

**–Supporting Information for–**

A “shortcut” Mosher ester method to assign configurations of stereocenters in nearly symmetric environments. Fluorous mixture synthesis and structure assignment of petrocortyne A

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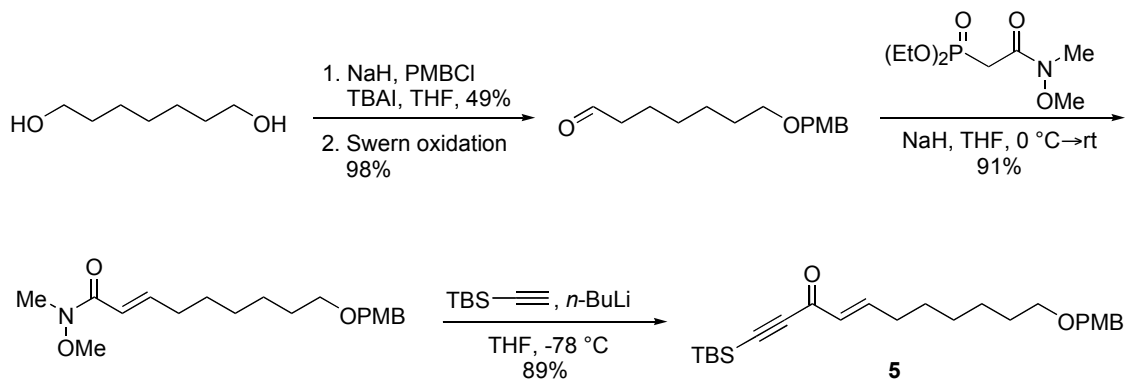
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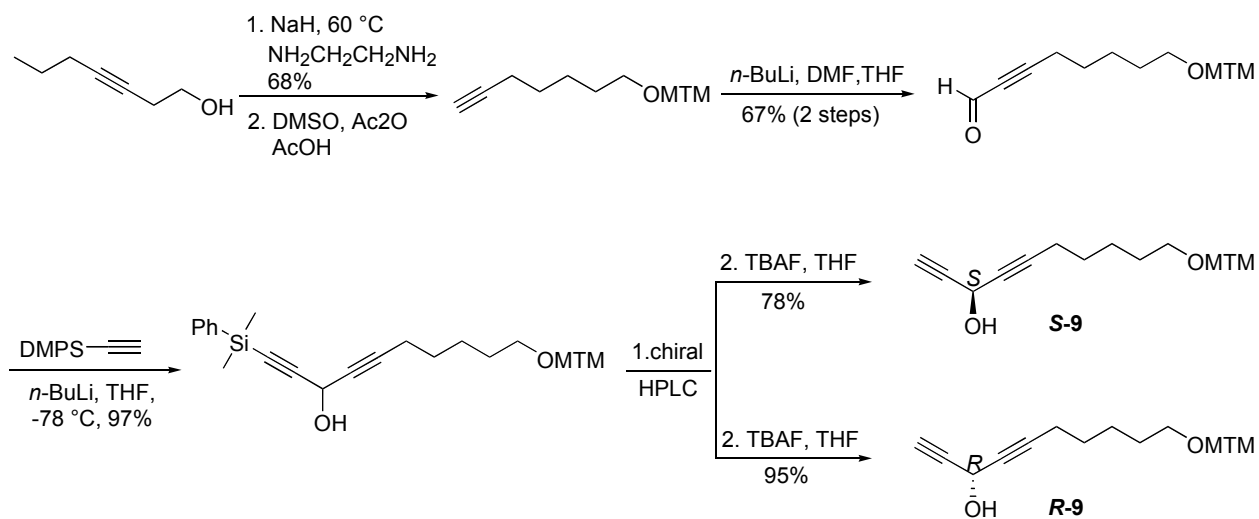
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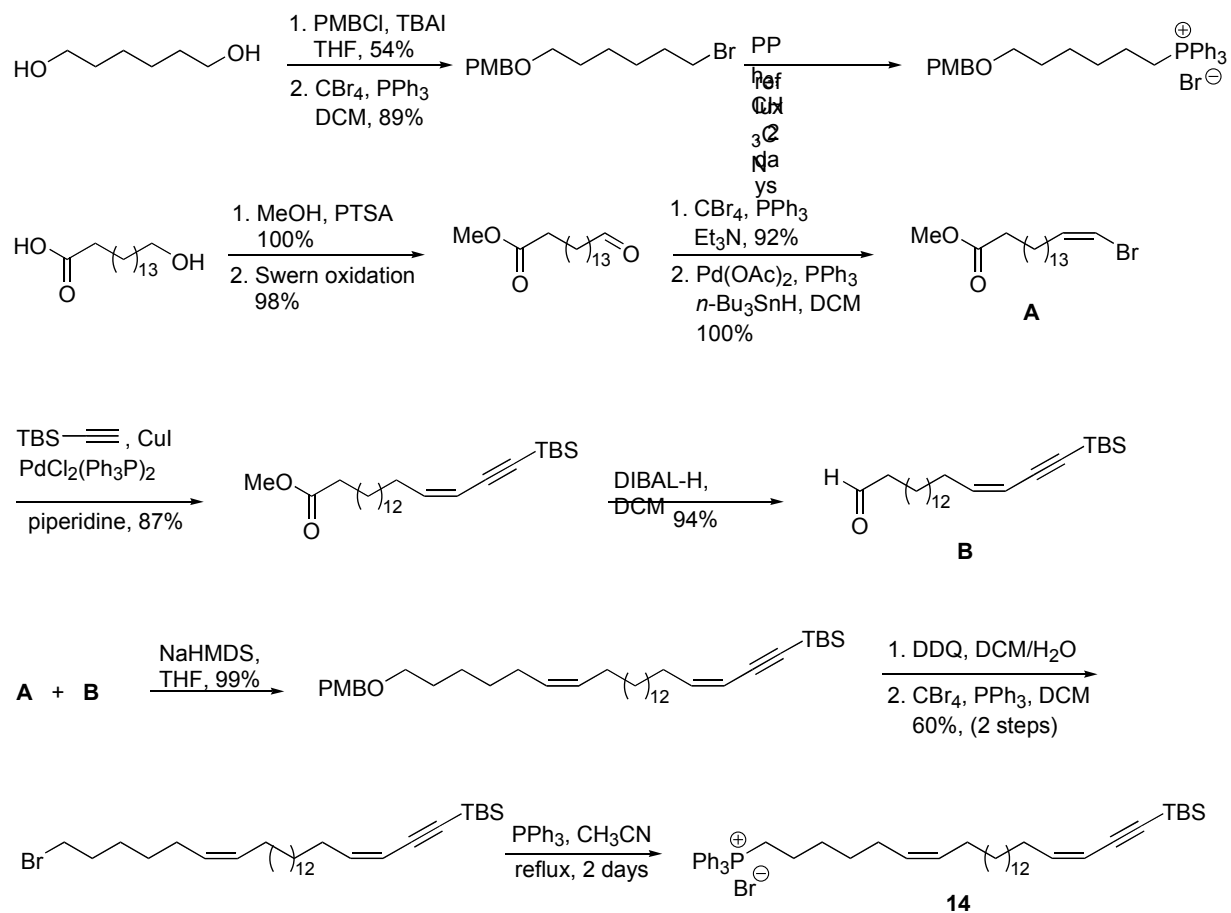
**Scheme S1. Synthesis of fragment 5**



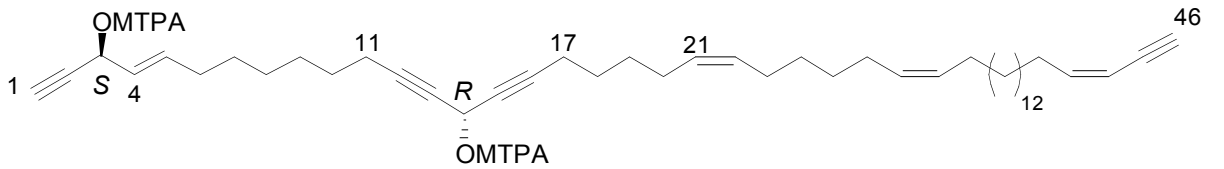
**Scheme S2. Synthesis of fragment 9**



**Scheme S3. Synthesis of fragment 14**

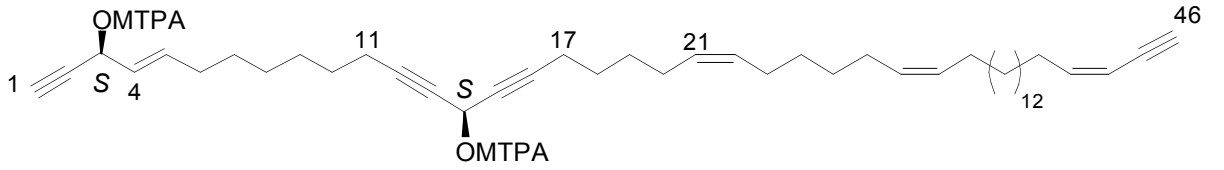


**Table S1. Chemical shifts in ppm of relevant protons in pairs of Mosher esters and subtraction results. Top, Mosher esters of SR-4. Bottom, Mosher esters of SS-4**



The chemical structure shows a long-chain molecule with two stereocenters, S and R, each bearing an OMTPA group. The chain contains several double bonds and a terminal triple bond. Protons are labeled with numbers 1, 3, 4, 5, 6, 11, 14, 17, and 18. The OMTPA groups are attached to carbons 4 and 11.

	H1	3	4	5	6	11	14	17	18
$\delta$ S-MTPA	2.632	6.023	5.490	5.998	2.036	2.214	6.210	2.204	1.487
$\delta$ R-MTPA	2.591	6.008	5.601	6.057	2.077	2.190	6.214	2.233	1.515
$\delta(\delta S - \delta R)$	0.041	NA	-0.111	-0.059	-0.041	0.024	NA	-0.029	-0.027



The chemical structure shows a long-chain molecule with two stereocenters, S and S, each bearing an OMTPA group. The chain contains several double bonds and a terminal triple bond. Protons are labeled with numbers 1, 3, 4, 5, 6, 11, 14, 17, and 18. The OMTPA groups are attached to carbons 4 and 11.

	H1	3	4	5	6	11	14	17	18
$\delta$ S-MTPA	2.628	6.026	5.494	5.992	2.036	2.185	6.210	2.230	1.516
$\delta$ R-MTPA	2.590	6.001	5.594	6.053	2.074	2.219	6.208	2.204	1.492
$\delta(\delta S - \delta R)$	0.038	NA	-0.100	-0.061	-0.037	-0.034	NA	0.026	0.024

The protons were assigned by COSY and TOSCY spectra. NA = does not apply; the protons on the carbon bearing the Mosher ester are not used in the Mosher subtraction.



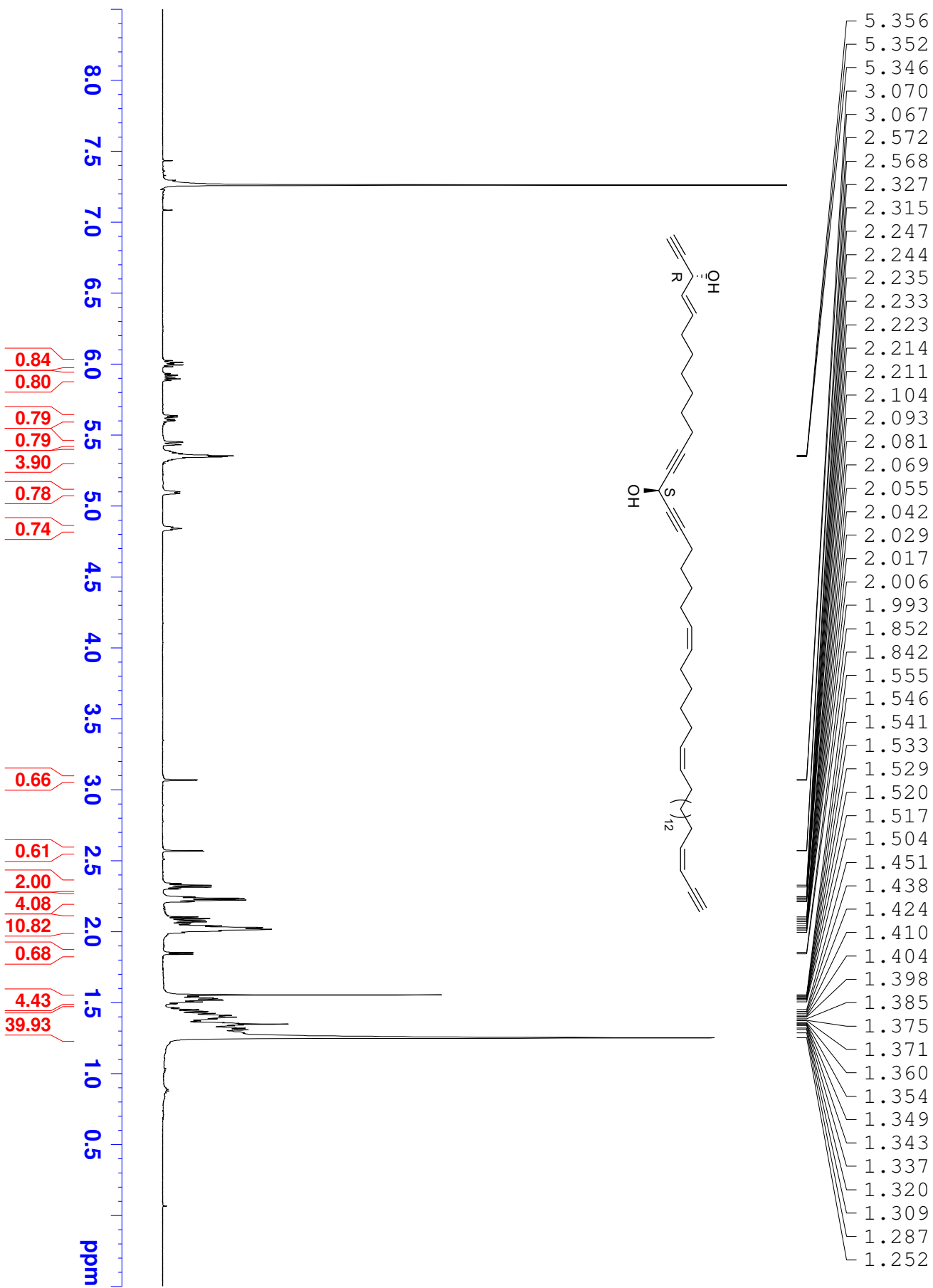




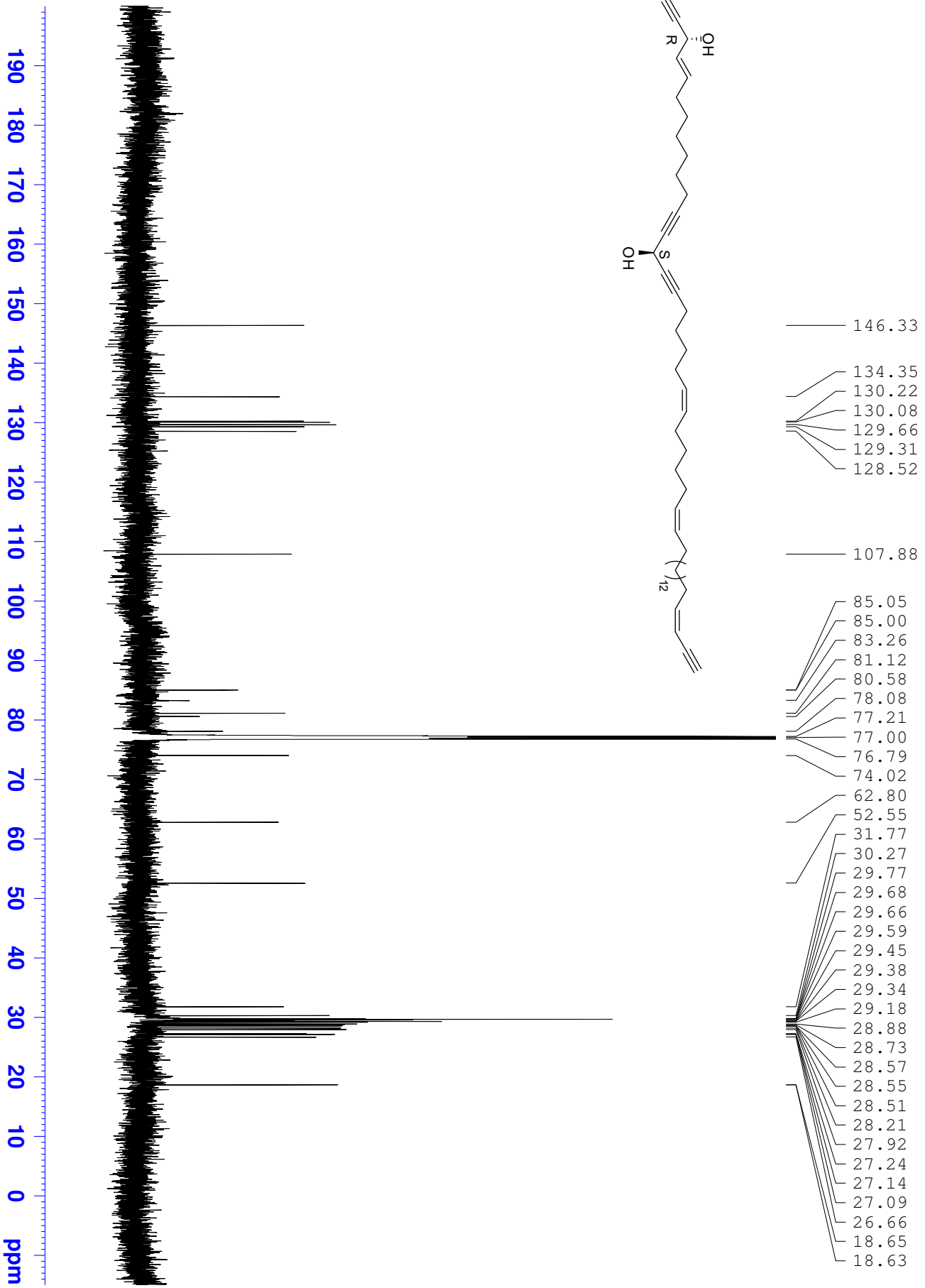
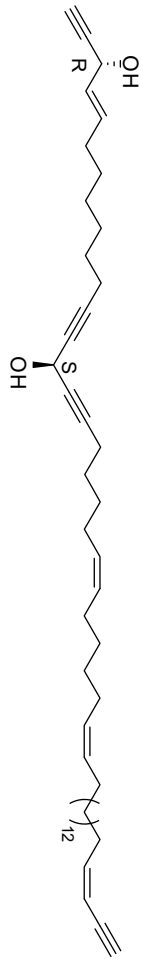




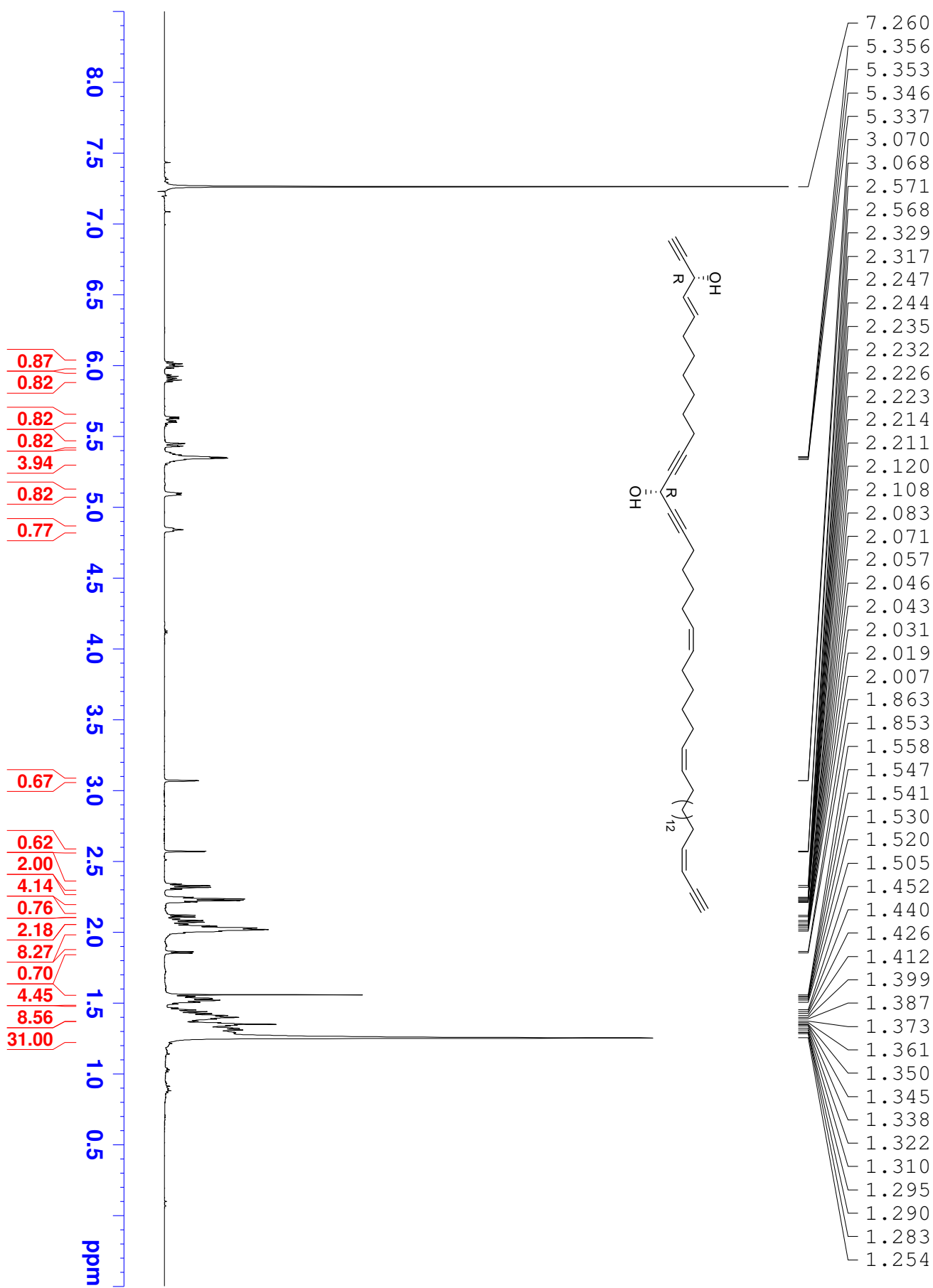
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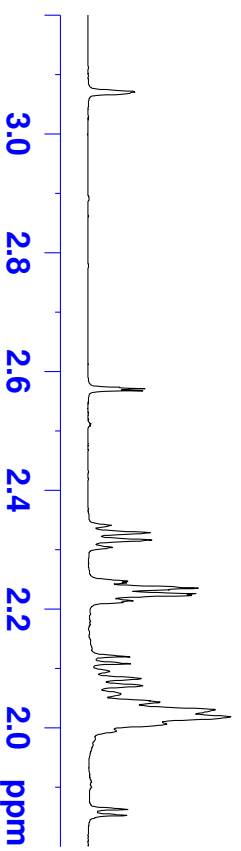
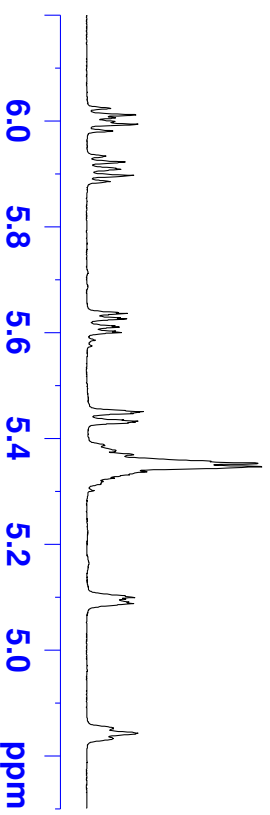
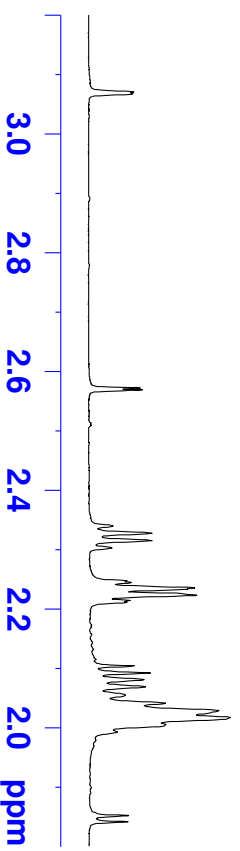
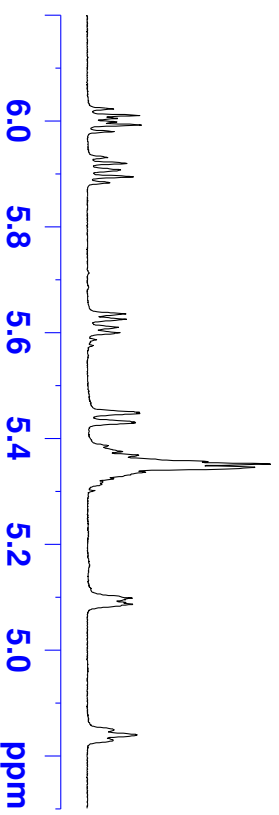
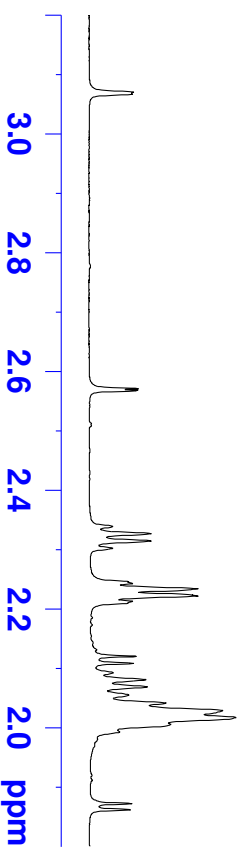
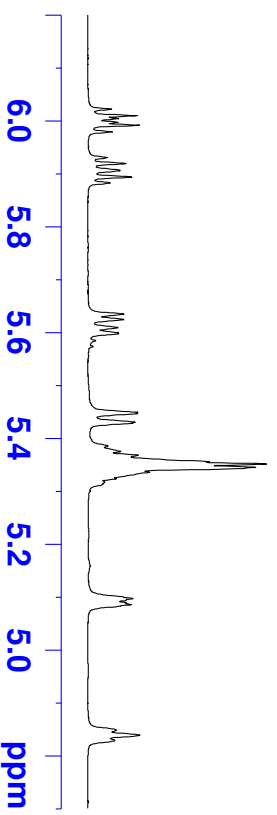
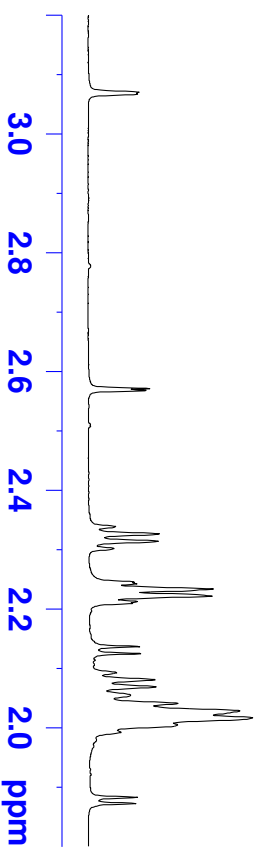
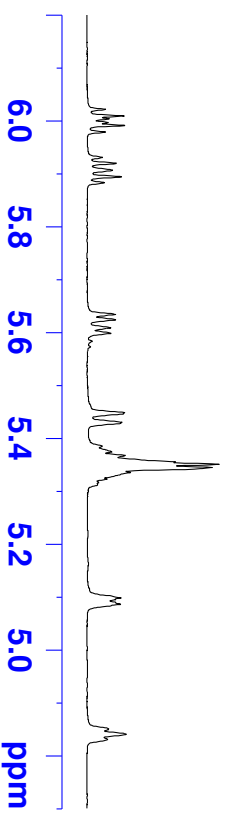
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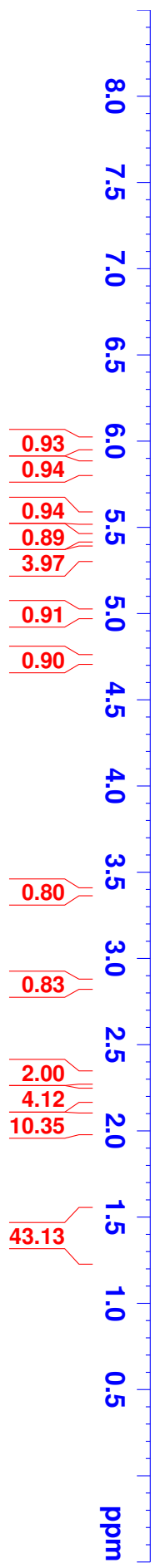
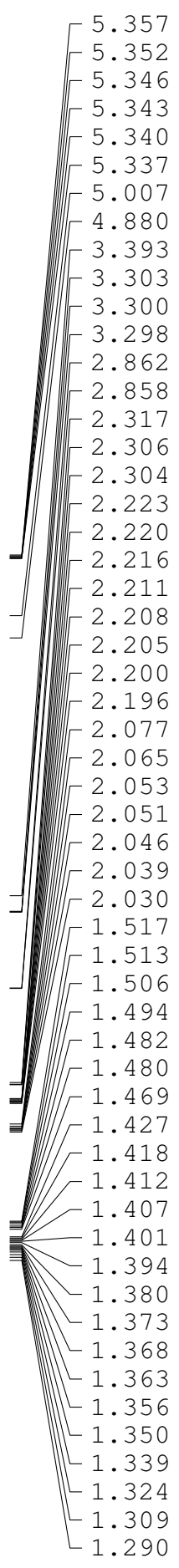
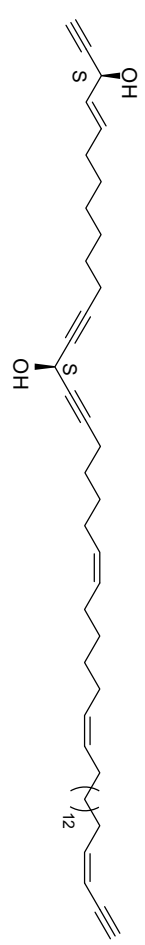
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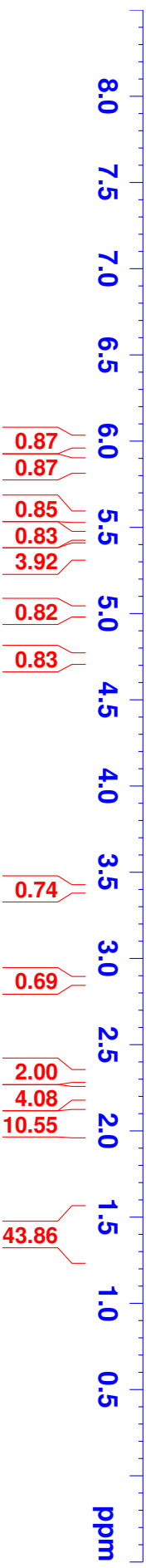
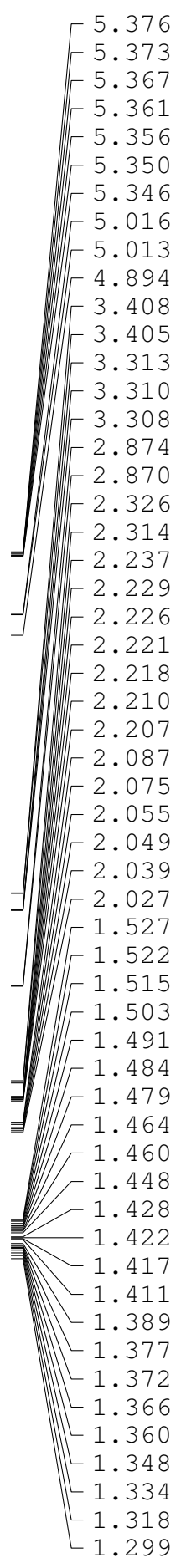
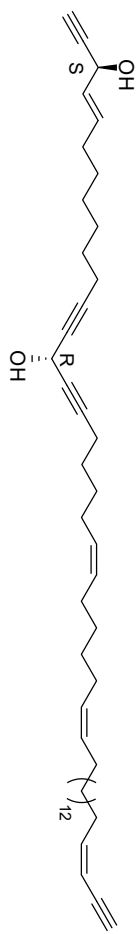


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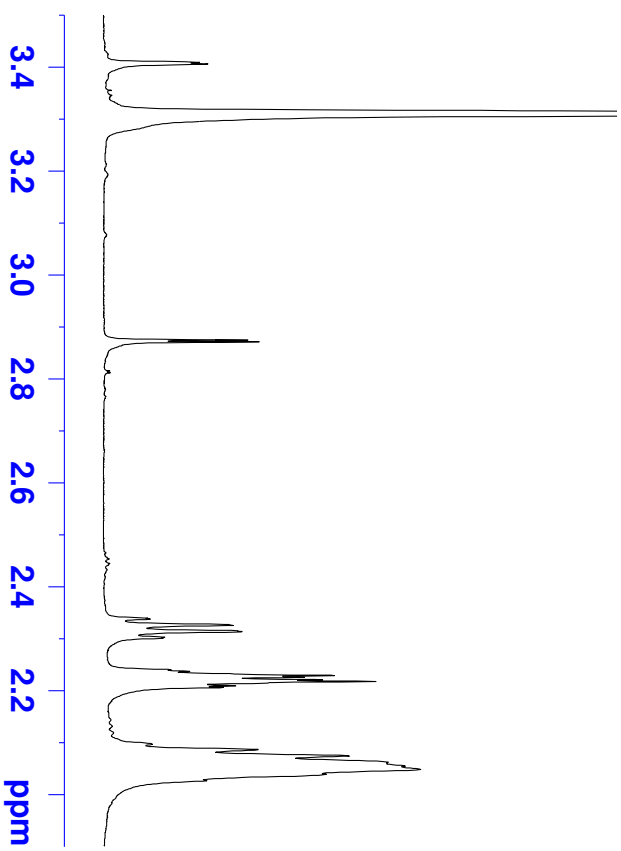
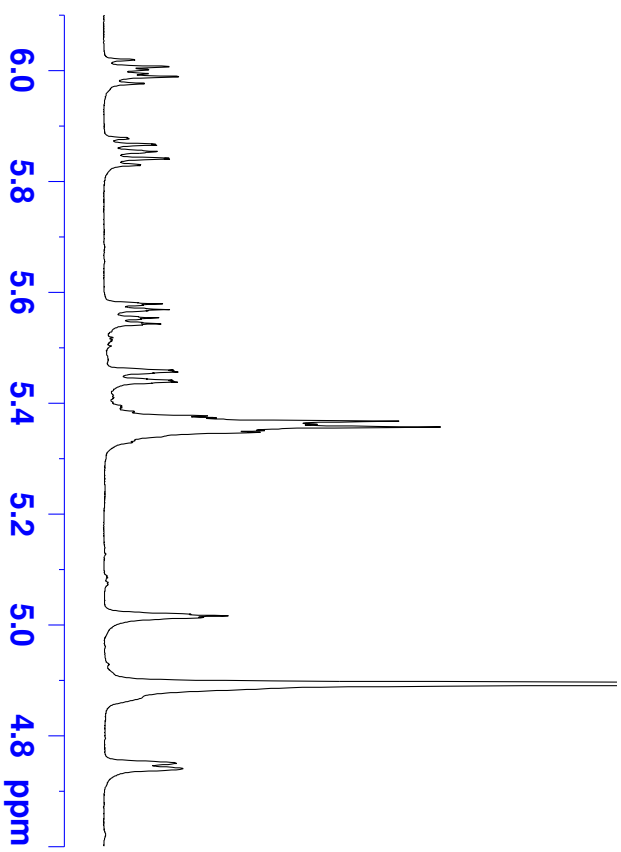
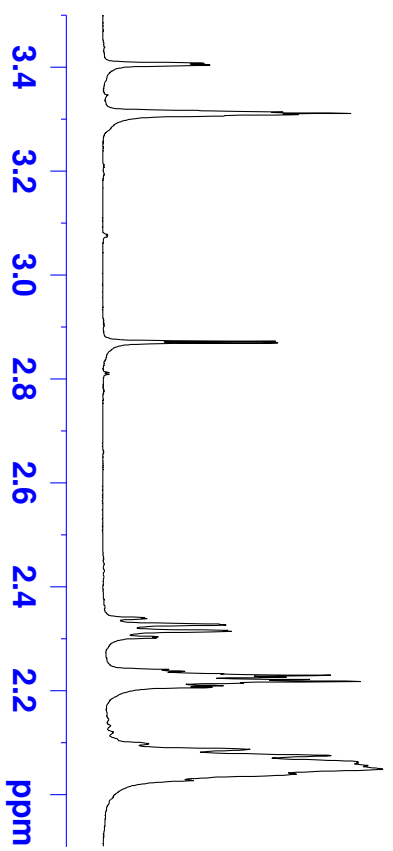
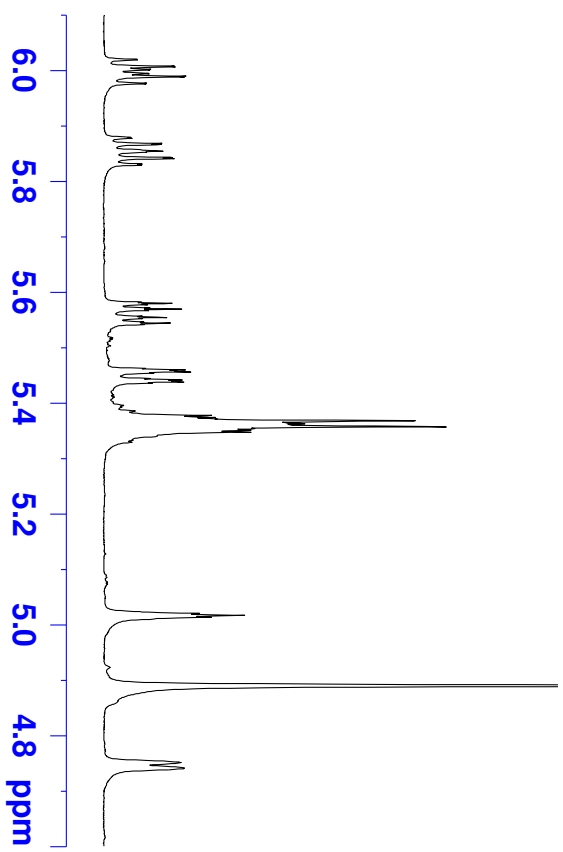


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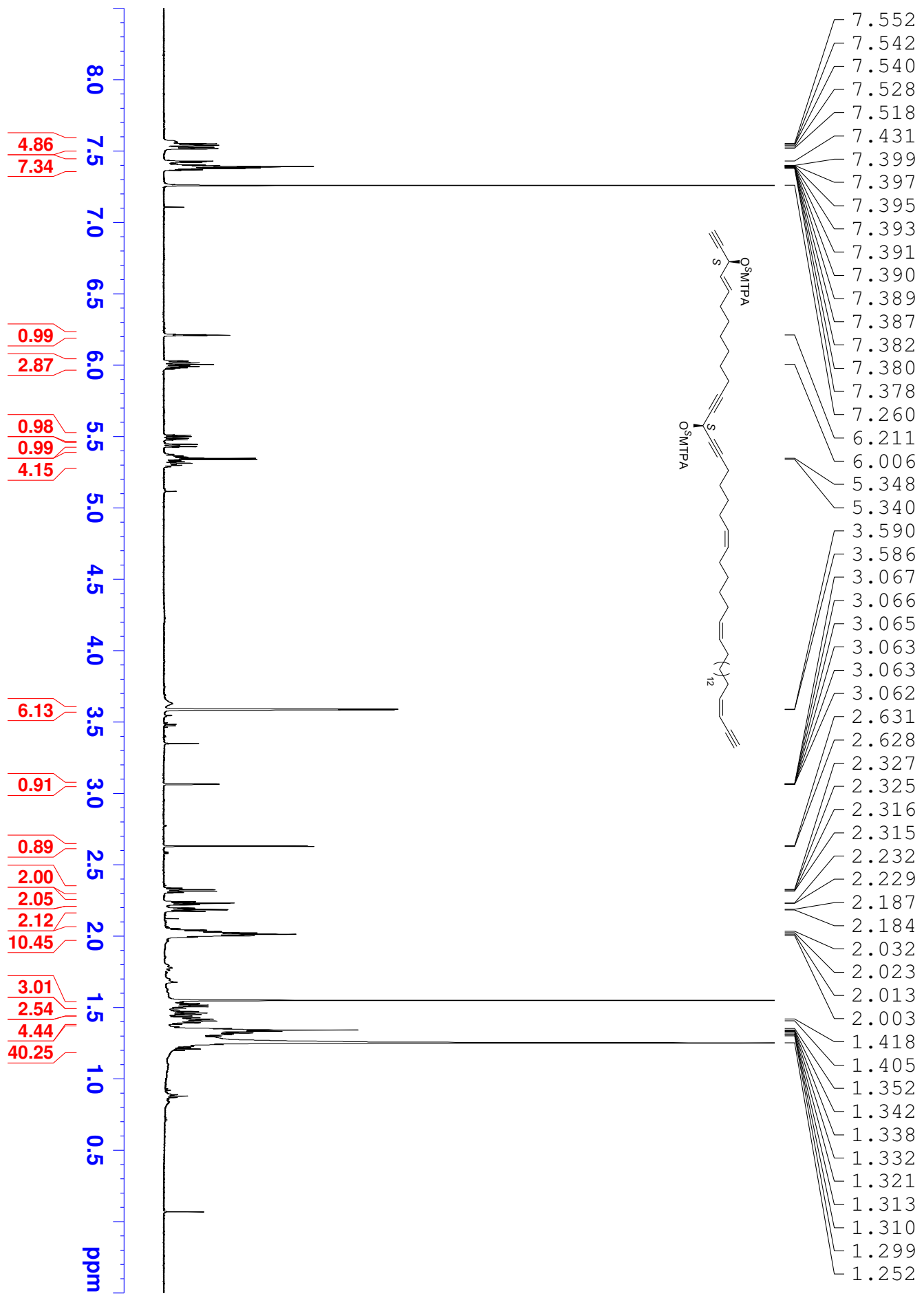




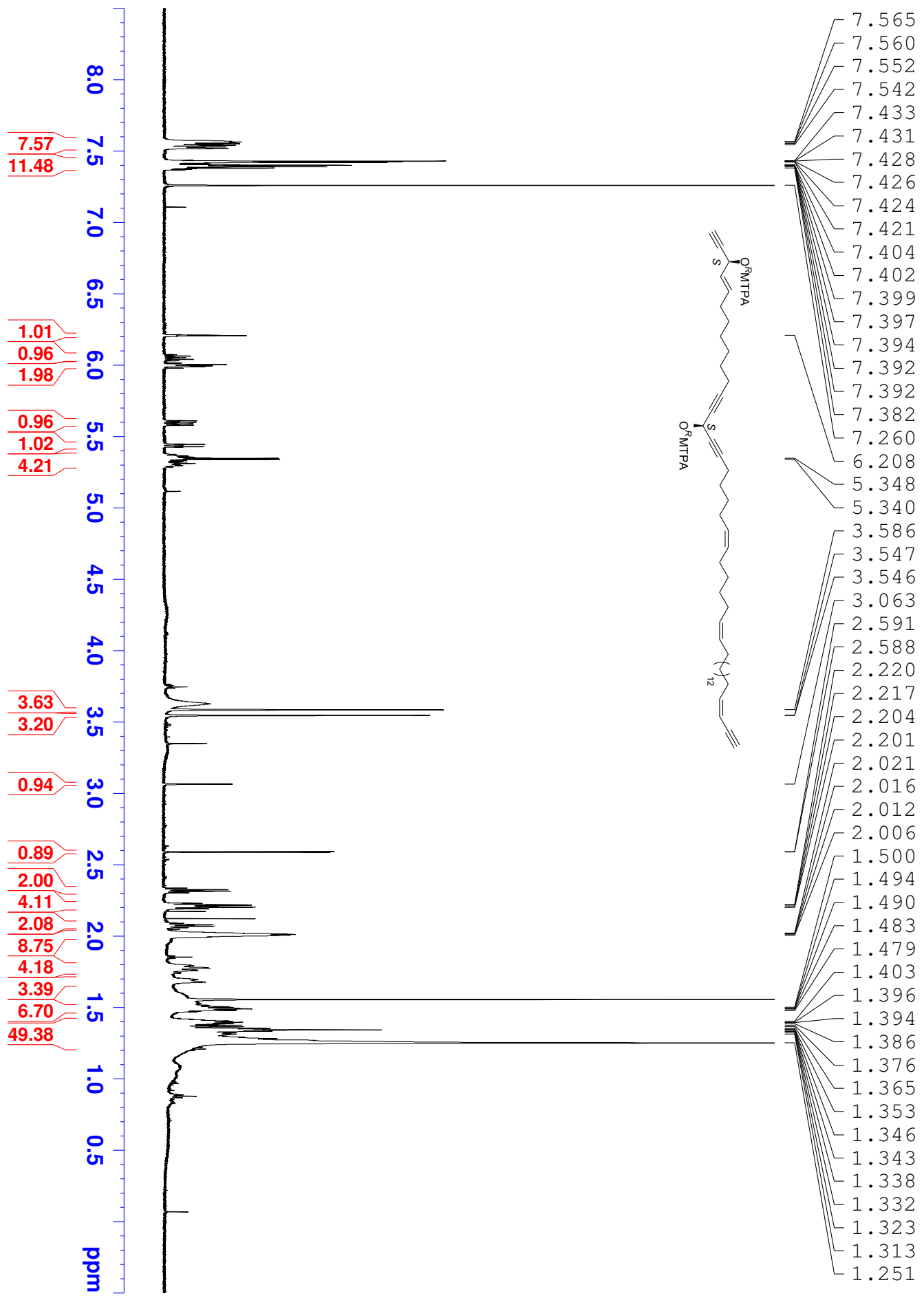


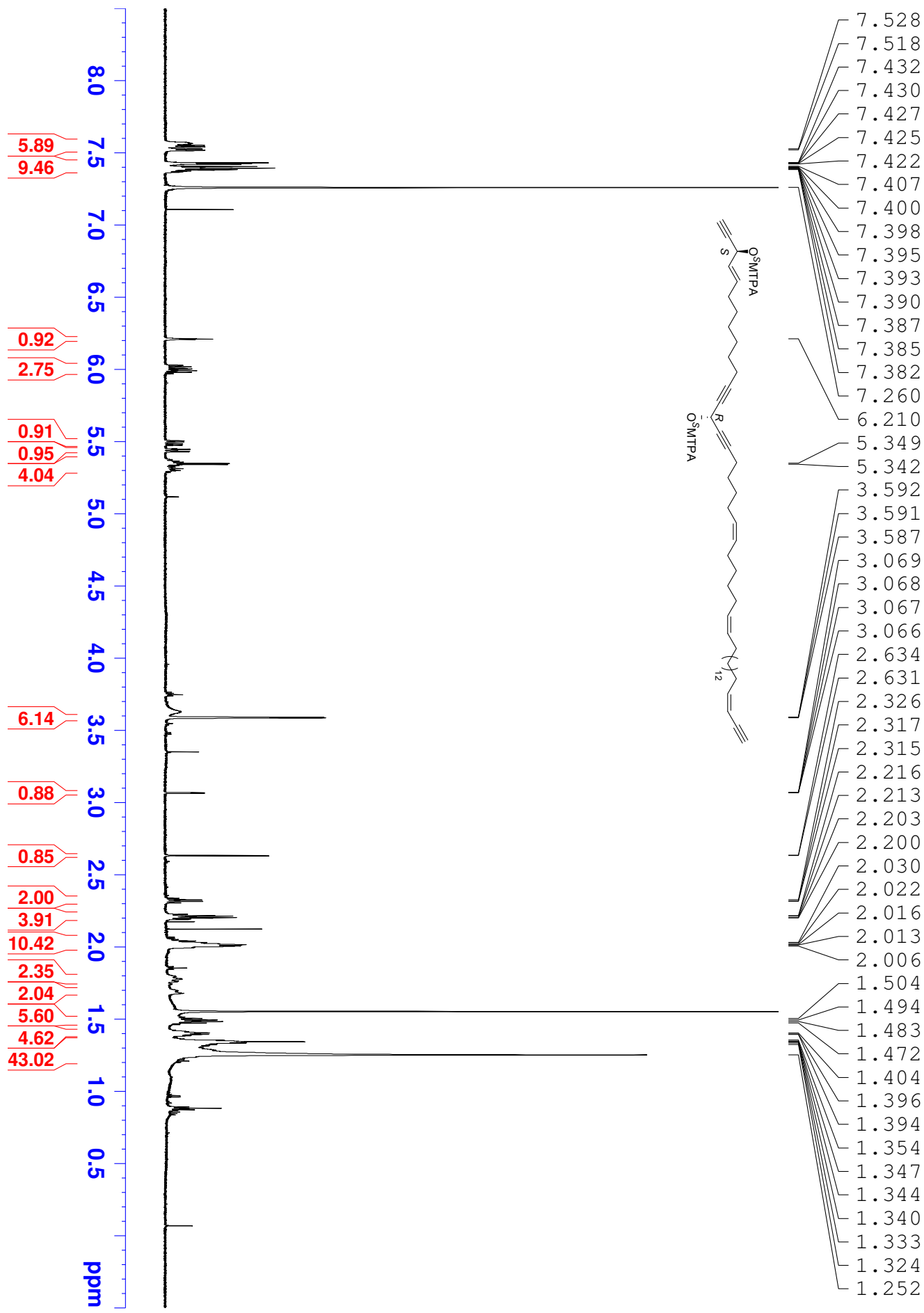


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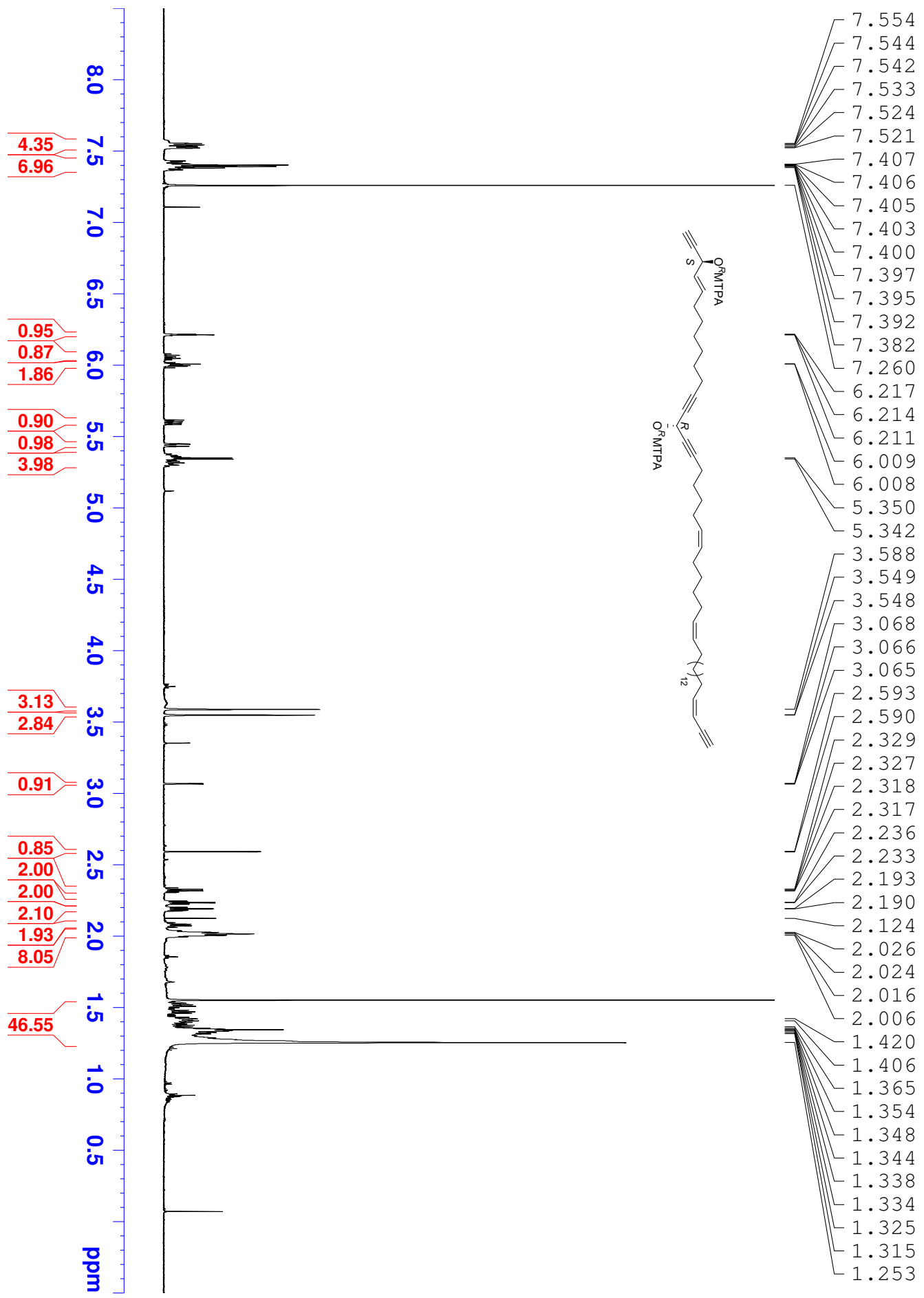


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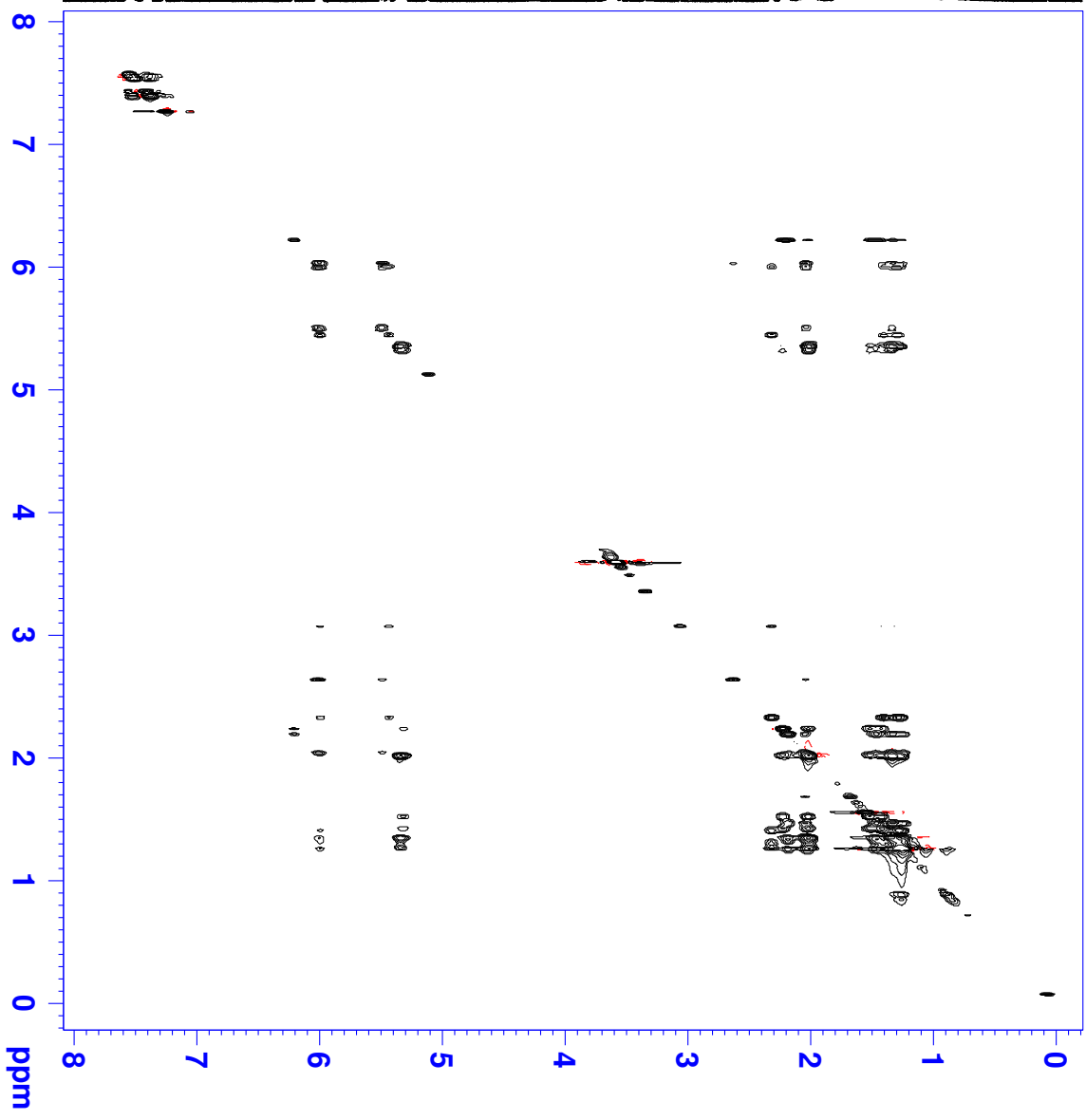
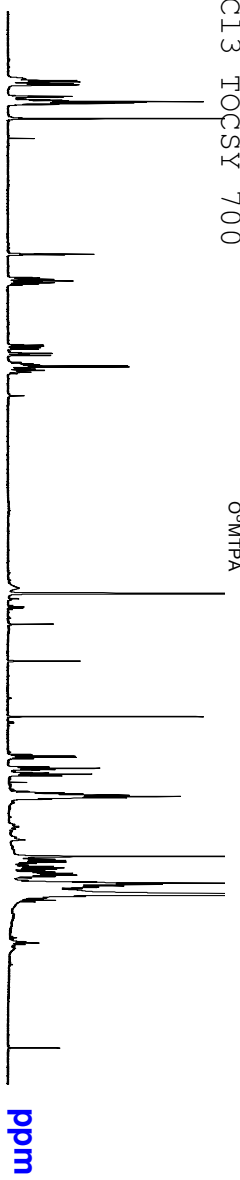
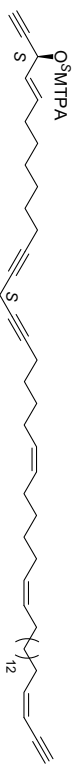




BS5P148 SR+R CDCl3 700



BS5P151 SS+S CDCl3 TOCSY 700



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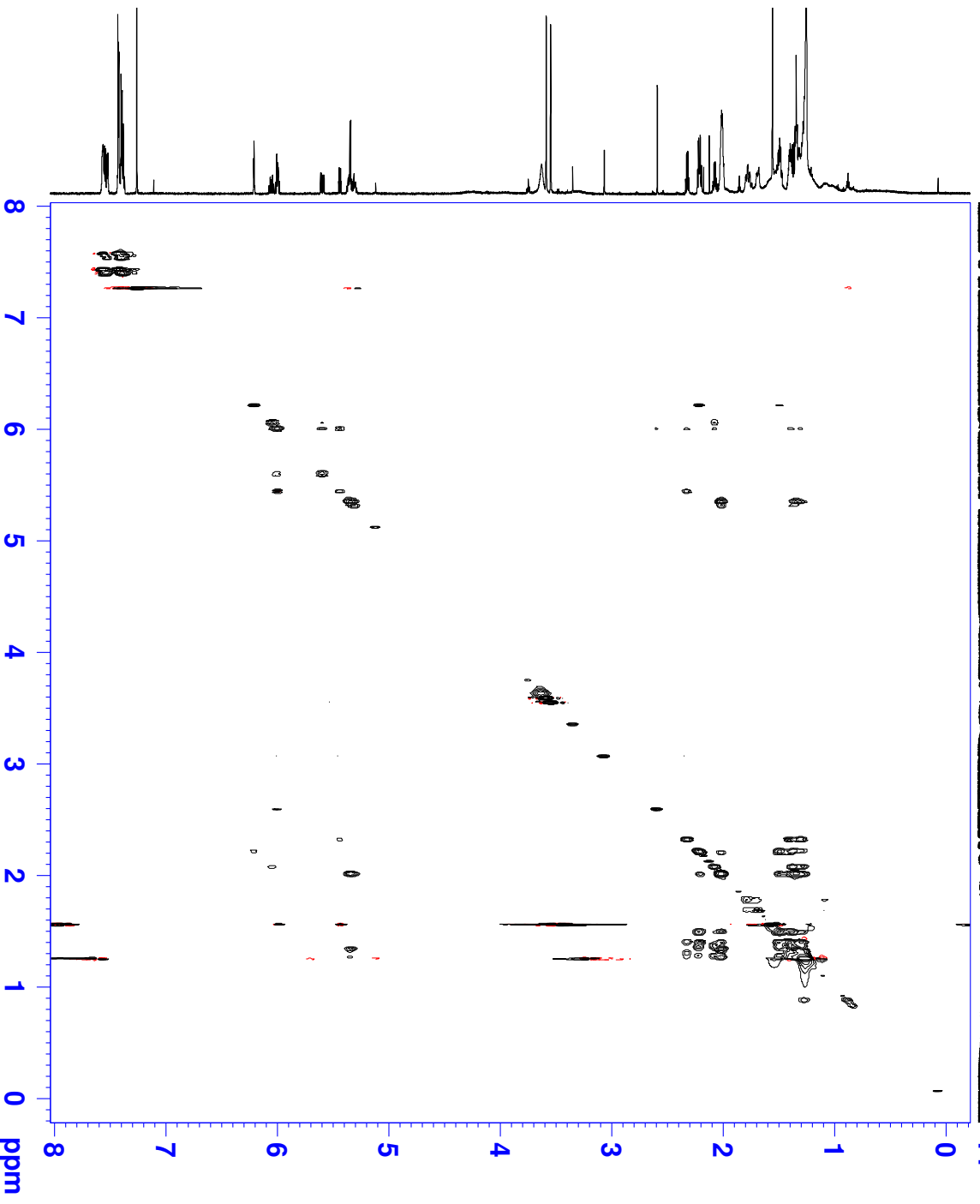
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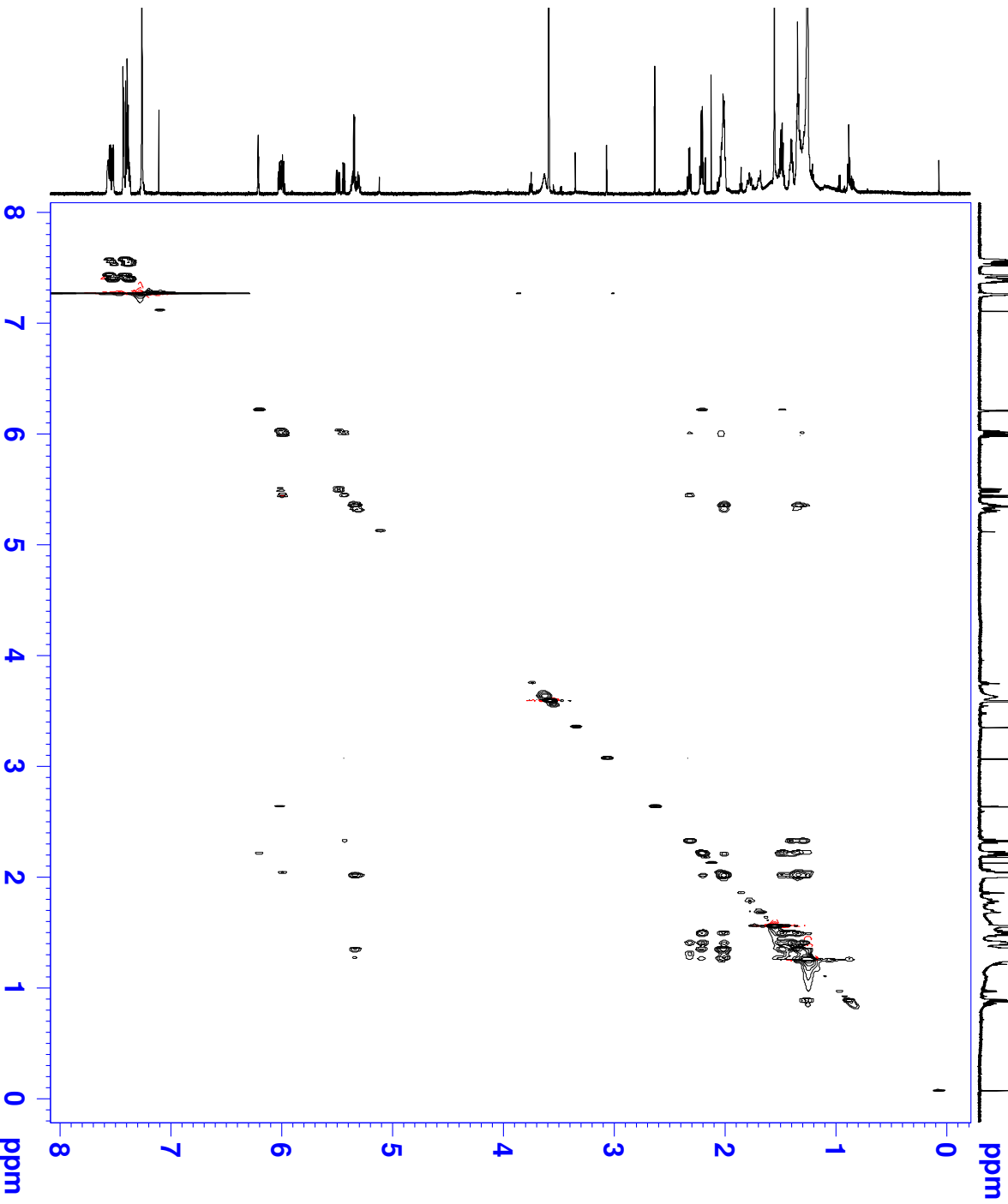
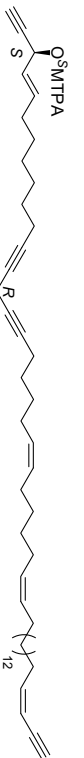
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BS5P149 SR+S CDCl3 TOCSY 700



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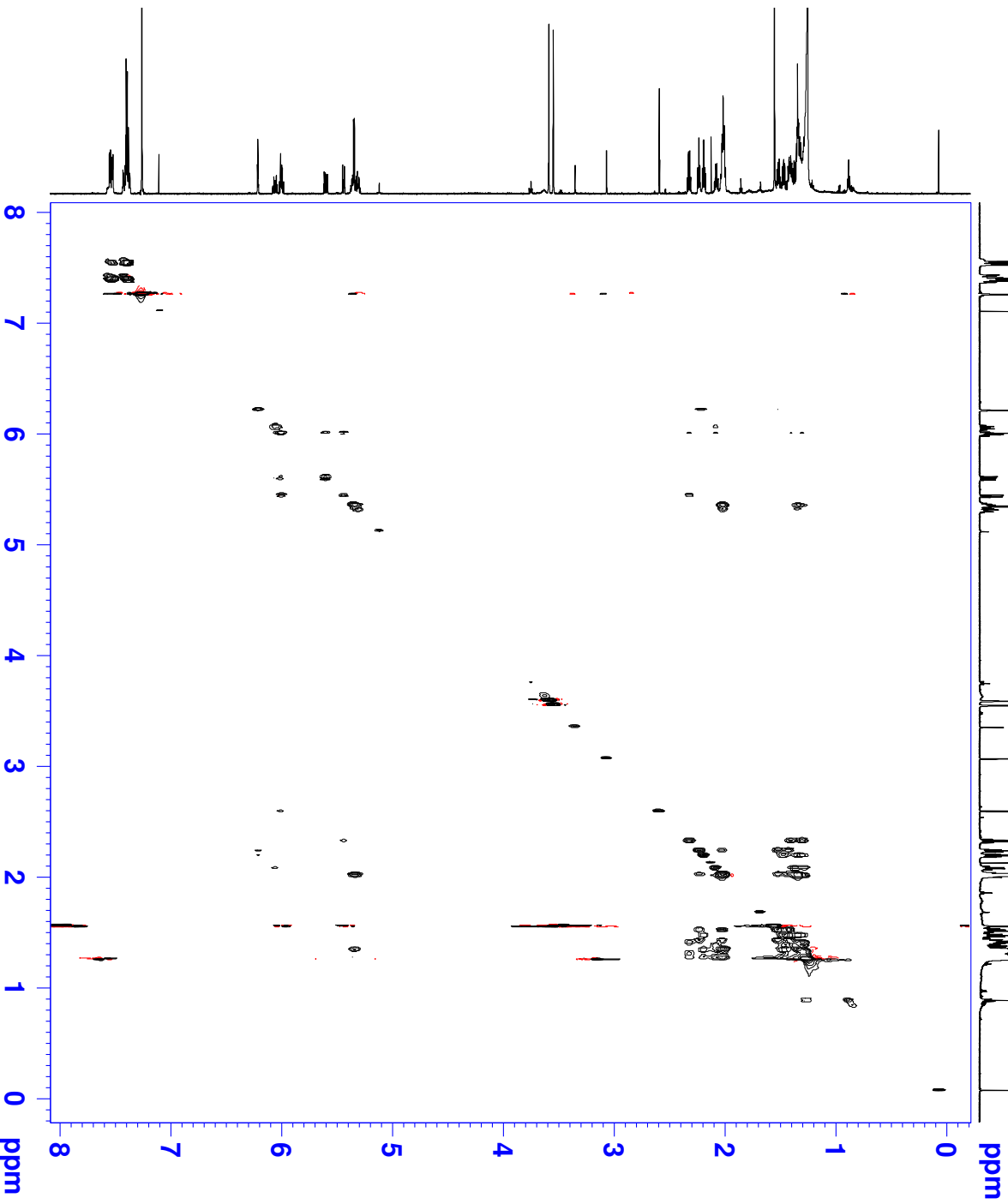
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