

SUPPORTING INFORMATION

**Carbofluoresceins and Carborhodamines as Scaffolds for High-  
Contrast Fluorogenic Probes**

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Luke D. Lavis\*

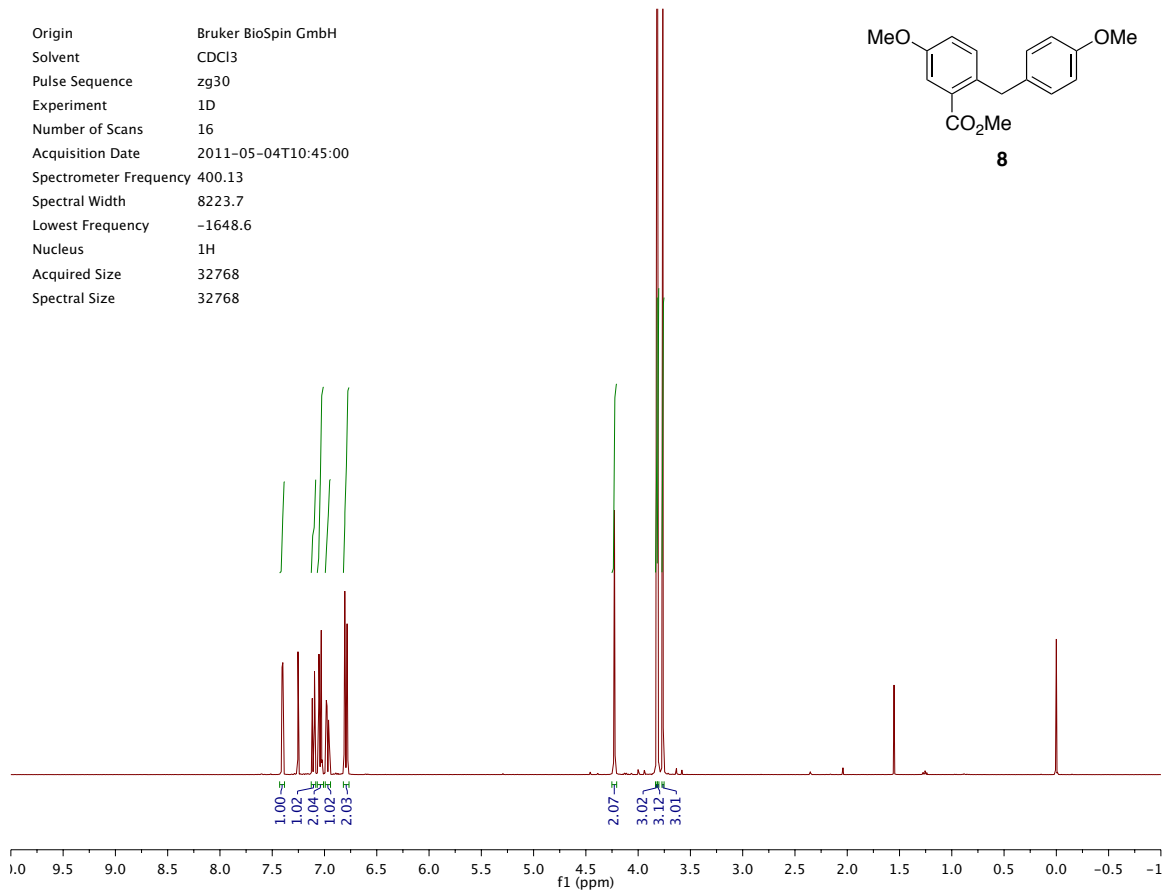
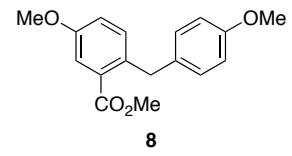
*Janelia Farm Research Campus, Howard Hughes Medical Institute,  
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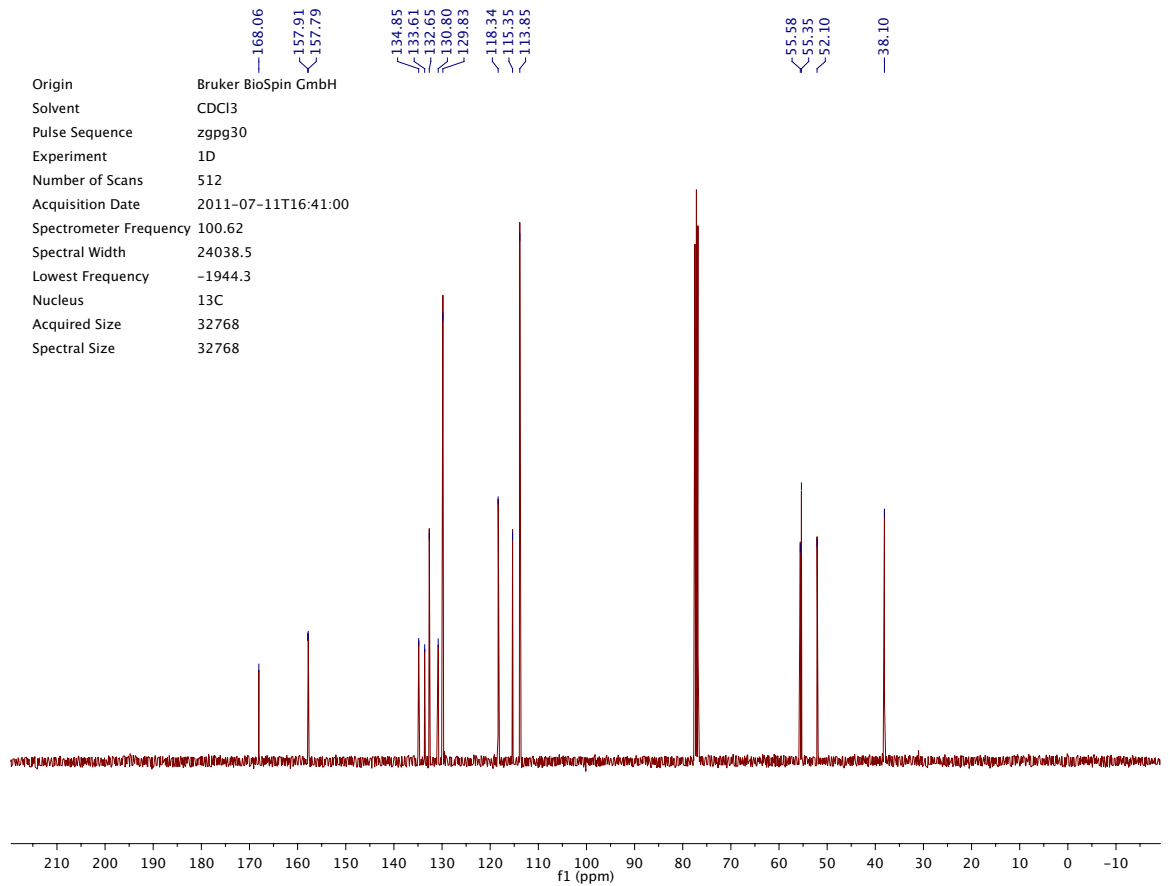
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**S2: Characterization Spectra (NMR, HPLC)**

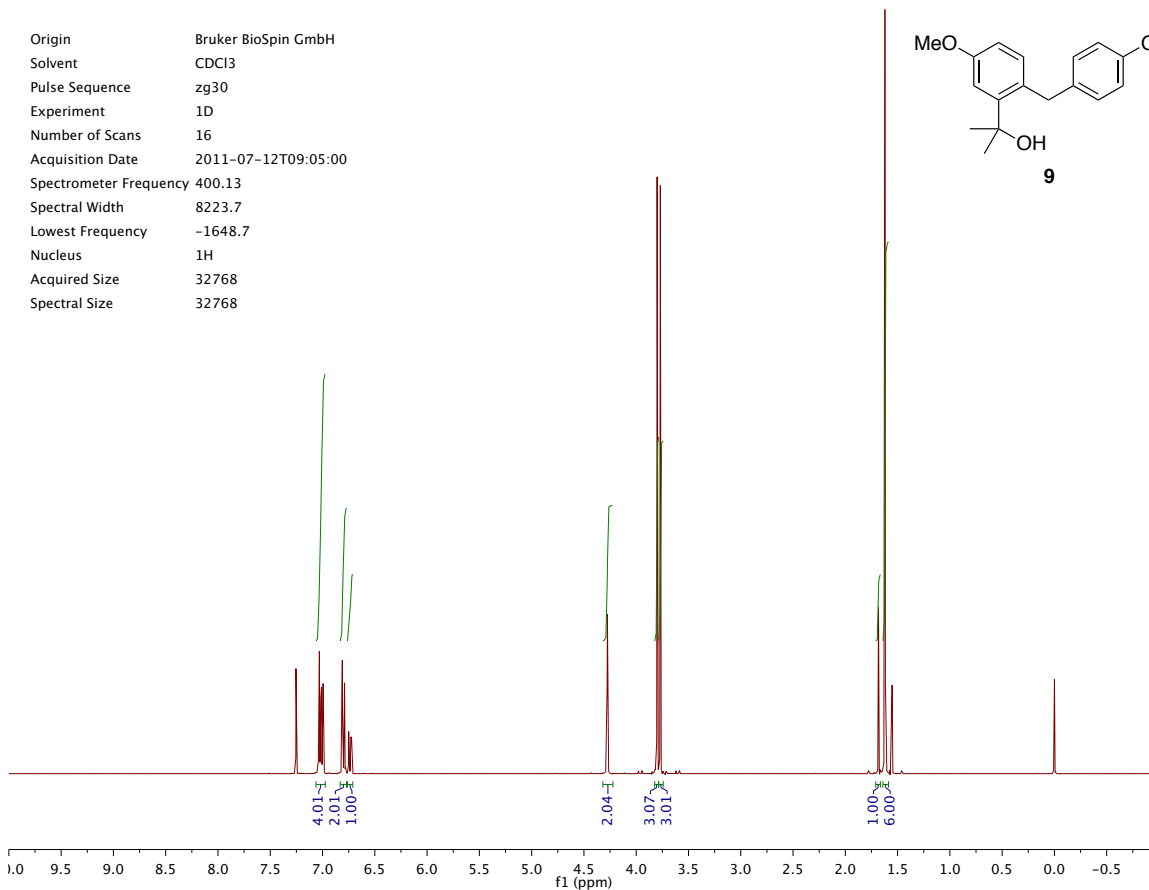
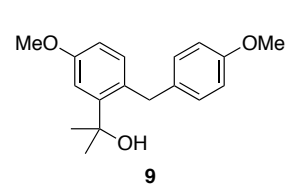
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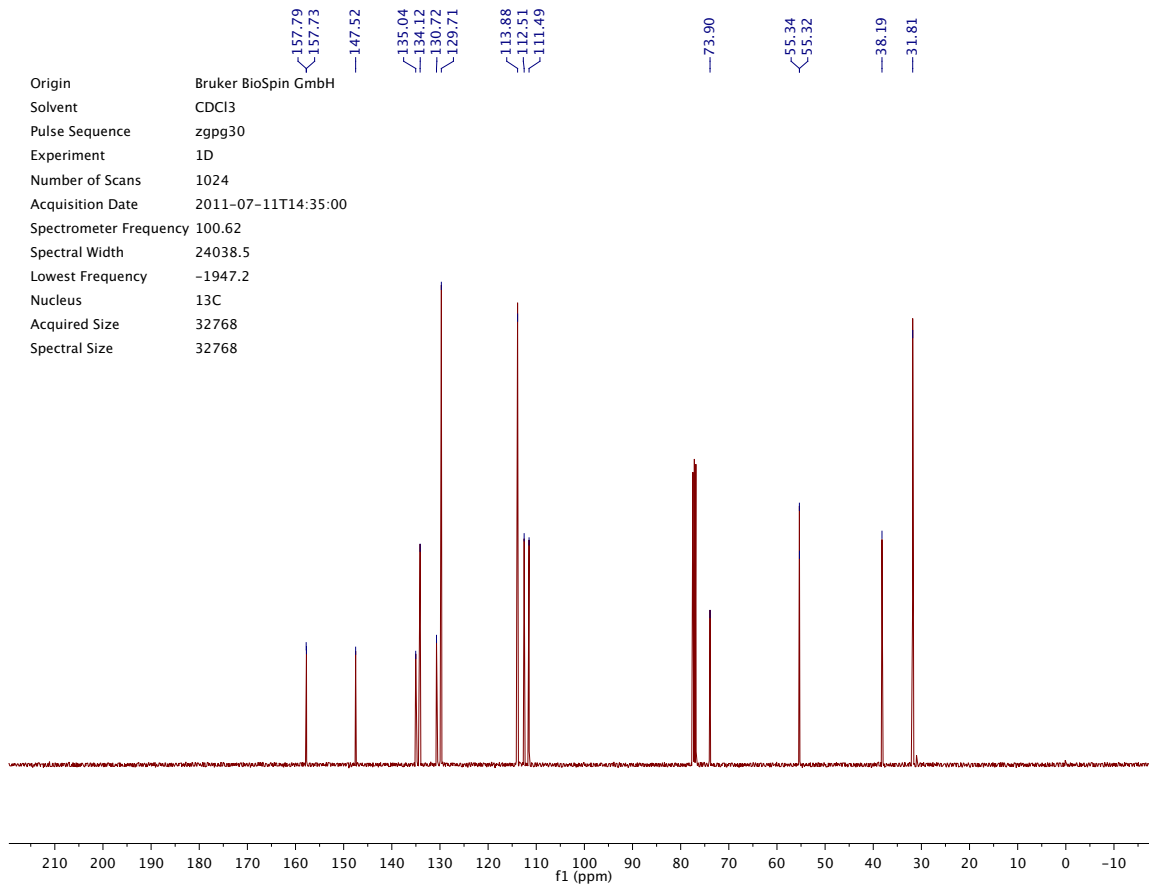
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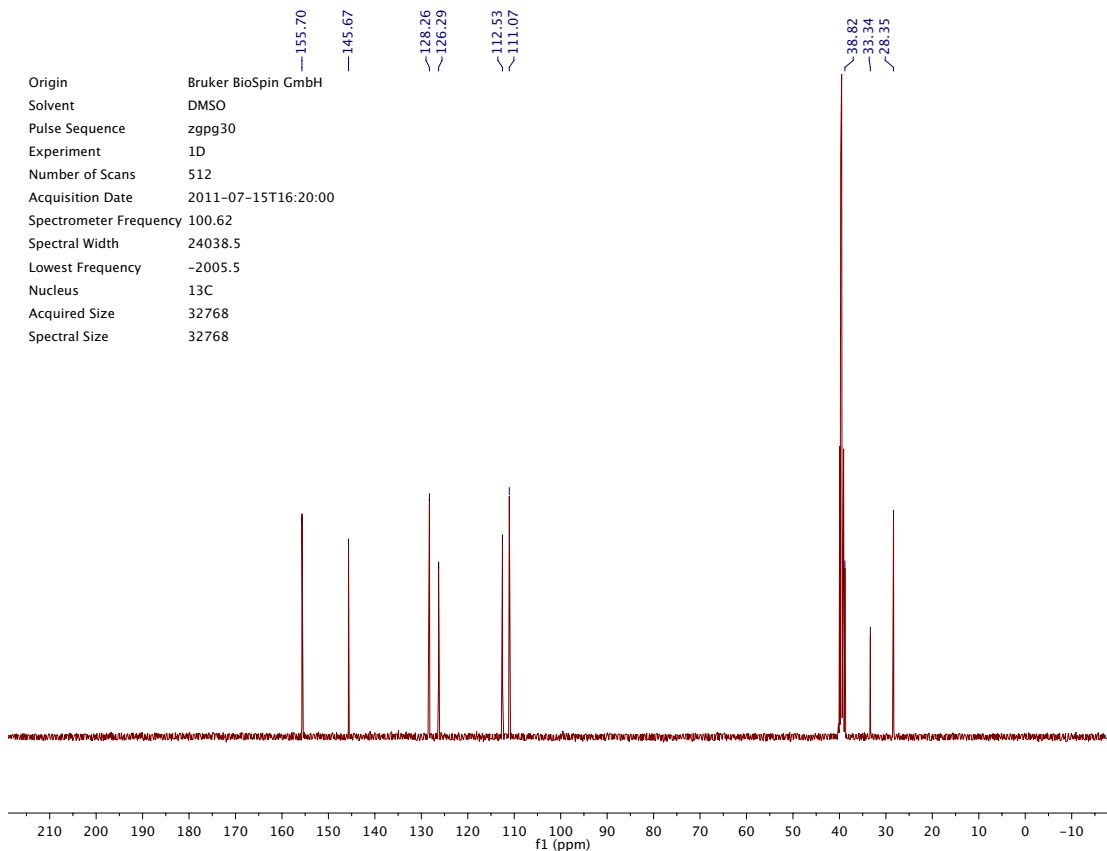
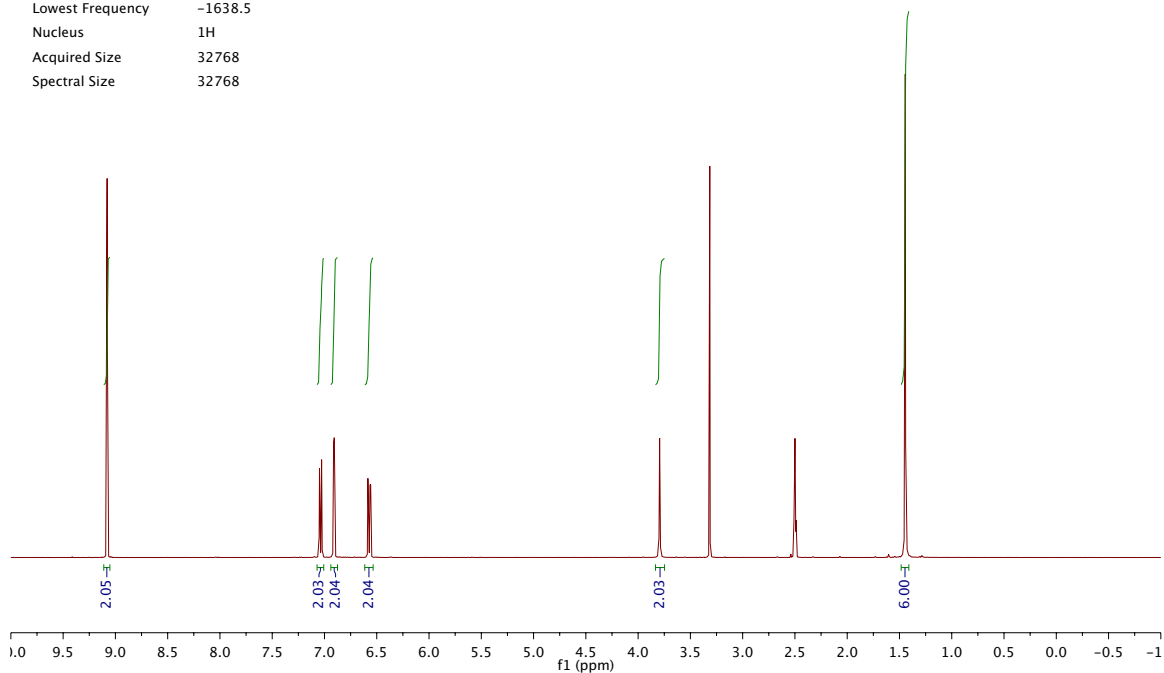
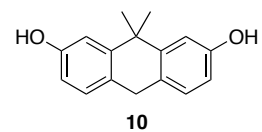
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 Solvent CDCl3  
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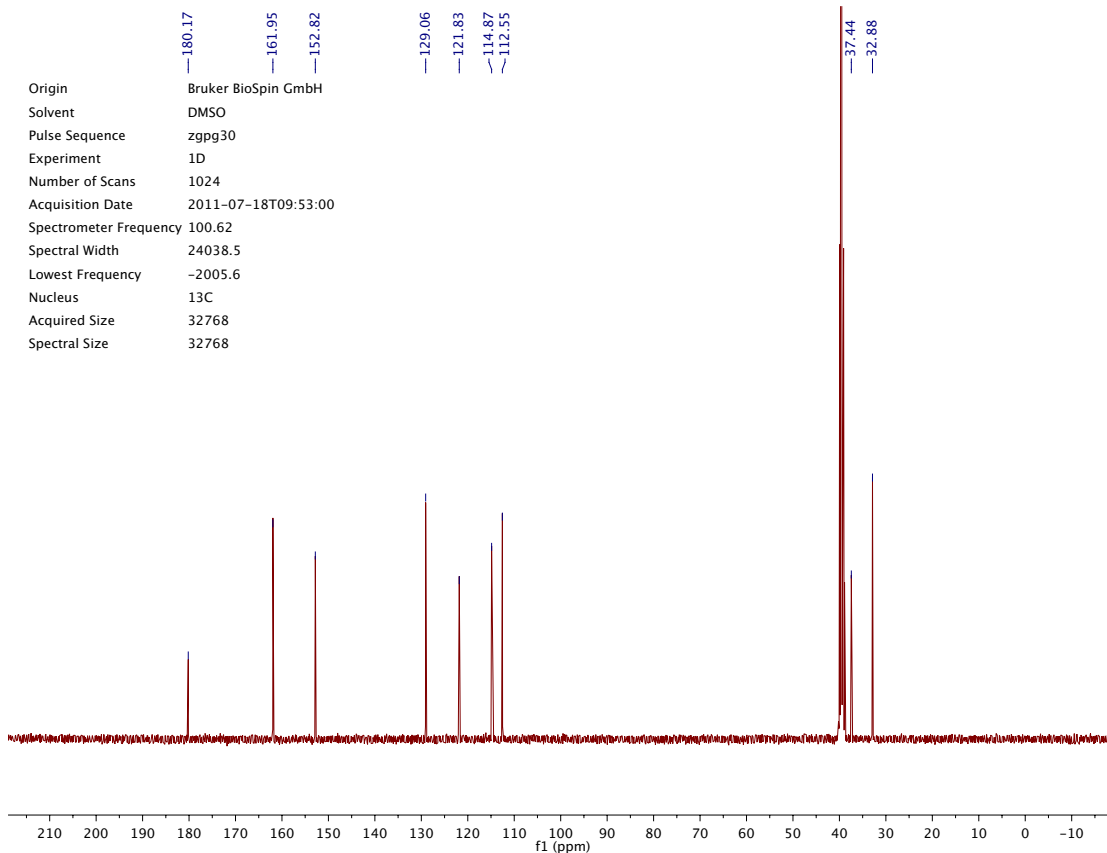
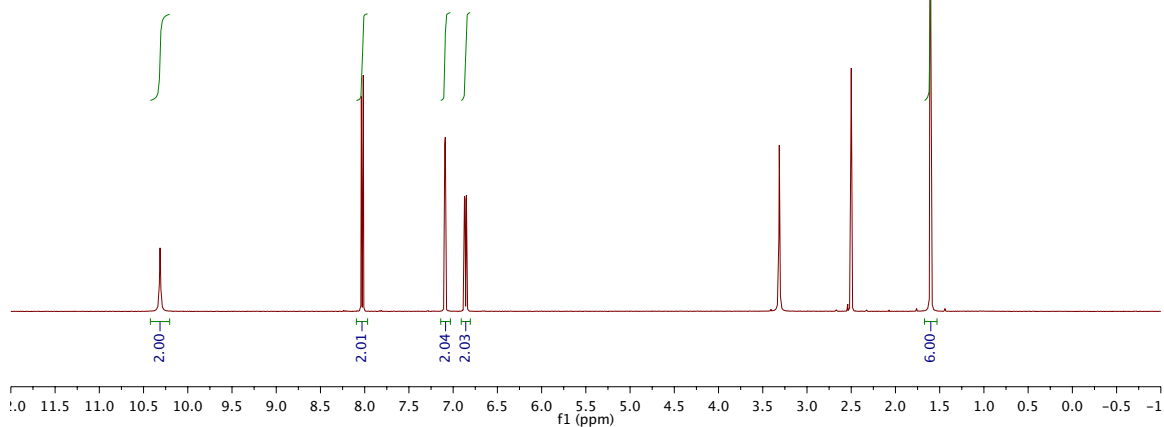
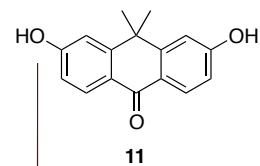


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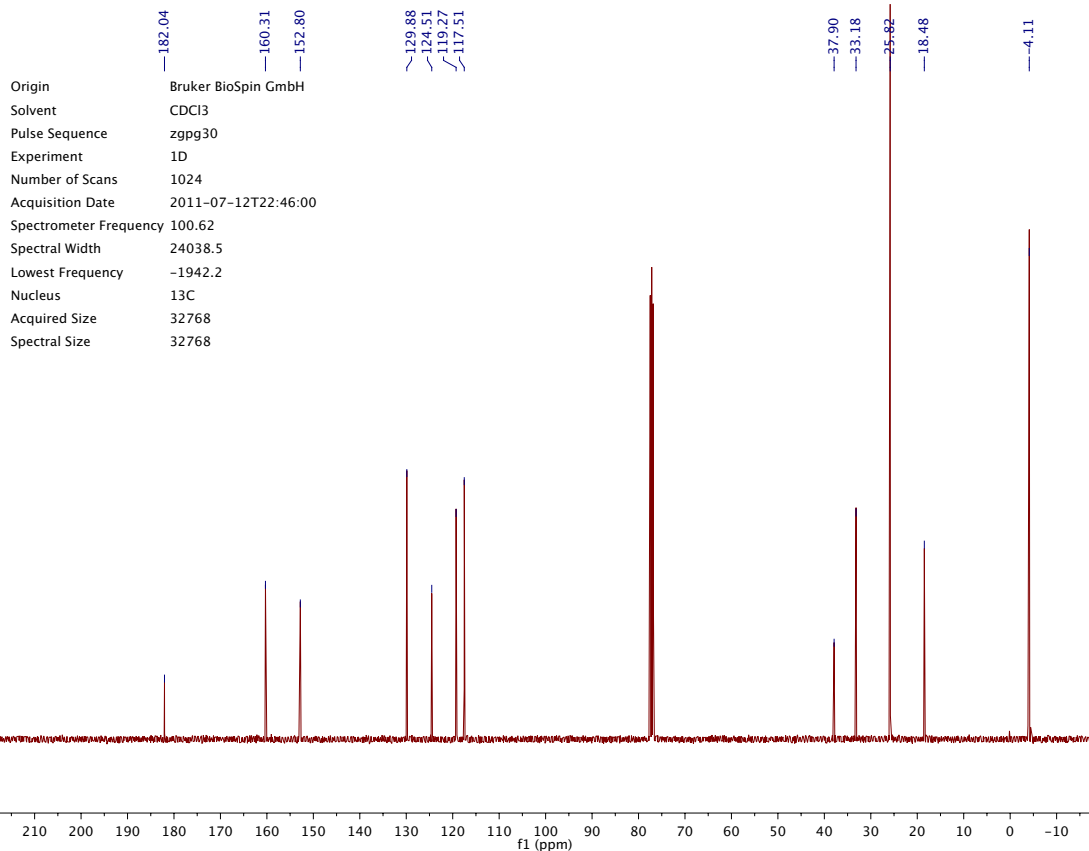
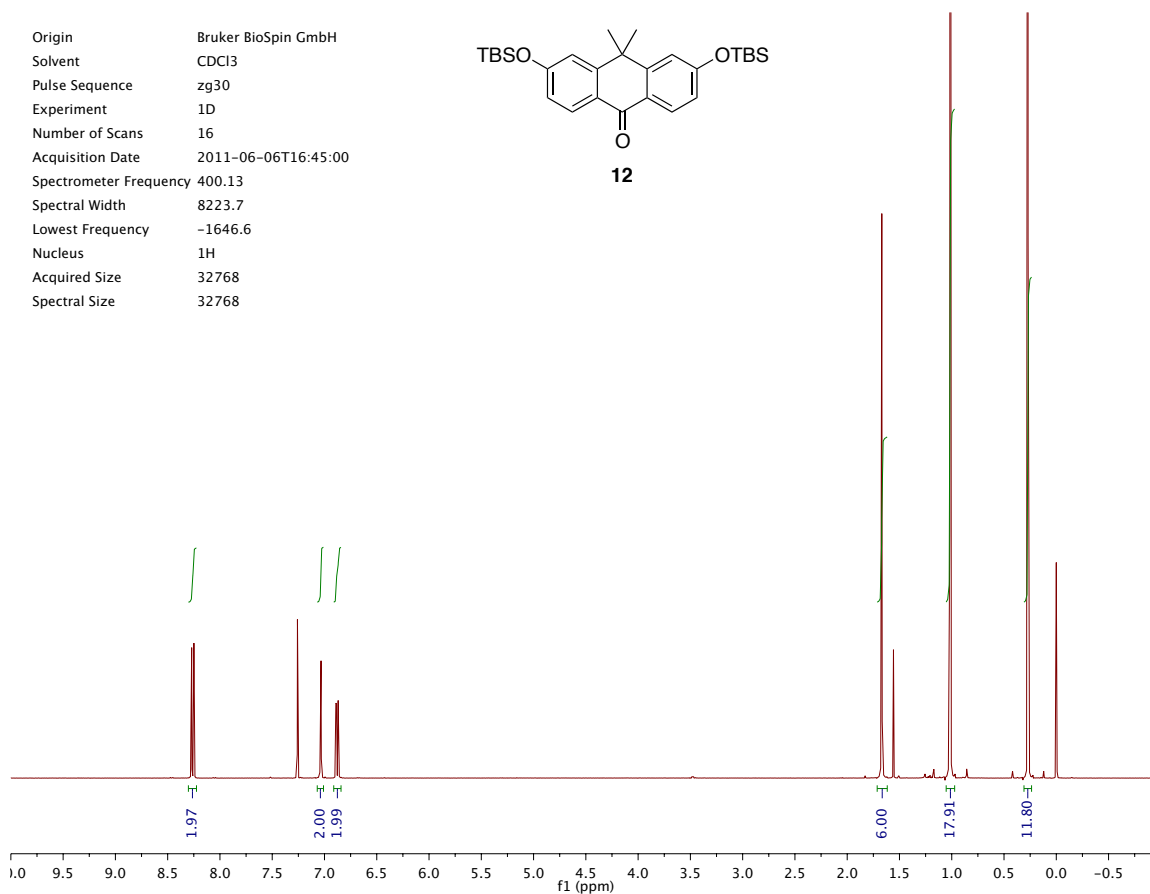
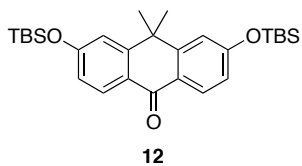


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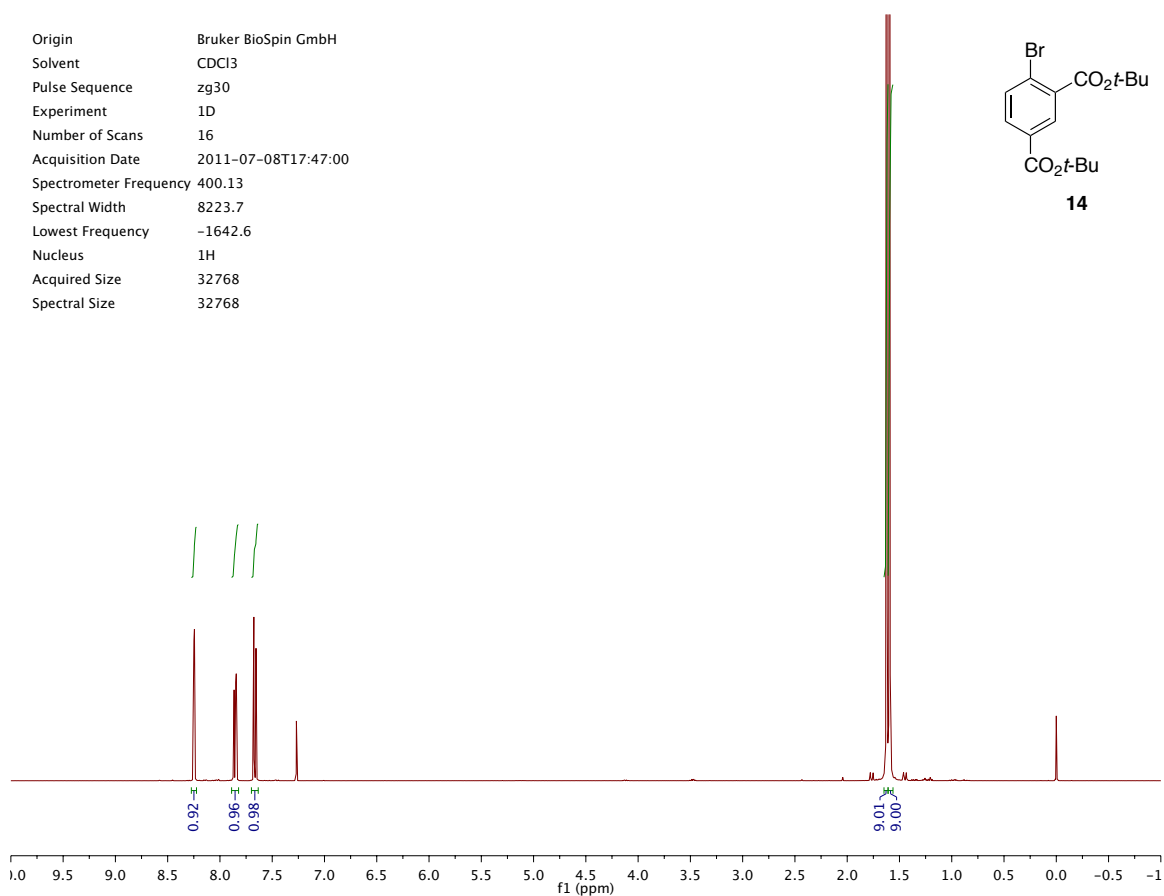
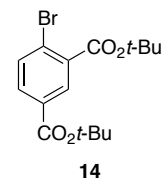


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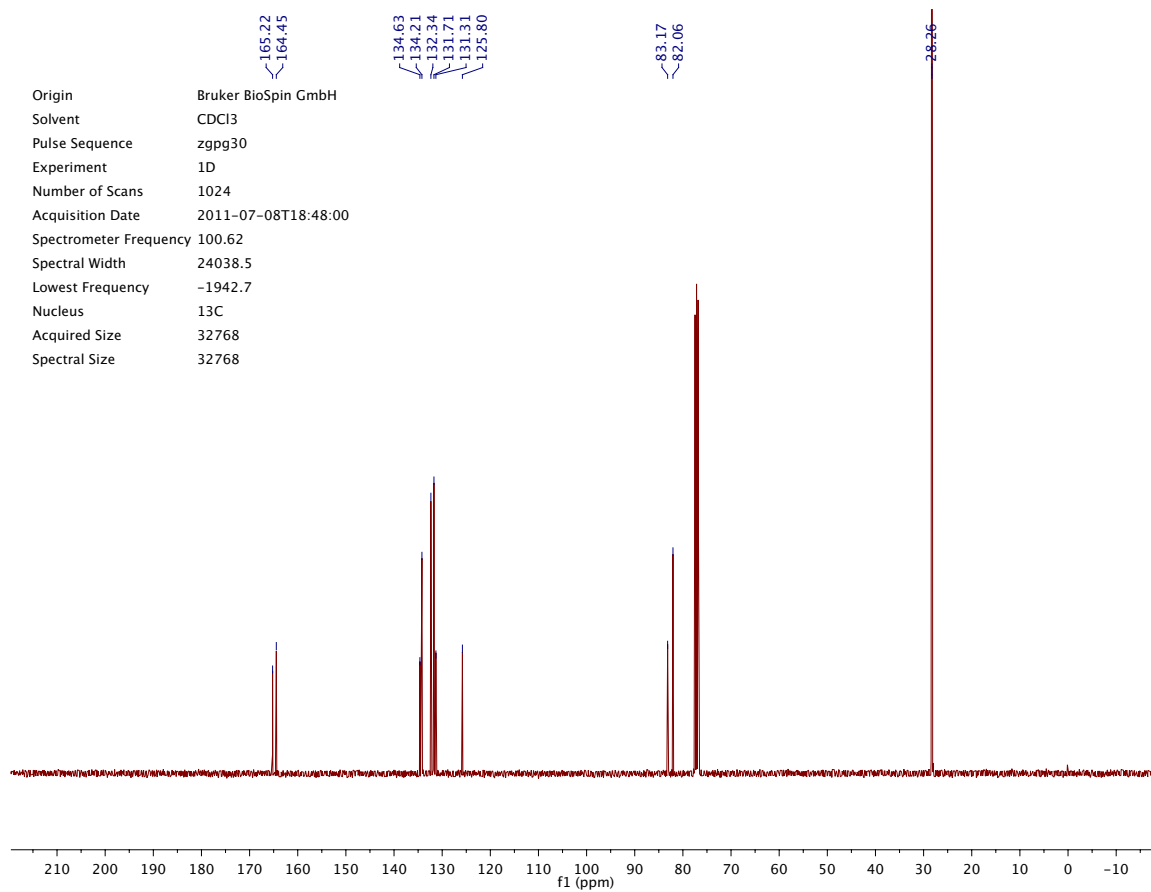


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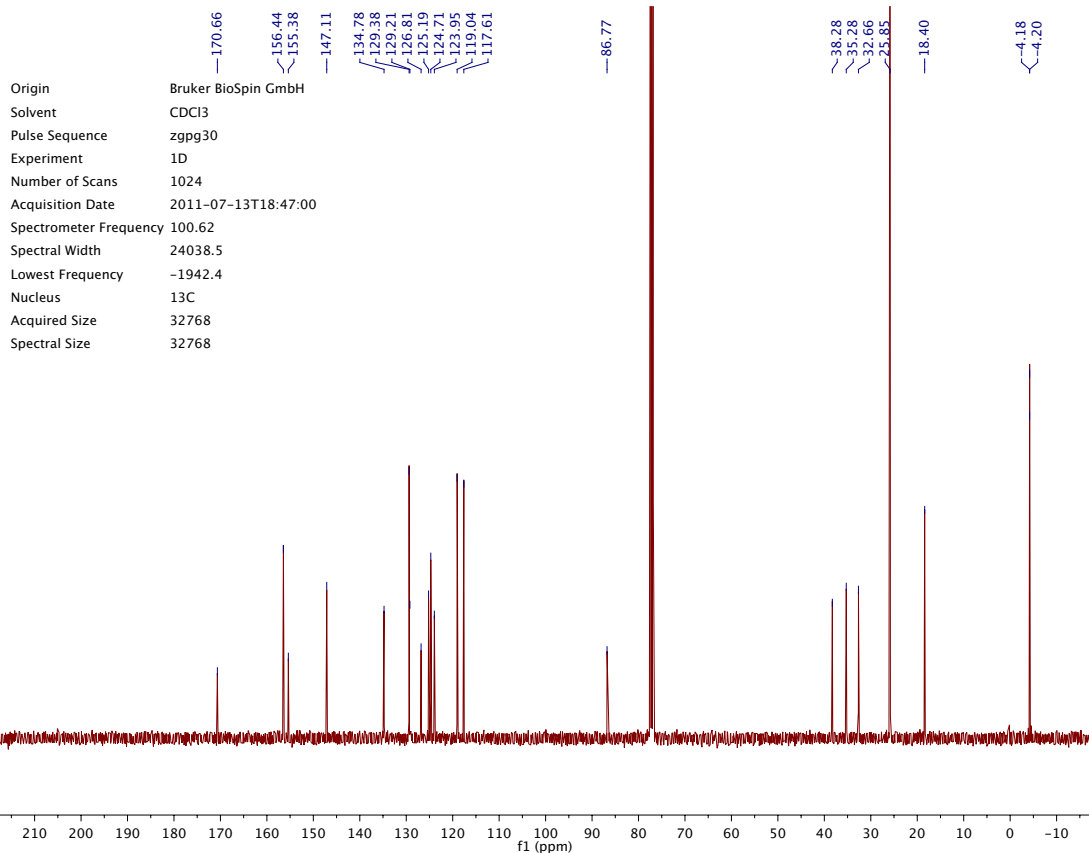
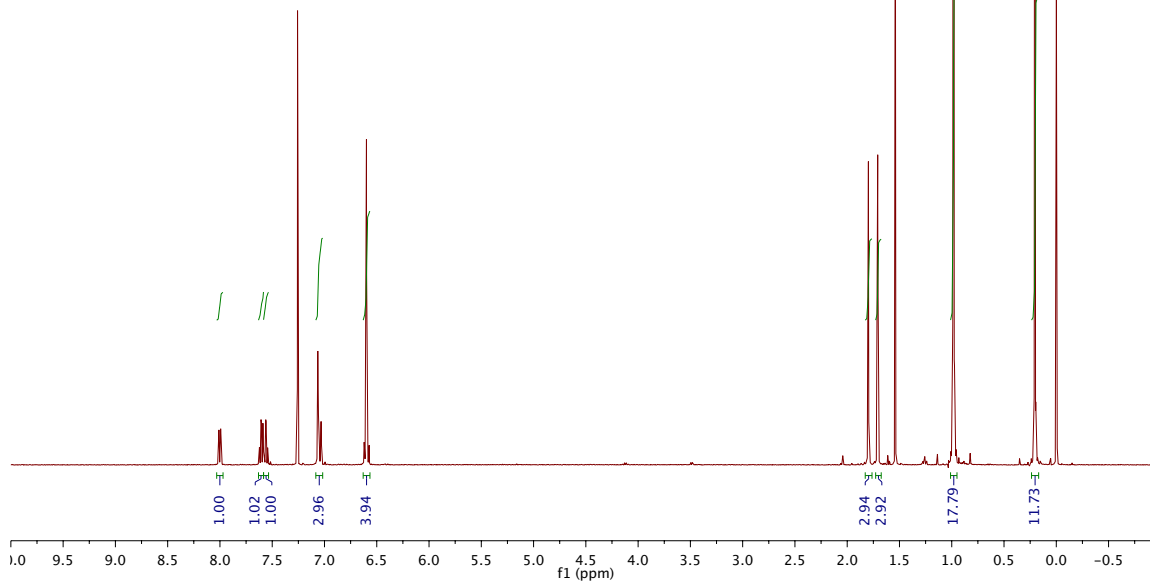
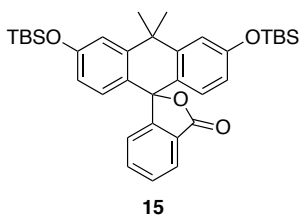
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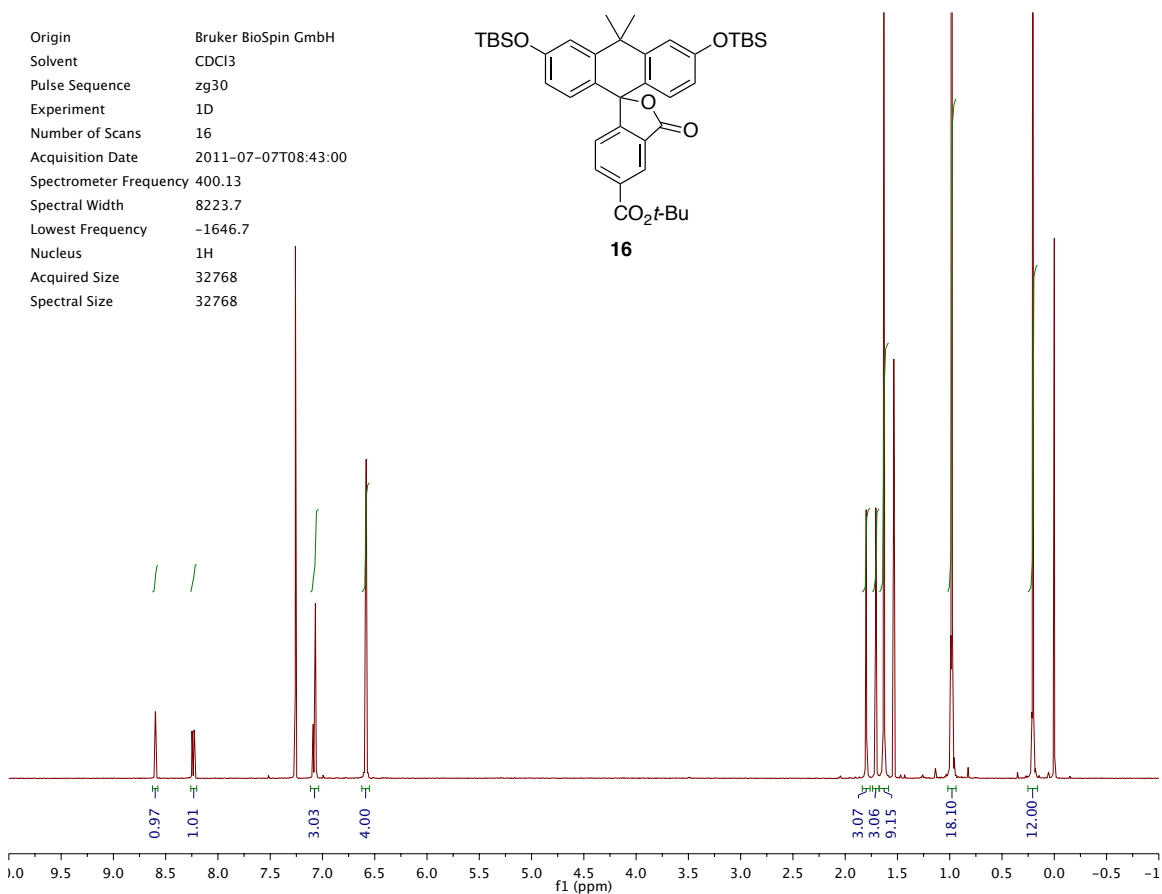
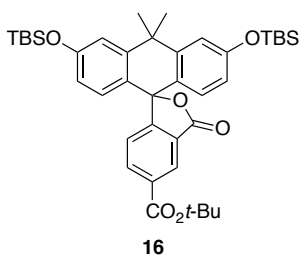
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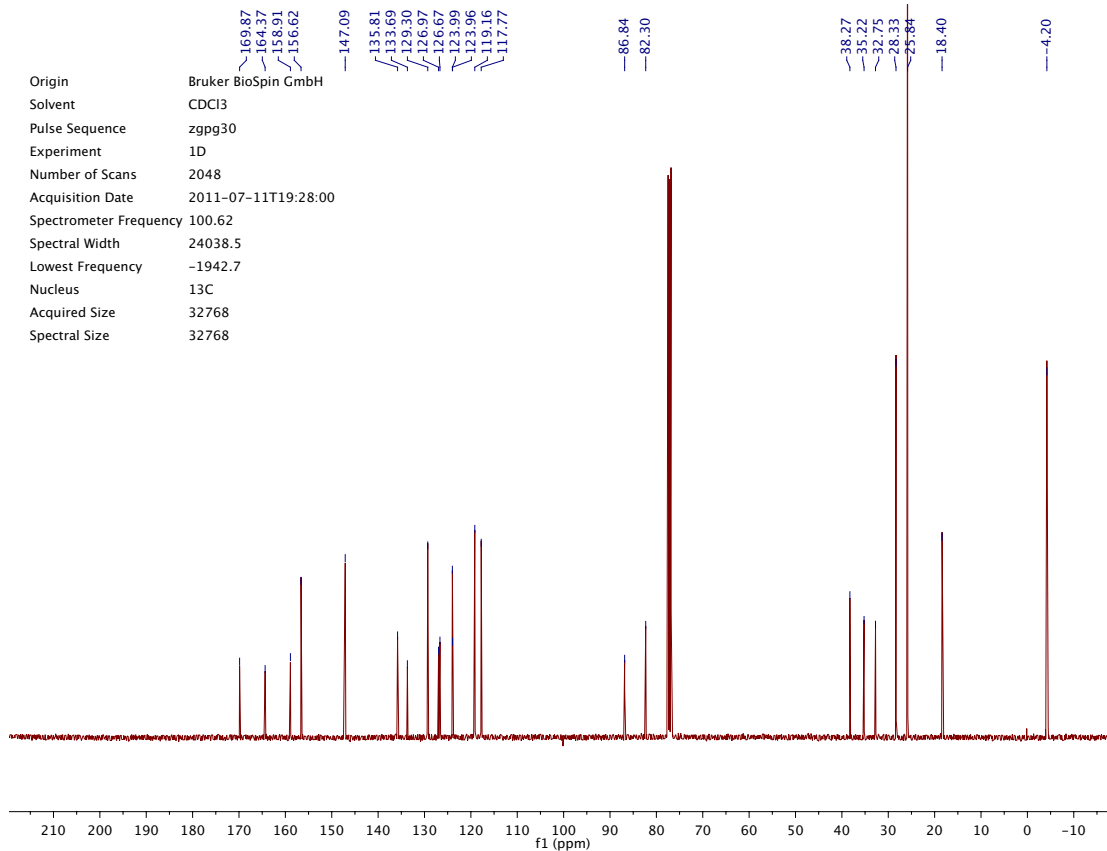
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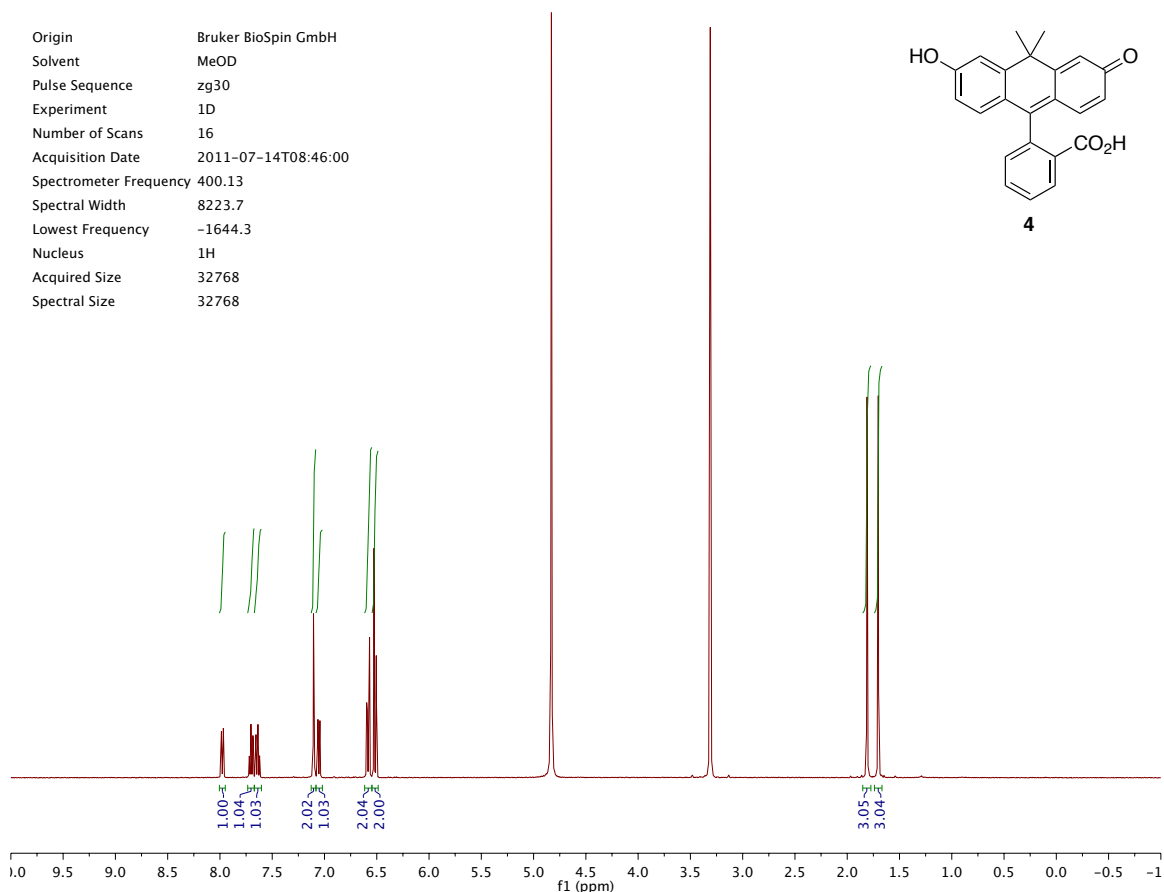
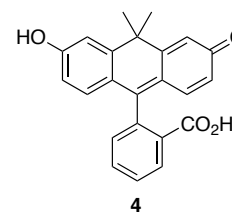
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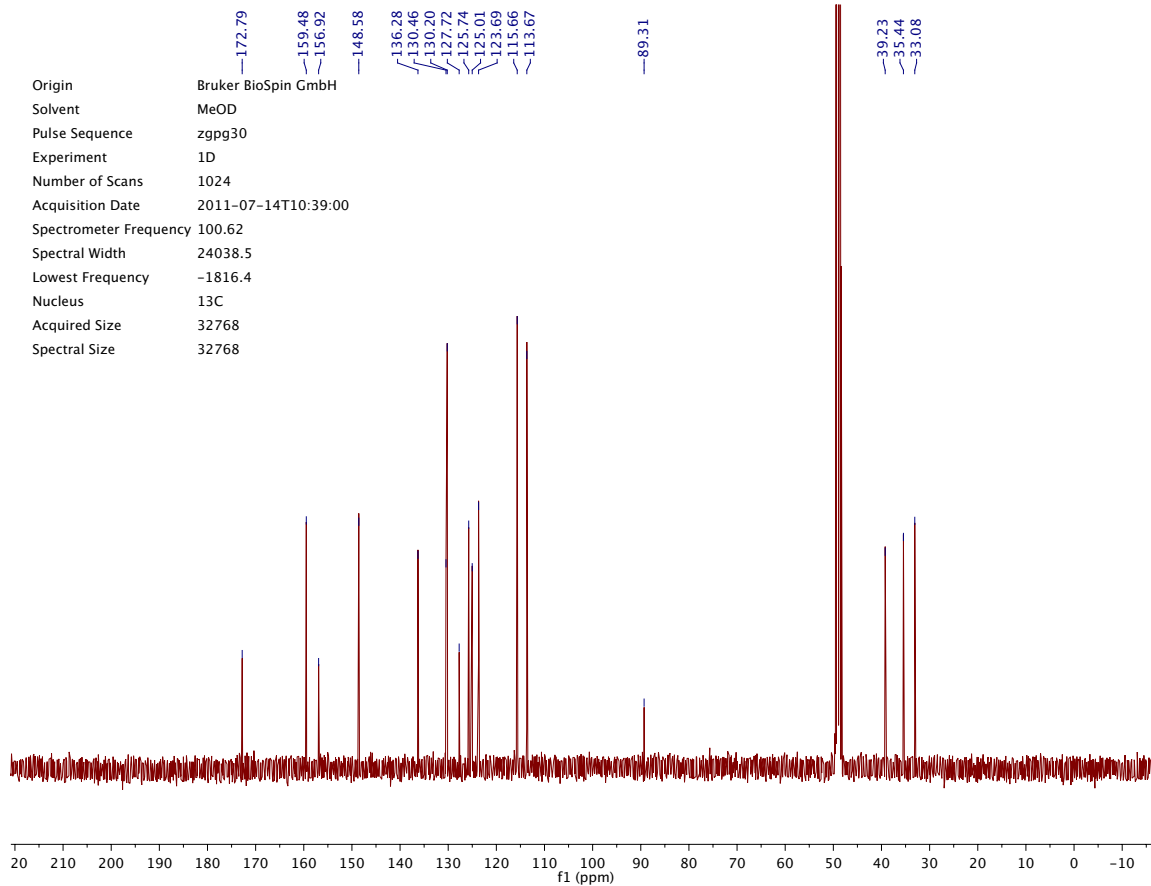
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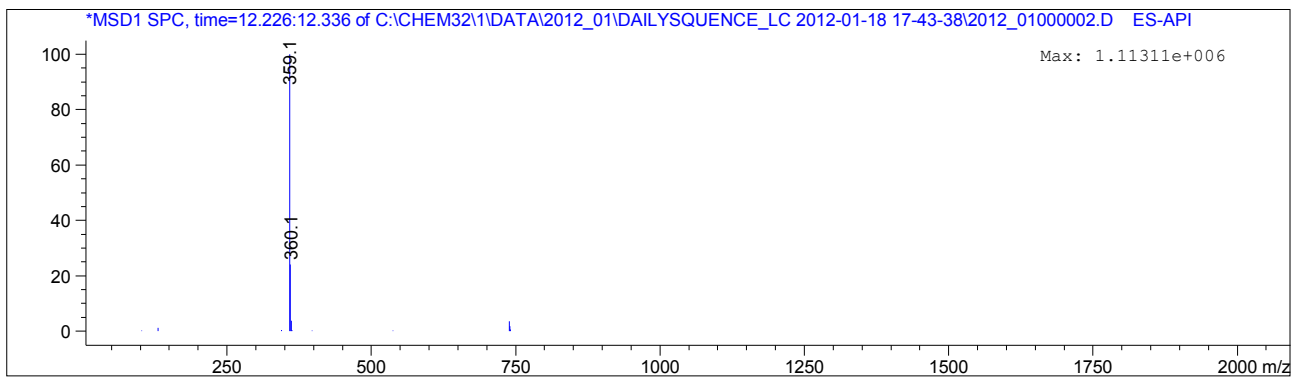
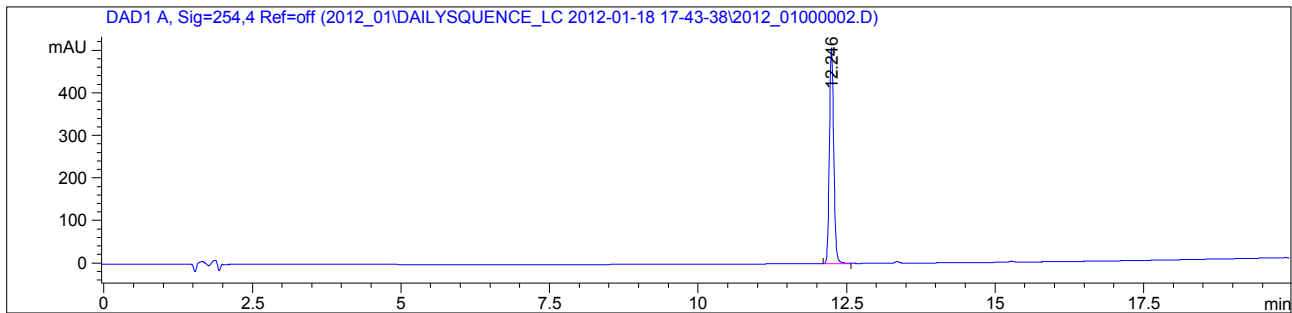
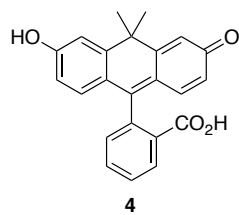


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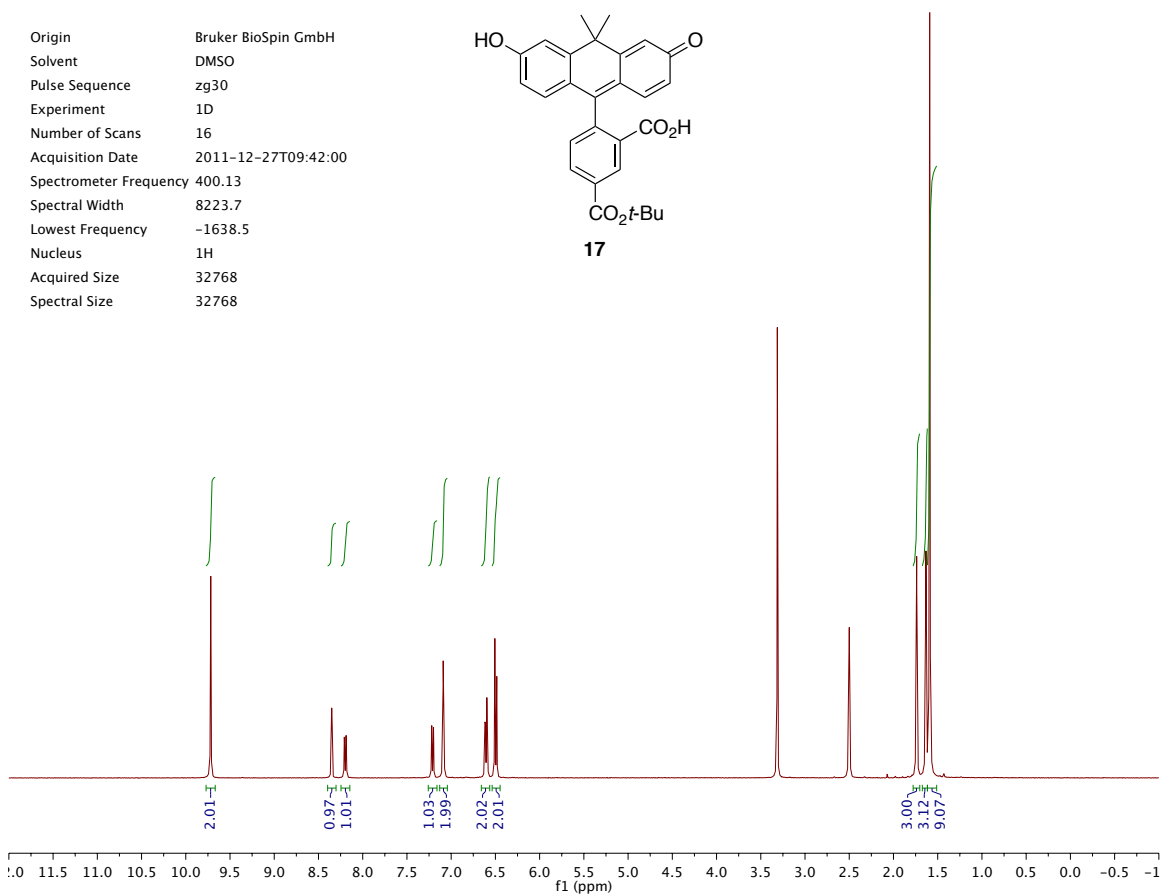
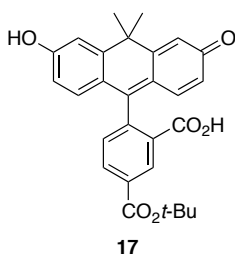


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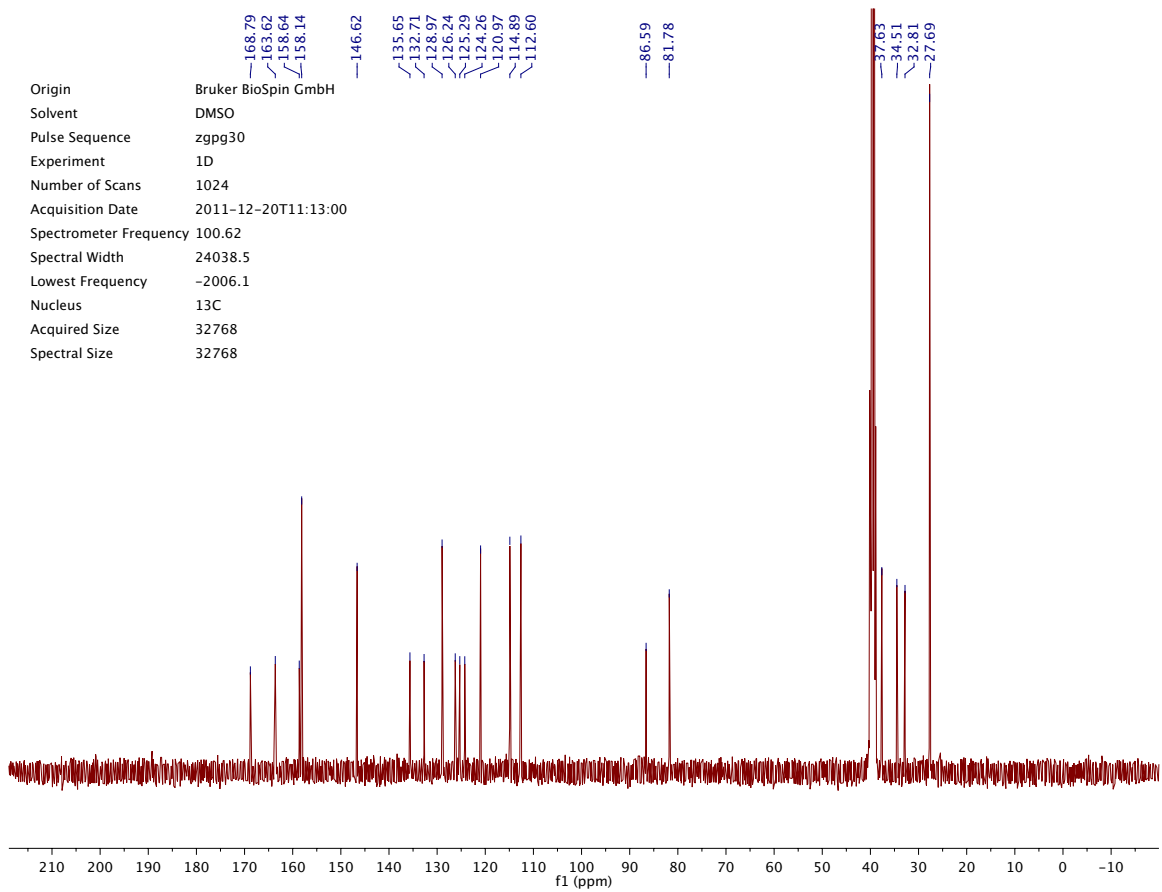




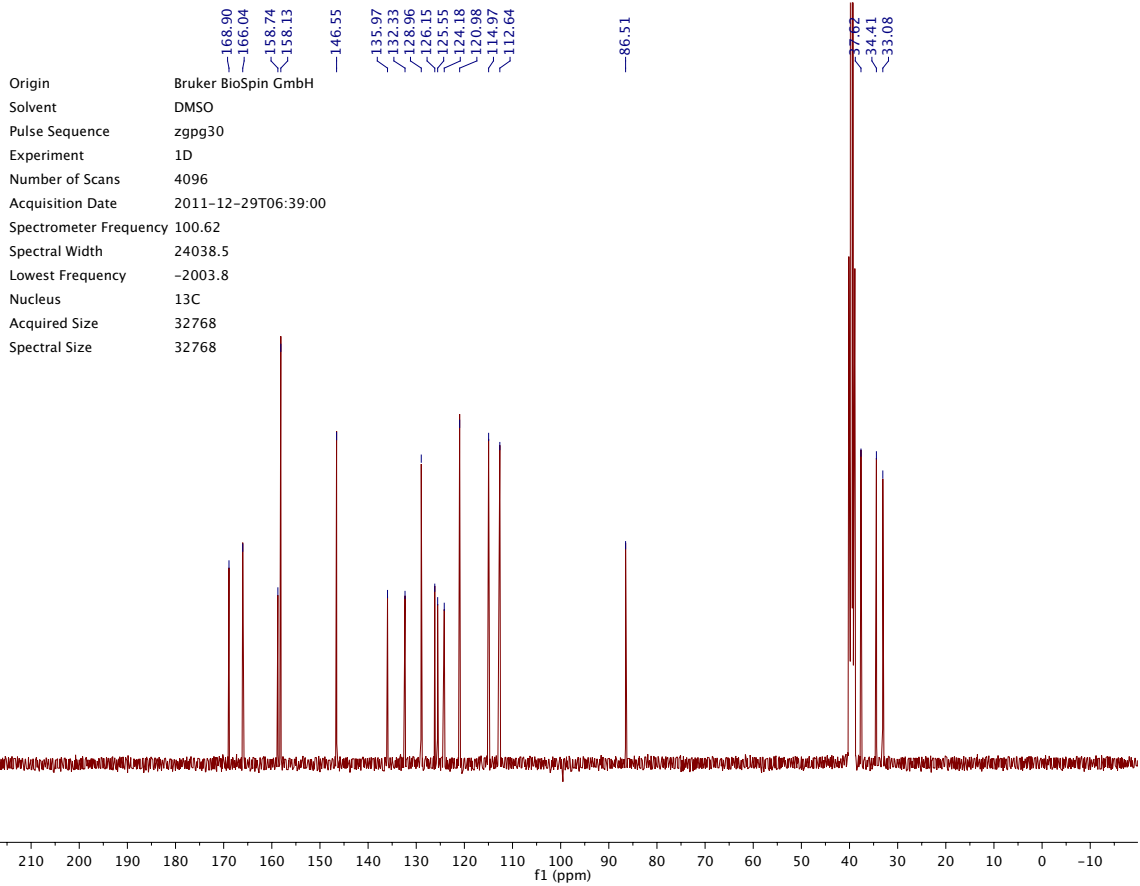
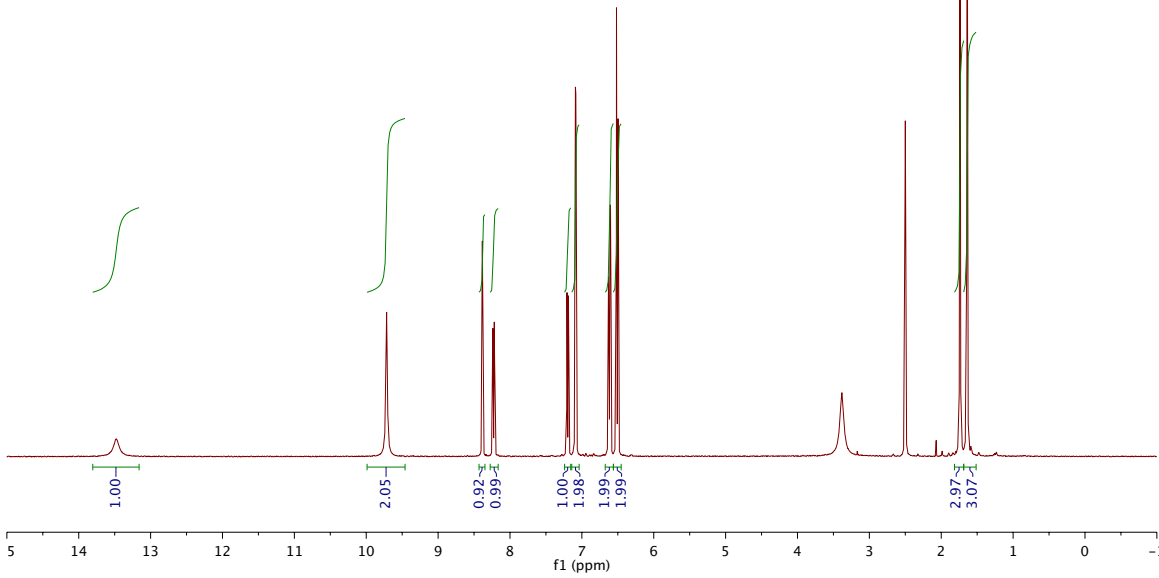
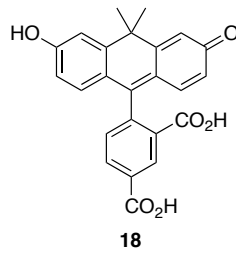
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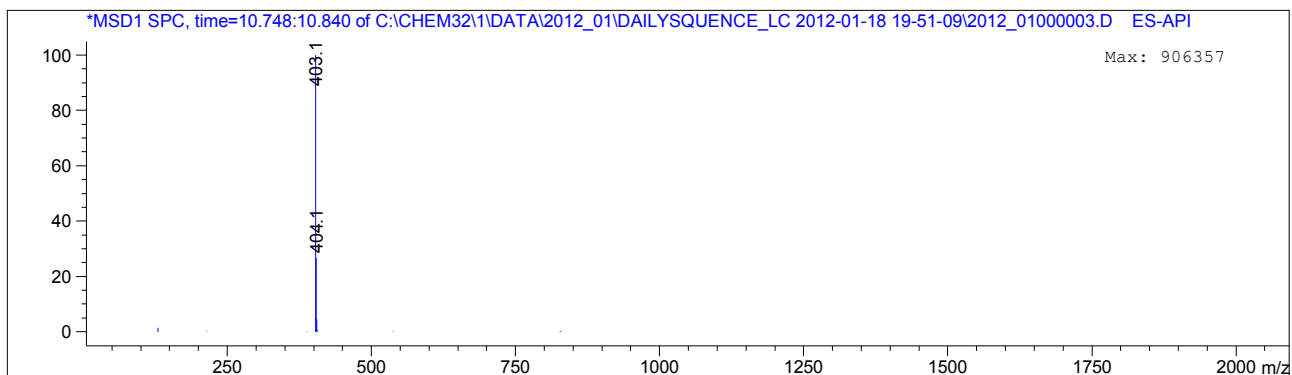
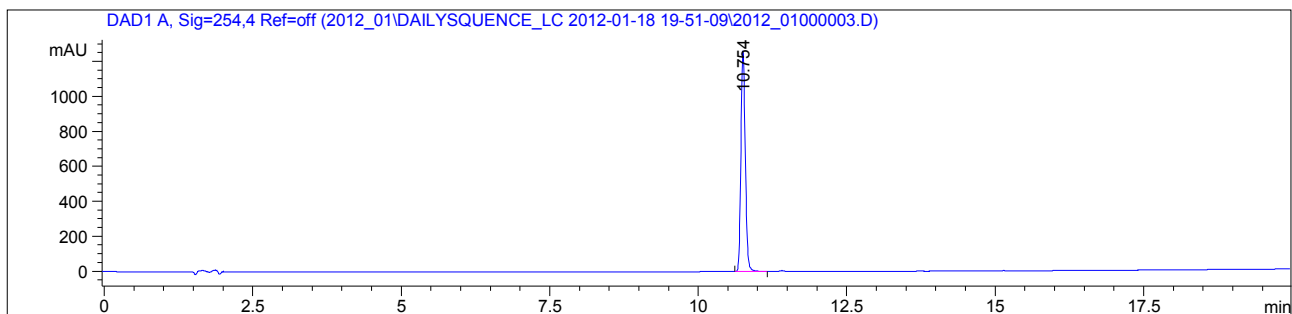
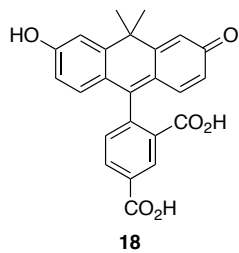
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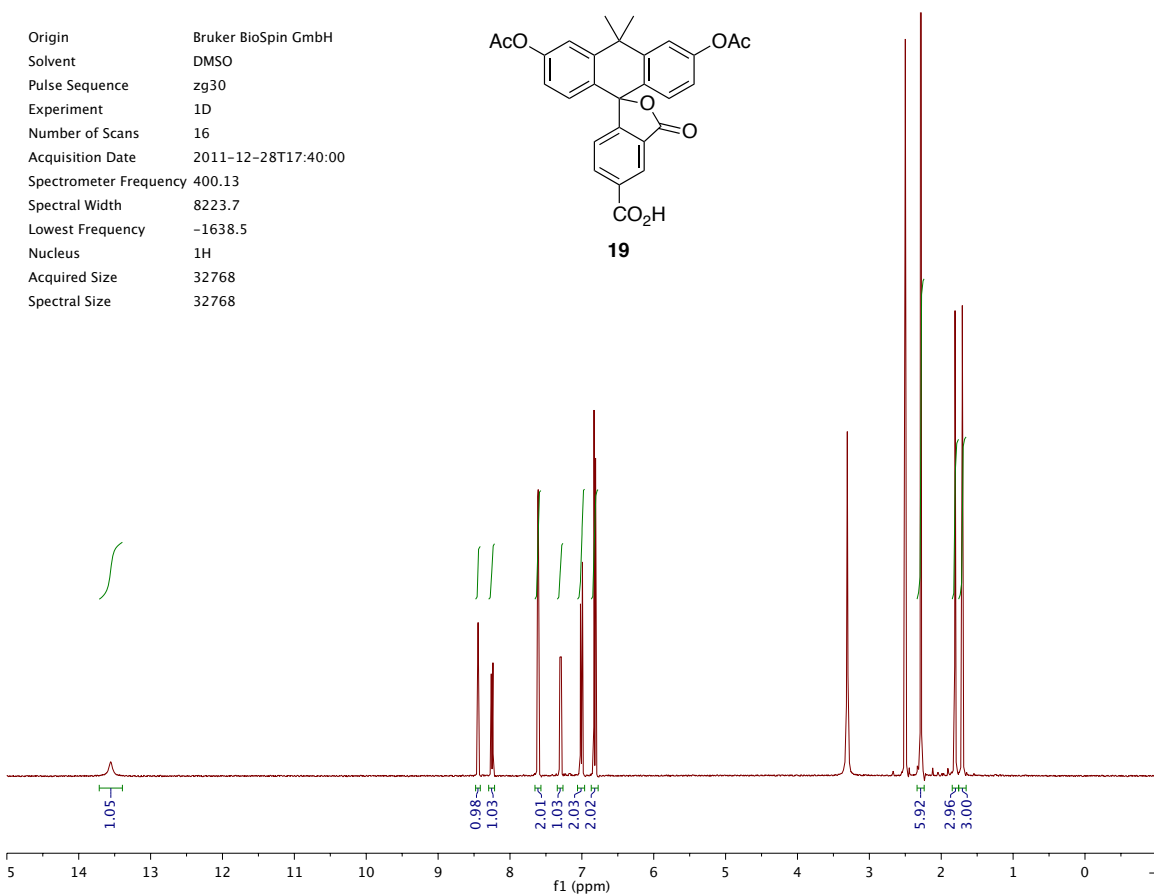
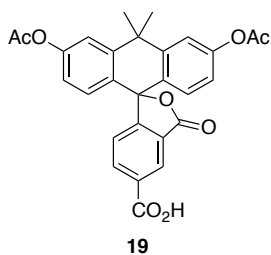
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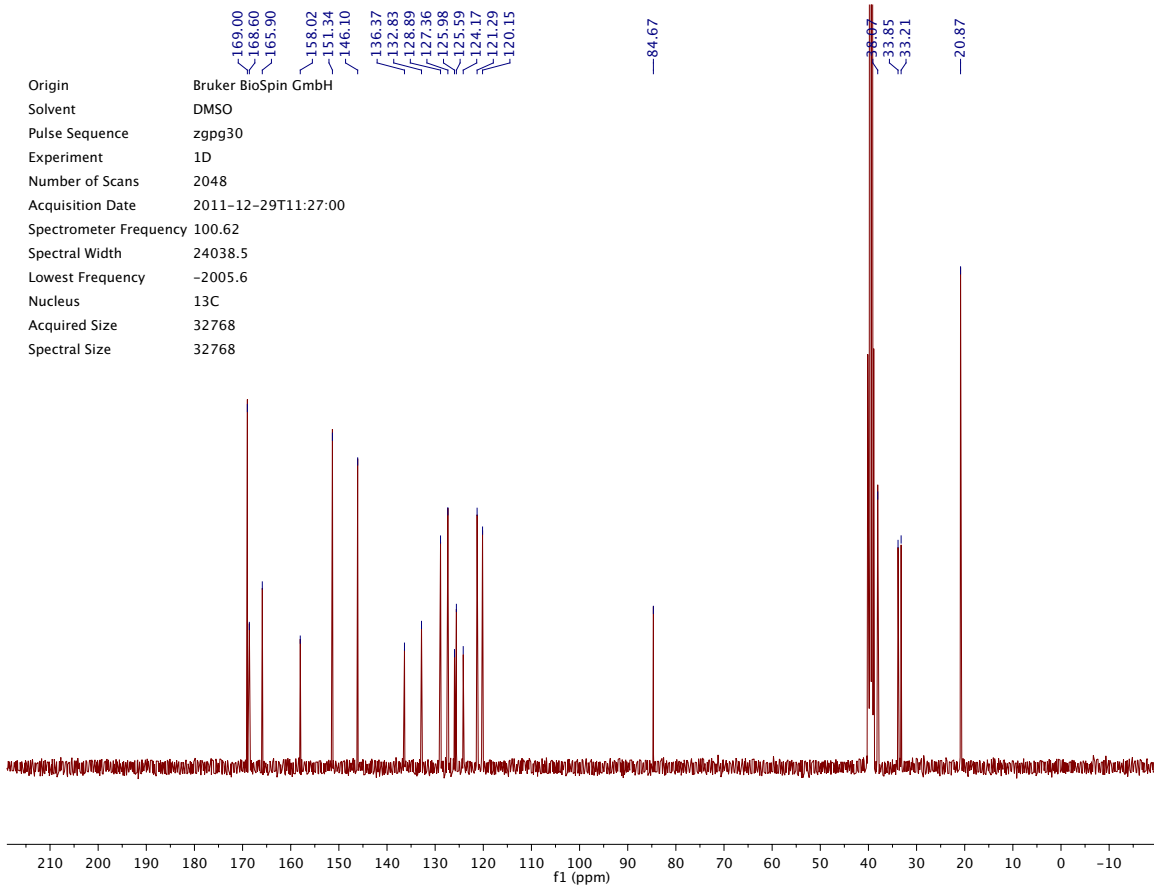
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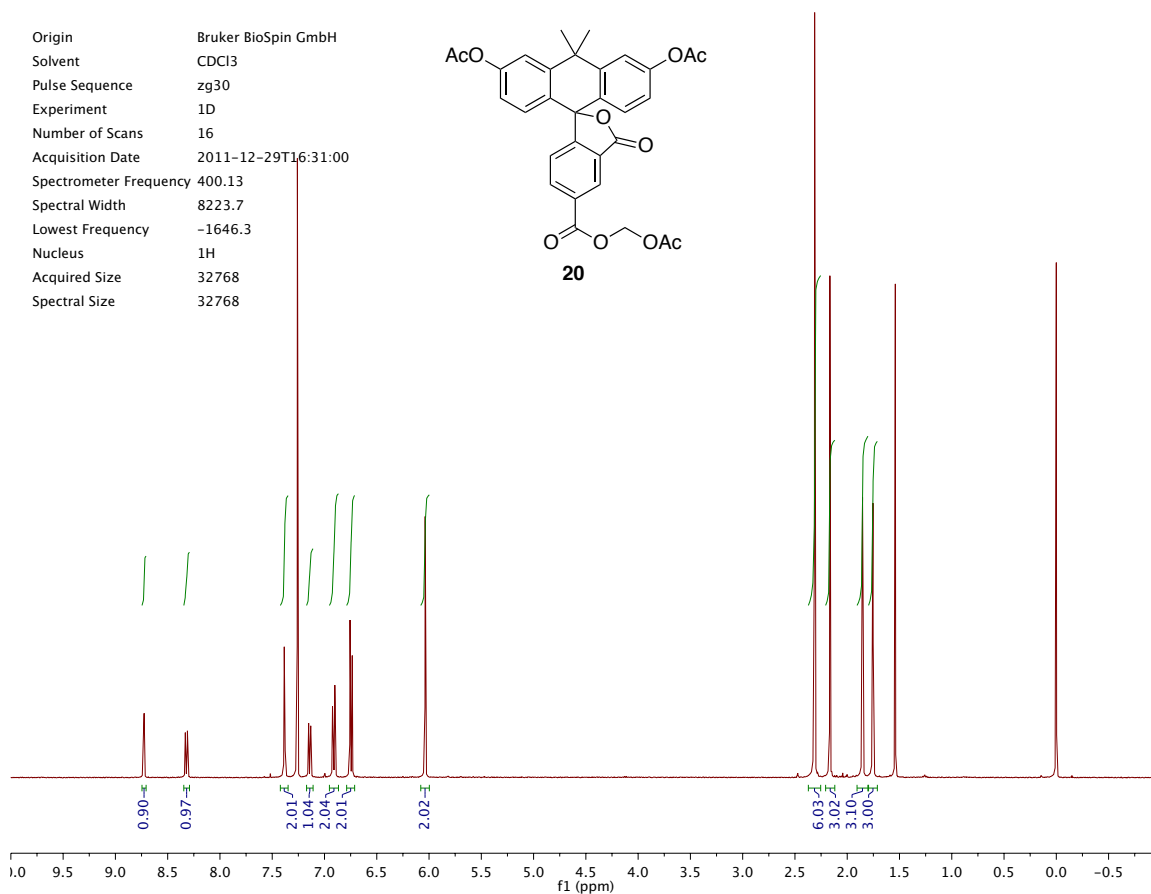
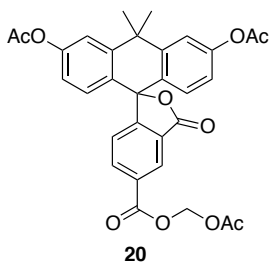
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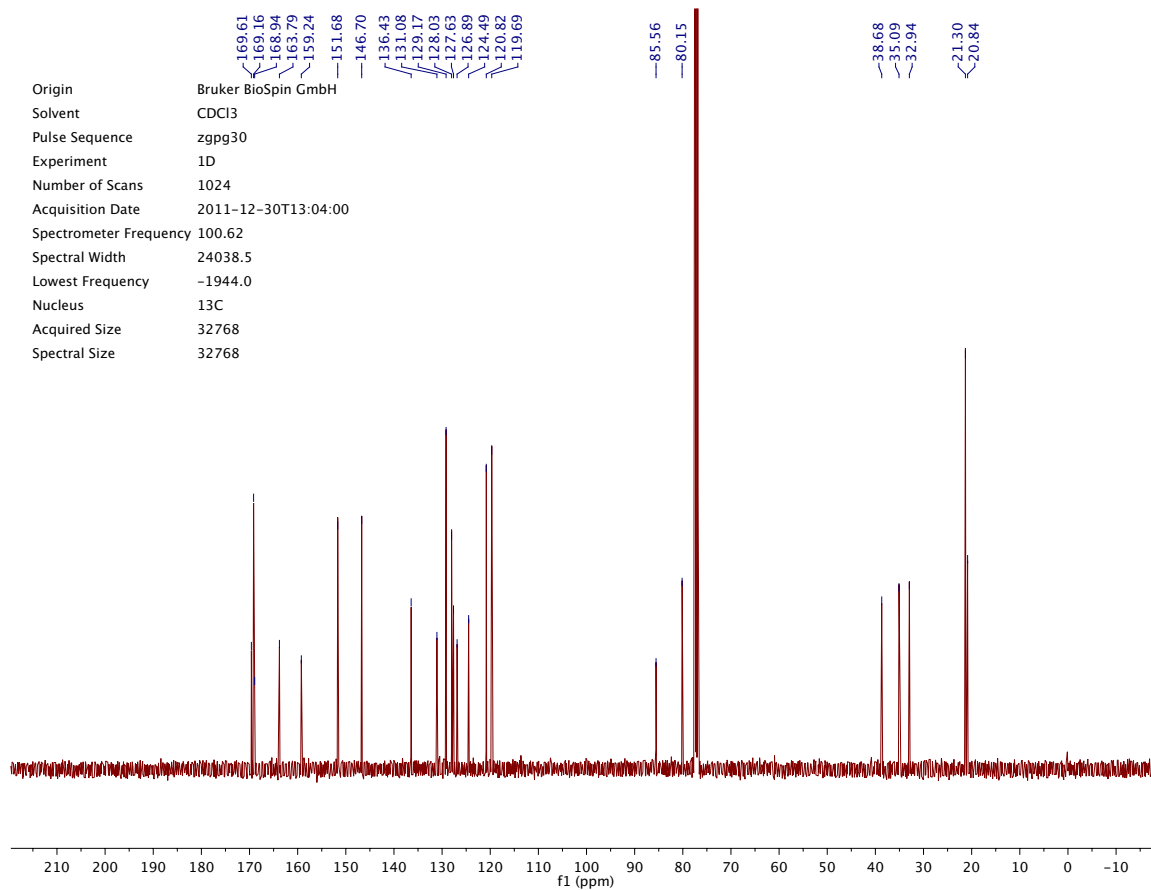
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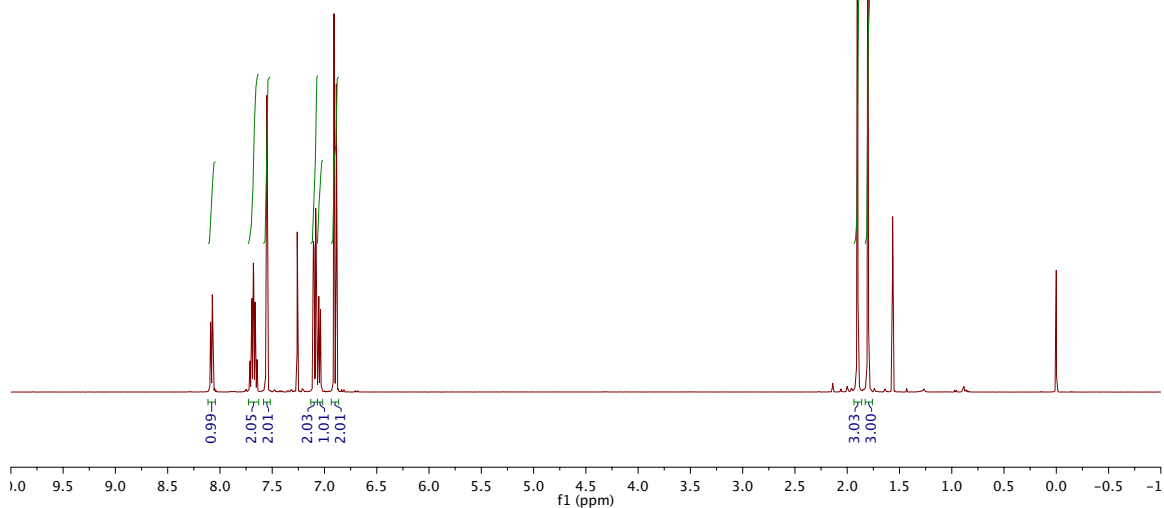
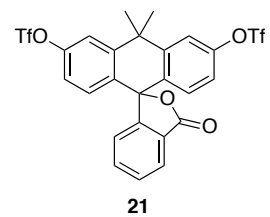


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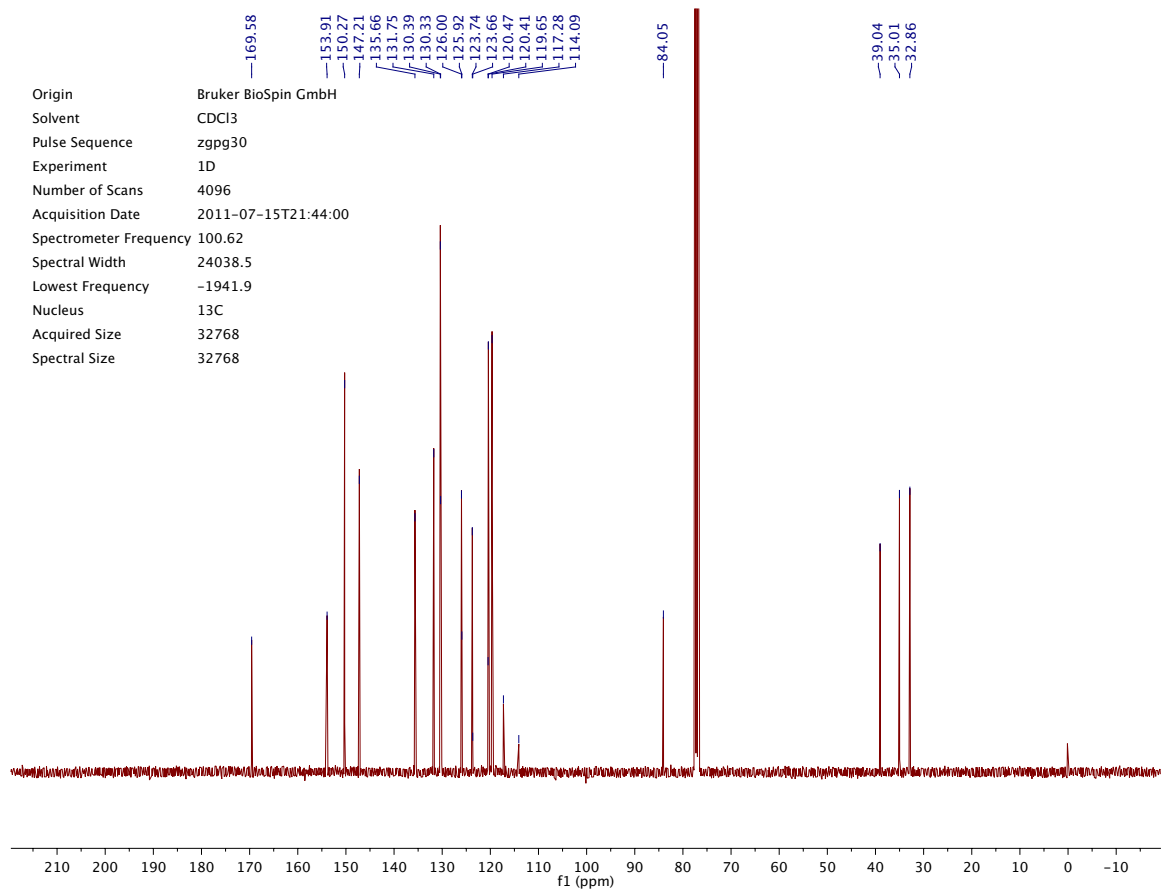




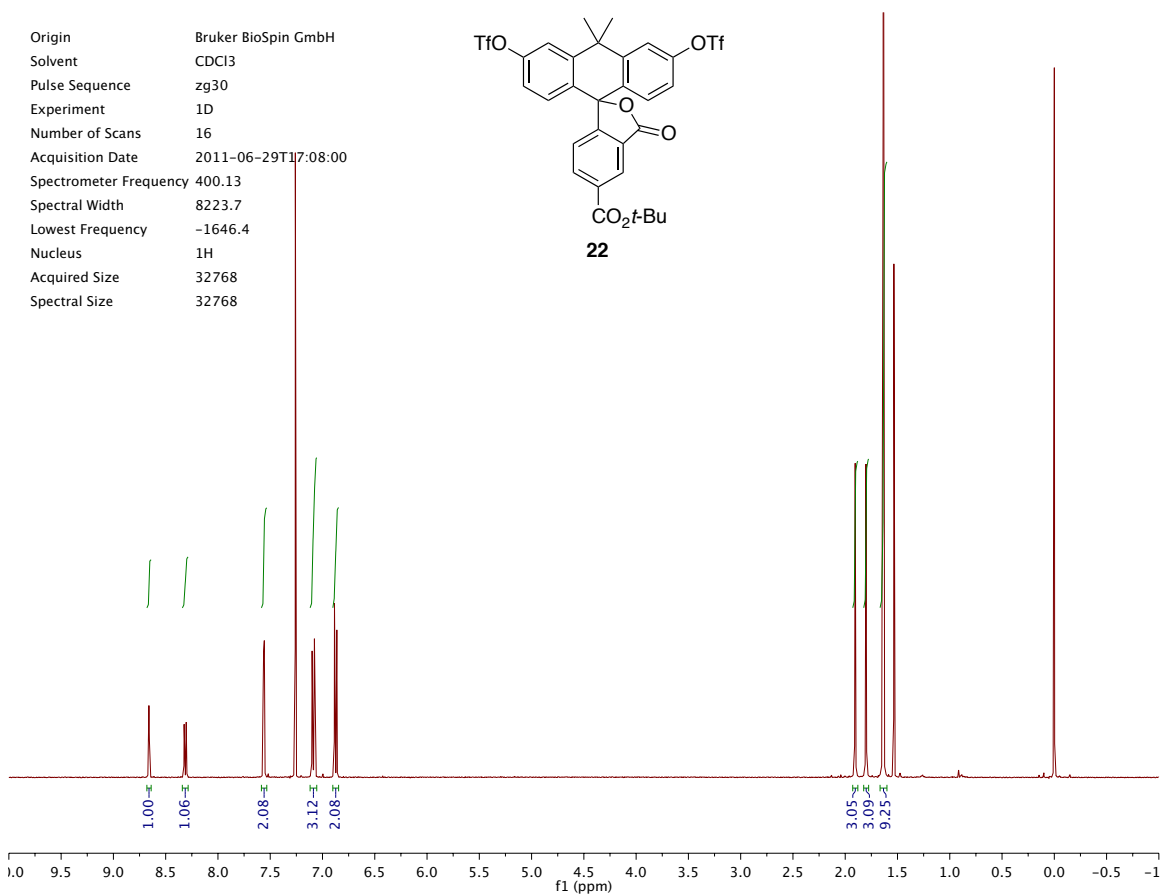
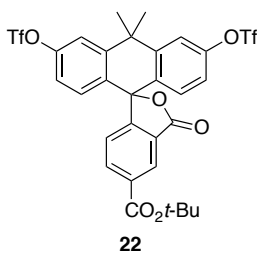
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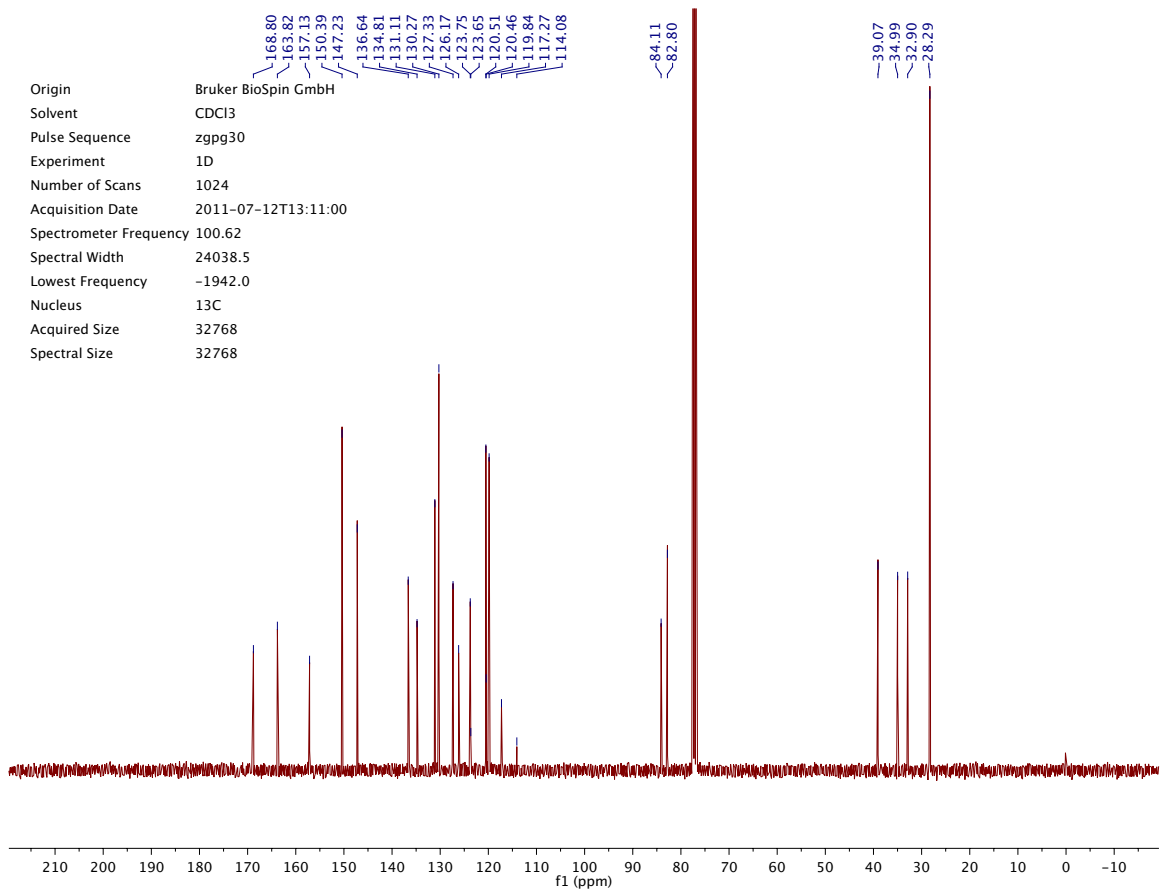
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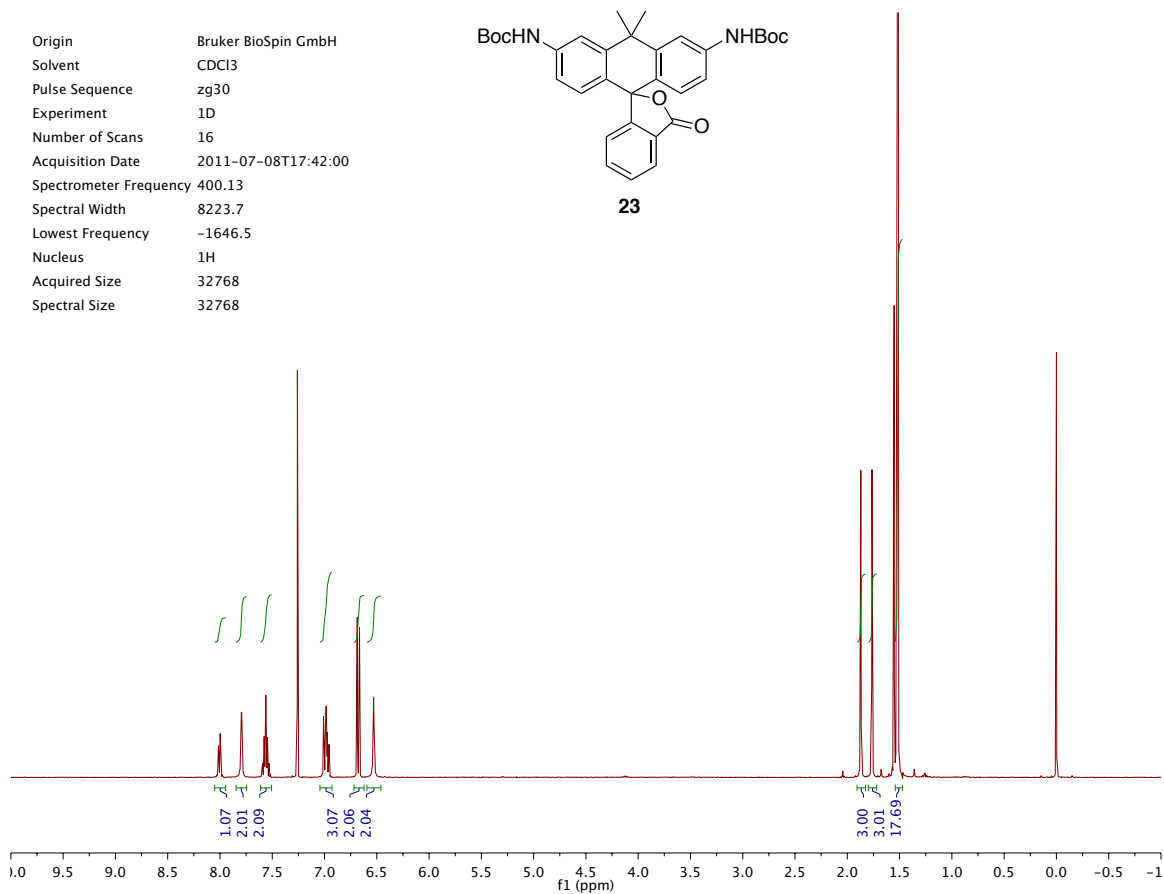
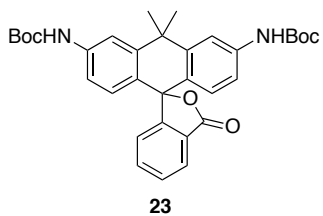
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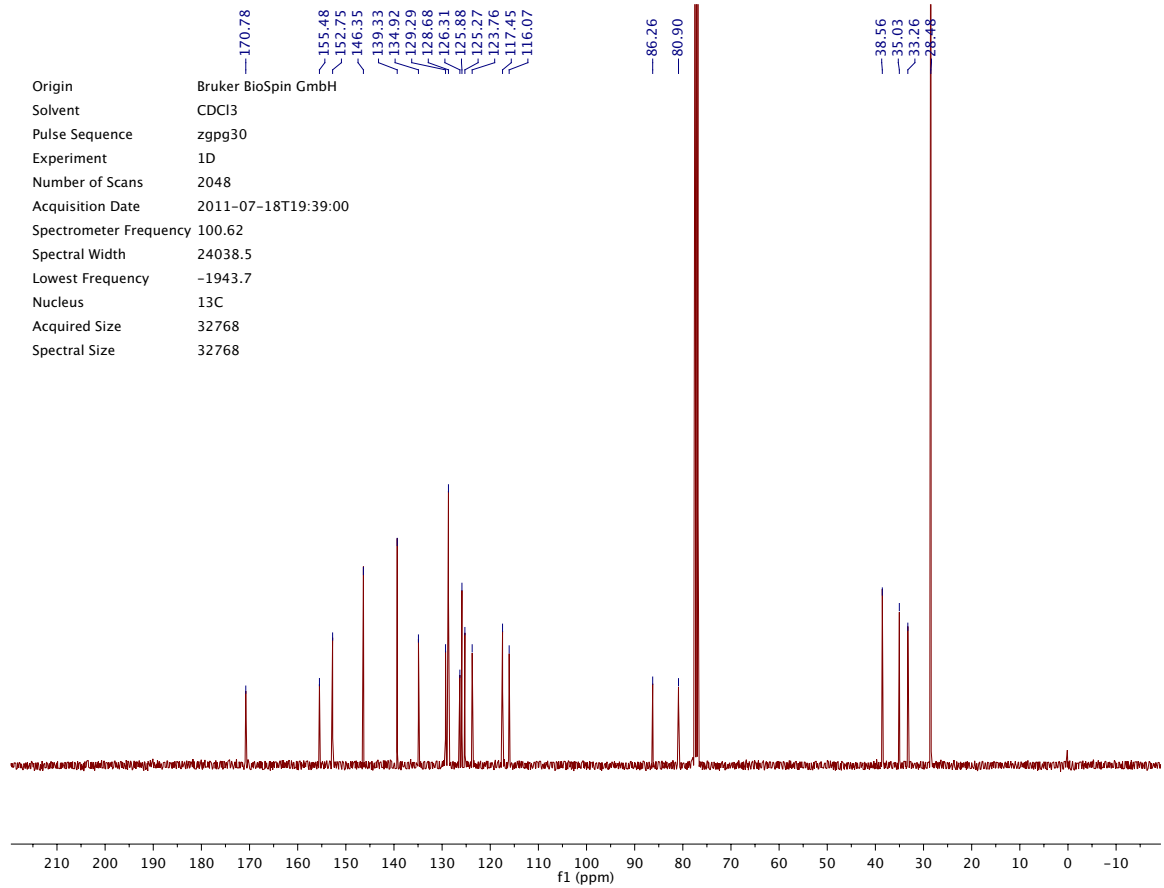
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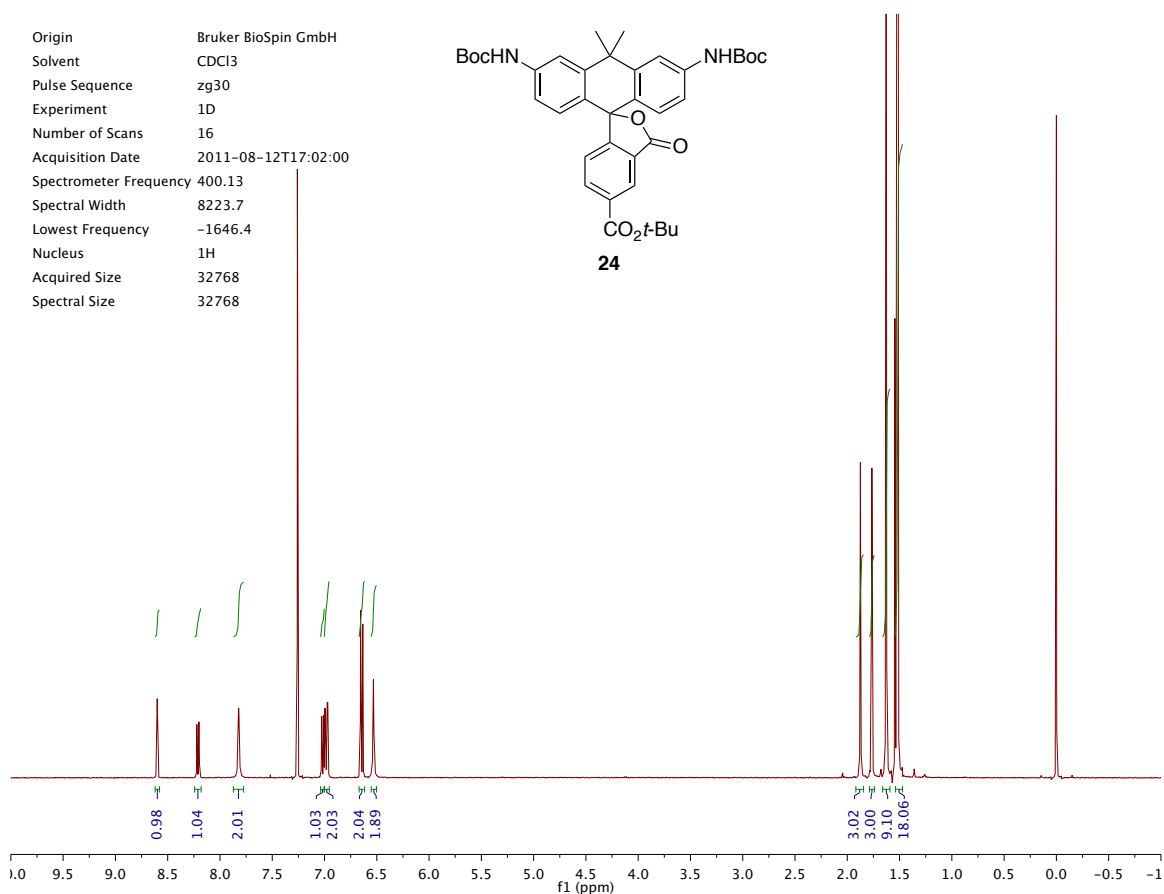
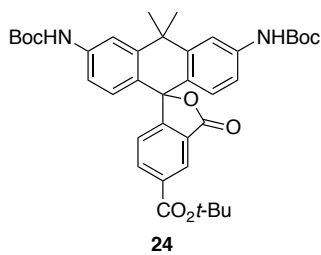
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 Acquired Size 32768  
 Spectral Size 32768



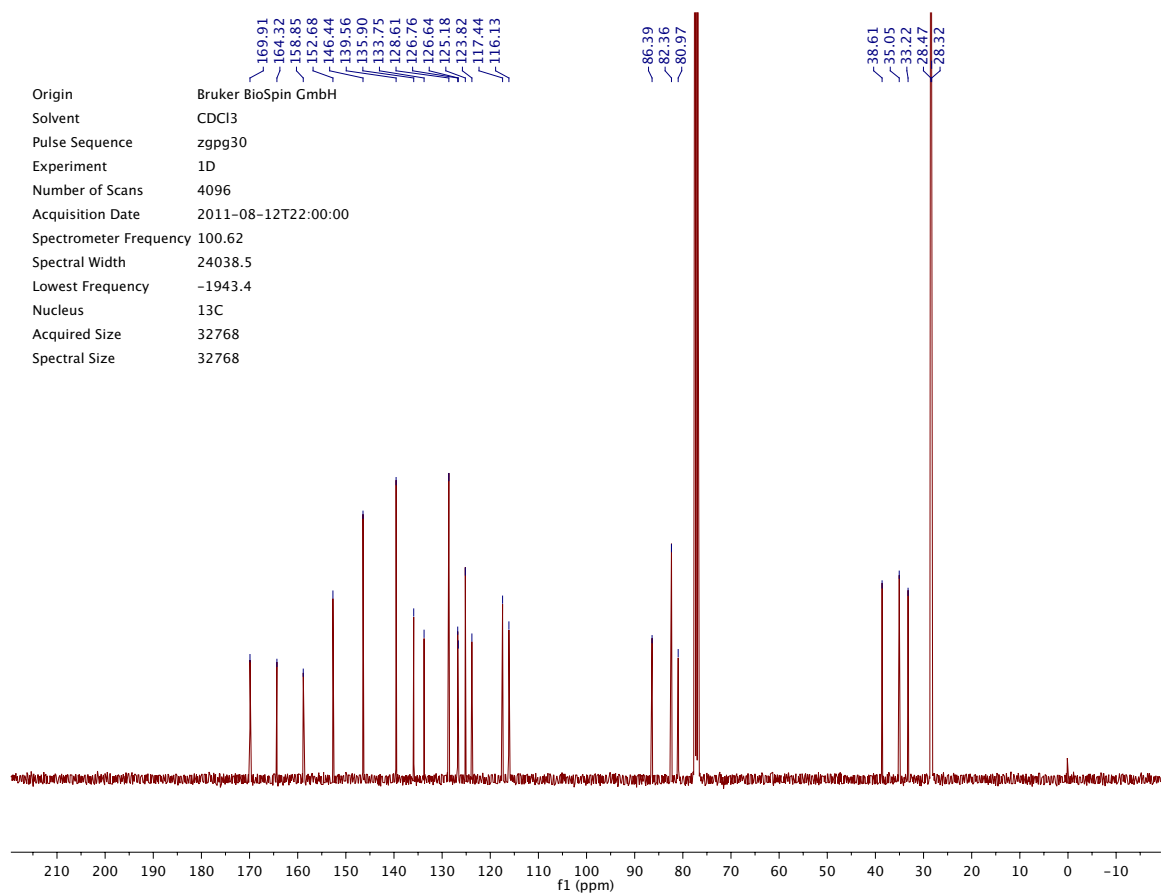
Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 2048  
 Acquisition Date 2011-07-18T19:39:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1943.7  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768



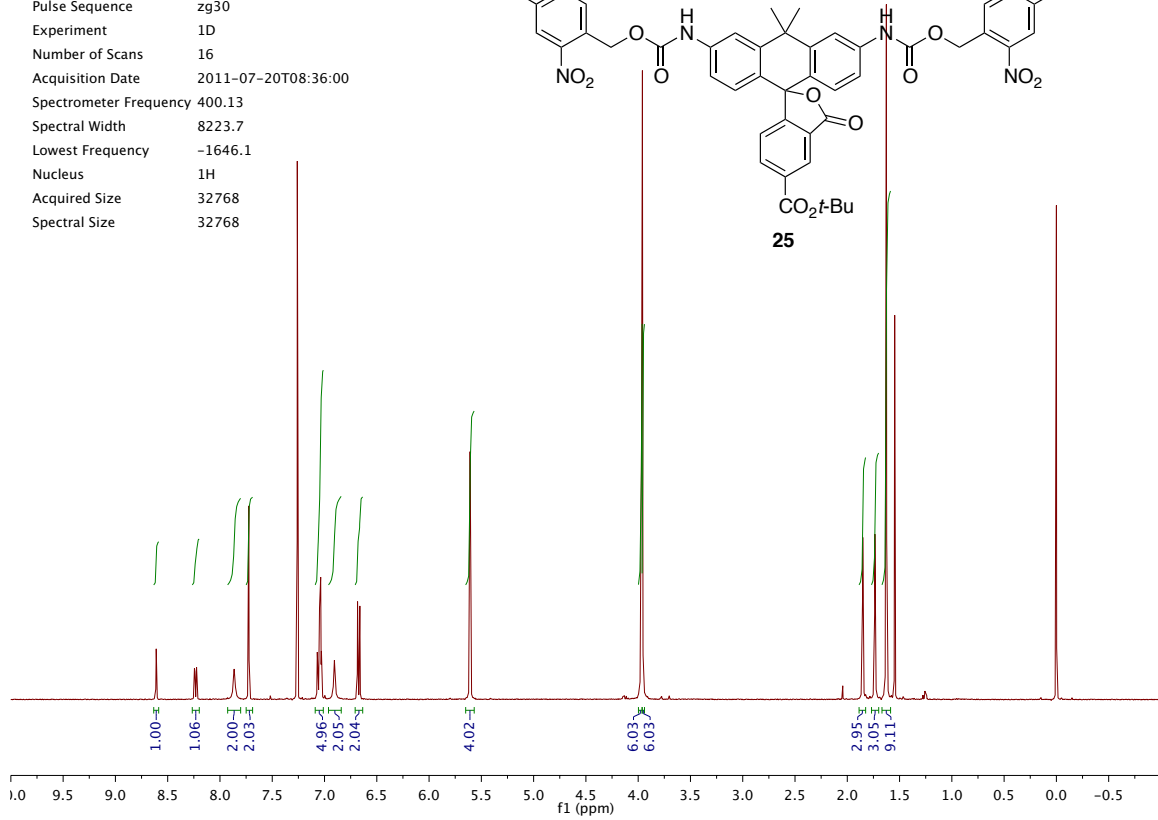
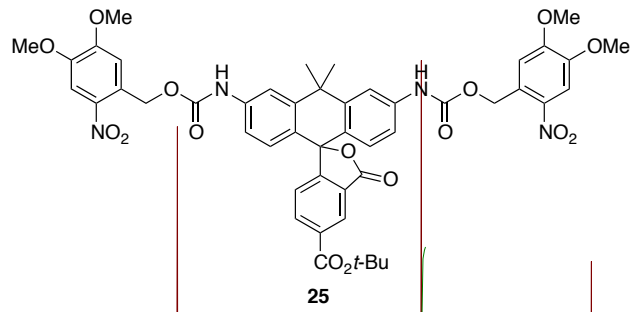
Origin Bruker BioSpin GmbH  
 Solvent CDCl<sub>3</sub>  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2011-08-12T17:02:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1646.4  
 Nucleus <sup>1</sup>H  
 Acquired Size 32768  
 Spectral Size 32768



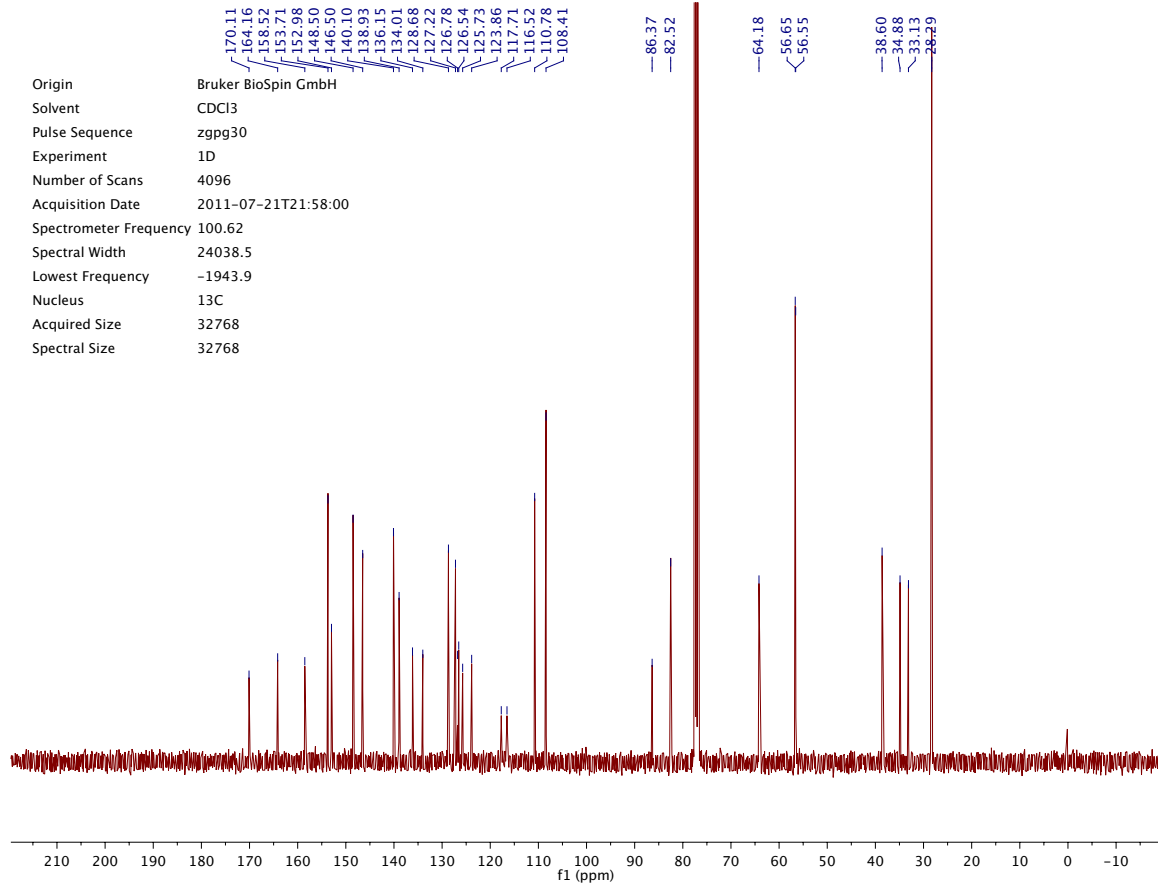
Origin Bruker BioSpin GmbH  
 Solvent CDCl<sub>3</sub>  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 4096  
 Acquisition Date 2011-08-12T22:00:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1943.4  
 Nucleus <sup>13</sup>C  
 Acquired Size 32768  
 Spectral Size 32768



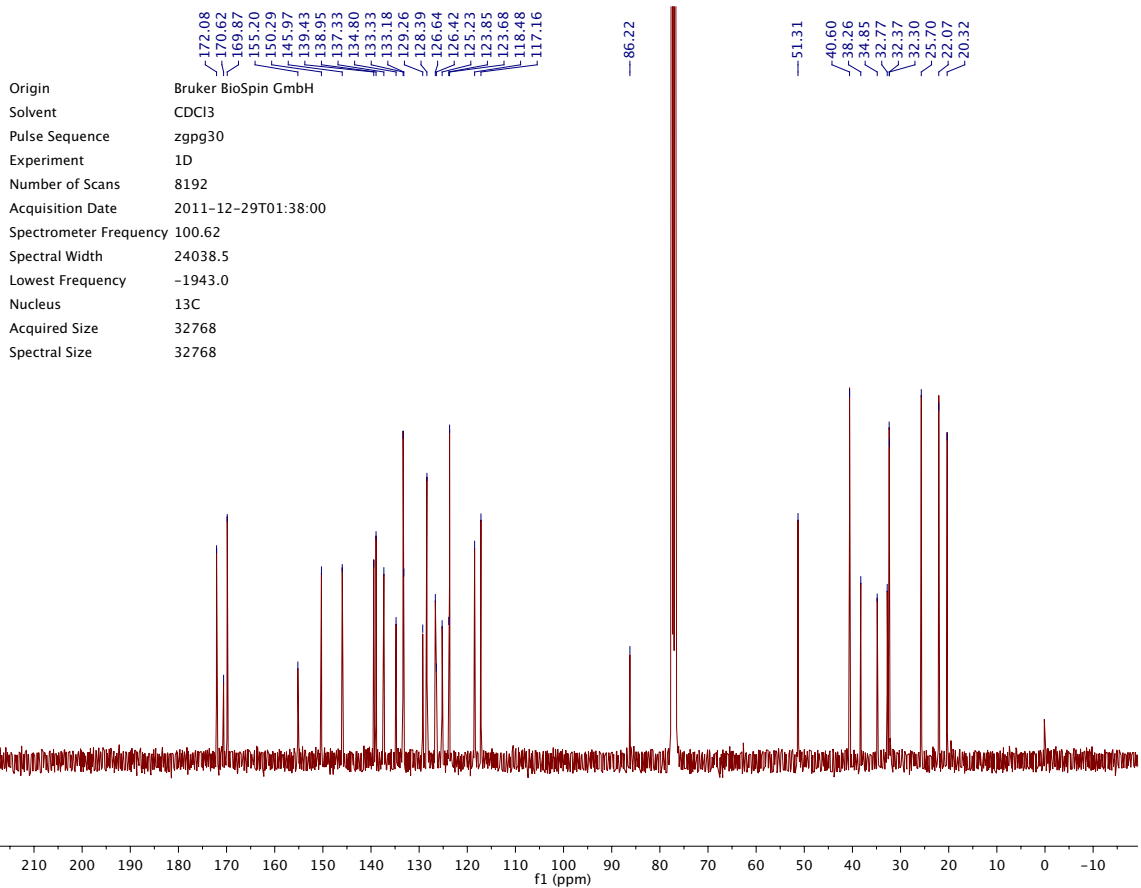
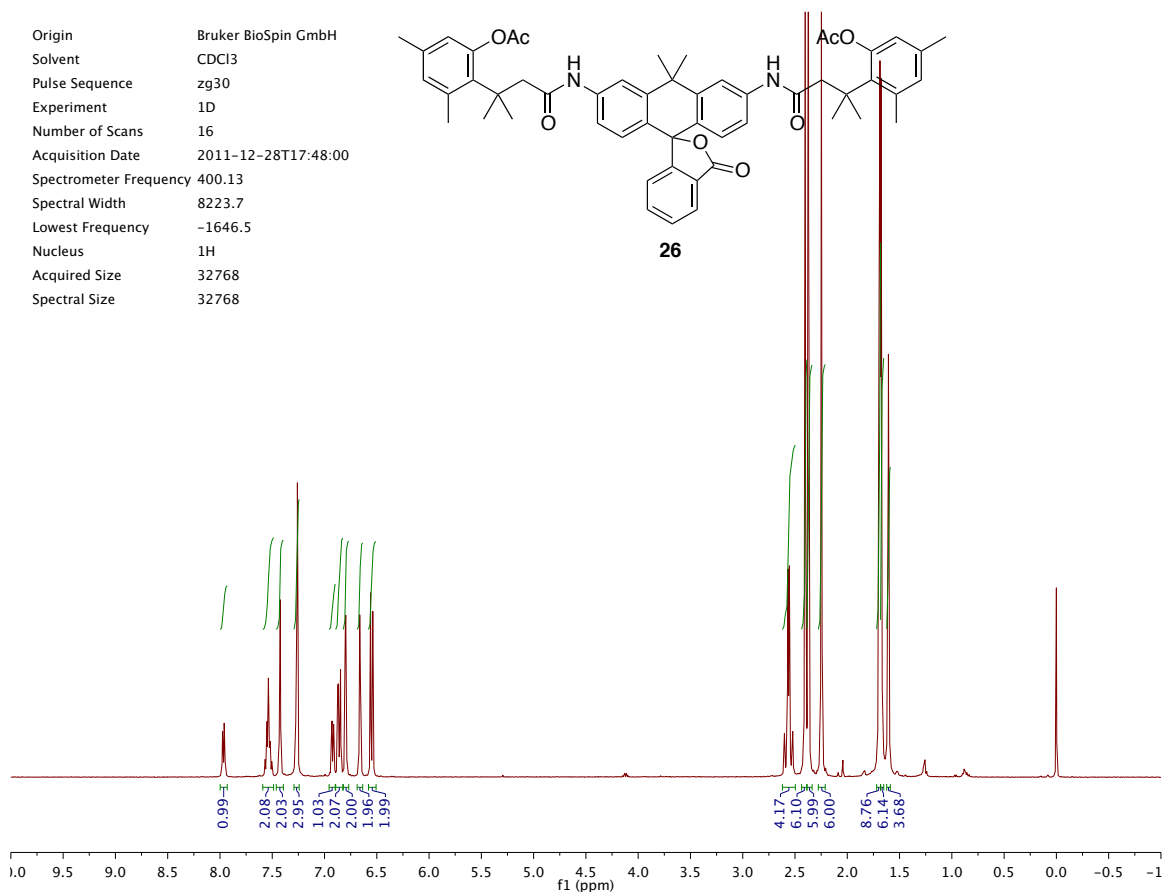
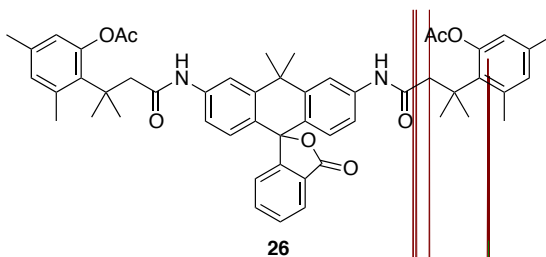
Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2011-07-20T08:36:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1646.1  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768



Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 4096  
 Acquisition Date 2011-07-21T21:58:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1943.9  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

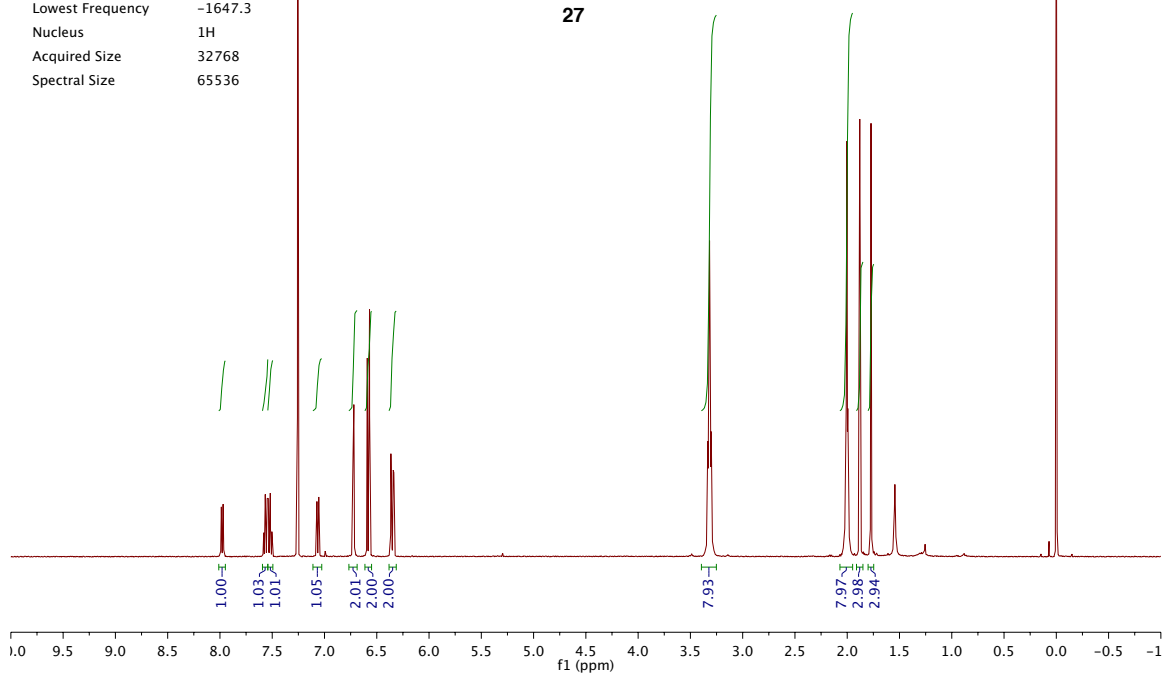
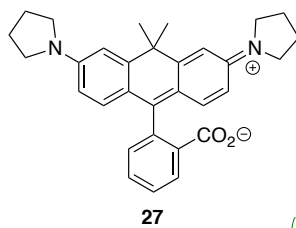


Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2011-12-28T17:48:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1646.5  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768

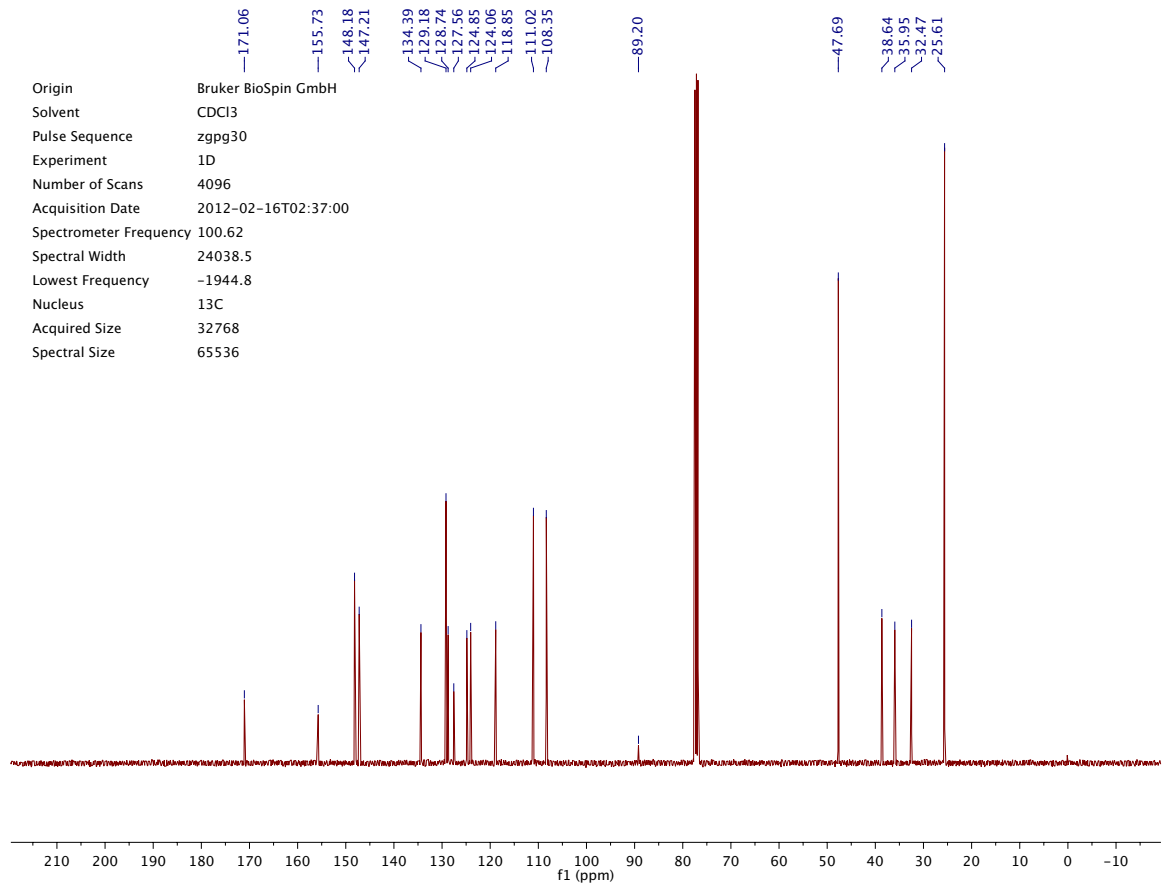


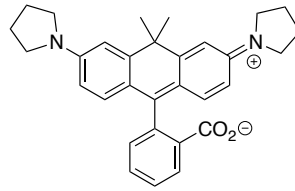
Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 8192  
 Acquisition Date 2011-12-29T01:38:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1943.0  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2012-02-15T17:11:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1647.3  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 65536

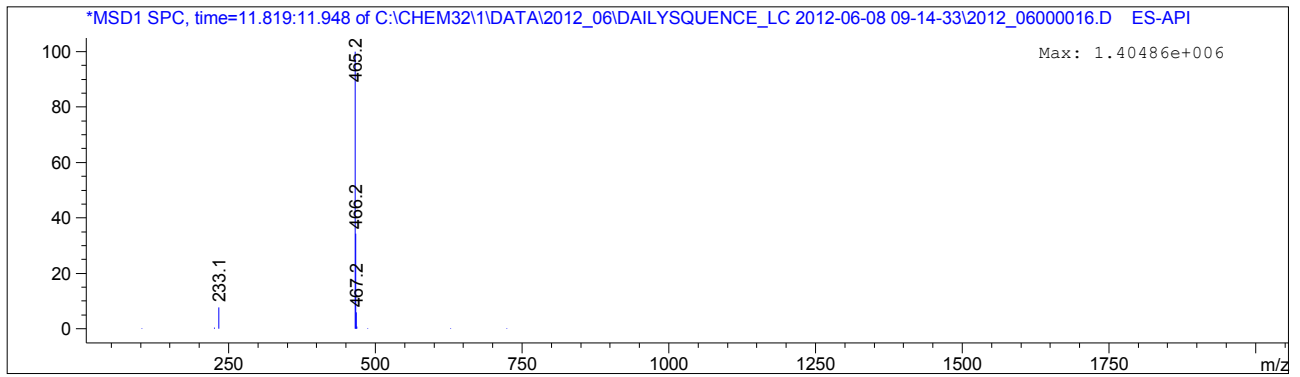
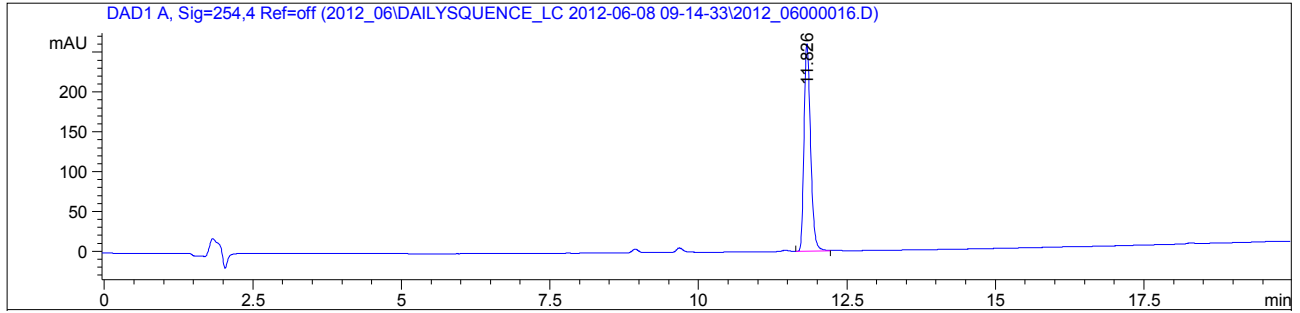


Origin Bruker BioSpin GmbH  
 Solvent CDCl3  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 4096  
 Acquisition Date 2012-02-16T02:37:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1944.8  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 65536



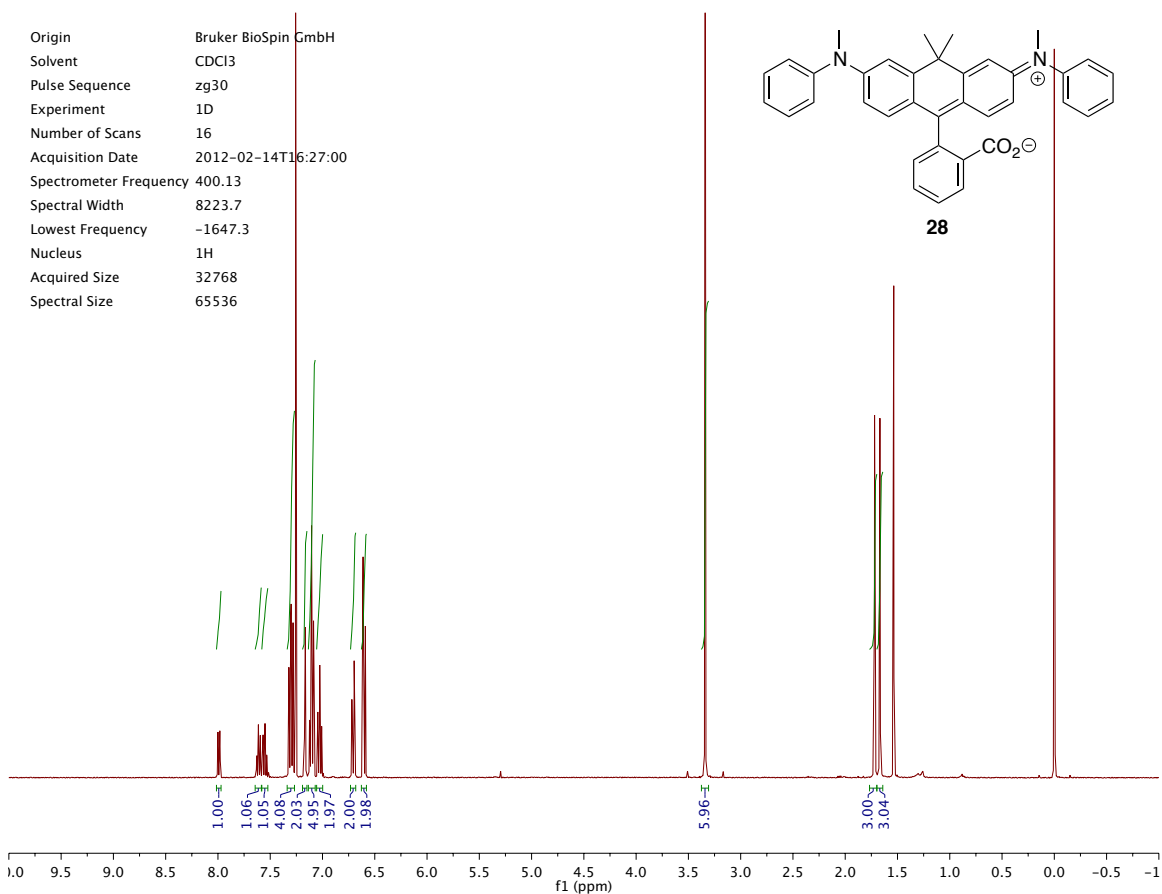
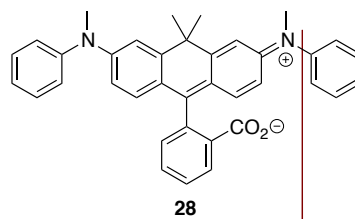


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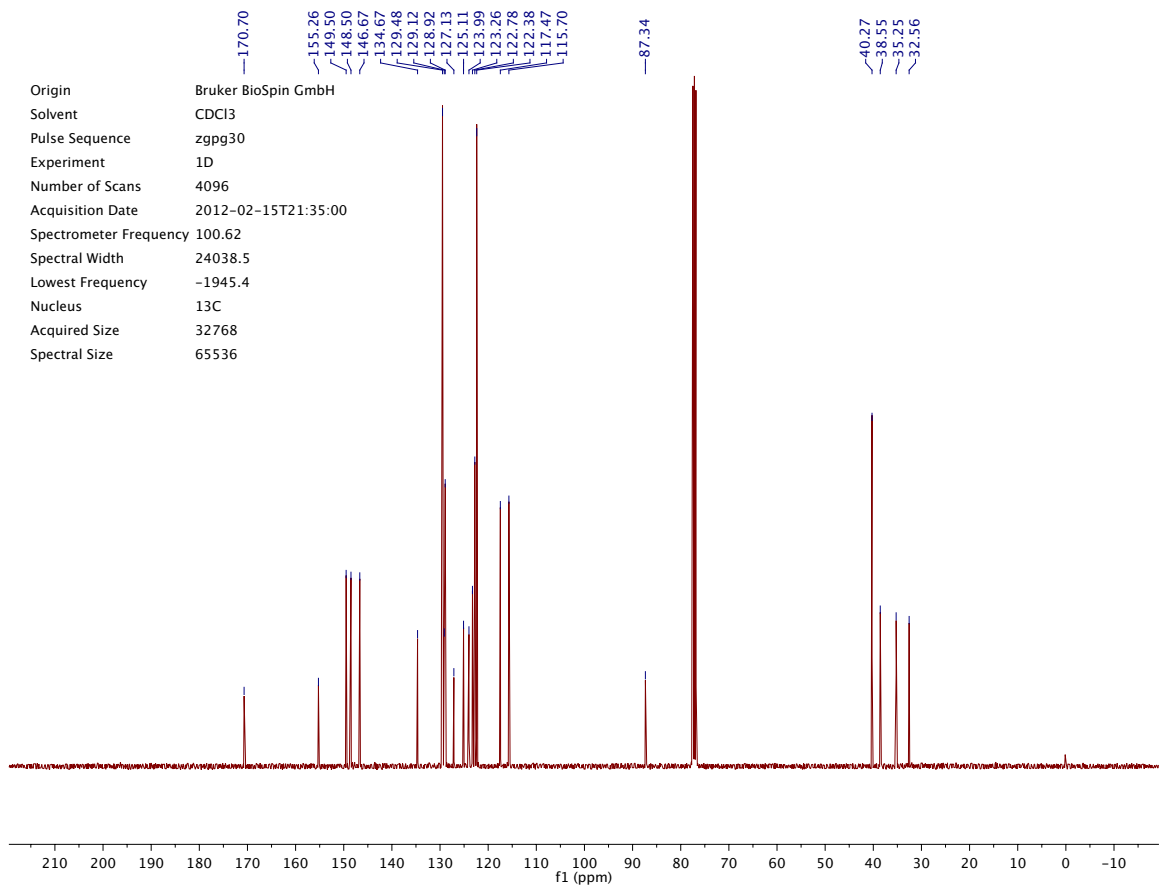


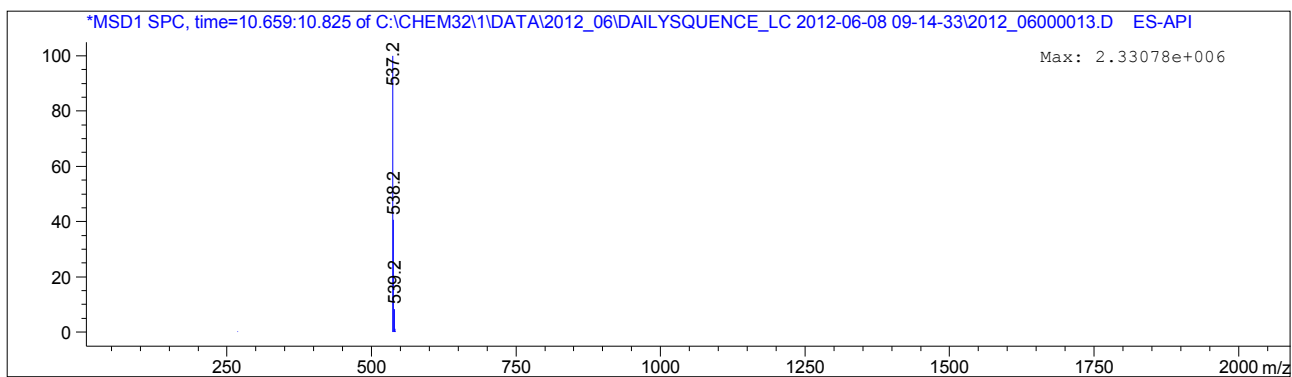
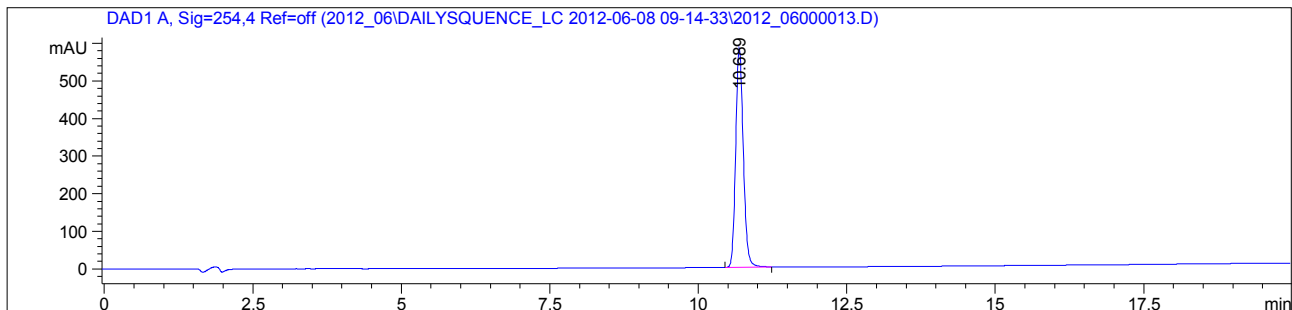
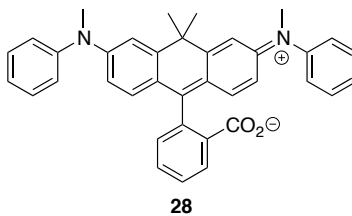


Origin Bruker BioSpin GmbH  
 Solvent CDCl<sub>3</sub>  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2012-02-14T16:27:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1647.3  
 Nucleus <sup>1</sup>H  
 Acquired Size 32768  
 Spectral Size 65536

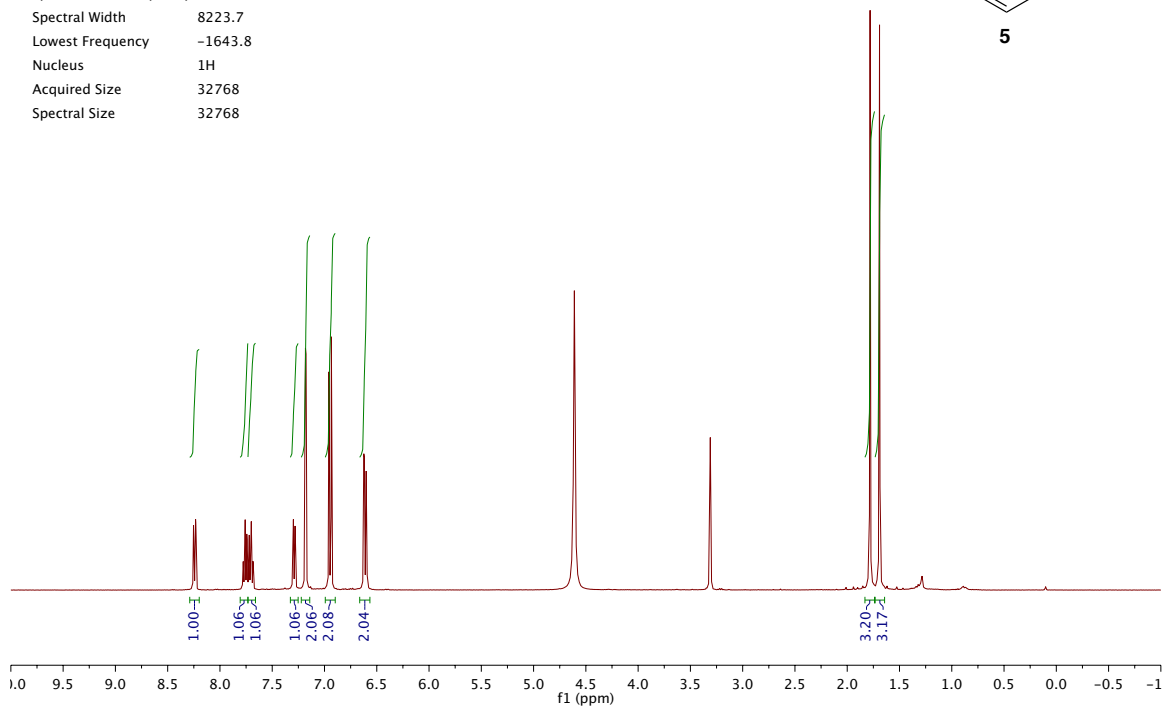
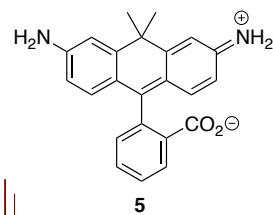


Origin Bruker BioSpin GmbH  
 Solvent CDCl<sub>3</sub>  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 4096  
 Acquisition Date 2012-02-15T21:35:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1945.4  
 Nucleus <sup>13</sup>C  
 Acquired Size 32768  
 Spectral Size 65536

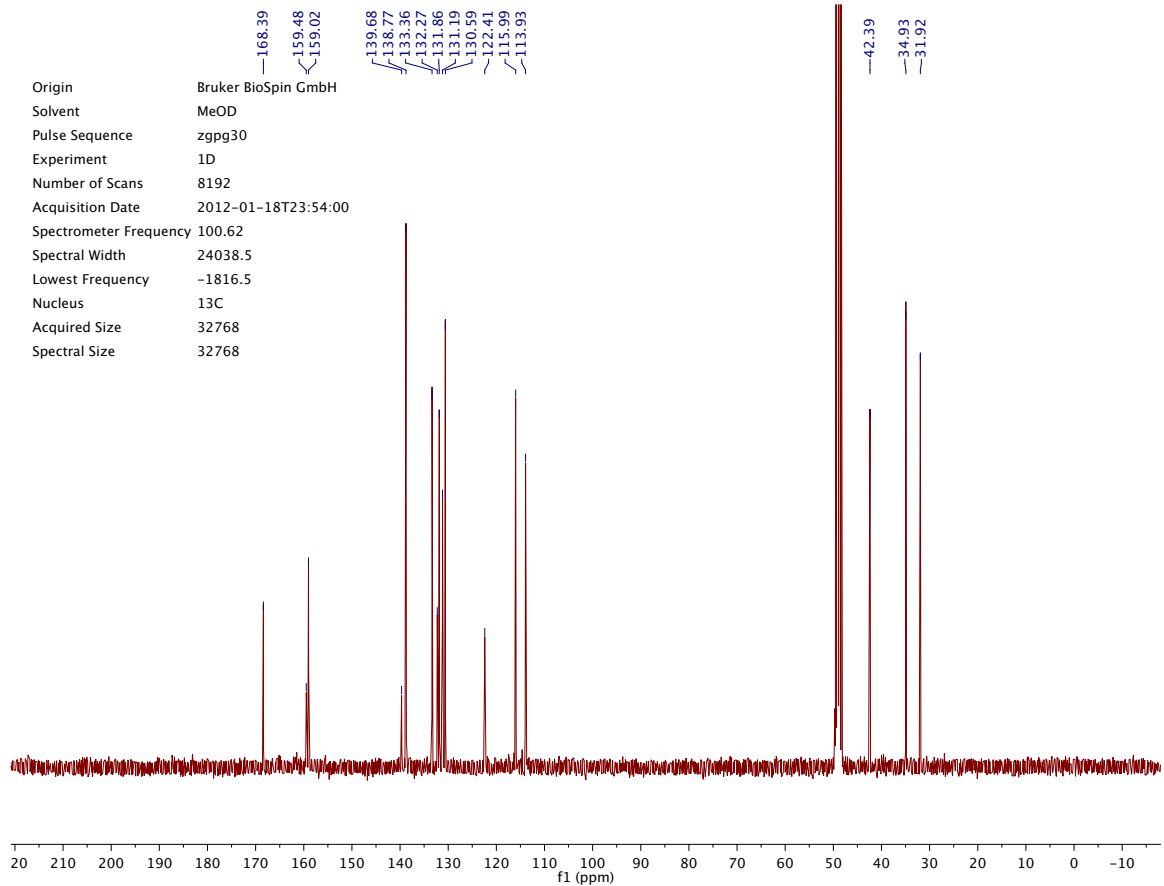


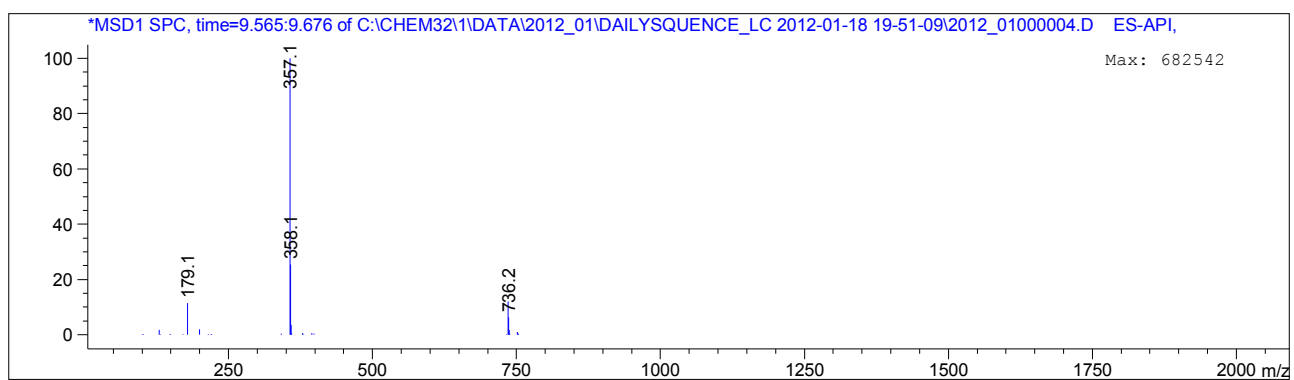
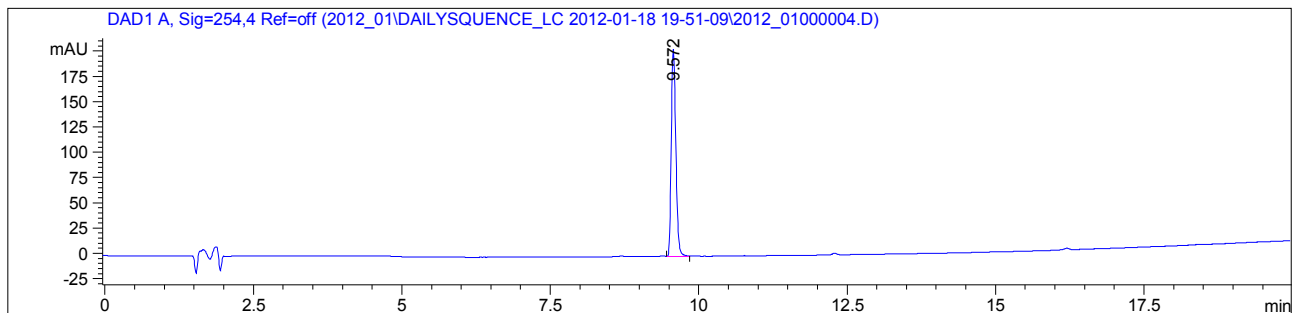
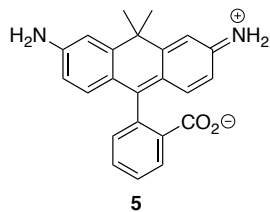


Origin Bruker BioSpin GmbH  
 Solvent MeOD  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2012-01-18T15:58:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1643.8  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768

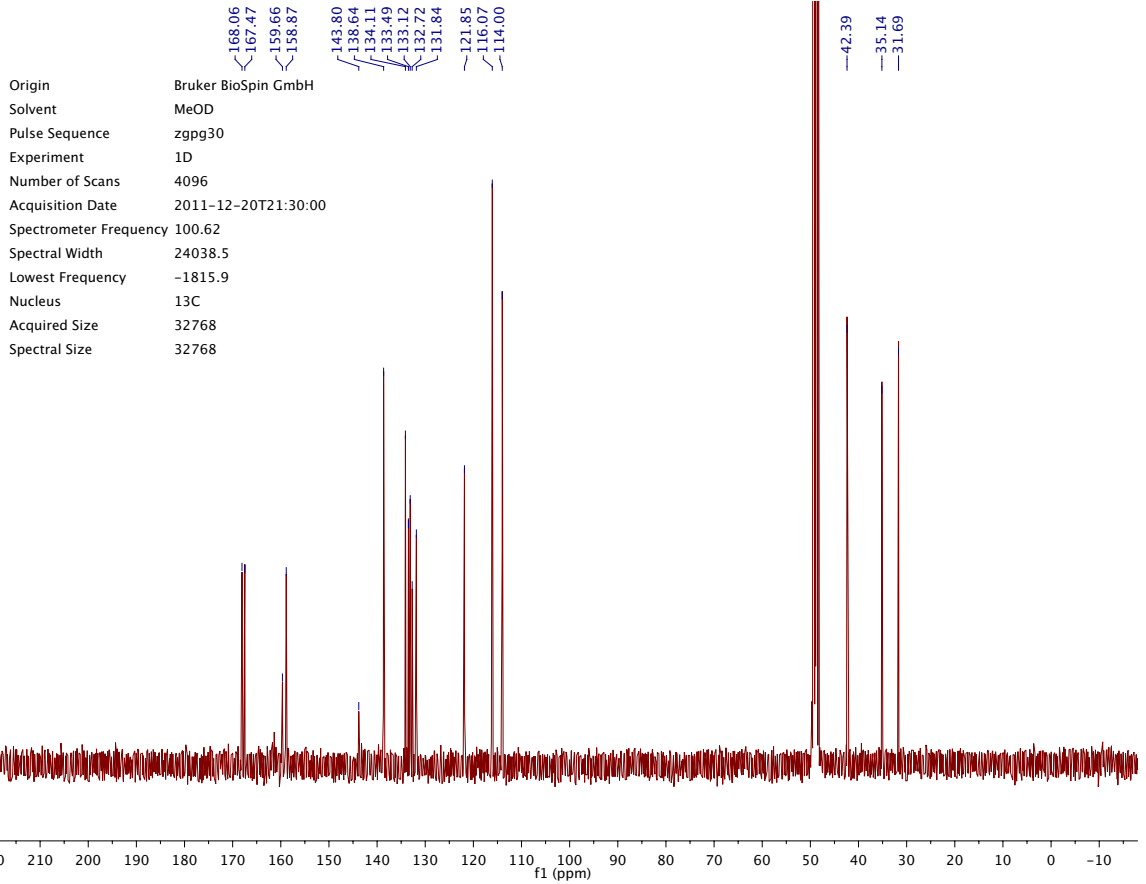
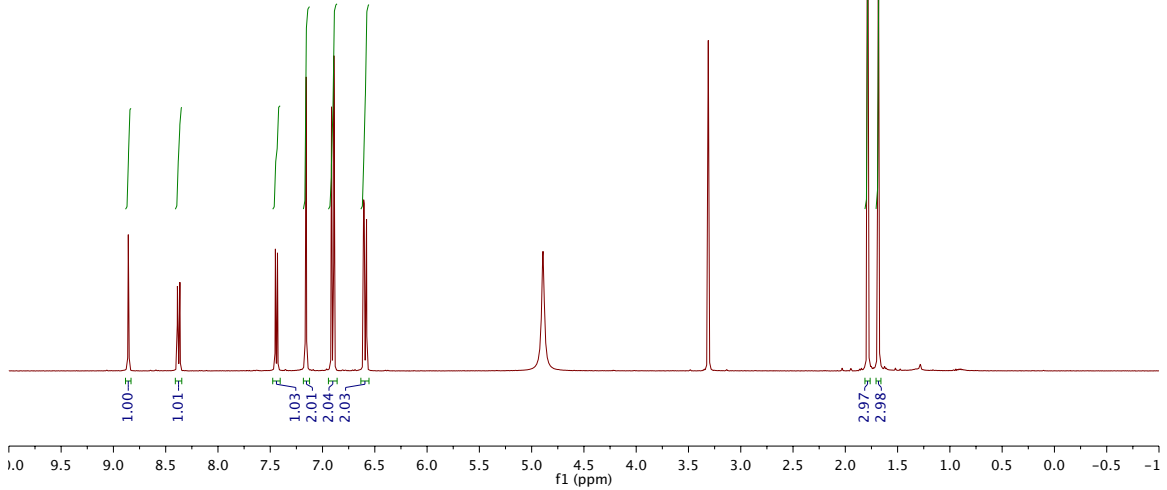
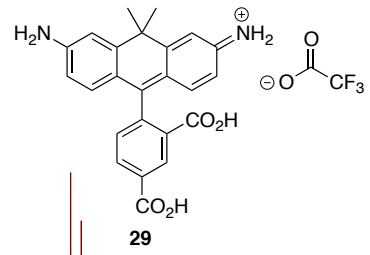


Origin Bruker BioSpin GmbH  
 Solvent MeOD  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 8192  
 Acquisition Date 2012-01-18T23:54:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1816.5  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

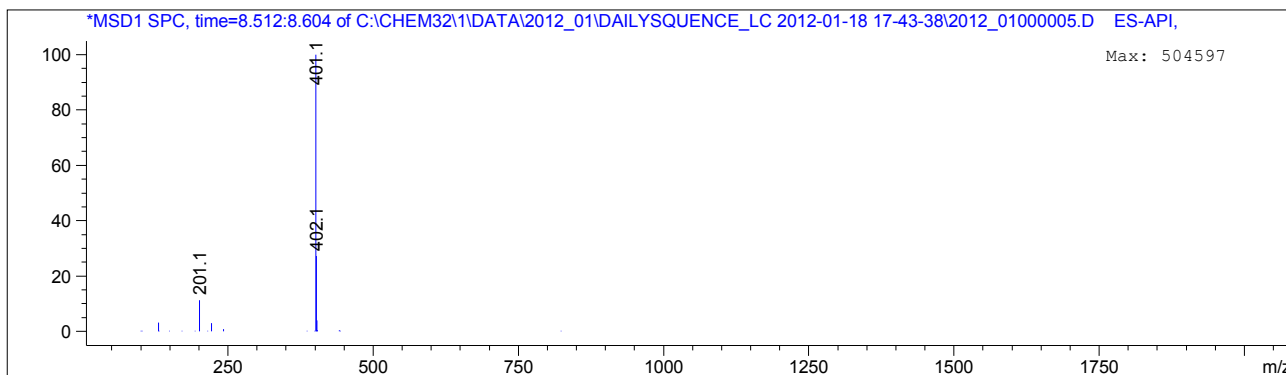
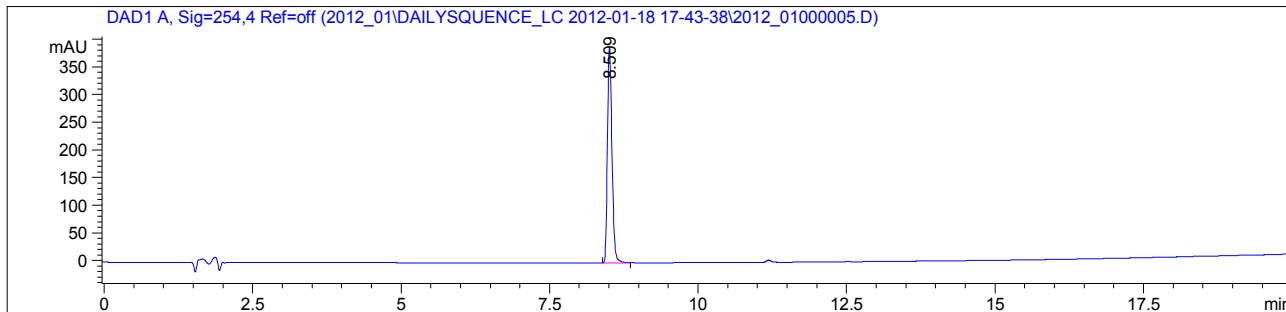
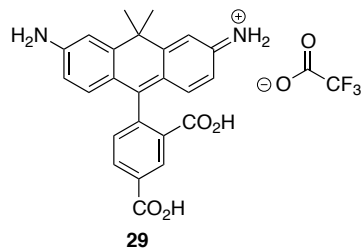




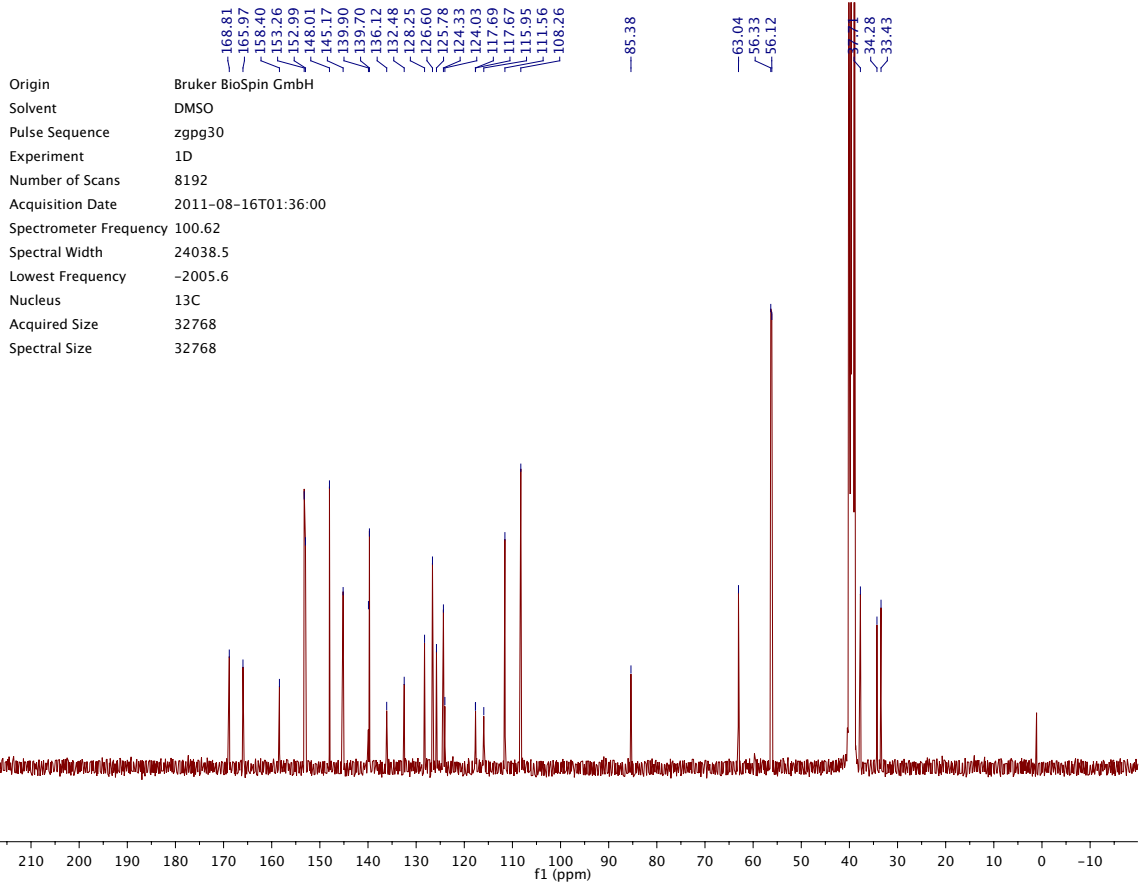
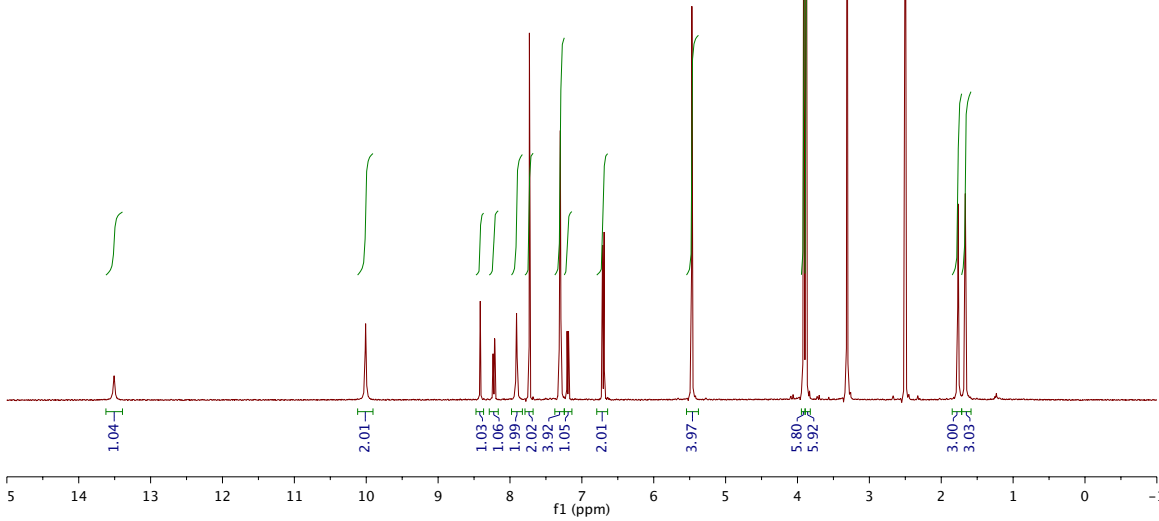
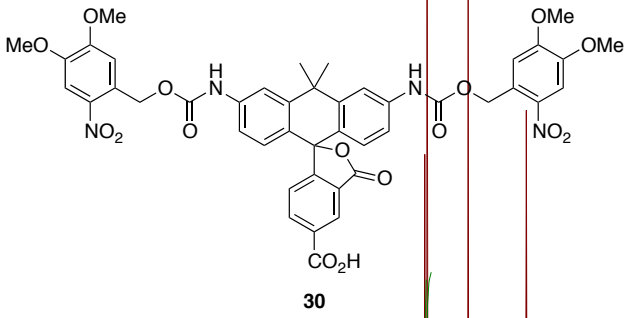
Origin Bruker BioSpin GmbH  
 Solvent MeOD  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2012-01-24T16:47:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1644.0  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768



Origin Bruker BioSpin GmbH  
 Solvent MeOD  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 4096  
 Acquisition Date 2011-12-20T21:30:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -1815.9  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

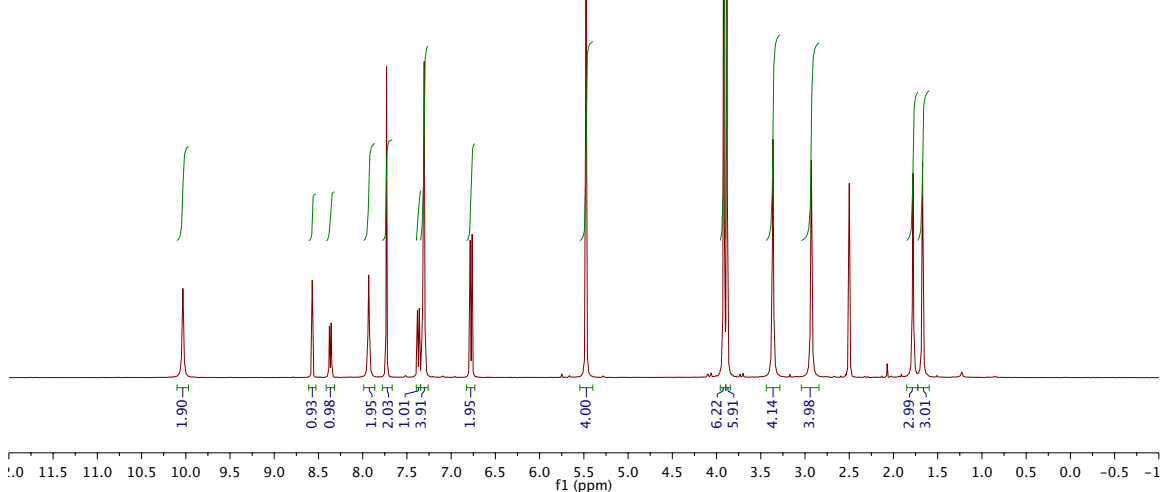
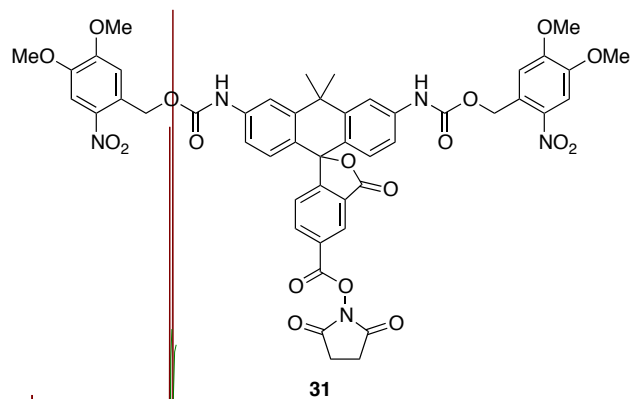


Origin Bruker BioSpin GmbH  
 Solvent DMSO  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2011-07-26T09:32:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1638.5  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768



Origin Bruker BioSpin GmbH  
 Solvent DMSO  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 8192  
 Acquisition Date 2011-08-16T01:36:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -2005.6  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

Origin Bruker BioSpin GmbH  
 Solvent DMSO  
 Pulse Sequence zg30  
 Experiment 1D  
 Number of Scans 16  
 Acquisition Date 2011-12-15T15:52:00  
 Spectrometer Frequency 400.13  
 Spectral Width 8223.7  
 Lowest Frequency -1638.5  
 Nucleus 1H  
 Acquired Size 32768  
 Spectral Size 32768



Origin Bruker BioSpin GmbH  
 Solvent DMSO  
 Pulse Sequence zgpg30  
 Experiment 1D  
 Number of Scans 8192  
 Acquisition Date 2011-12-16T01:24:00  
 Spectrometer Frequency 100.62  
 Spectral Width 24038.5  
 Lowest Frequency -2006.0  
 Nucleus 13C  
 Acquired Size 32768  
 Spectral Size 32768

