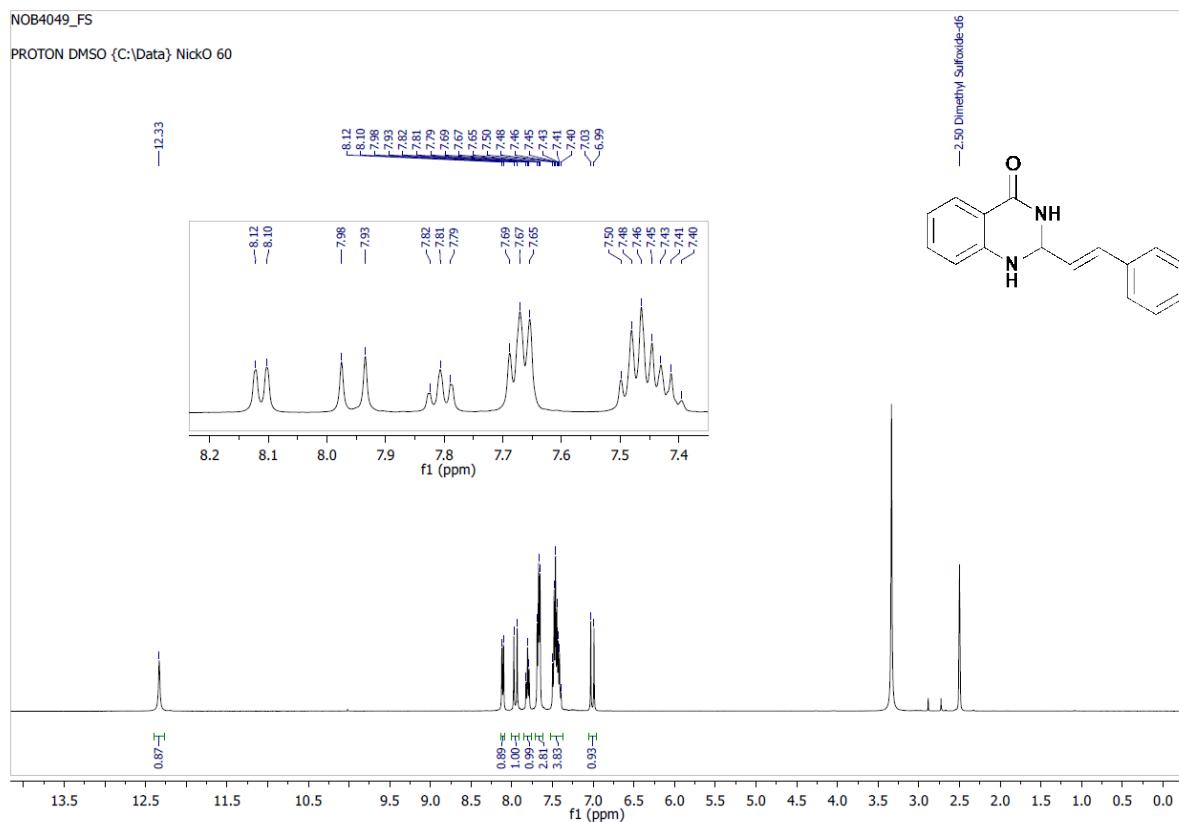


**3-(4-Oxo-1,2,3,4-tetrahydroquinazolin-2-yl)-1*H*-indole-5-carbonitrile (**10ar**)**



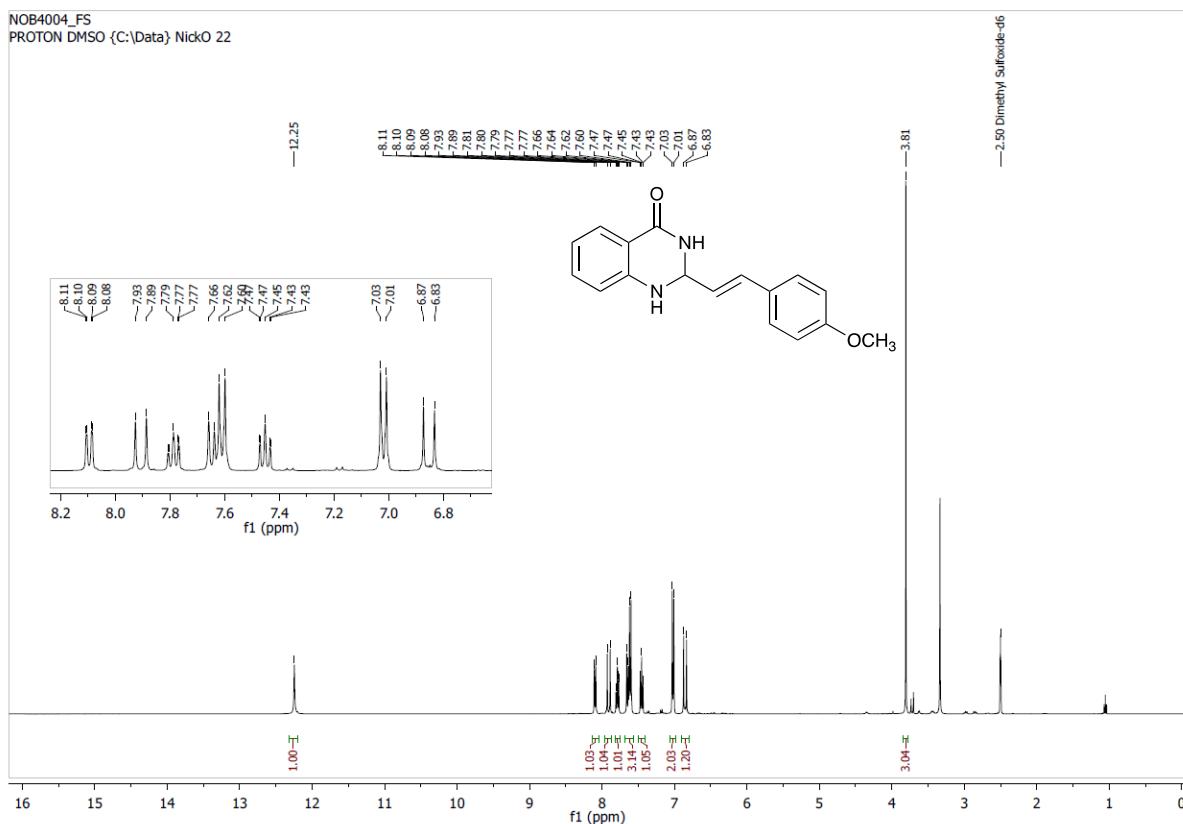
**(10as)** no reaction observed

*(E)-2-Styryl-2,3-dihydroquinazolin-4(1H)-one (**11a**)*

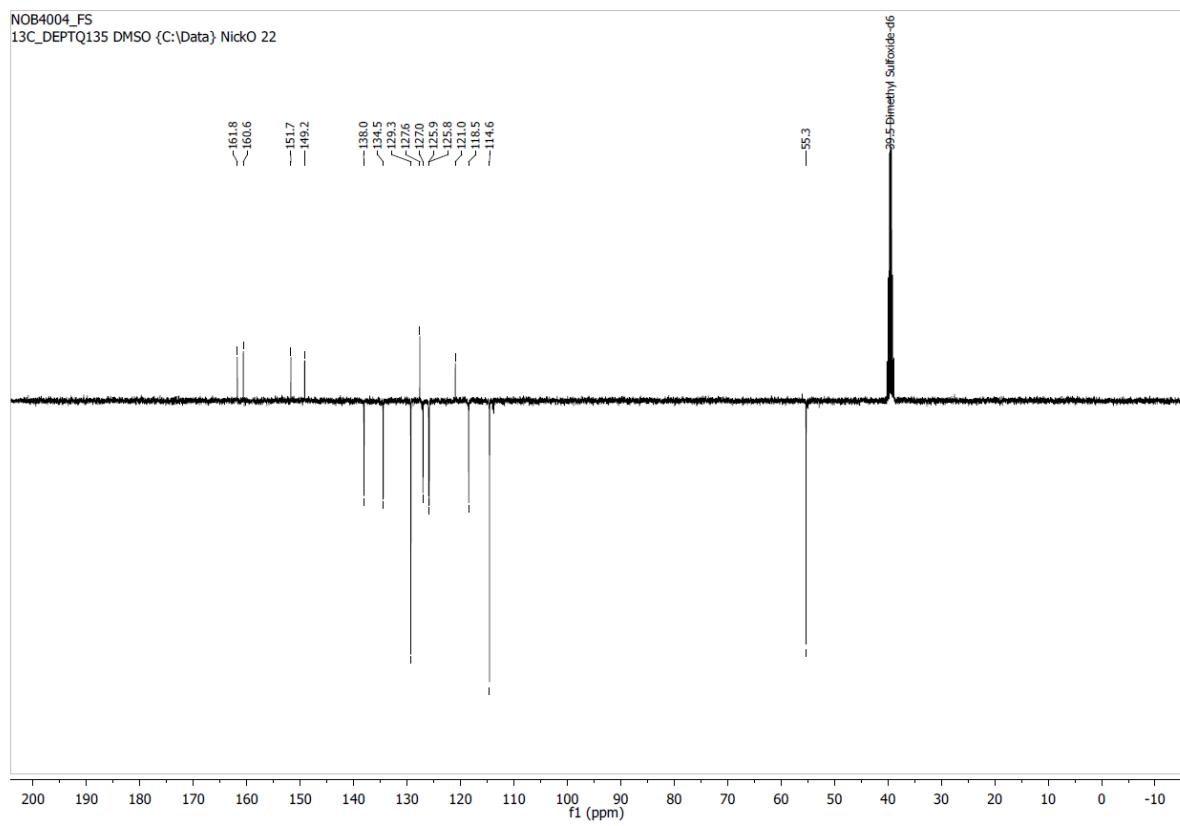


*(E)-2-(4-Methoxystyryl)-2,3-dihydroquinazolin-4(1H)-one (11b)*

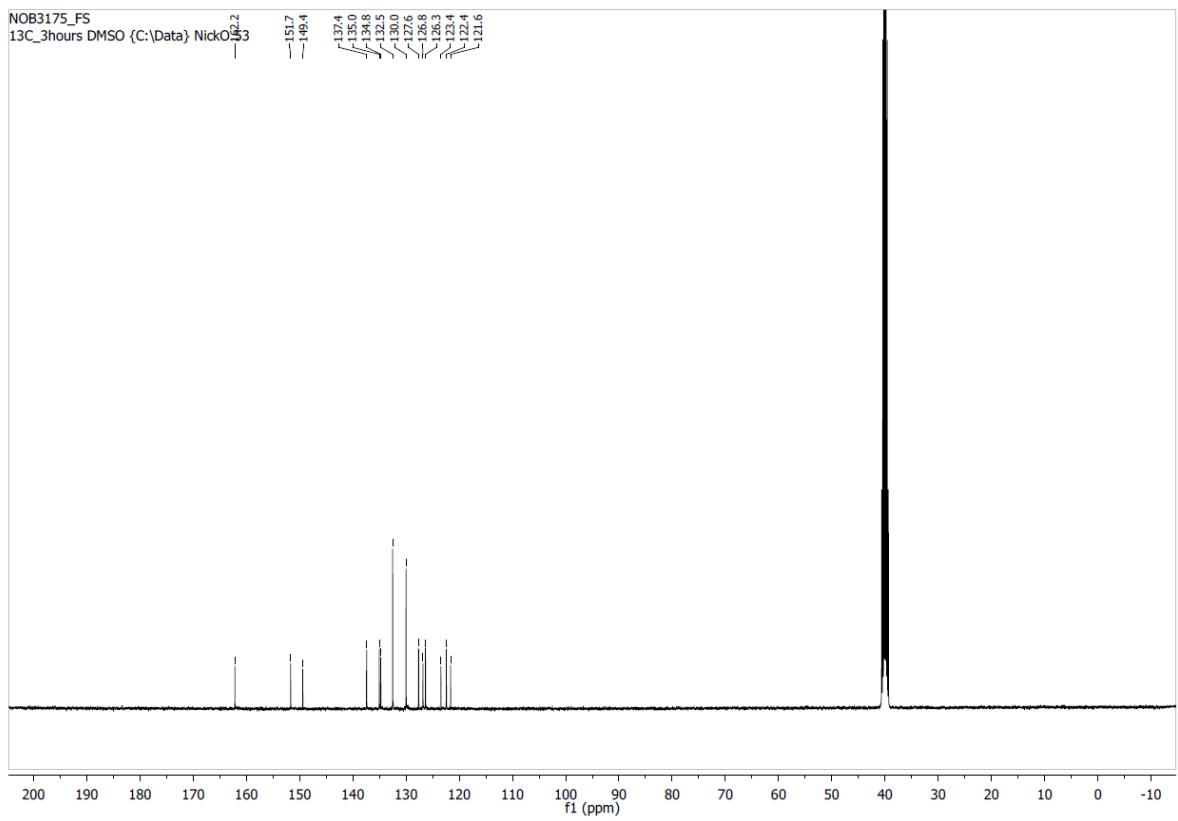
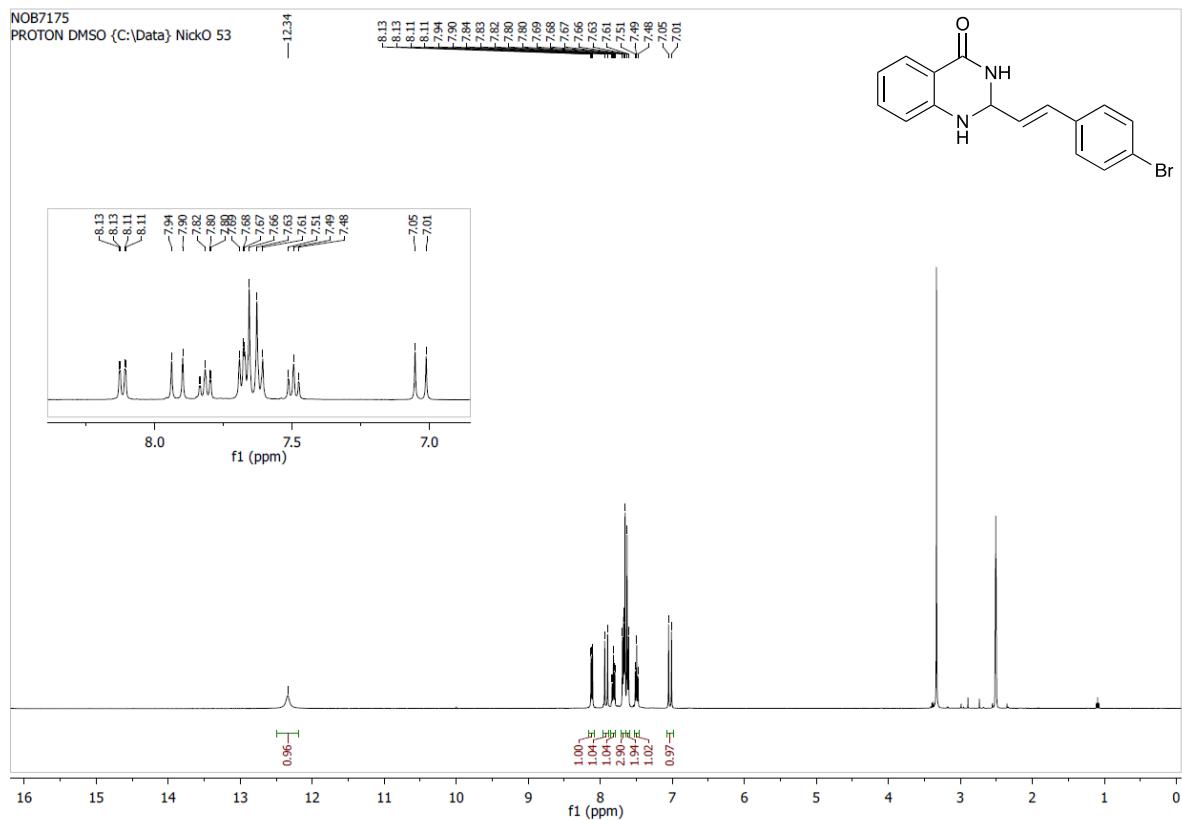
NOB4004\_FS  
PROTON DMSO {C:\Data} NickO 22



NOB4004\_FS  
13C\_DPTQ135 DMSO {C:\Data} NickO 22



*(E)-2-(4-Bromostyryl)-2,3-dihydroquinazolin-4(1H)-one (11c)*



*(E)-2-(Hex-1-en-1-yl)-2,3-dihydroquinazolin-4(1H)-one (**11d**)*

