

## Return of the lysergamides. Part V: Analytical and behavioural characterization of 1-butanoyl-*D*-lysergic acid diethylamide (1B-LSD)

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<sup>d</sup> Synex Synthetics BV, Karveelweg 20, 6222NH, Maastricht, The Netherlands

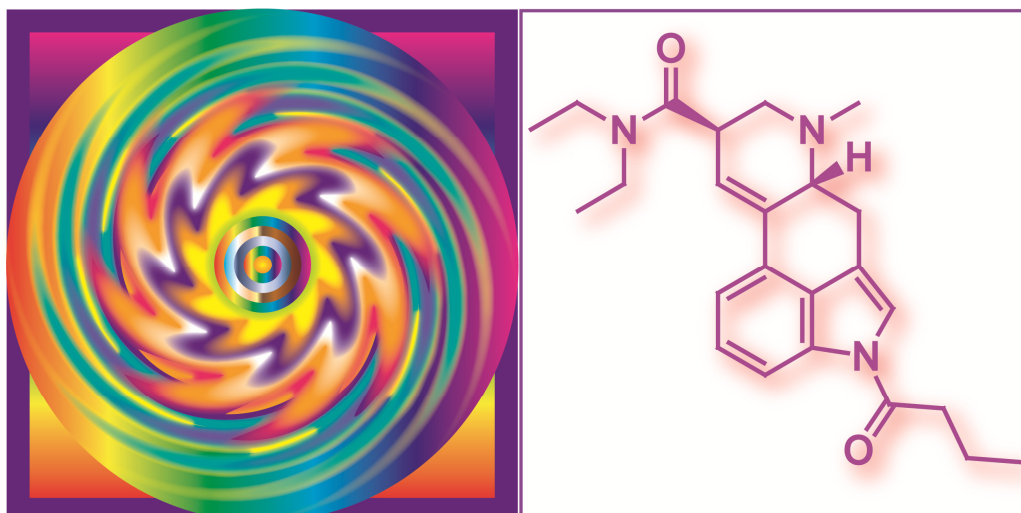
<sup>e</sup> Elliott Forensic Consulting, Birmingham, UK

<sup>f</sup> Department of Life Sciences, School of Science, Sligo Institute of Technology, Ash Lane, Sligo, F91YW50, Ireland

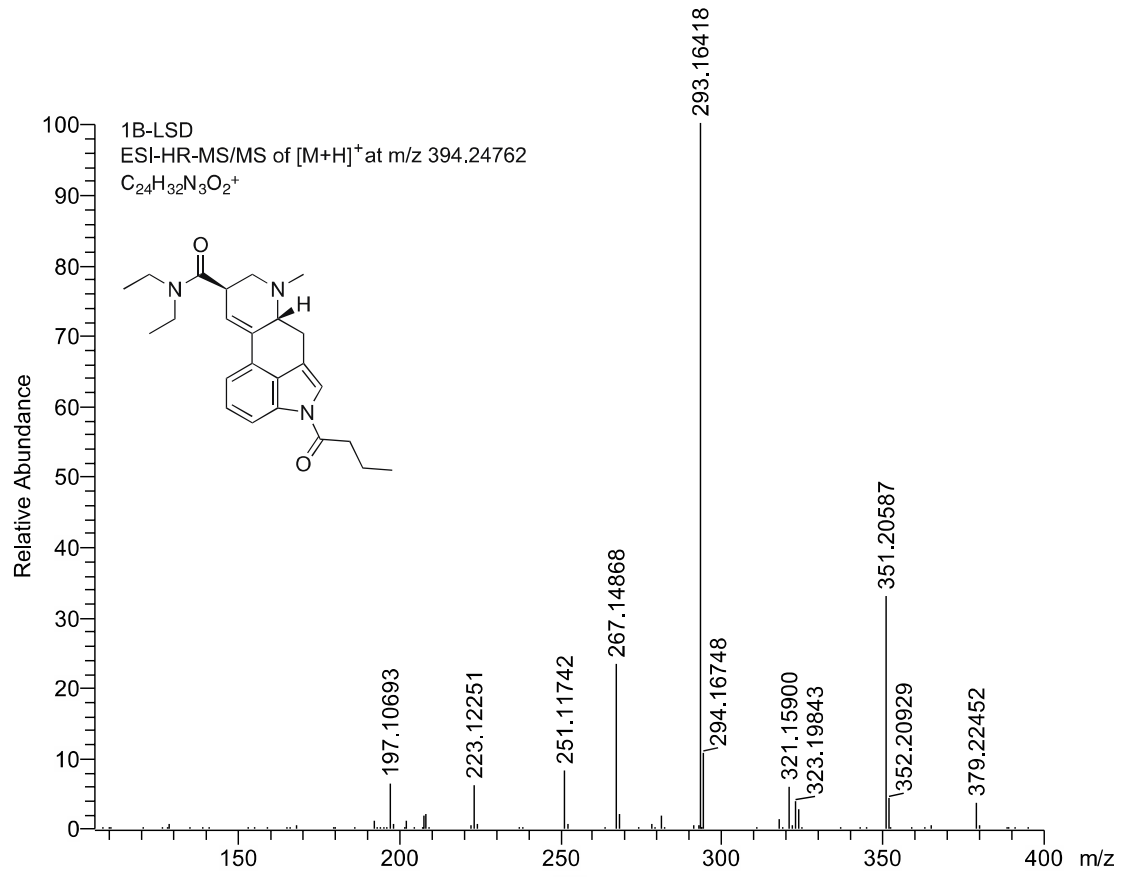
<sup>g</sup> Department of Pharmaceutical Sciences, Philadelphia College of Pharmacy, University of the Sciences, Philadelphia, PA 19104, USA

<sup>h</sup> Department of Psychiatry, University of California San Diego, La Jolla, CA 92093-0804, USA

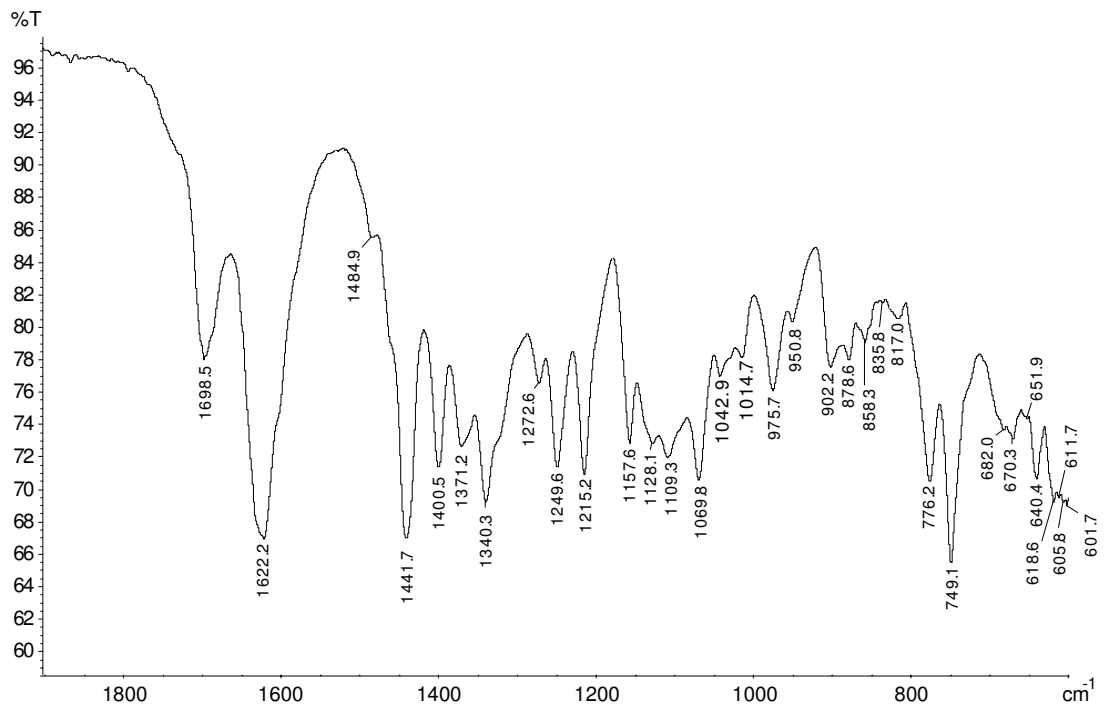
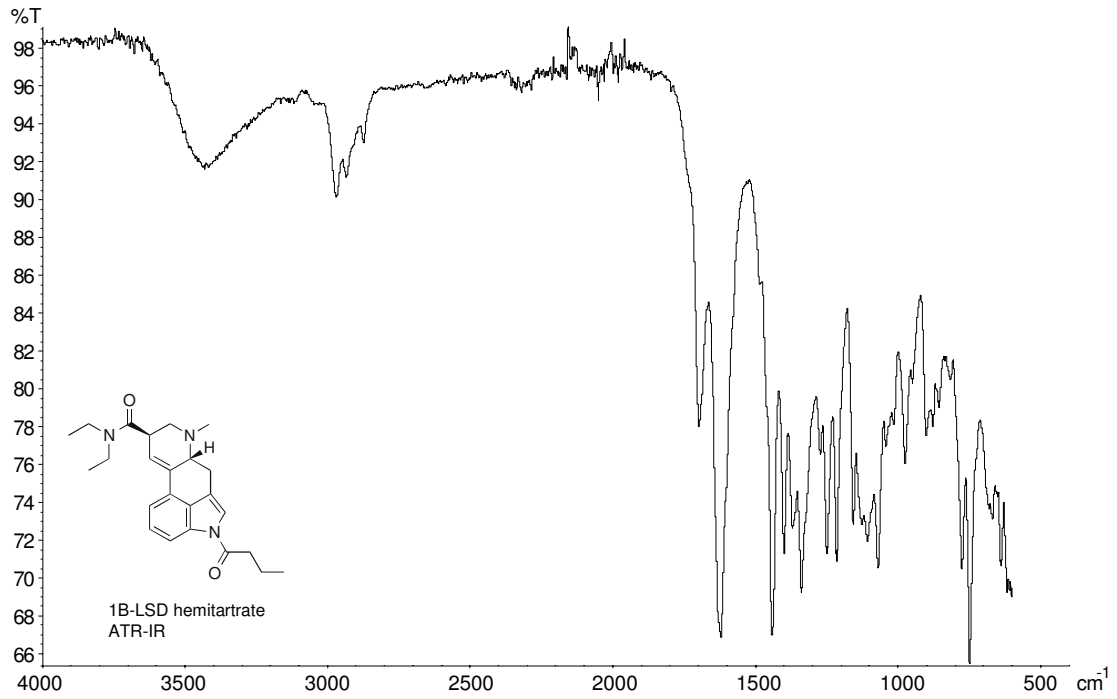
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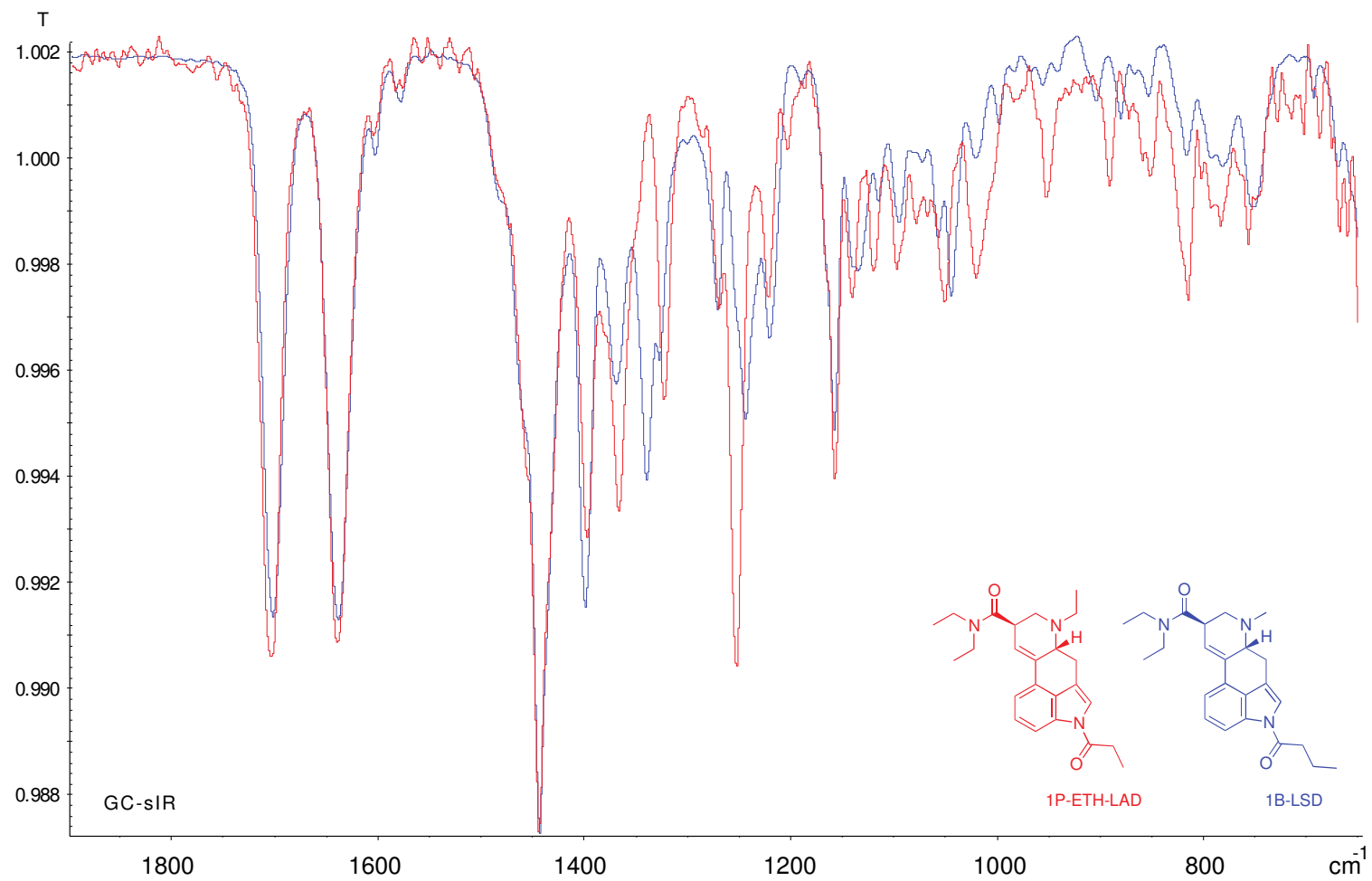
Supporting Information – Drug Testing and Analysis



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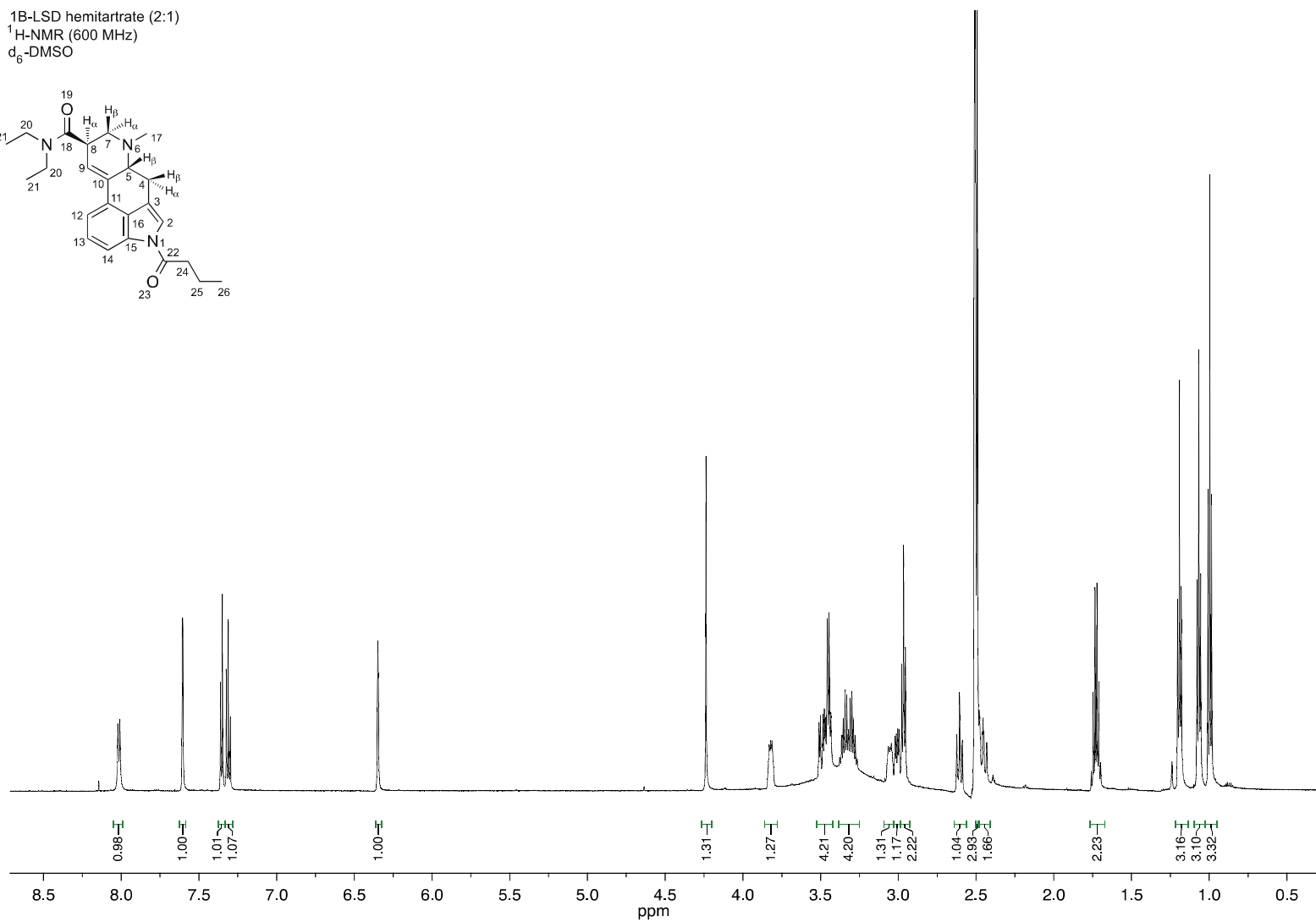
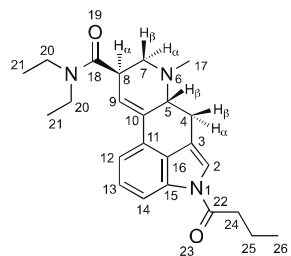


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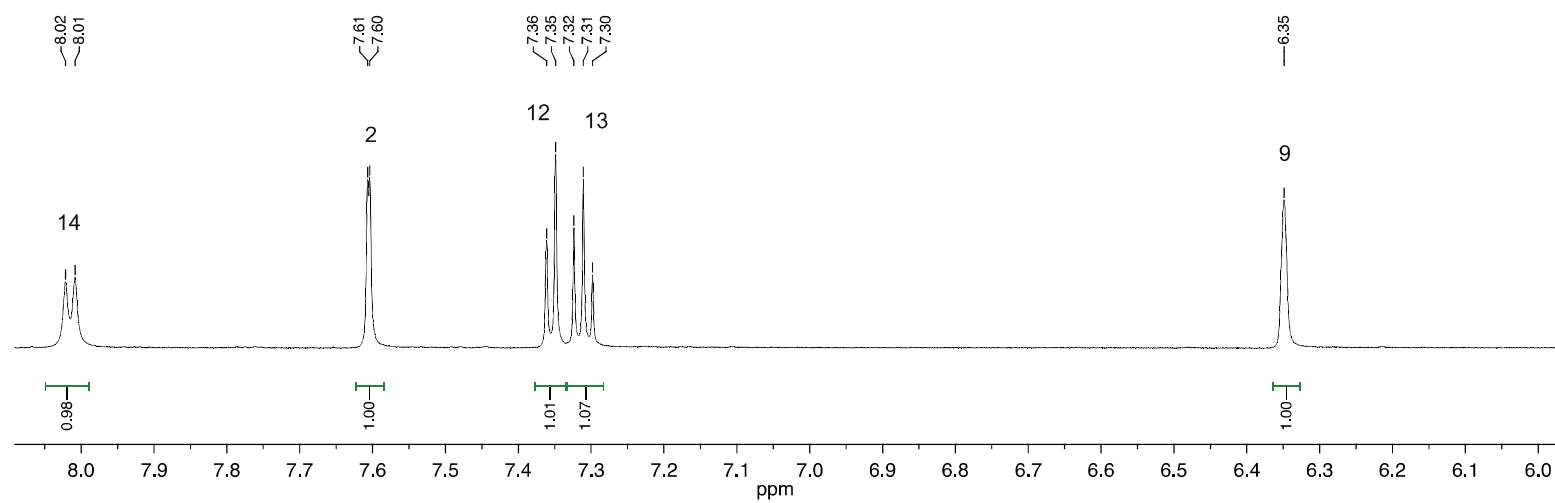
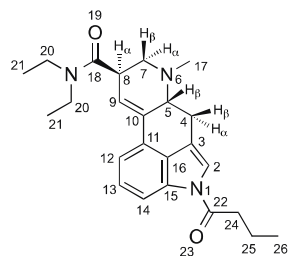
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<sup>1</sup>H-NMR (600 MHz)  
d<sub>6</sub>-DMSO



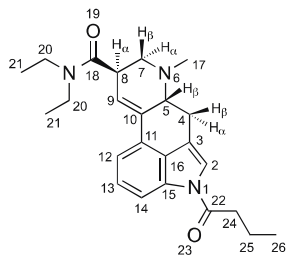
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1B-LSD hemitartrate (2:1)  
<sup>1</sup>H-NMR (600 MHz)  
d<sub>6</sub>-DMSO

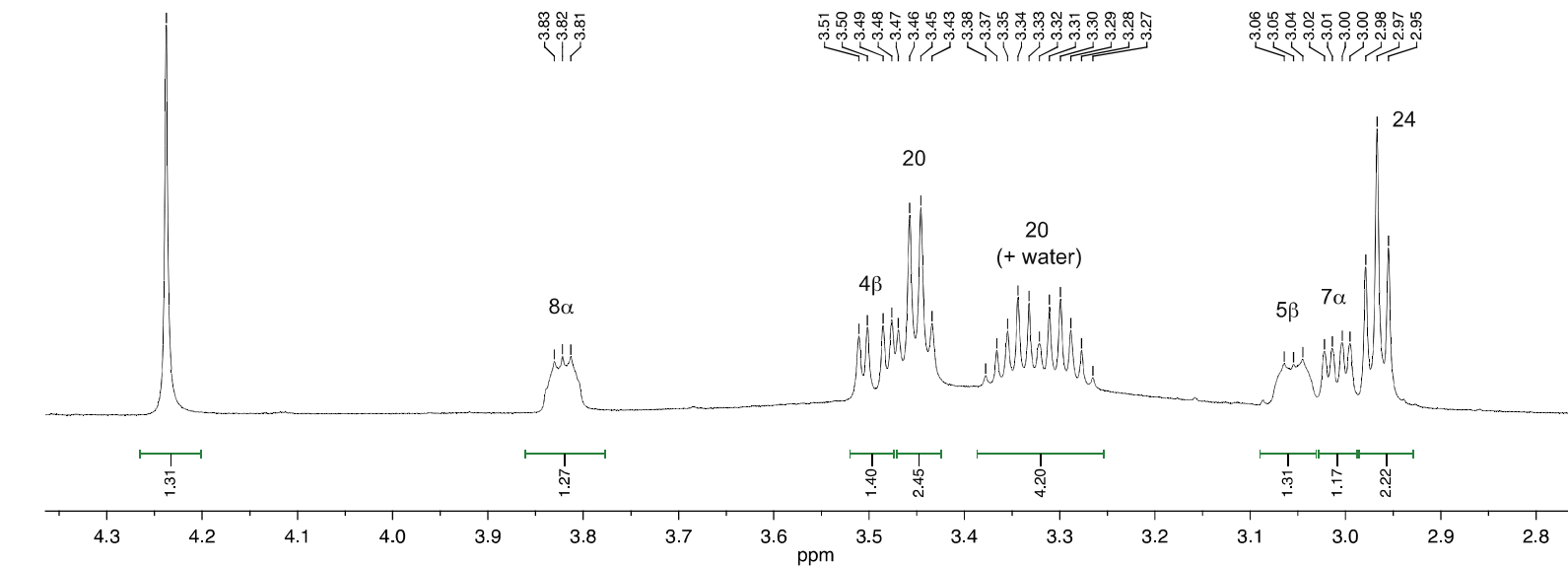


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1B-LSD hemitartrate (2:1)  
<sup>1</sup>H-NMR (600 MHz)  
d<sub>6</sub>-DMSO



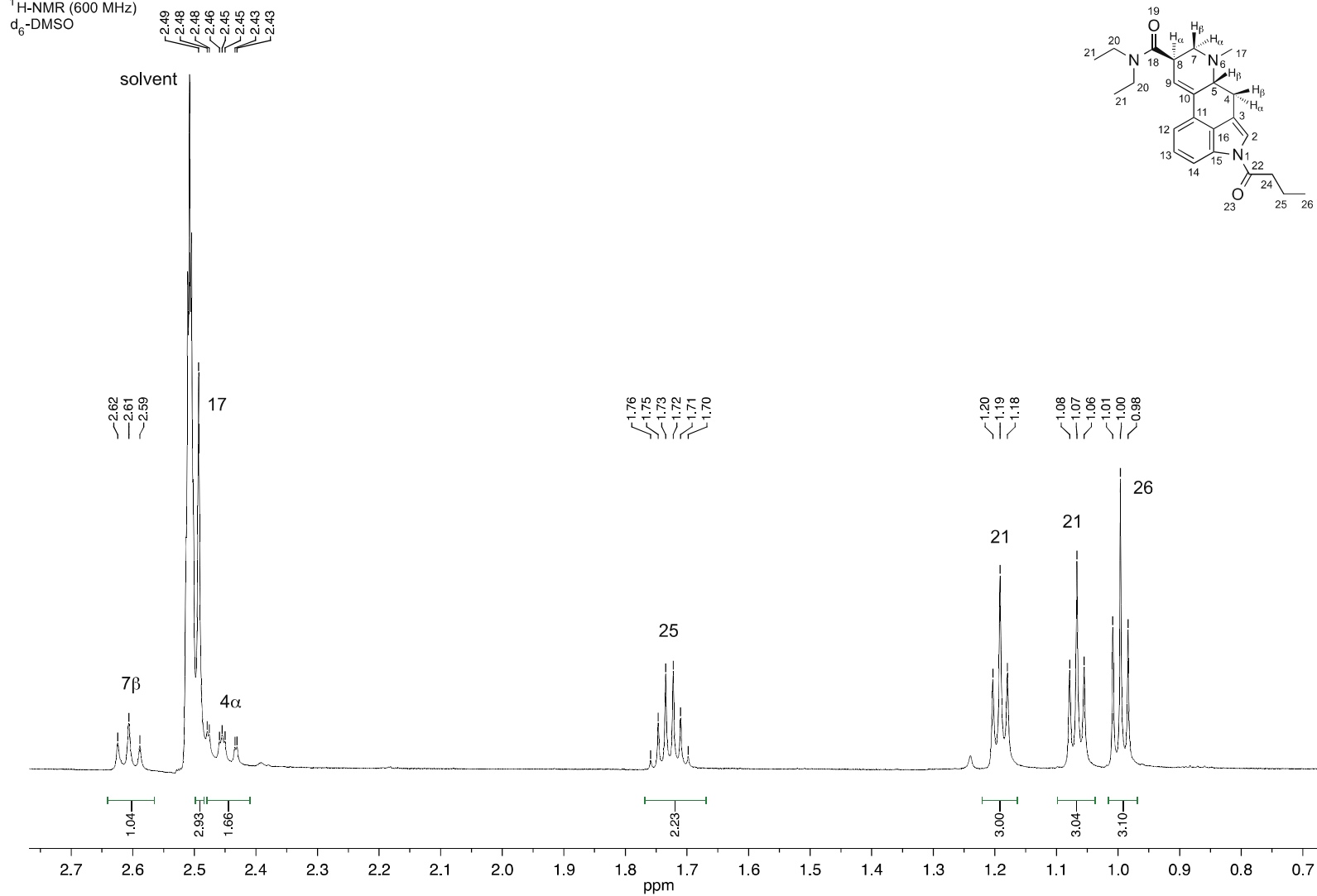
4.24  
 TA



TA = Tartaric acid

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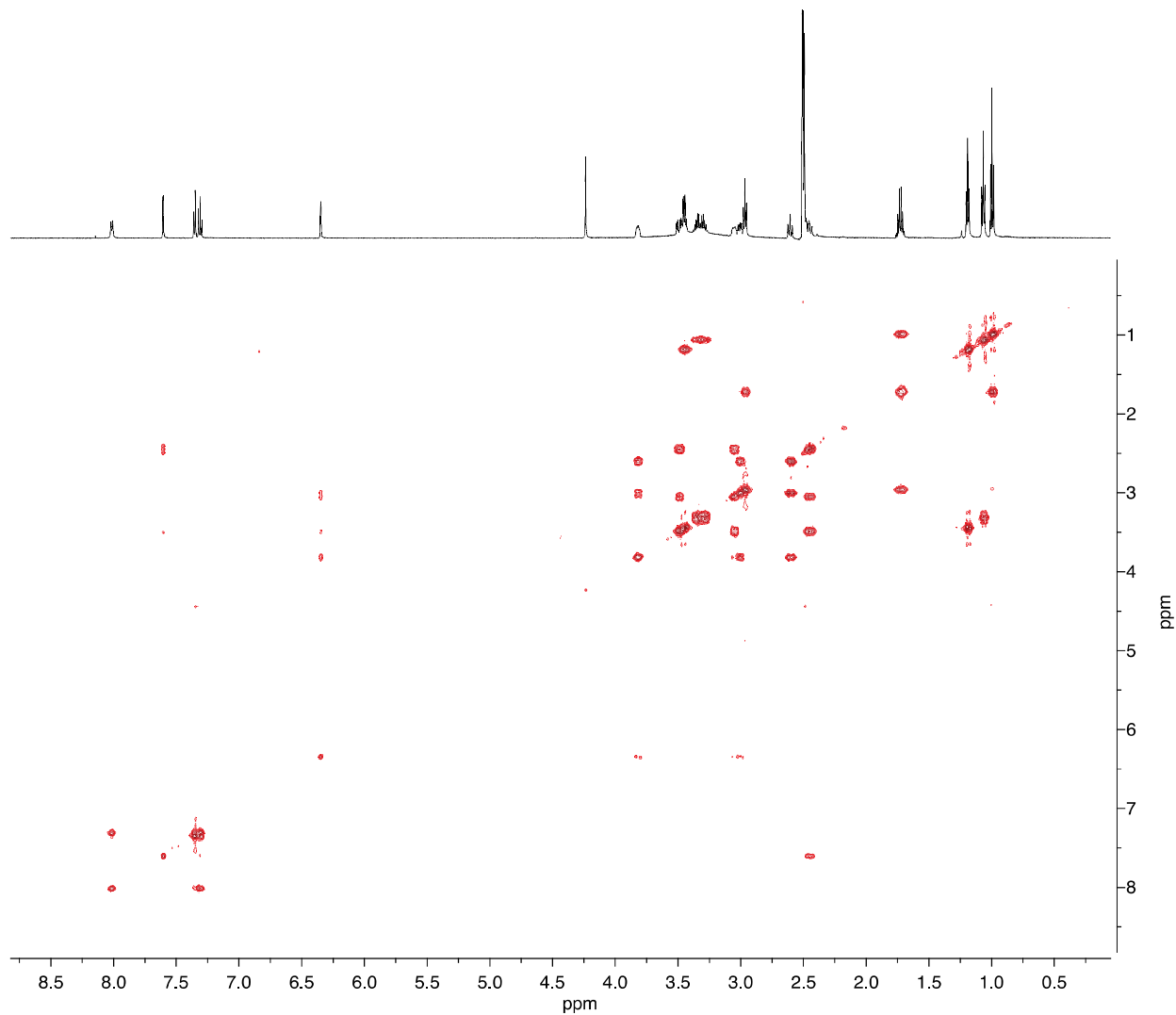
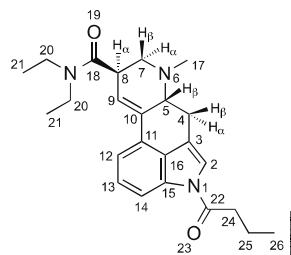
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<sup>1</sup>H-NMR (600 MHz)  
d<sub>6</sub>-DMSO





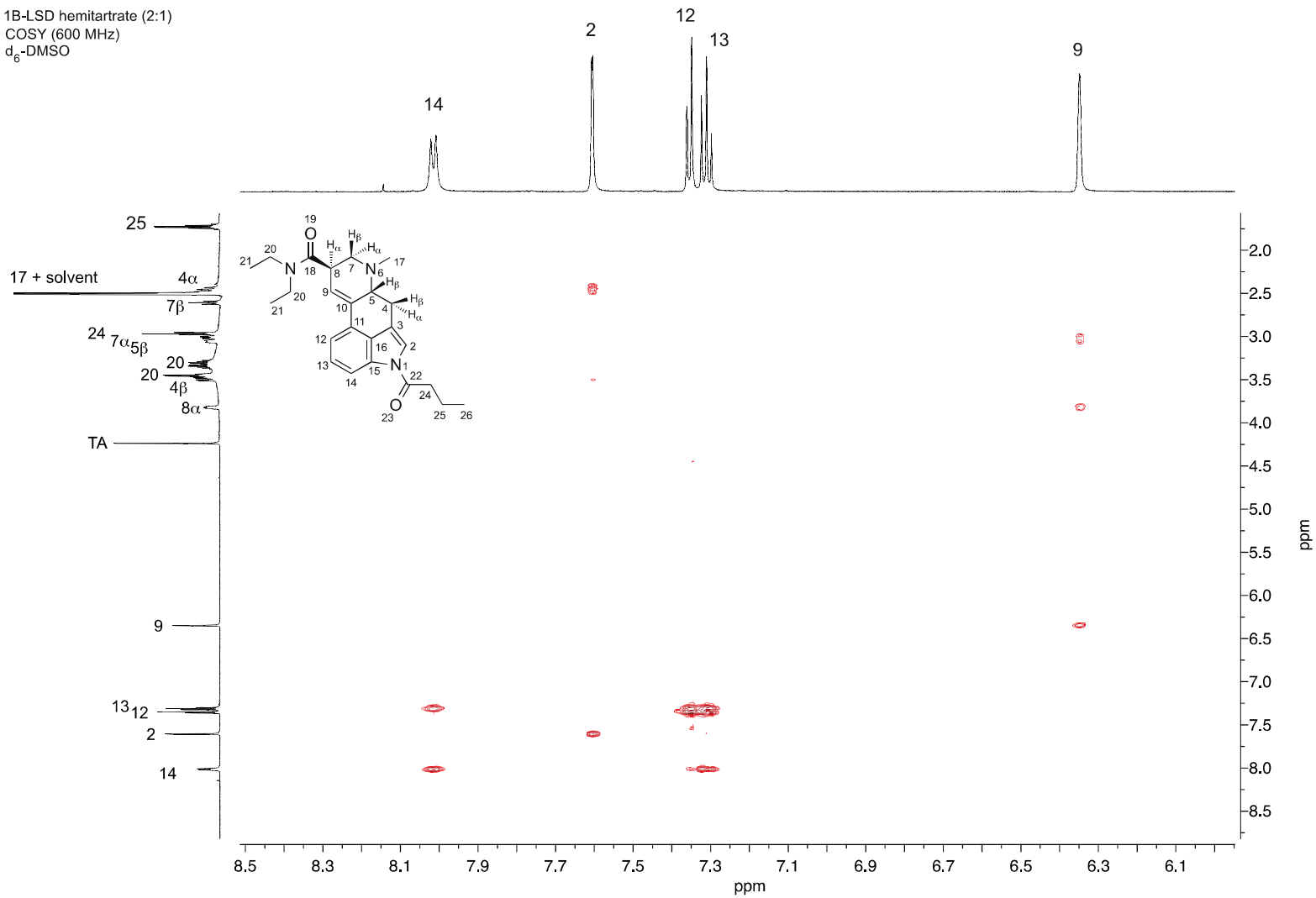
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COSY (600 MHz)  
d<sub>6</sub>-DMSO



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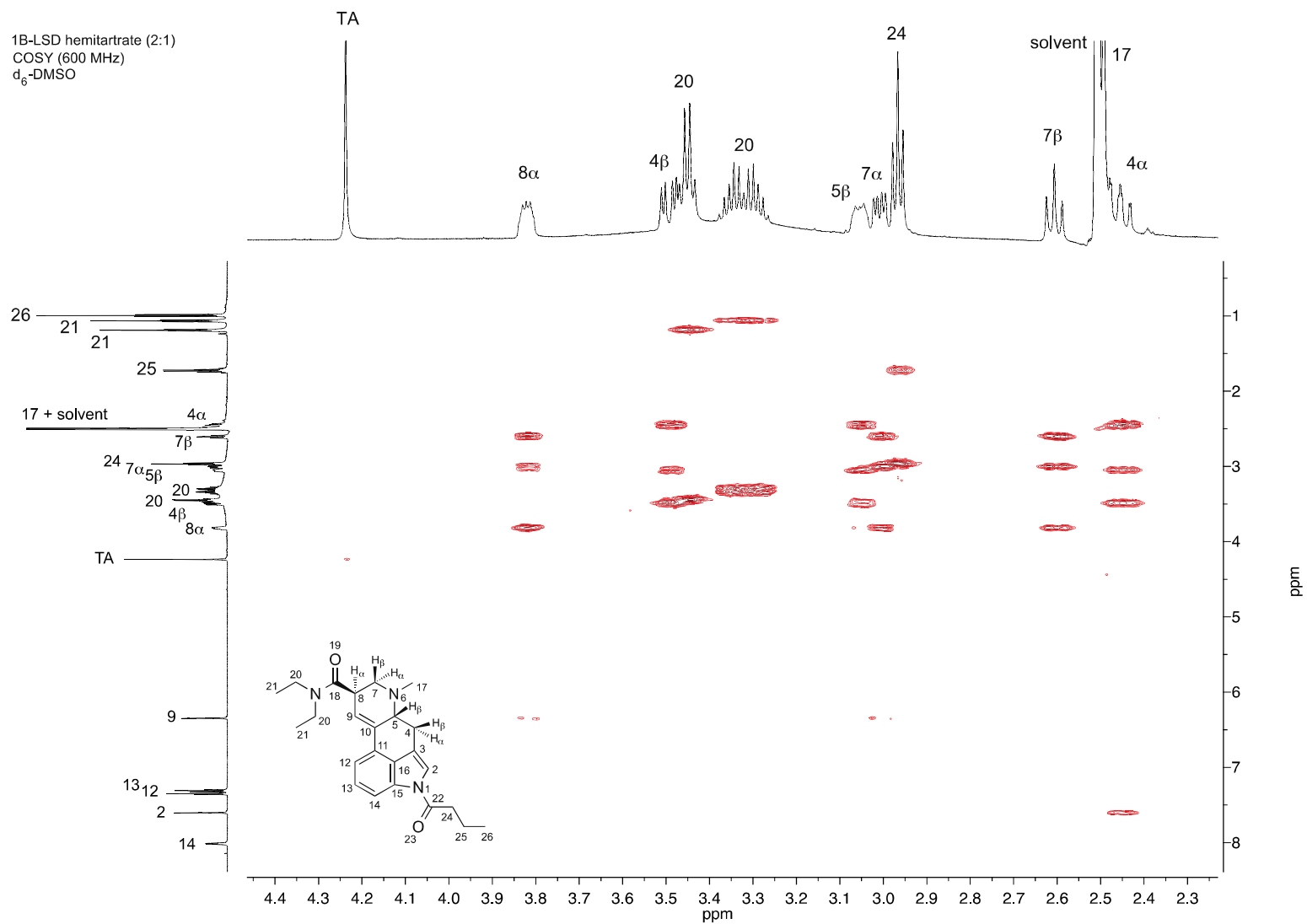
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 COSY (600 MHz)  
 d<sub>6</sub>-DMSO



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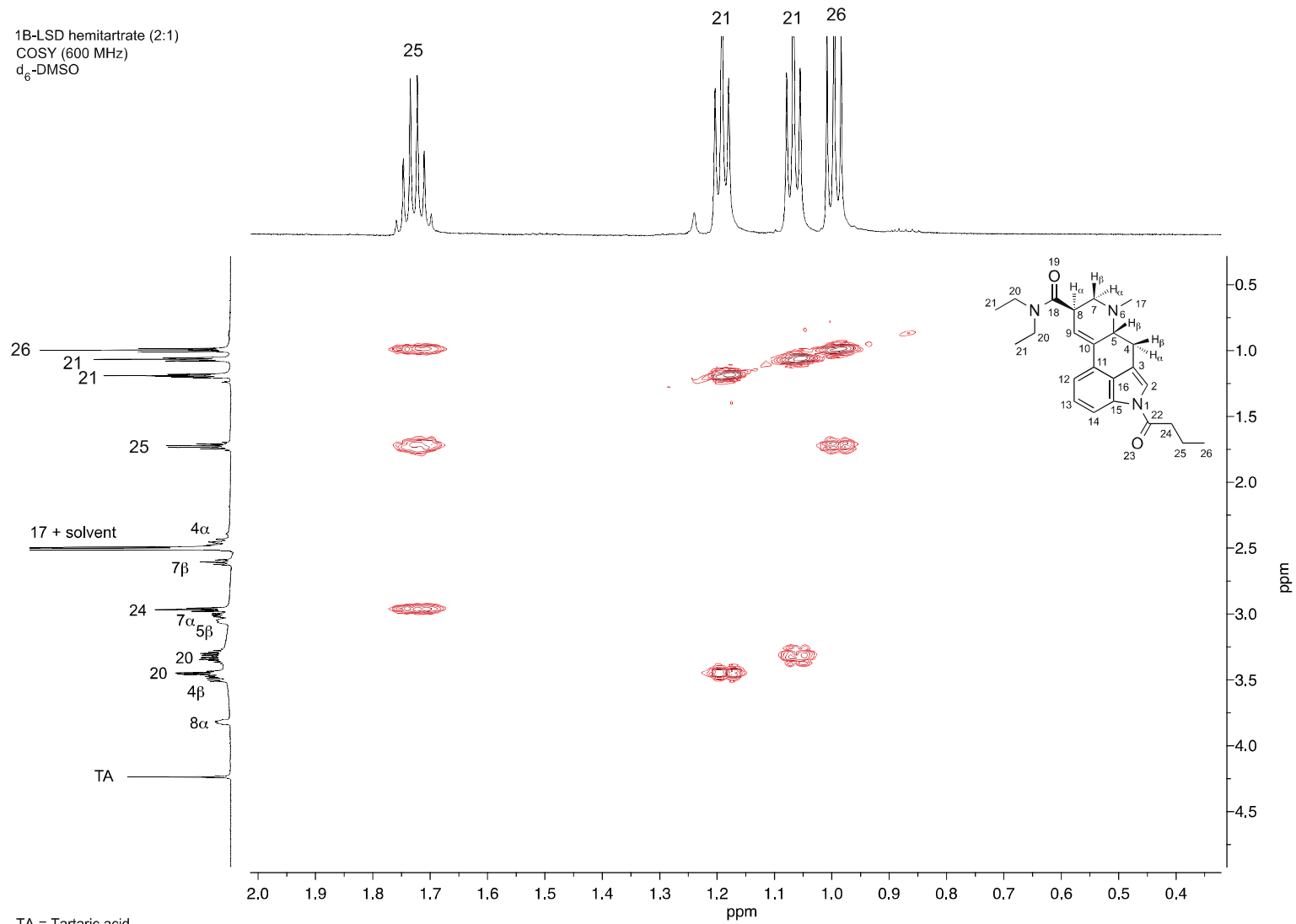
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 COSY (600 MHz)  
 d<sub>6</sub>-DMSO



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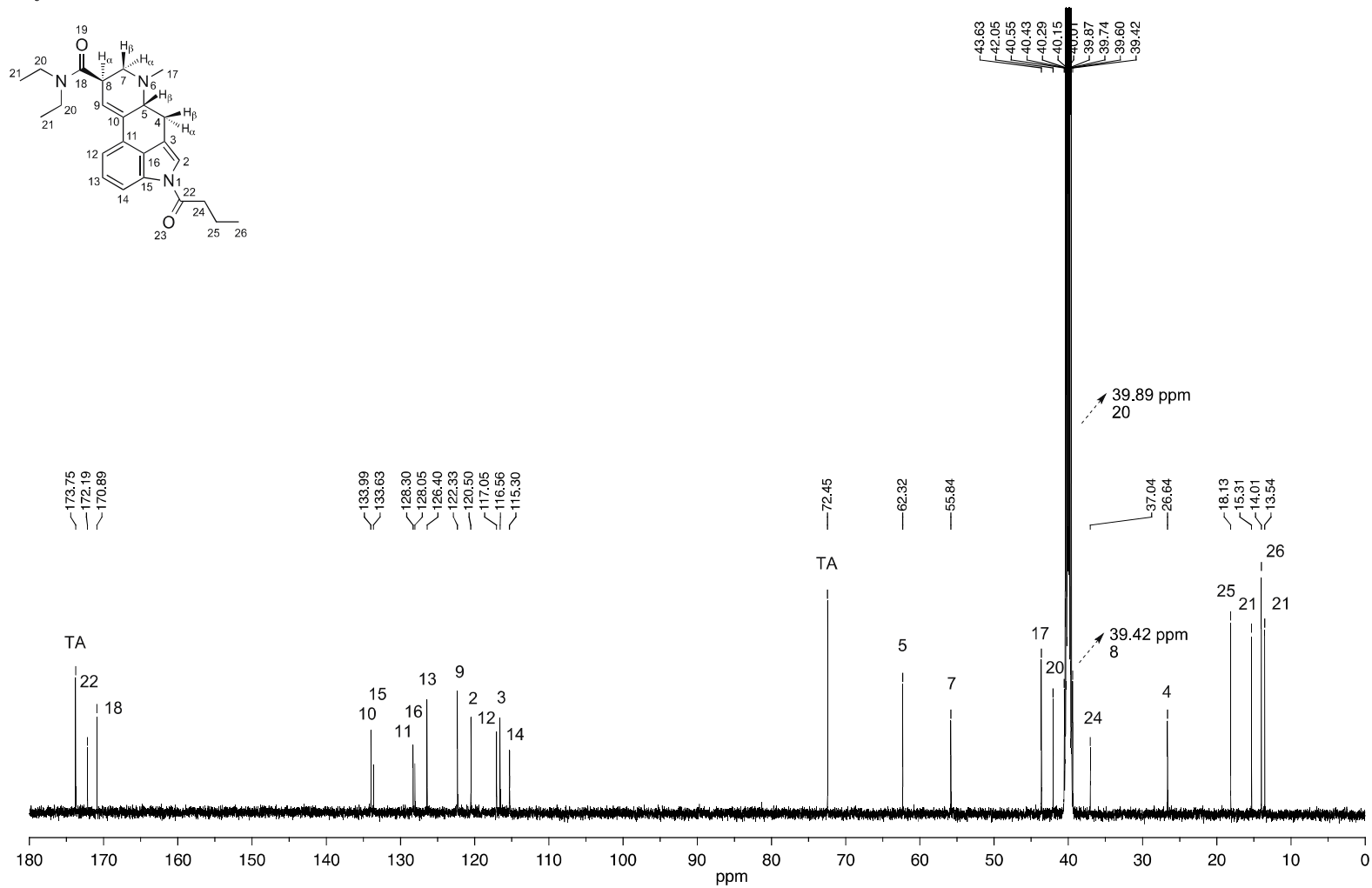
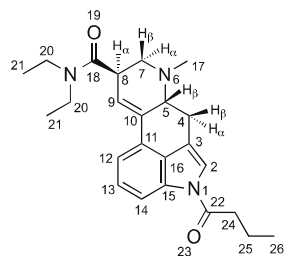
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 d<sub>6</sub>-DMSO



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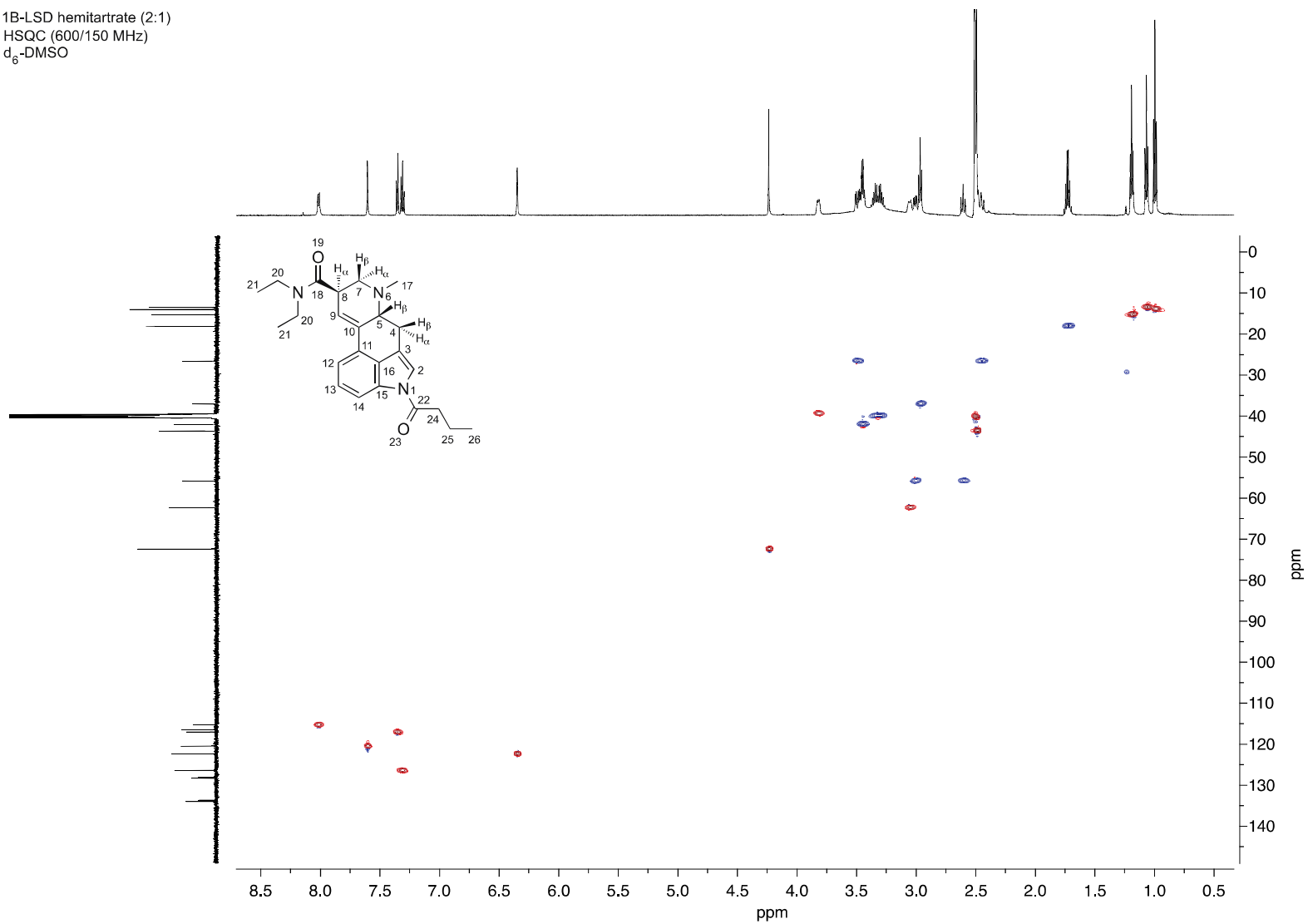
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d<sub>6</sub>-DMSO



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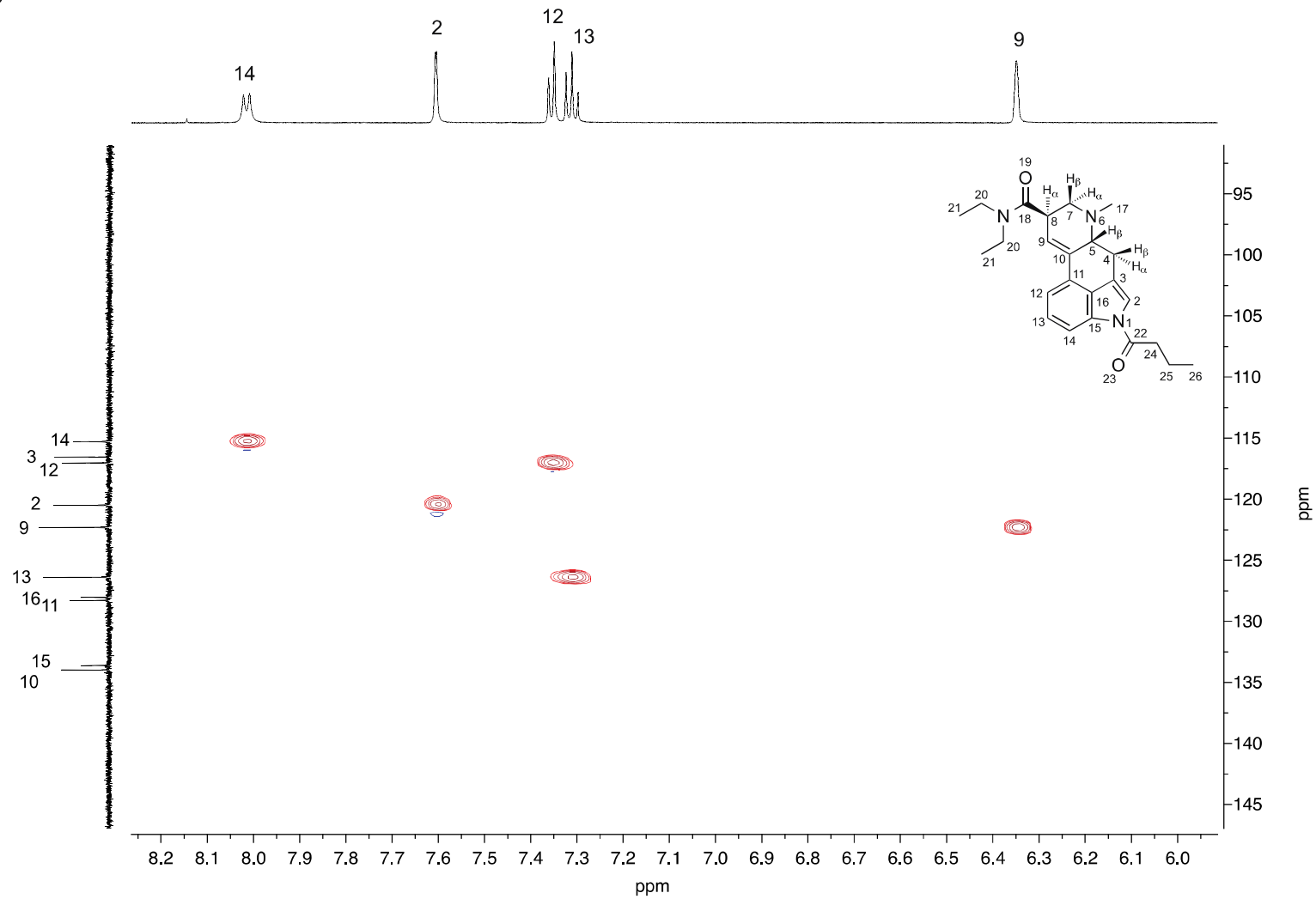
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d<sub>6</sub>-DMSO



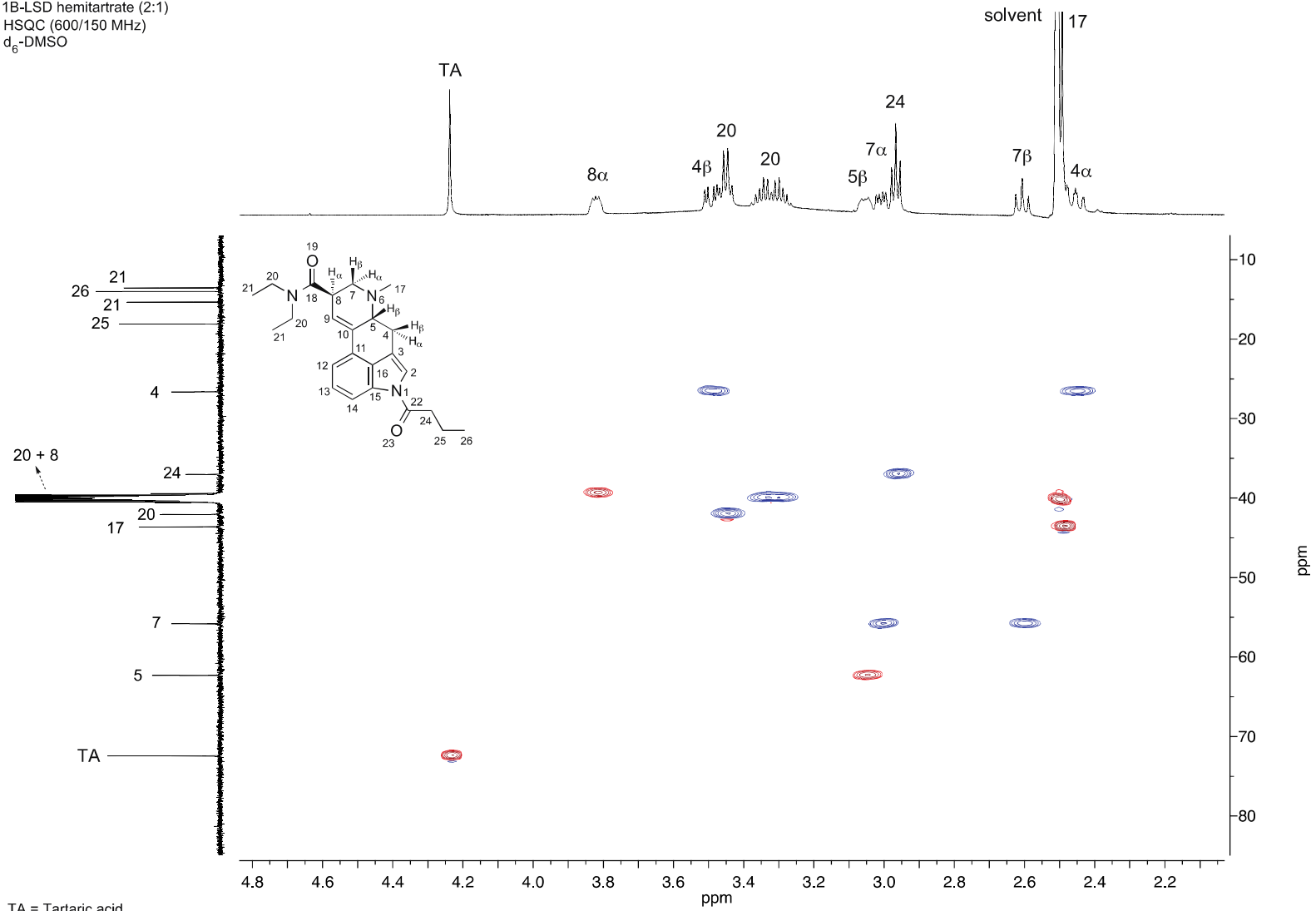
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HSQC (600/150 MHz)  
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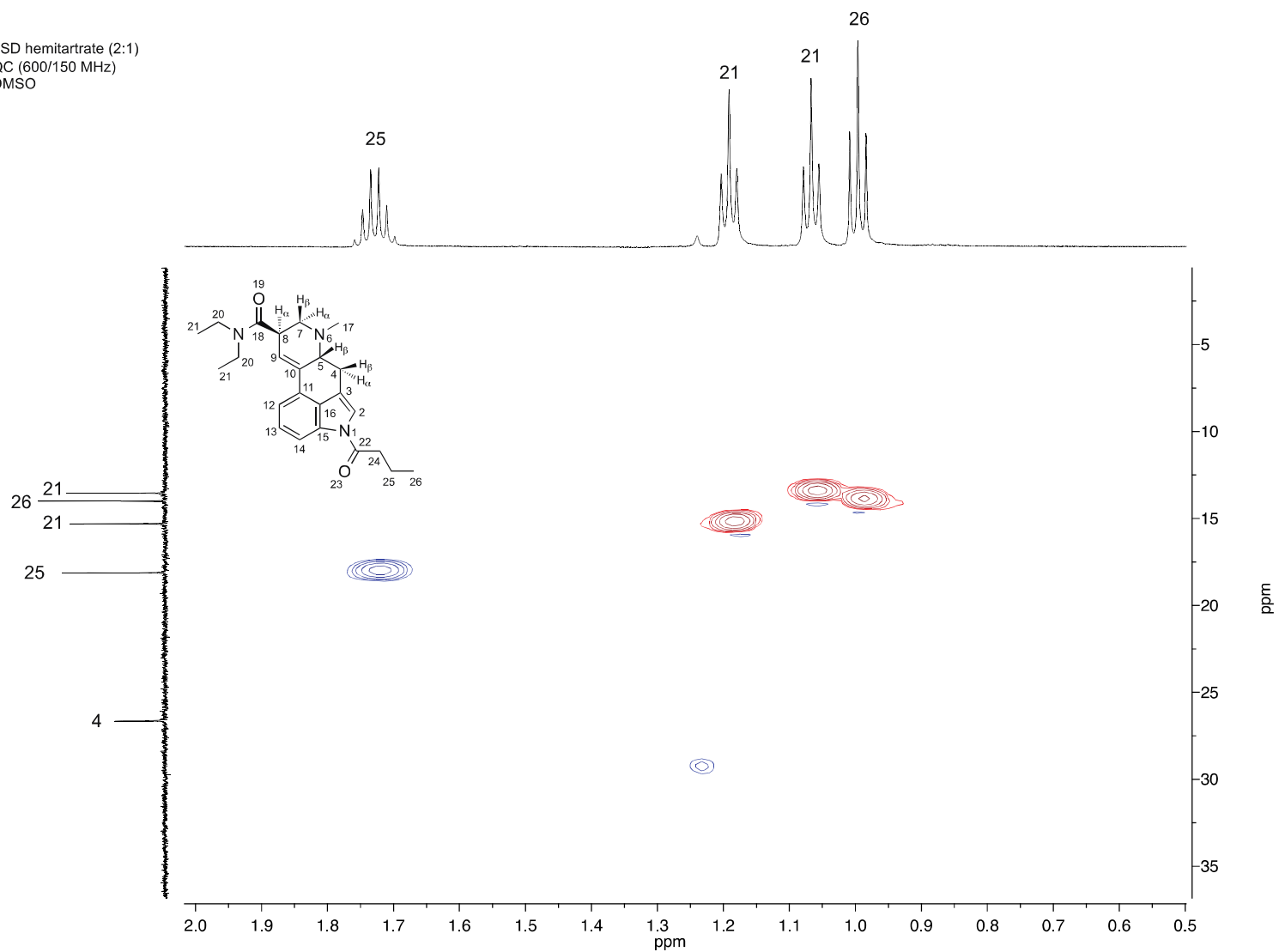
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 HSQC (600/150 MHz)  
 d<sub>6</sub>-DMSO





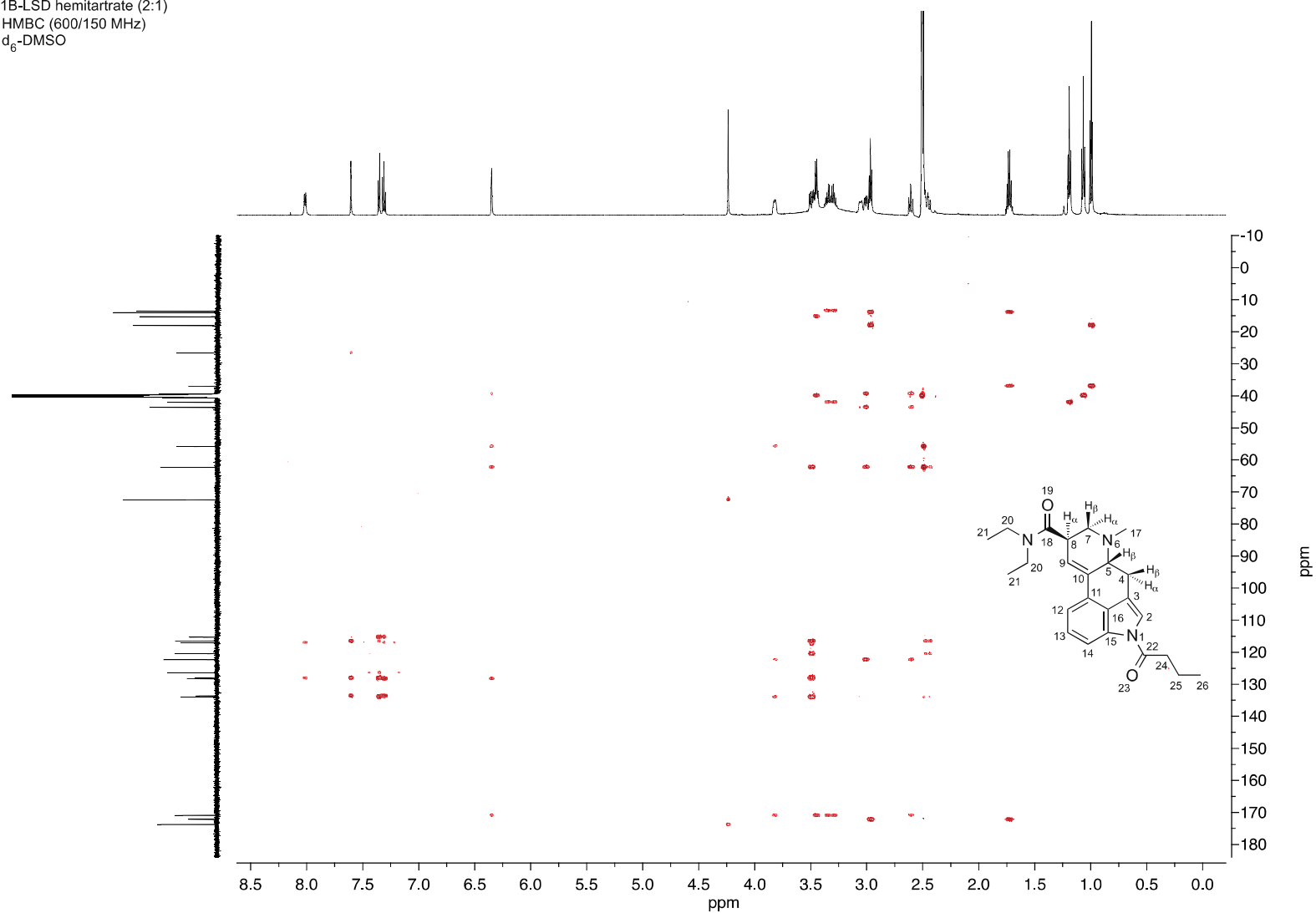
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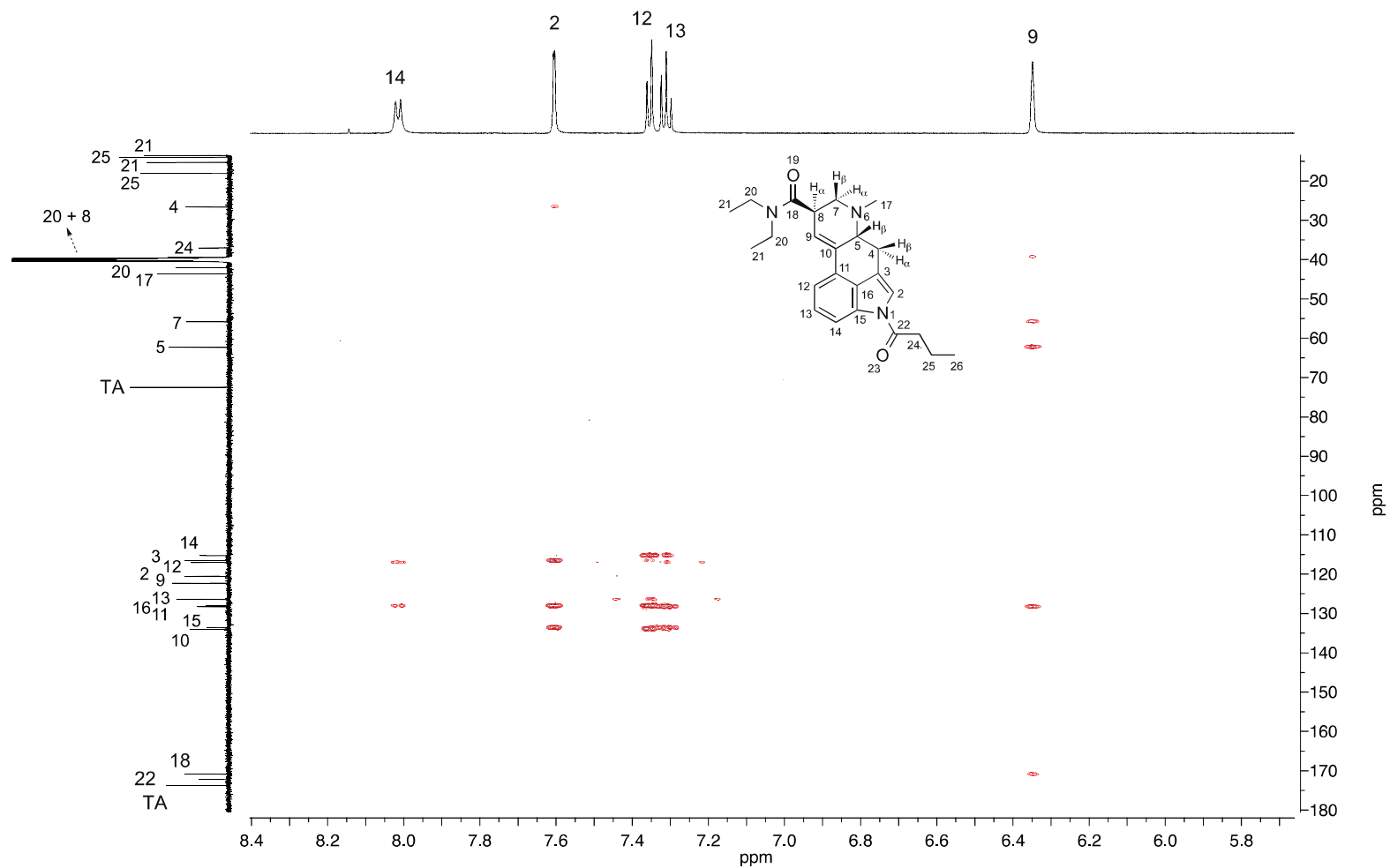
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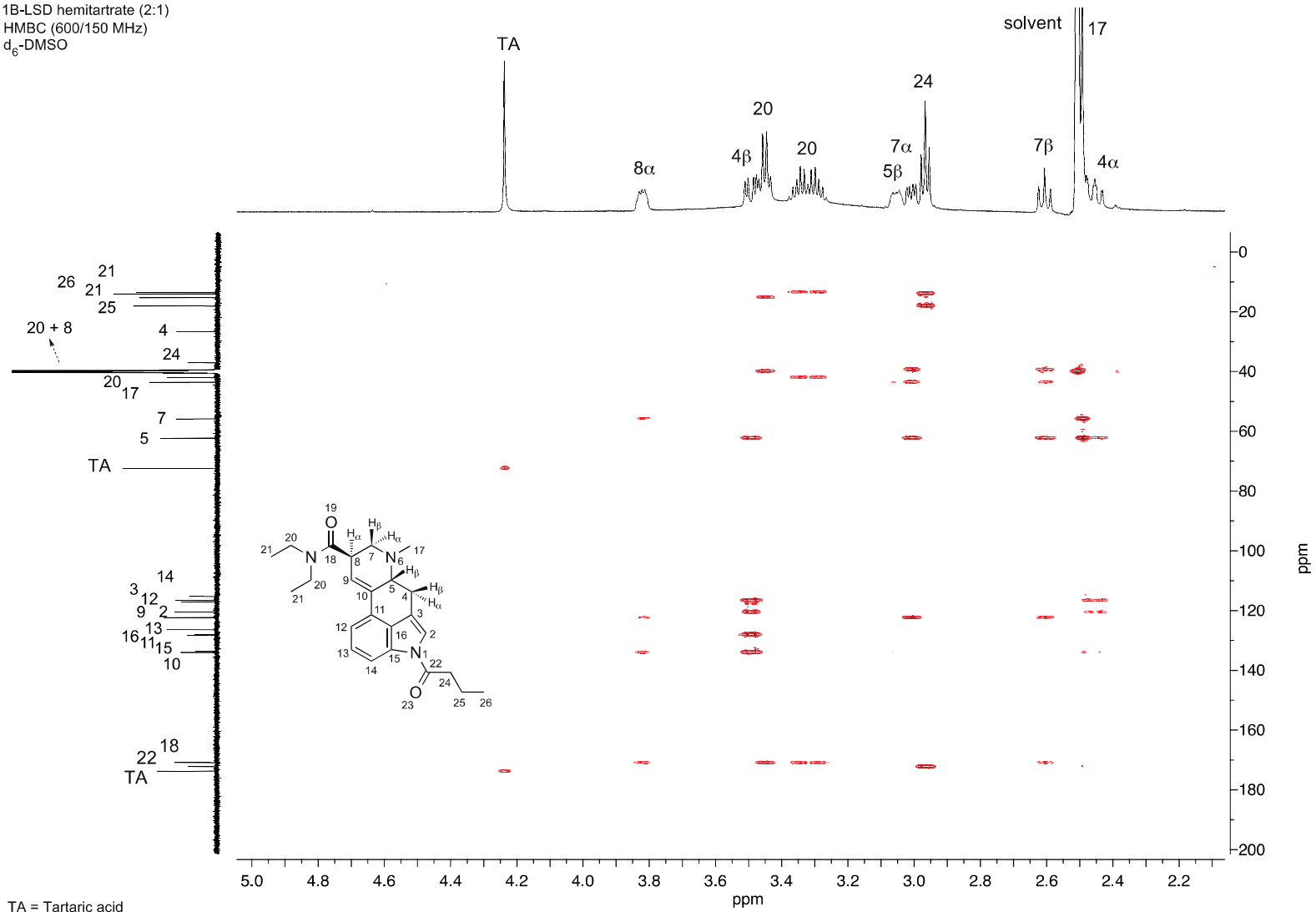
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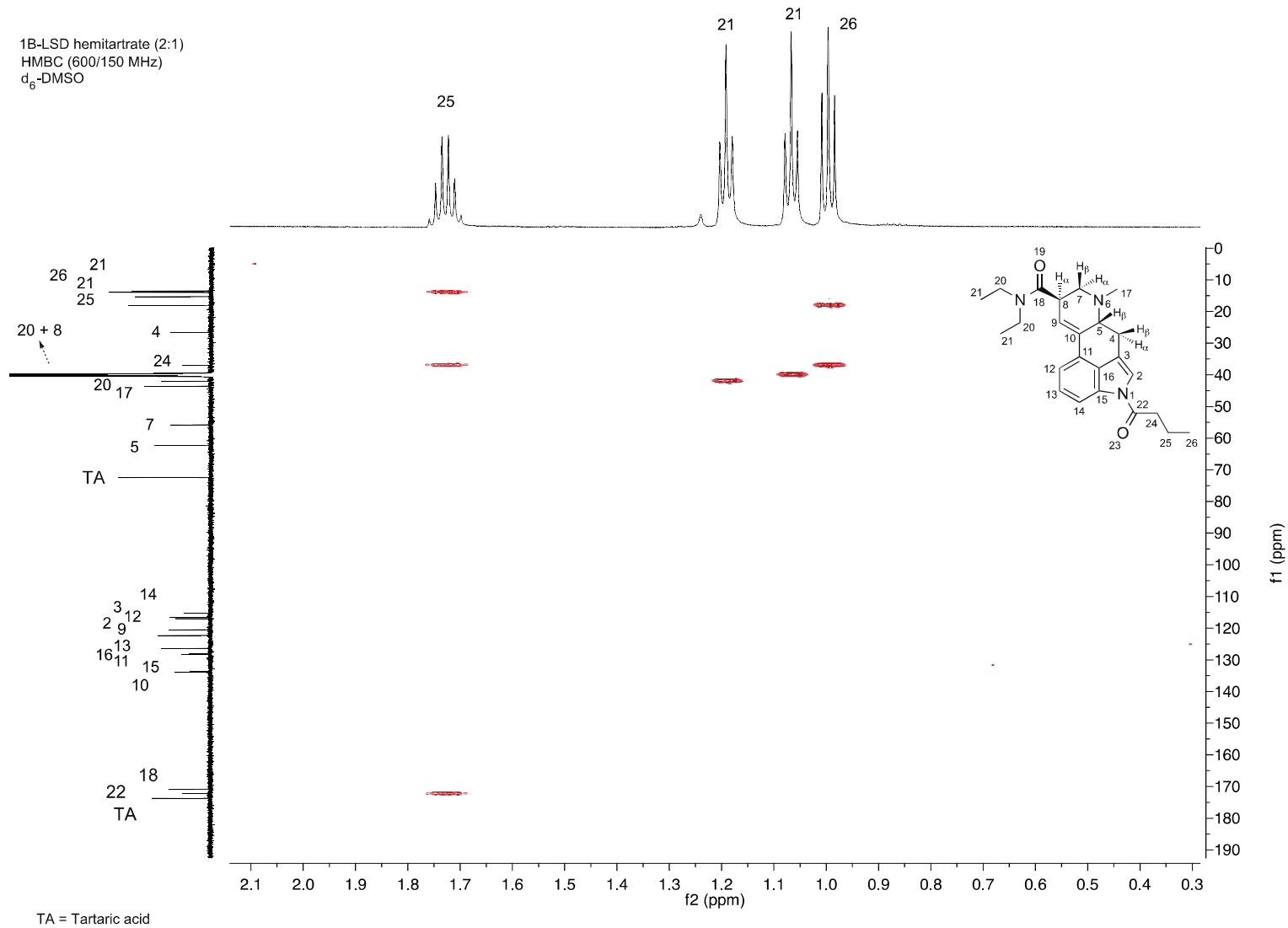
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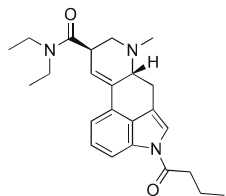
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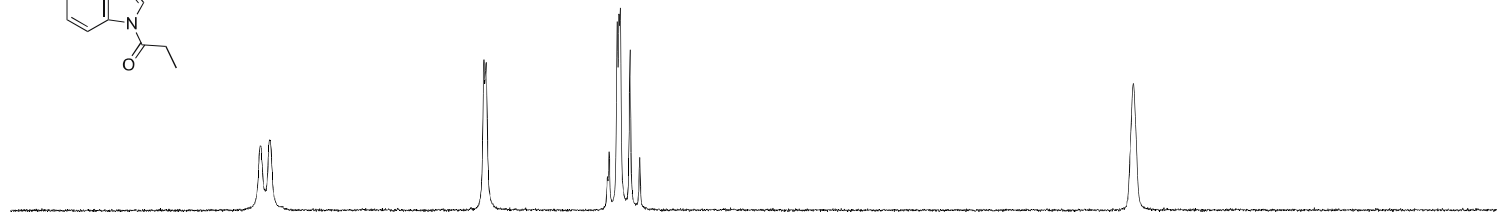
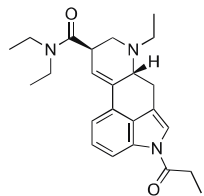


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1B-LSD hemitartrate (2:1)  
<sup>1</sup>H-NMR (600 MHz)  
d<sub>6</sub>-DMSO



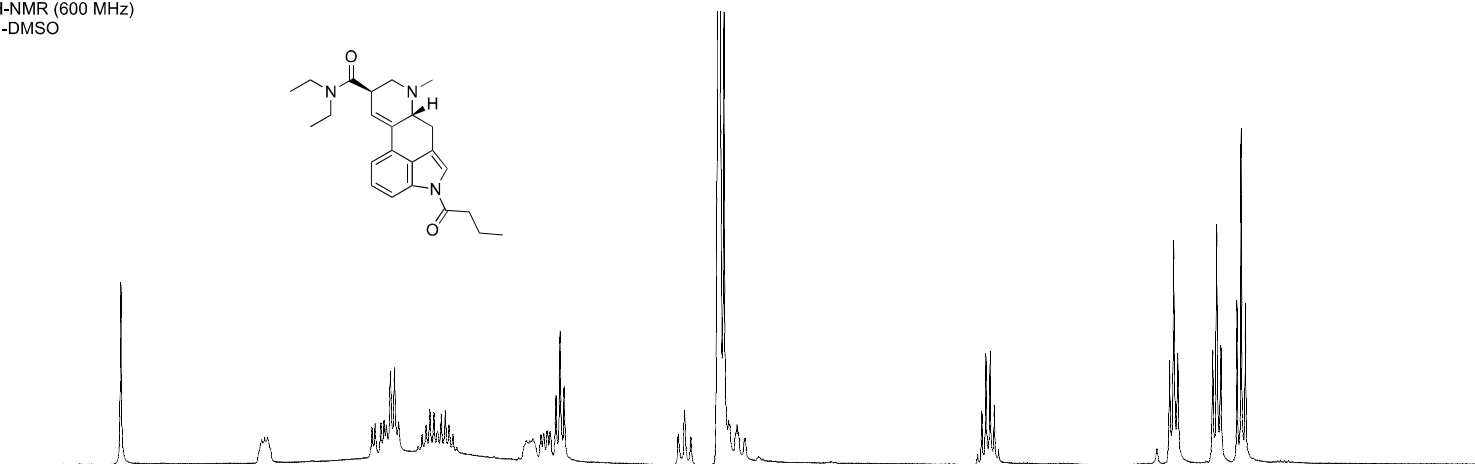
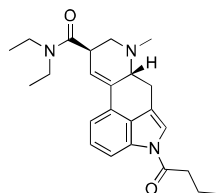
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d<sub>6</sub>-DMSO



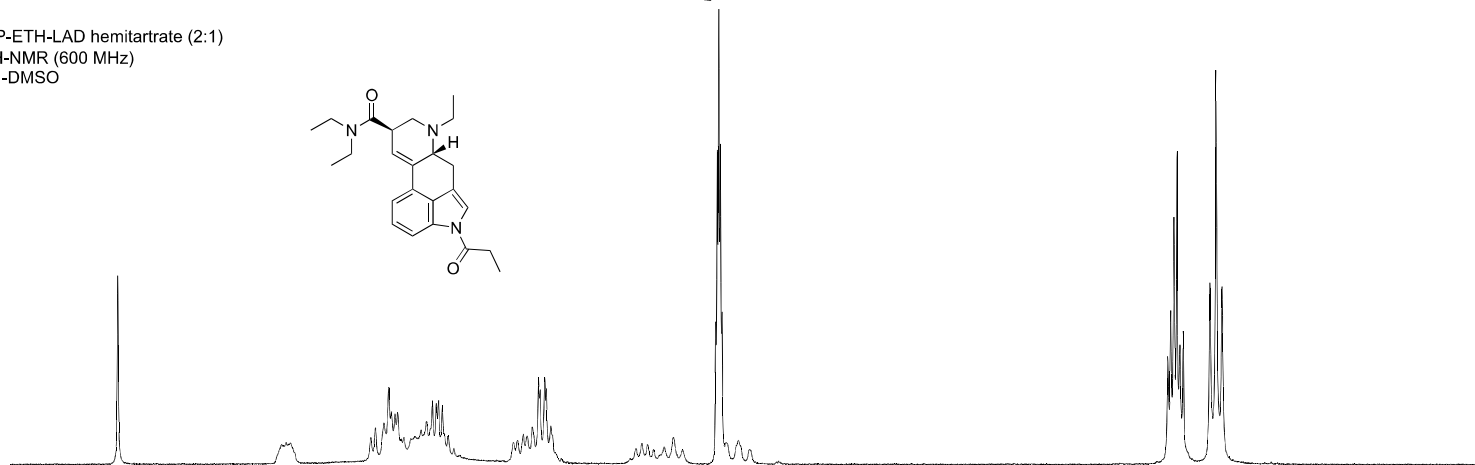
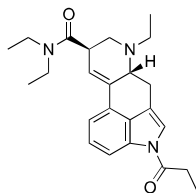
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1B-LSD hemitartrate (2:1)  
<sup>1</sup>H-NMR (600 MHz)  
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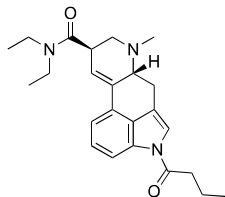
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d<sub>6</sub>-DMSO



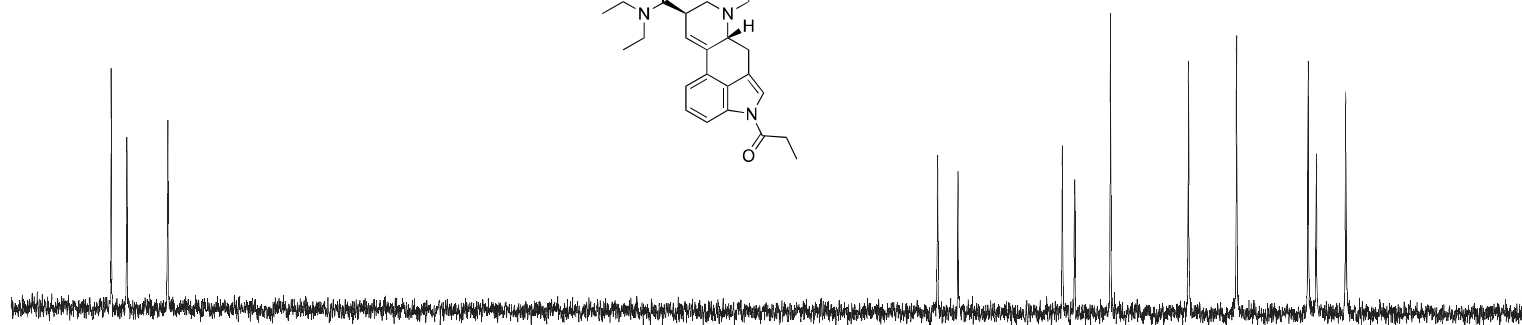
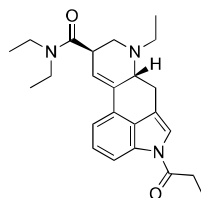
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ppm

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<sup>13</sup>C-NMR (600 MHz)  
d<sub>6</sub>-DMSO



1P-ETH-LAD hemitartrate (2:1)  
<sup>13</sup>C-NMR (600 MHz)  
d<sub>6</sub>-DMSO

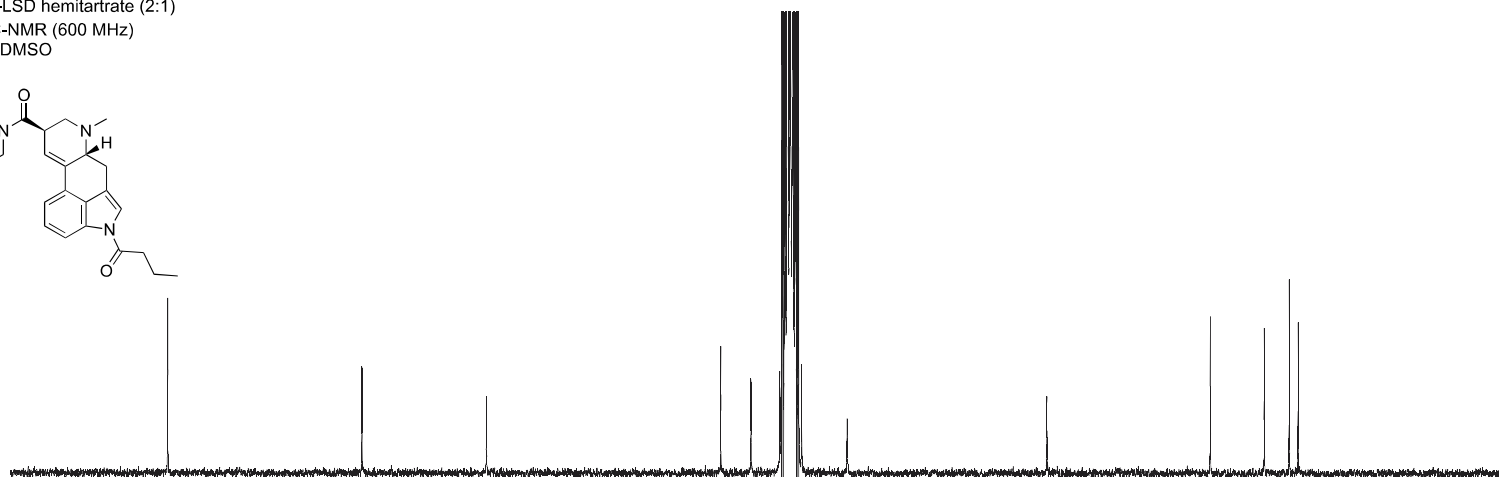
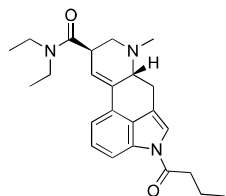


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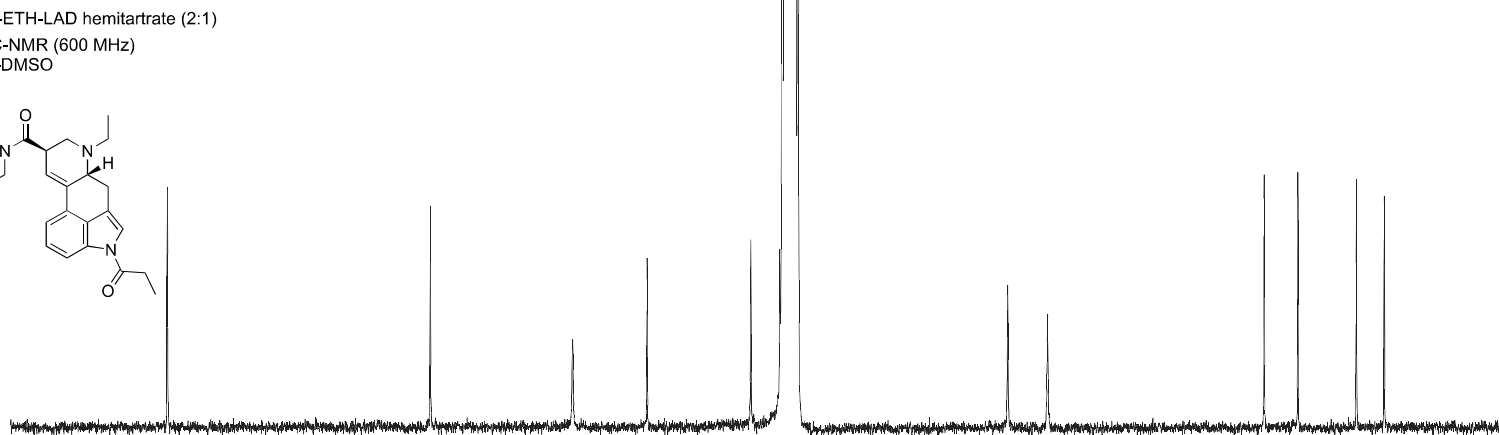
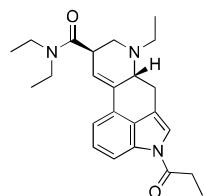


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<sup>13</sup>C-NMR (600 MHz)  
d<sub>6</sub>-DMSO



1P-ETH-LAD hemitartrate (2:1)  
<sup>13</sup>C-NMR (600 MHz)  
d<sub>6</sub>-DMSO



80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5  
ppm