

## *Supplementary Data*

# **Effective Hydrogenation of 3-(2"-furyl)- and 3-(2"-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one in Selected Yeast Cultures**

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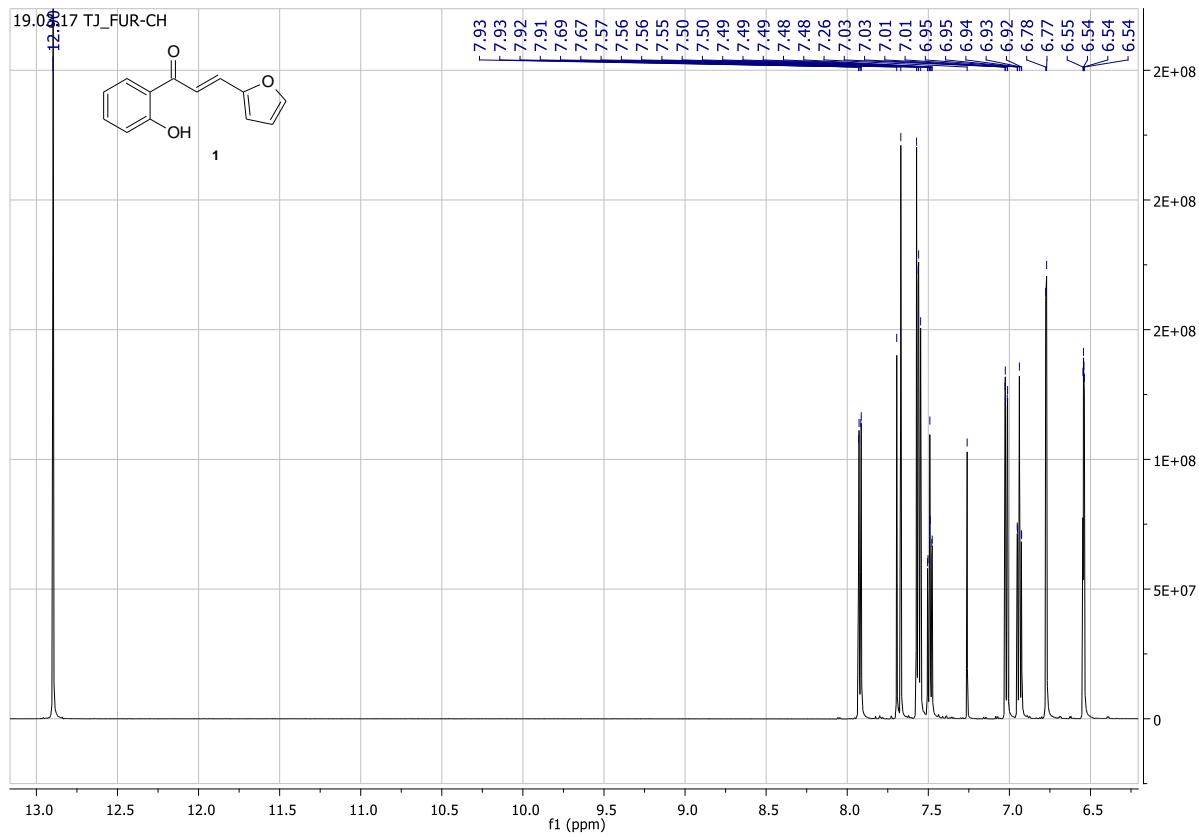
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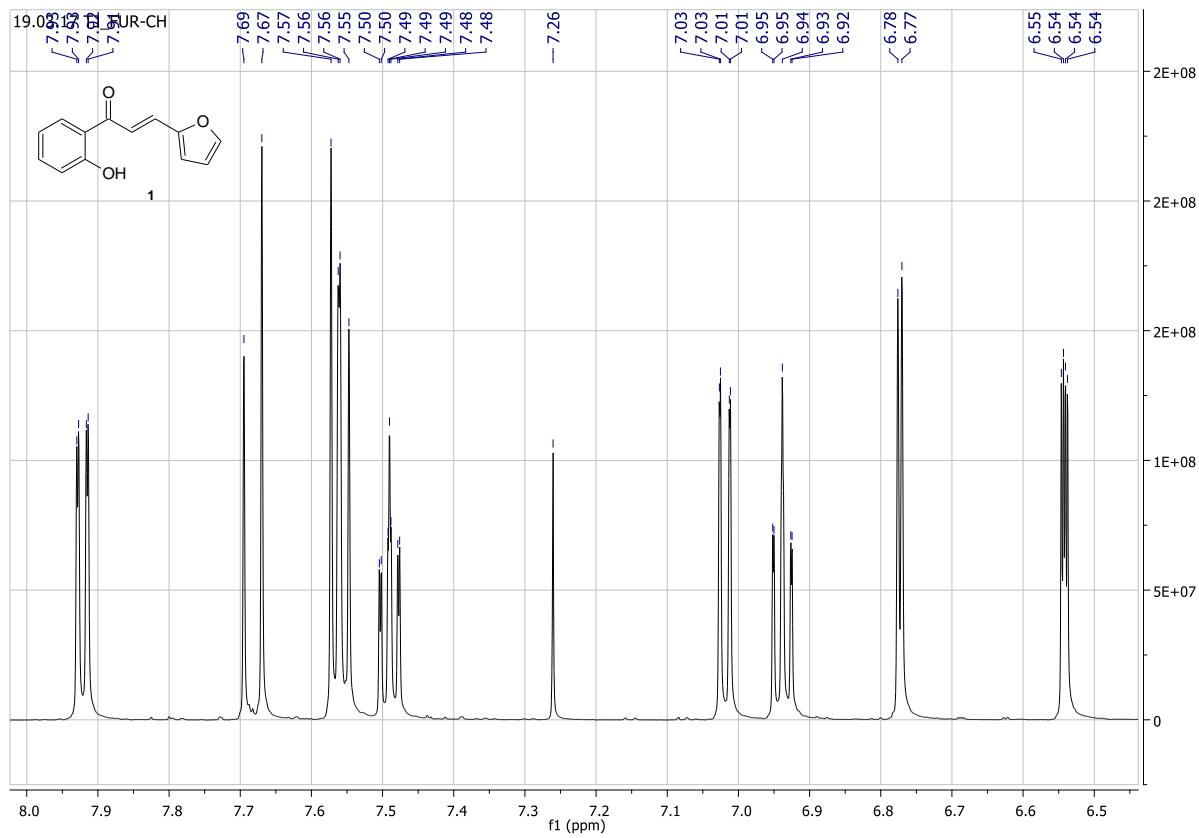
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FigureS30. Chromatogram presenting the composition of reaction mixture after 12 hours incubation of **3** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

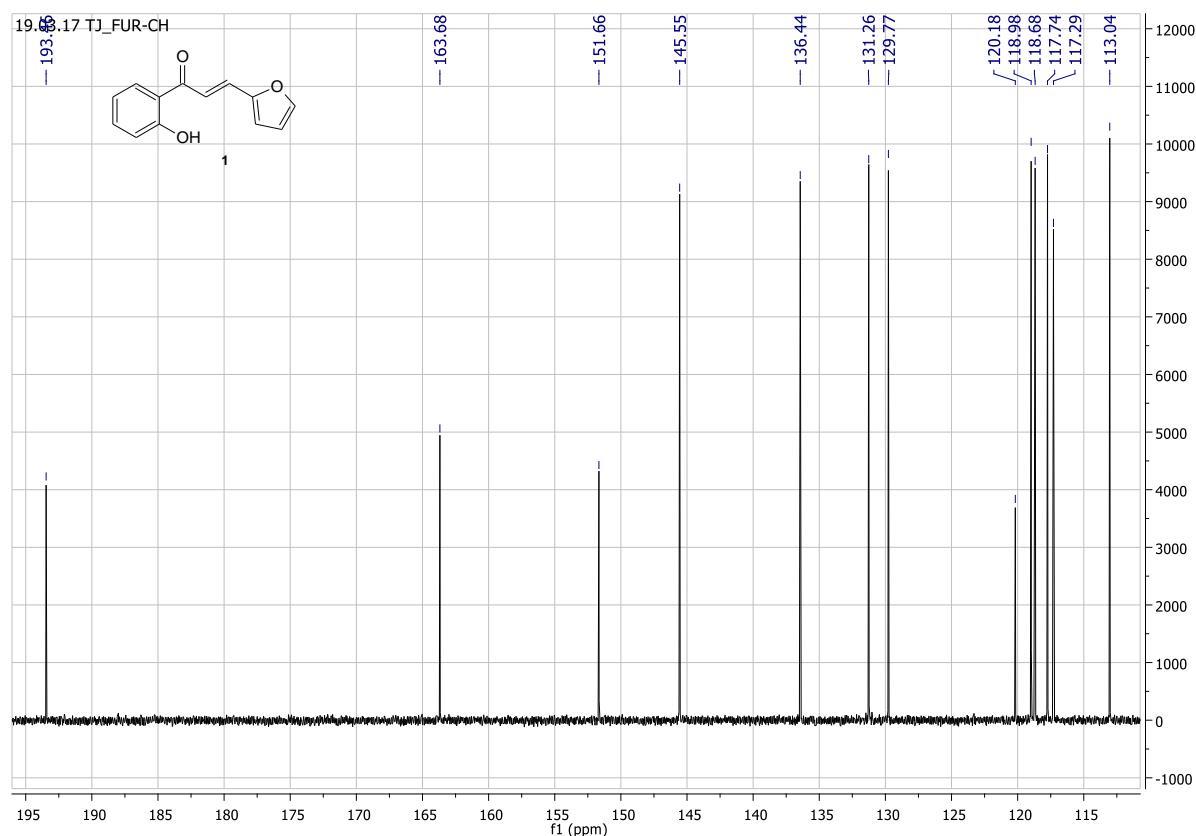
FigureS1.  $^1\text{H-NMR}$  spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) ( $\text{CDCl}_3$ , 600 MHz)



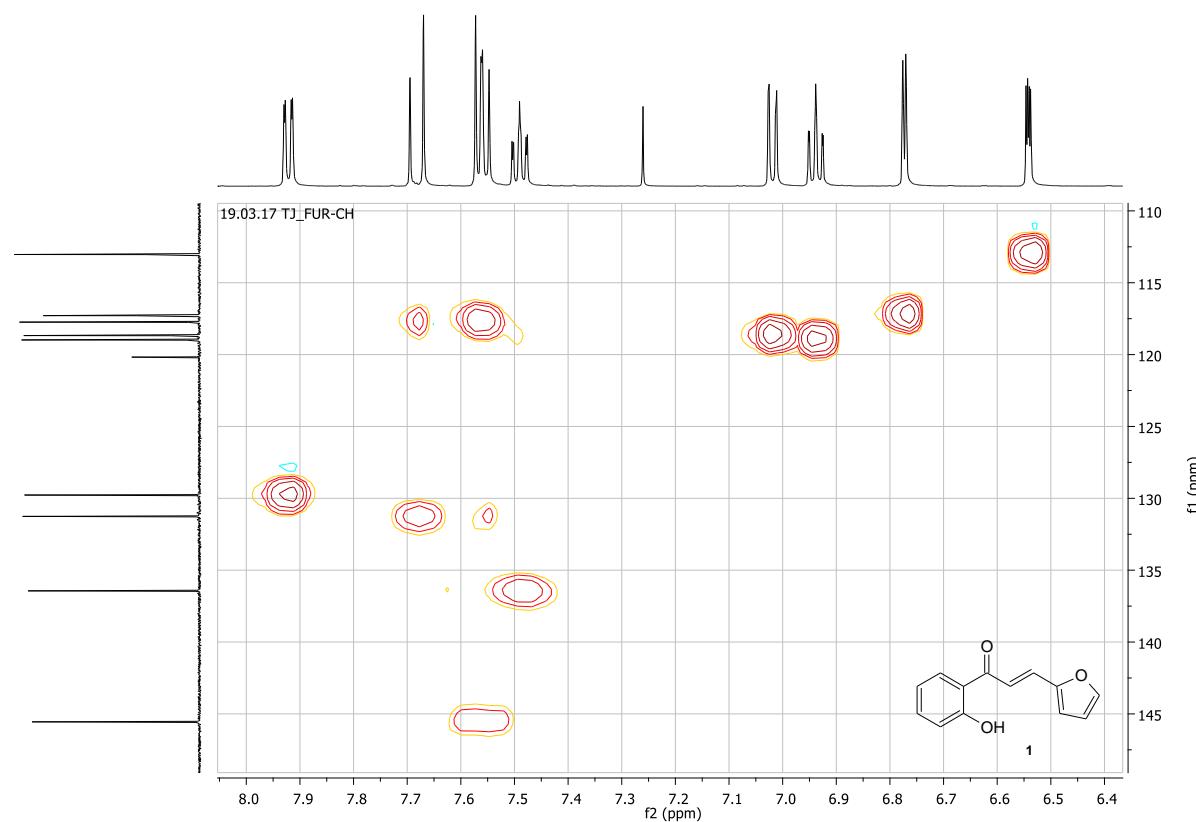
FigureS2. Part of the  $^1\text{H}$ -NMR spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) ( $\text{CDCl}_3$ , 600 MHz)



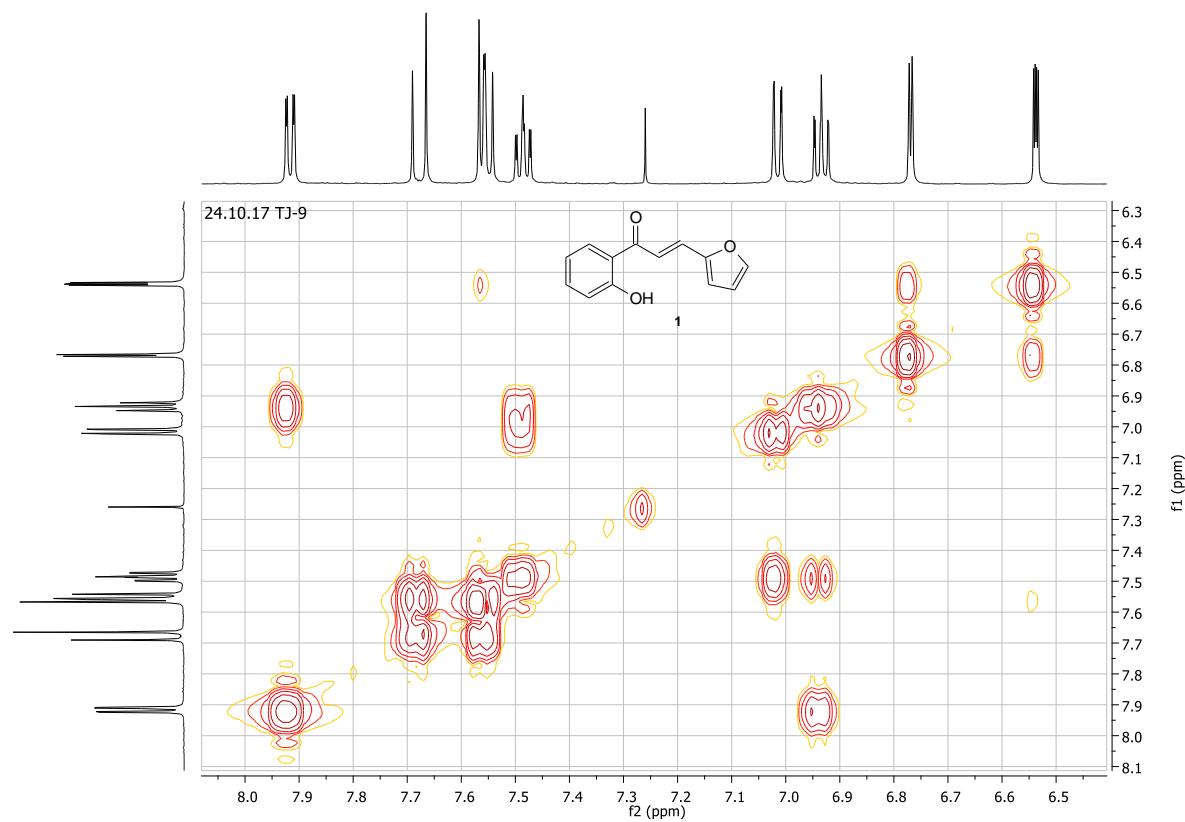
FigureS3.  $^{13}\text{C}$ -NMR spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) ( $\text{CDCl}_3$ , 151 MHz)



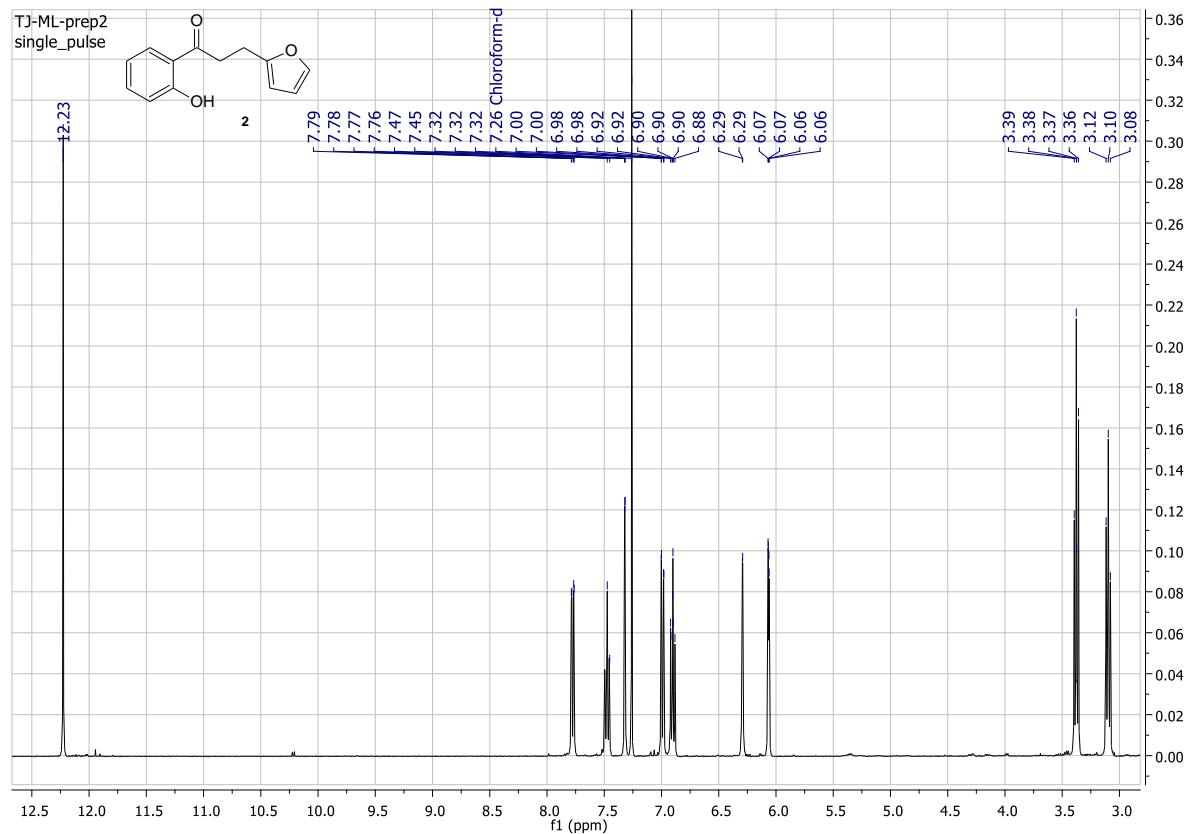
FigureS4. HSQC spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) ( $\text{CDCl}_3$ , 151 MHz)



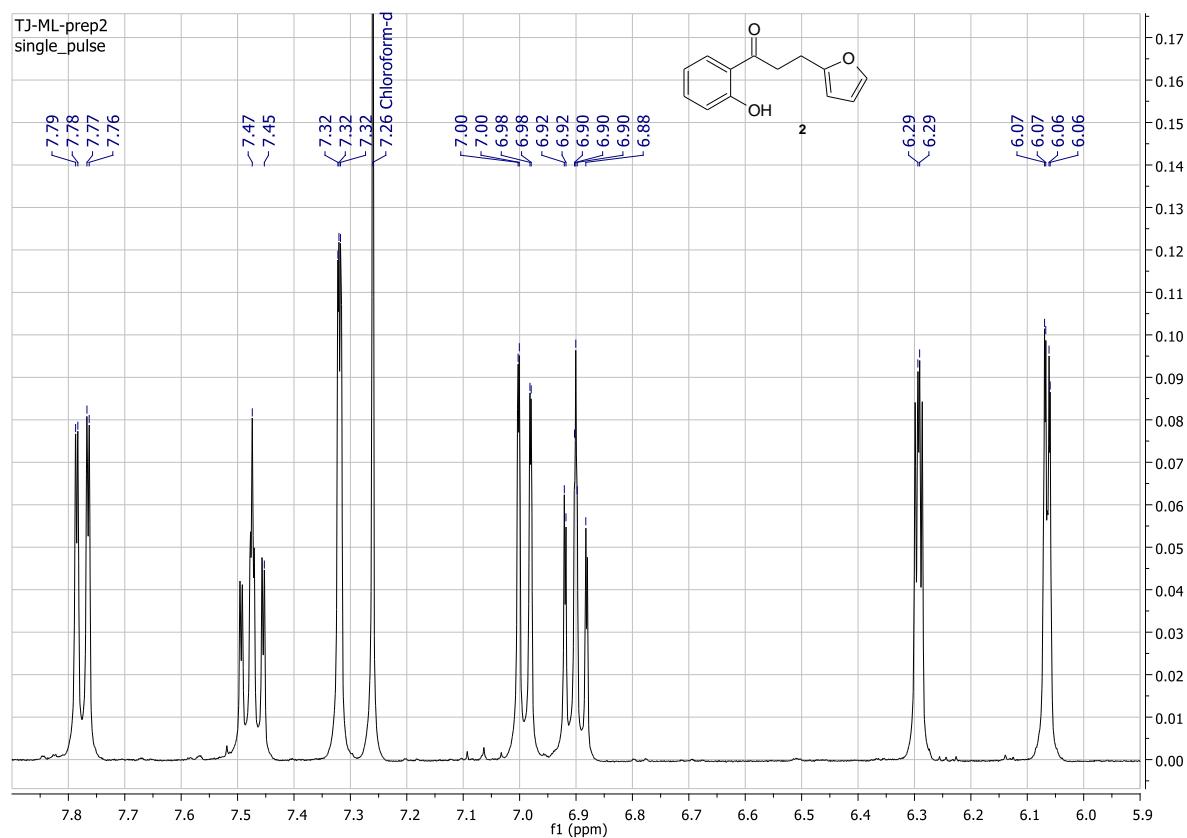
FigureS5. COSY spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) ( $\text{CDCl}_3$ , 600 MHz)



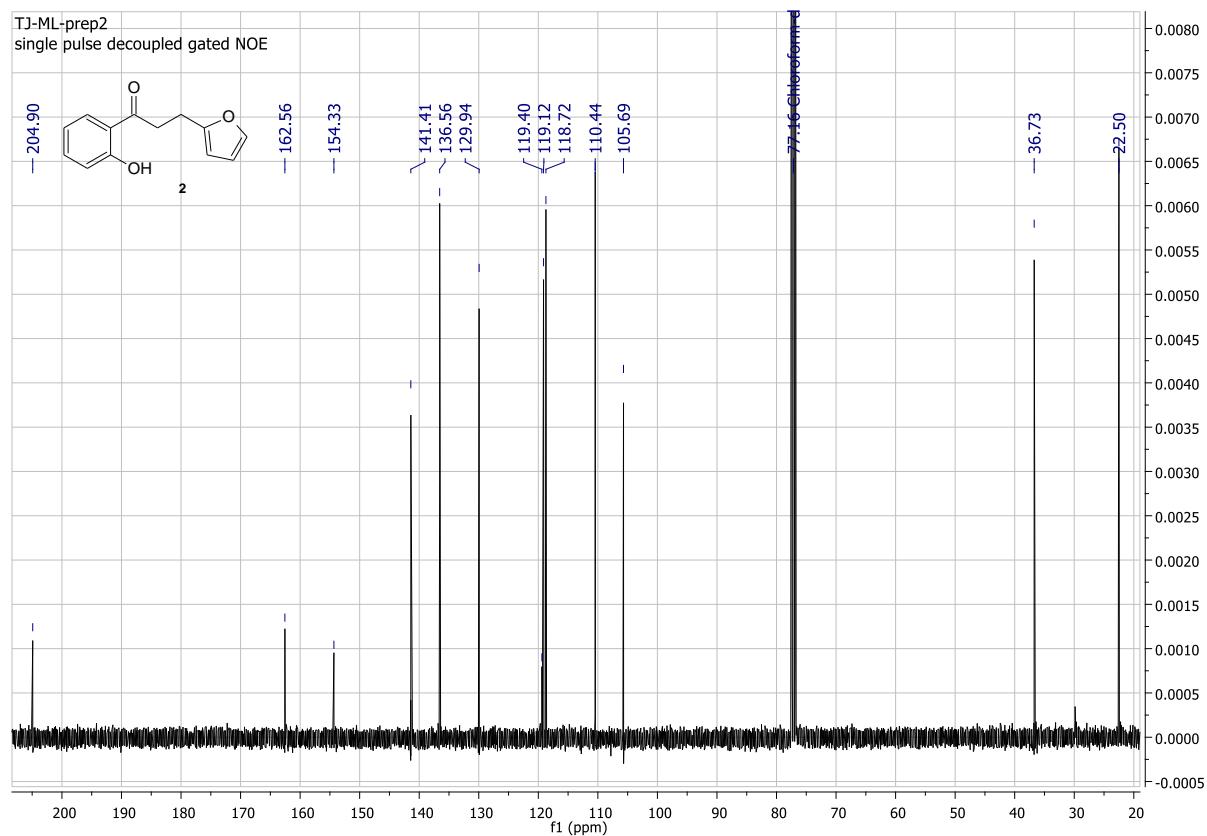
FigureS6.  $^1\text{H}$ -NMR spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)-propan-1-one (**2**) ( $\text{CDCl}_3$ , 600 MHz)



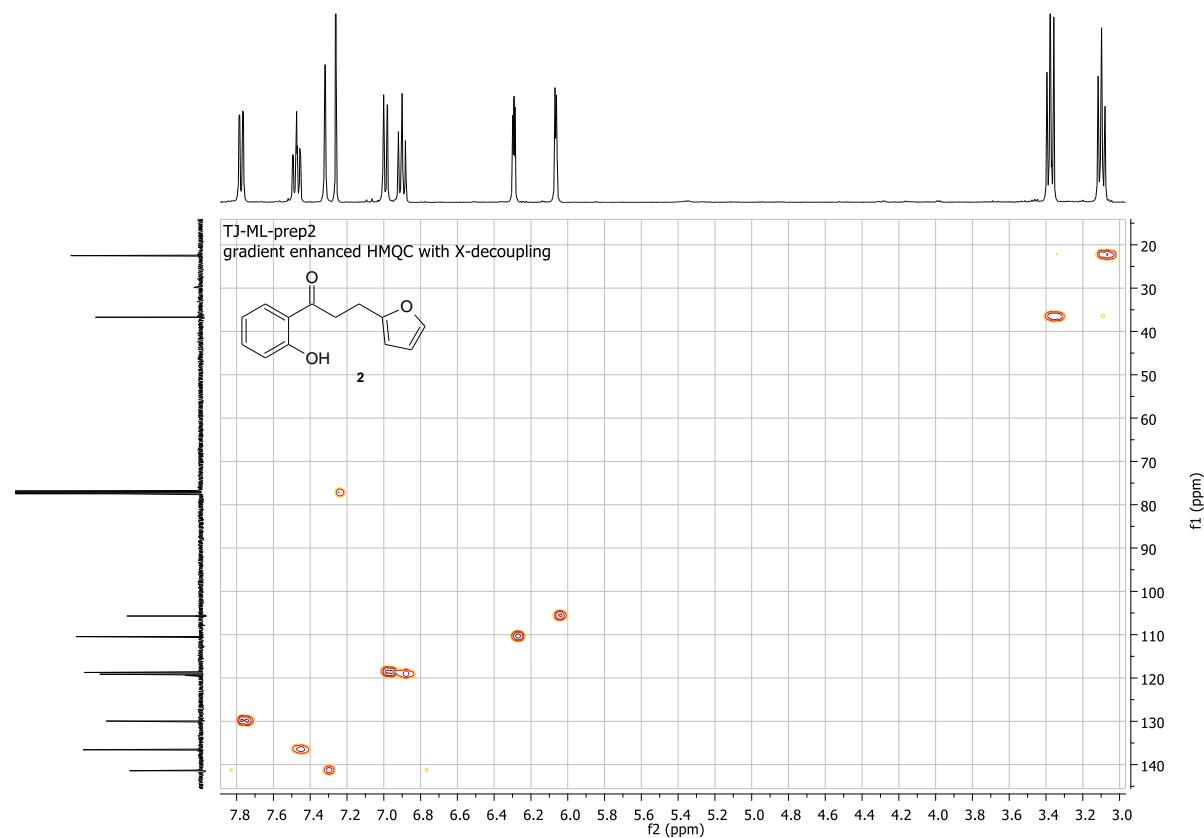
FigureS7. Part of the  $^1\text{H}$ -NMR spectral of 3-(2''-furyl)-1-(2'-hydroxyphenyl)- propan-1-one (**2**) ( $\text{CDCl}_3$ , 600 MHz)



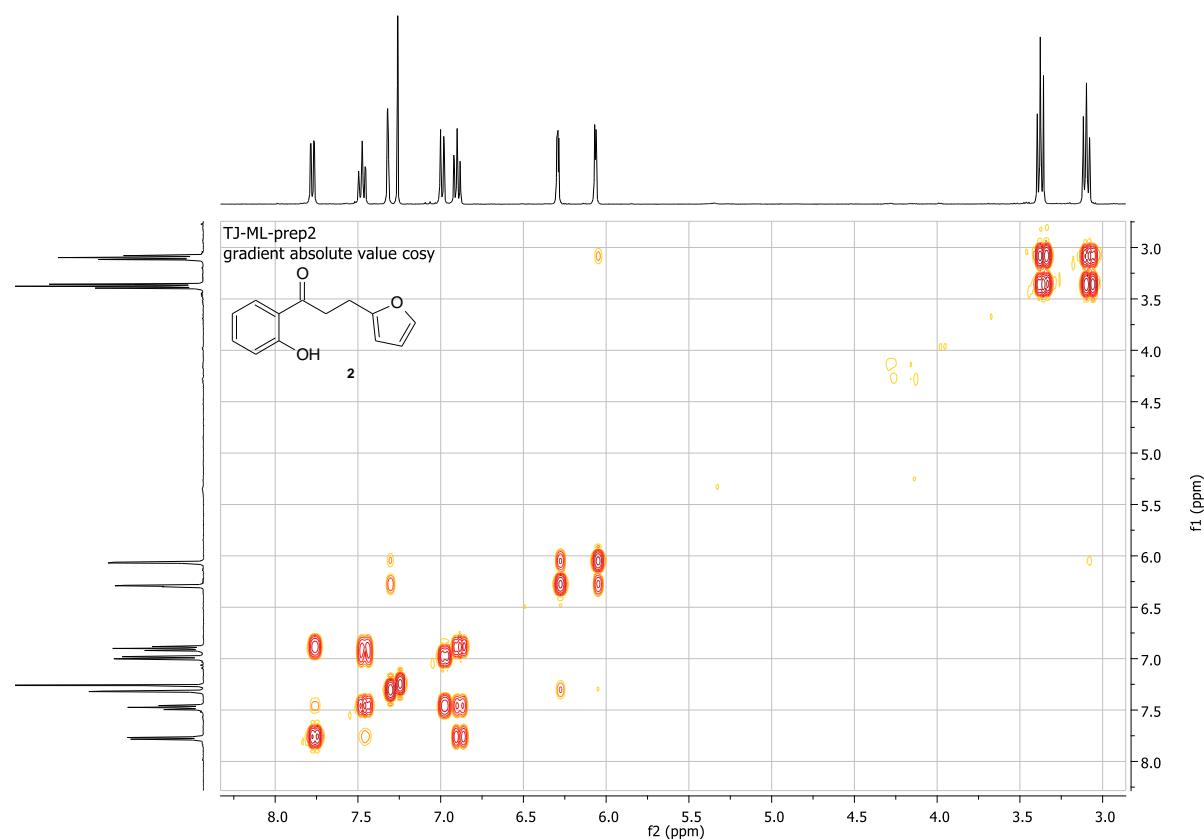
FigureS8.  $^{13}\text{C}$ -NMR spectral of 3-(2''-furyl)-1-(2'-hydroxyphenyl)- propan-1-one (**2**) ( $\text{CDCl}_3$ , 151 MHz)



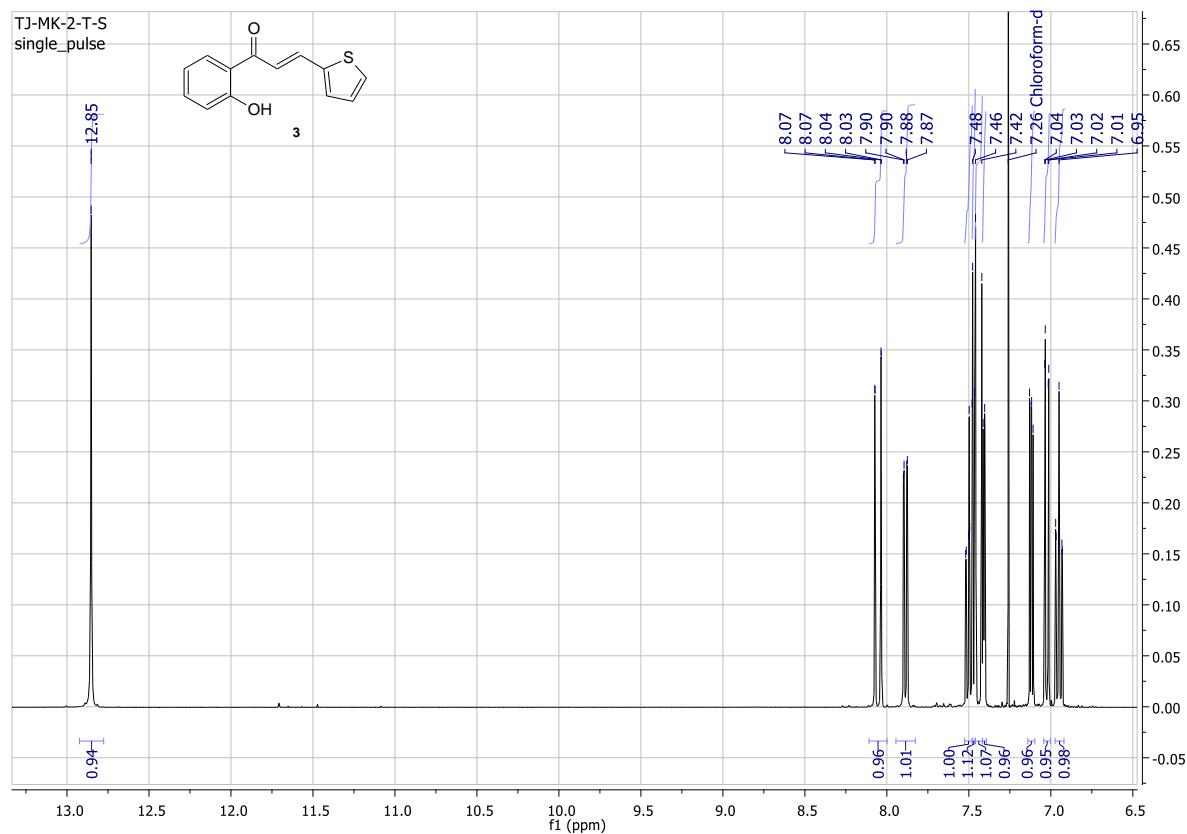
FigureS9. HSQC spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)- propan-1-one (**2**) ( $\text{CDCl}_3$ , 151 MHz)



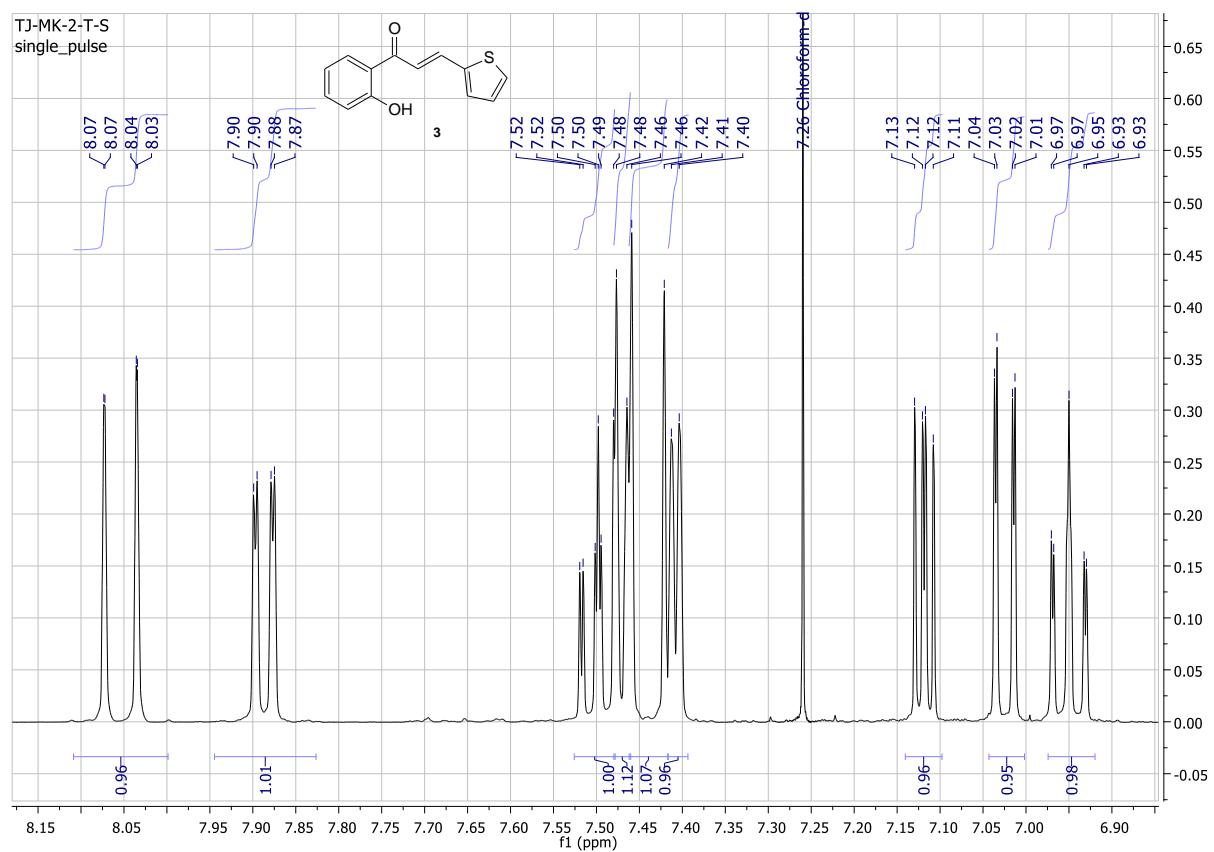
FigureS10. COSY spectral of 3-(2"-furyl)-1-(2'-hydroxyphenyl)- propan-1-one (**2**) ( $\text{CDCl}_3$ , 600 MHz)



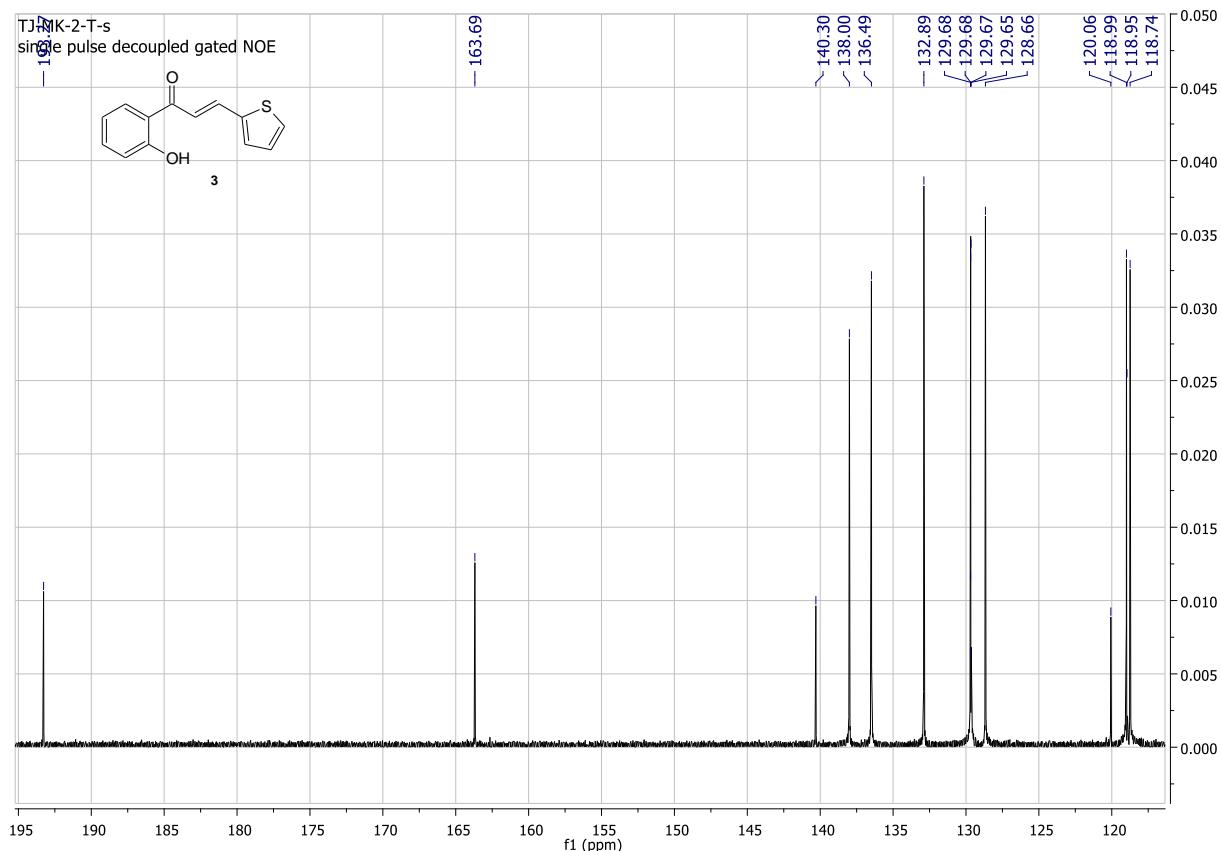
FigureS11.  $^1\text{H}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 600 MHz)



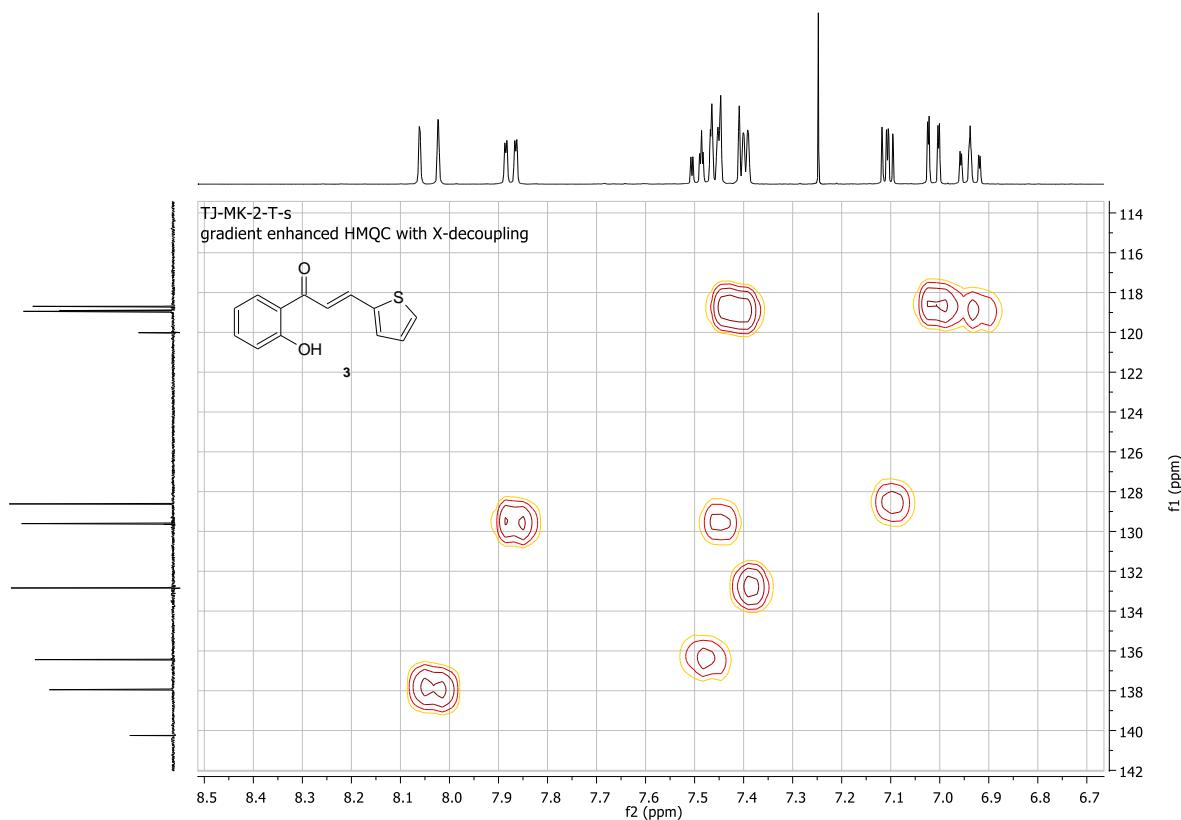
FigureS12. Part of the  $^1\text{H}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 600 MHz)



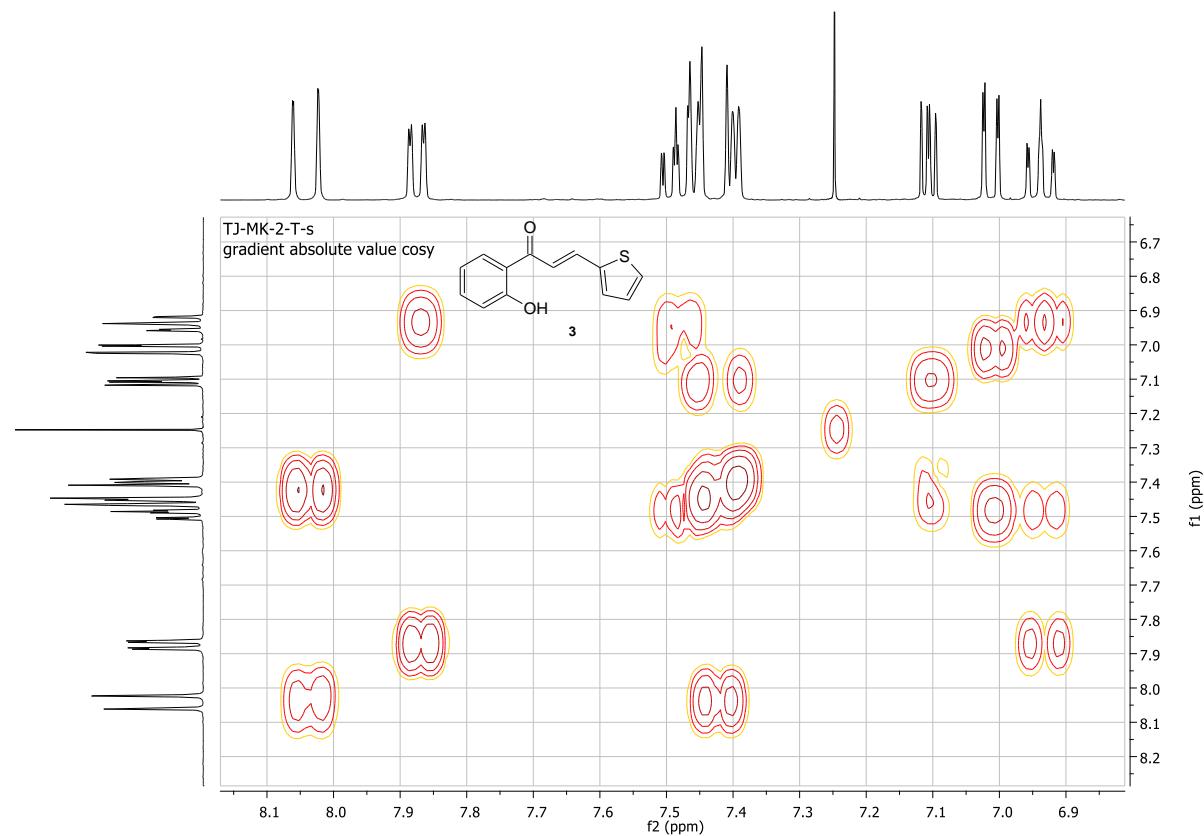
FigureS13.  $^{13}\text{C}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 151 MHz)



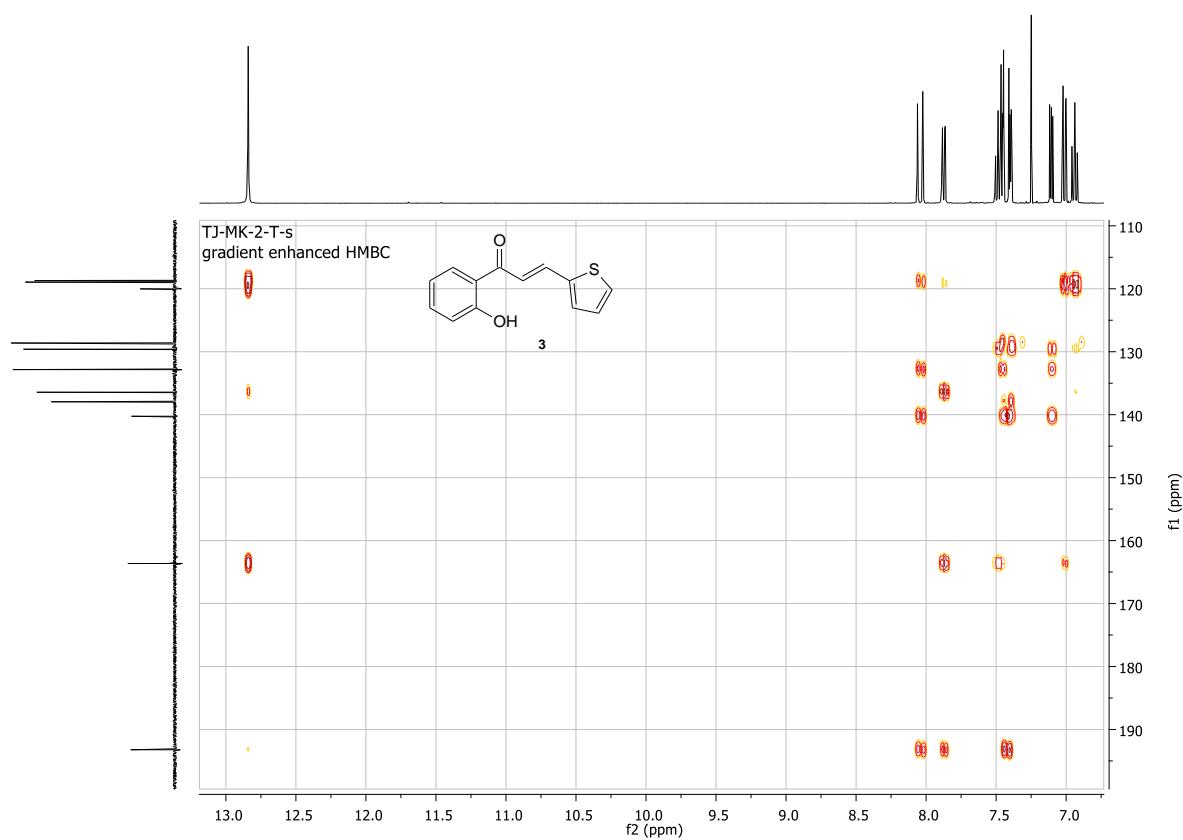
FigureS14. HSQC spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 151 MHz)



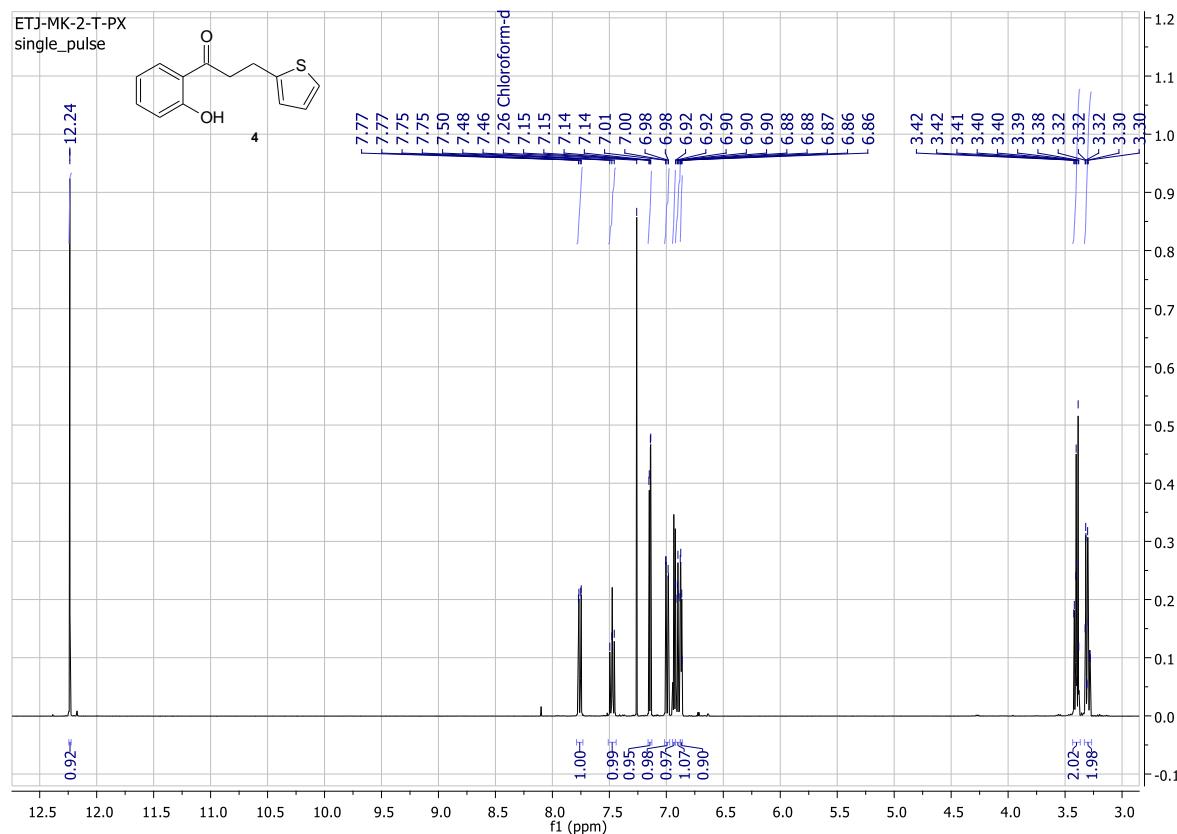
FigureS15. COSY spectral of 3-(2"-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 600 MHz)



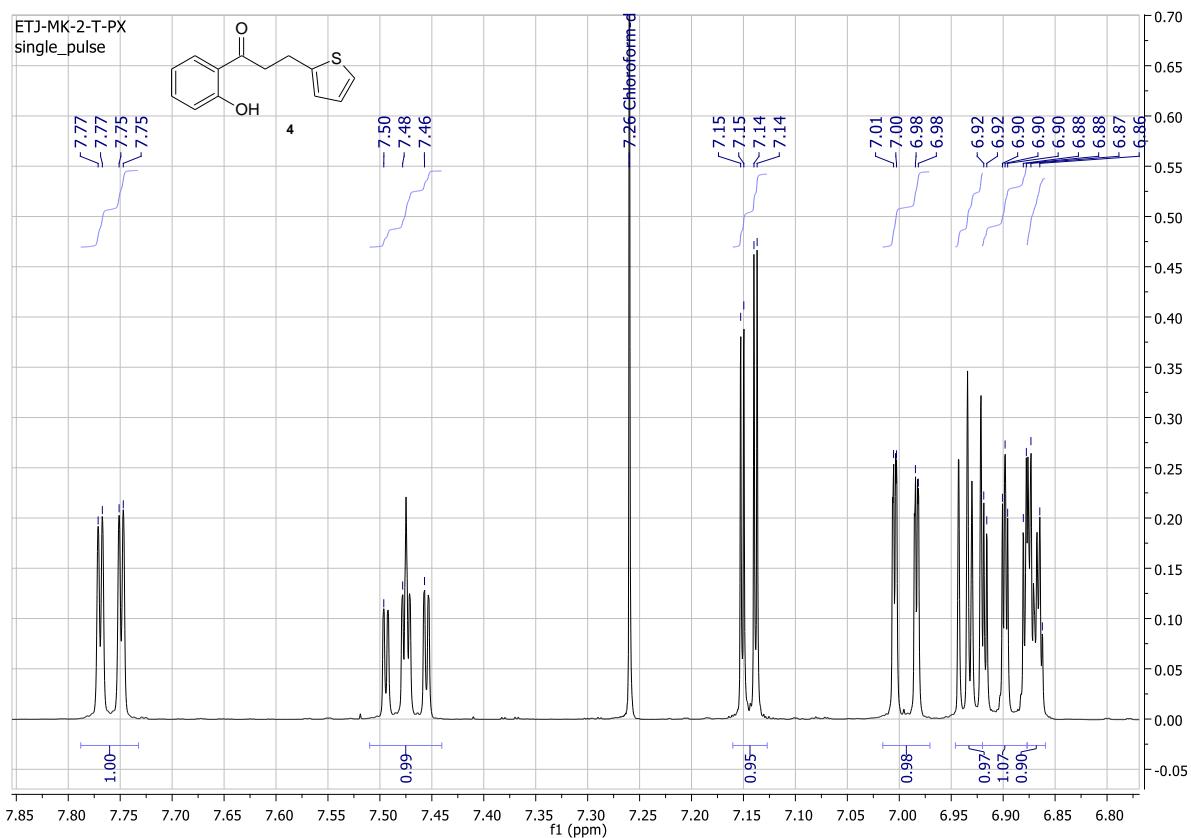
FigureS16. HMBC spectral of 3-(2"-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**) ( $\text{CDCl}_3$ , 151 MHz)



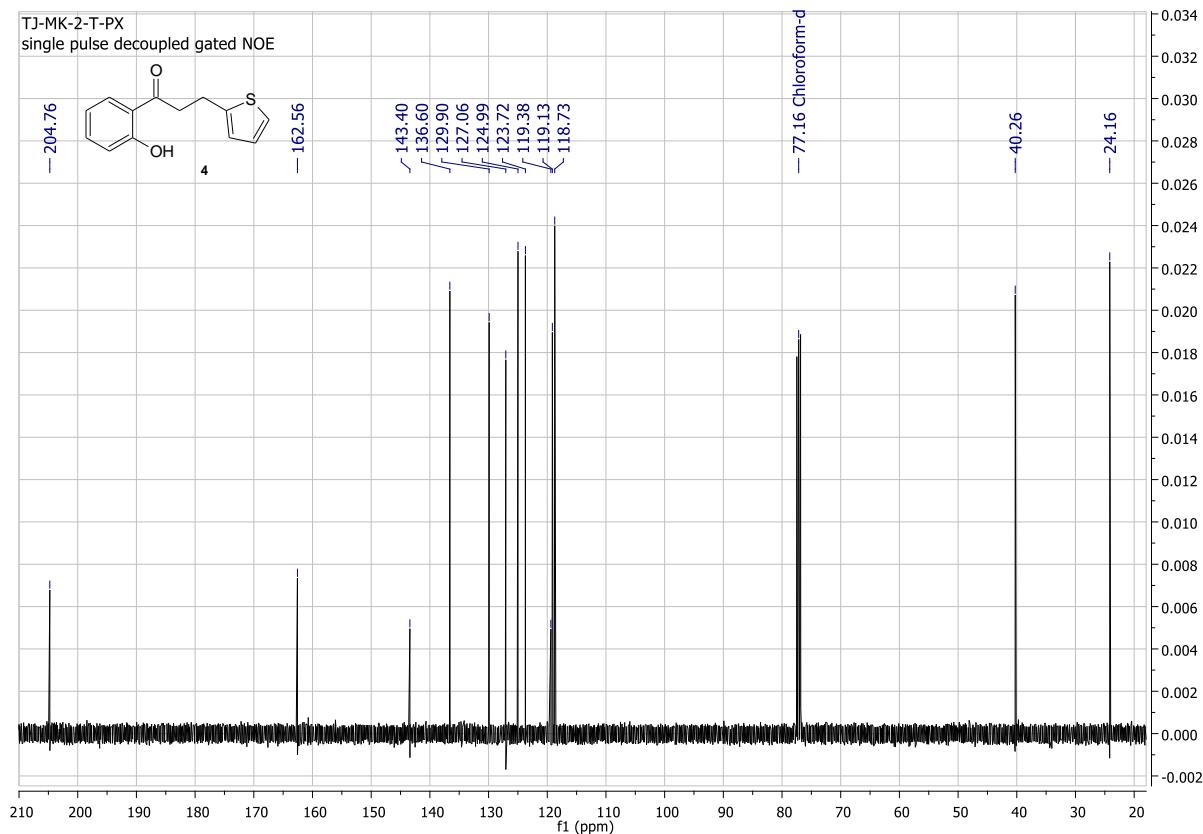
FigureS17.  $^1\text{H}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)-propan-1-one (**4**) ( $\text{CDCl}_3$ , 600 MHz)



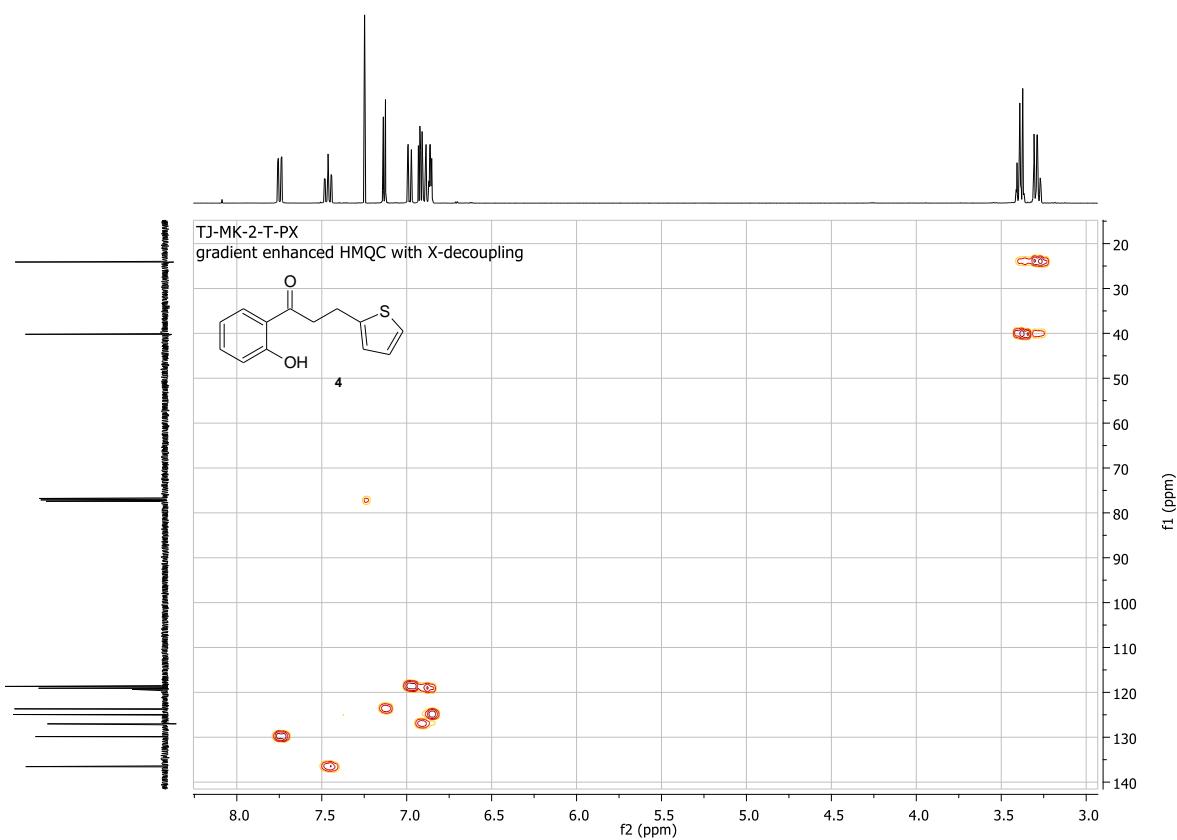
FigureS18. Part of the  $^1\text{H}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)- propan-1-one (**4**) ( $\text{CDCl}_3$ , 600 MHz)



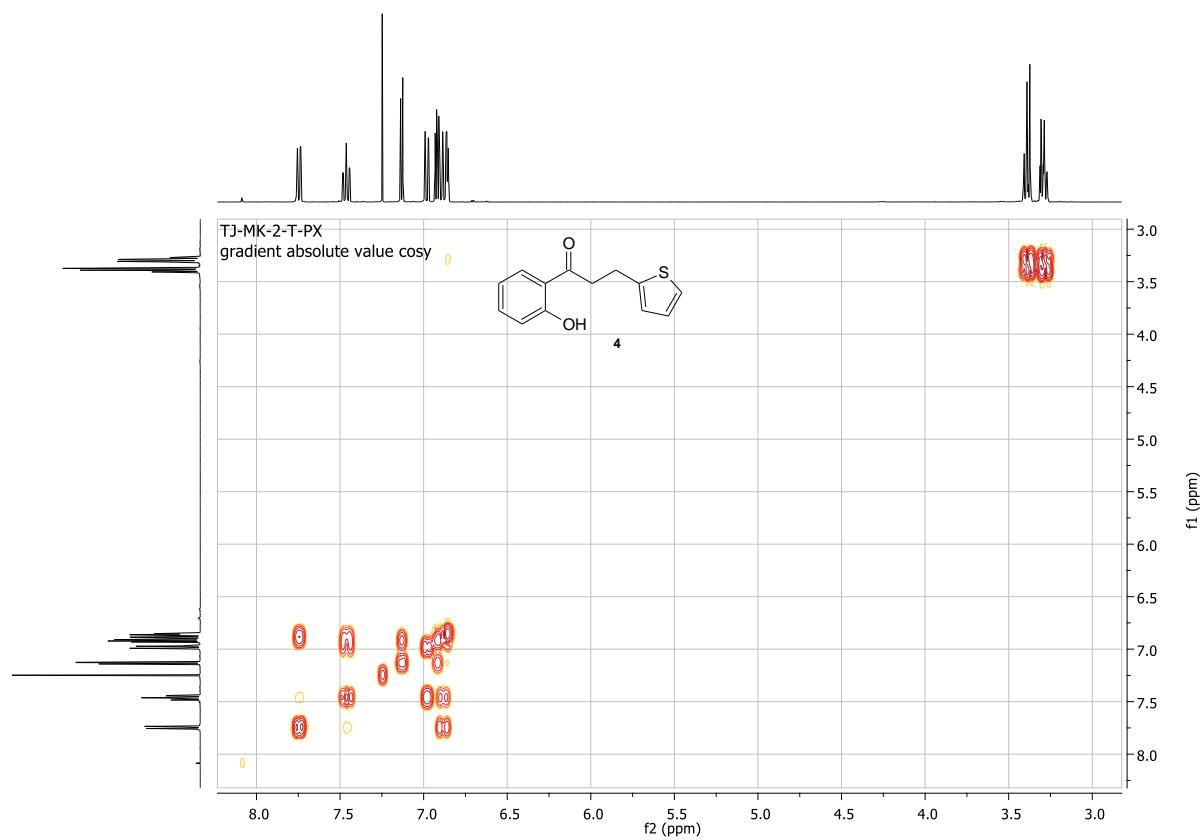
FigureS19.  $^{13}\text{C}$ -NMR spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)- propan-1-one (**4**) ( $\text{CDCl}_3$ , 151 MHz)



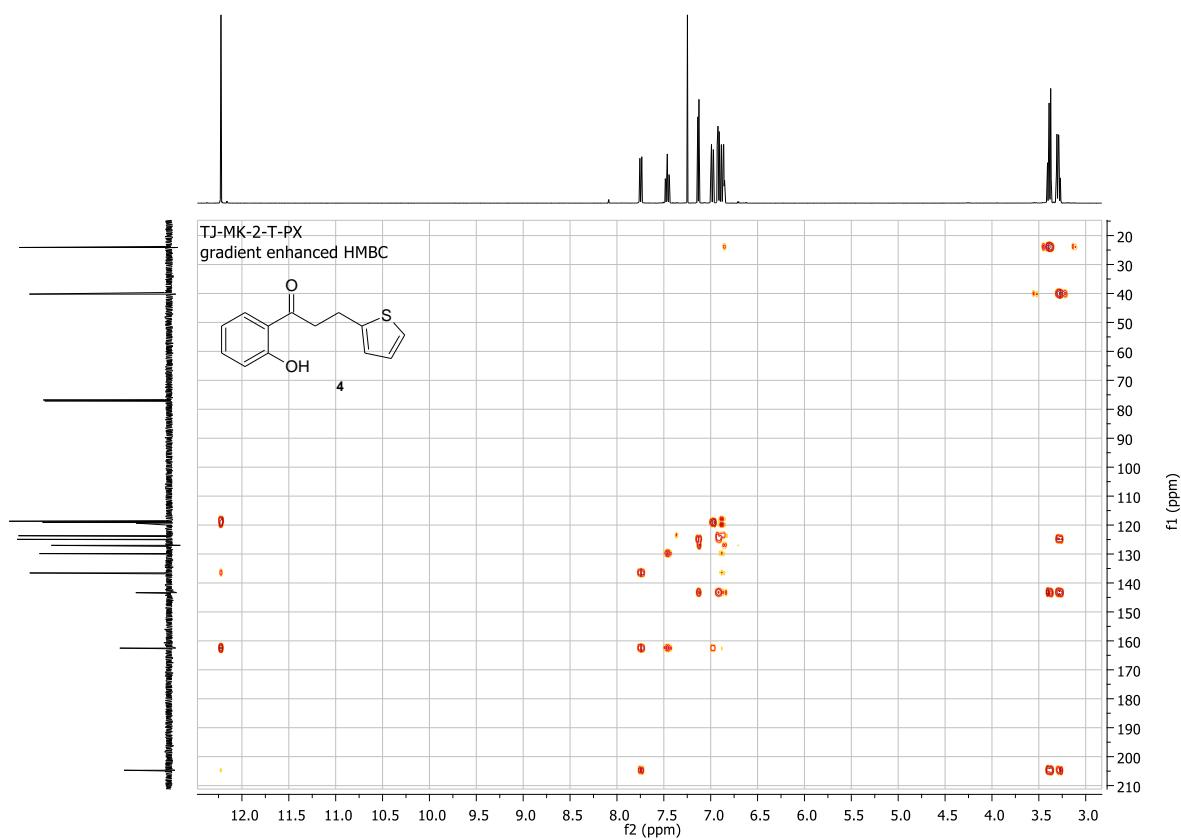
FigureS20. HSQC spectral of 3-(2''-thienyl)-1-(2'-hydroxyphenyl)- propan-1-one (**4**) ( $\text{CDCl}_3$ , 151 MHz)



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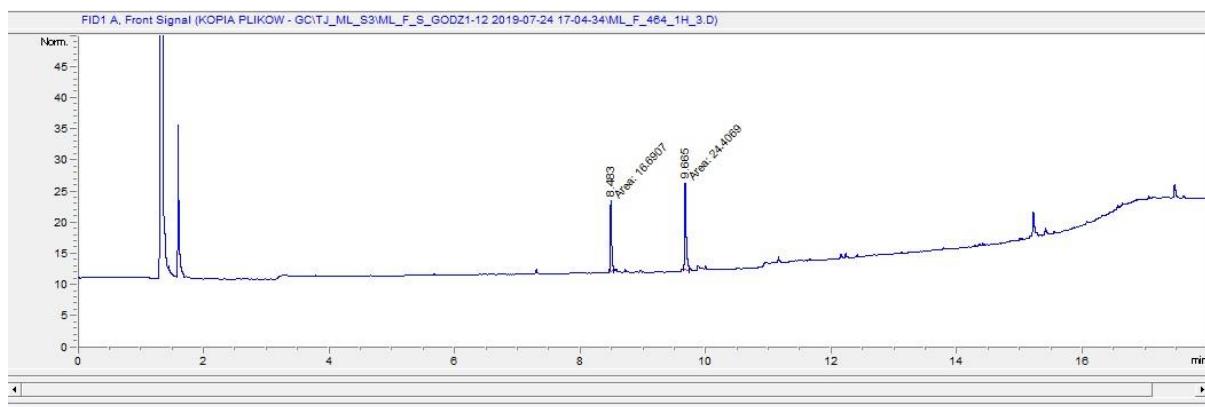
FigureS22. HMBC spectral of 3-(2"-thienyl)-1-(2'-hydroxyphenyl)- propan-1-one (**4**) ( $\text{CDCl}_3$ , 151 MHz)



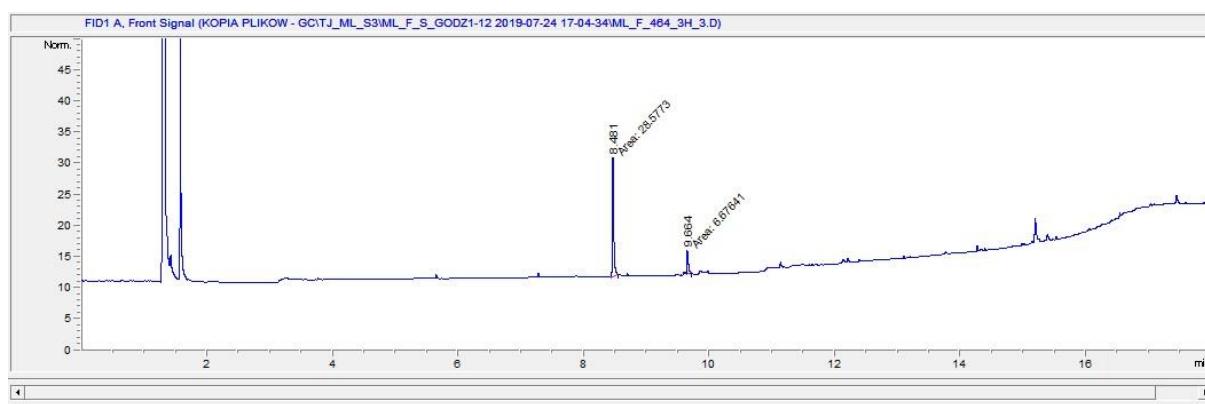
### Selected chromatograms of biotransformation course:

FigureS23. Chromatogram presenting the composition of reaction mixture after 1 hour incubation of **1** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

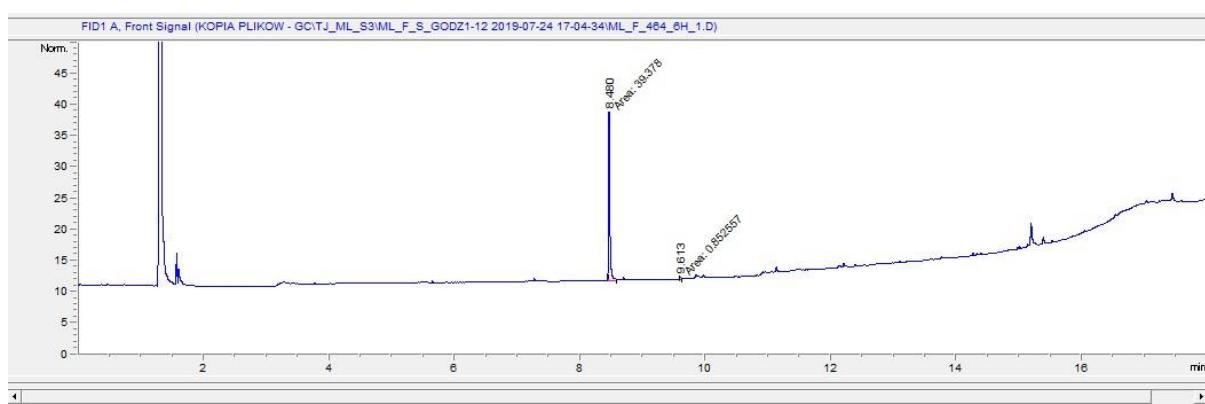
Retention time of the substrate (3-(2"-furyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**1**) – 9.6min and product (3-(2"-furyl)-1-(2'-hydroxyphenyl)- propan-1-one (**2**) - 8.5min.



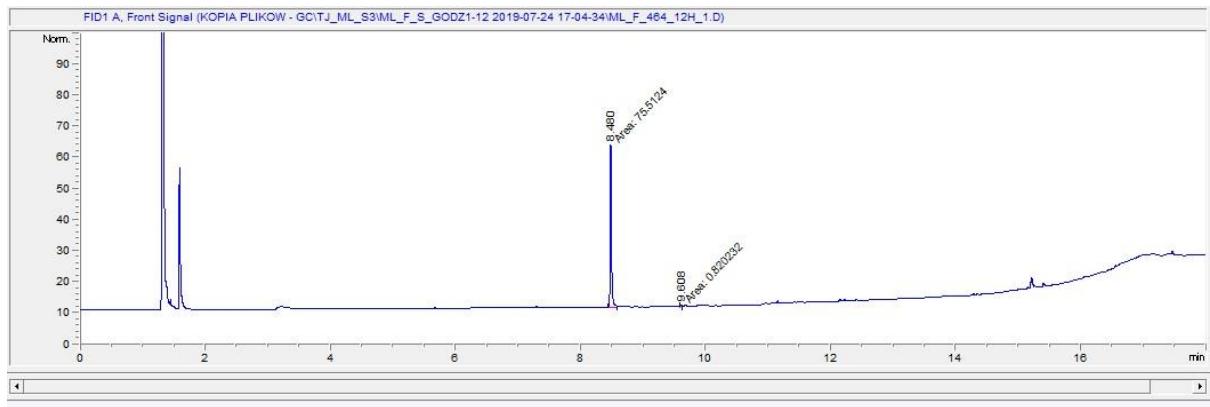
FigureS24. Chromatogram presenting the composition of reaction mixture after 3 hours incubation of **1** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.



FigureS25. Chromatogram presenting the composition of reaction mixture after 6 hours incubation of **1** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

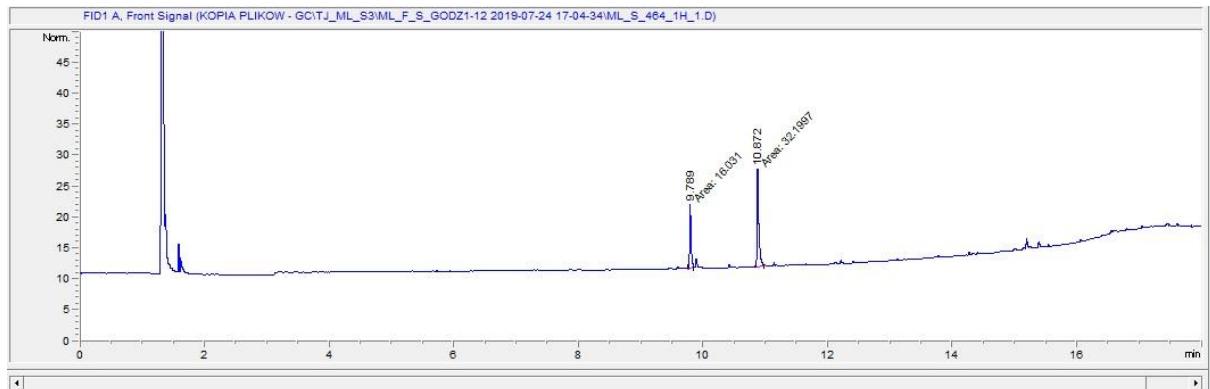


FigureS26. Chromatogram presenting the composition of reaction mixture after 12 hours incubation of **1** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

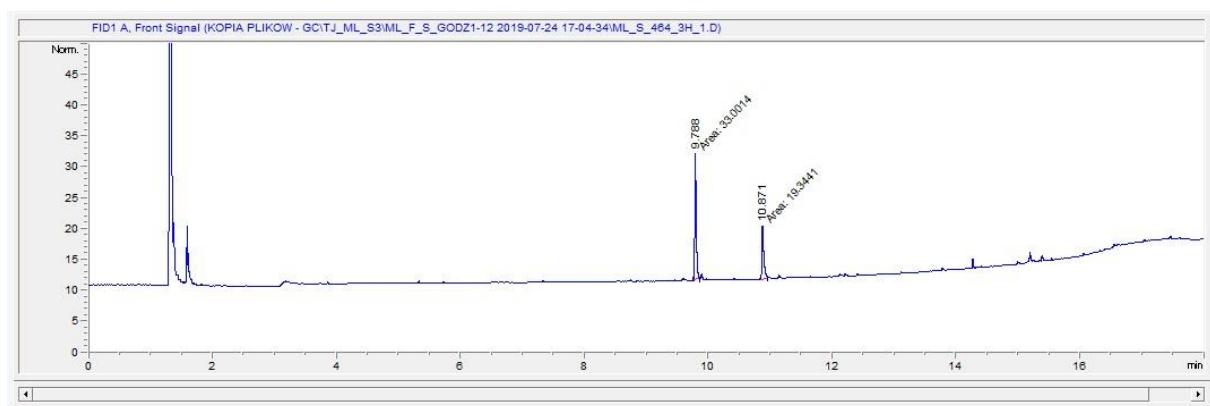


FigureS27. Chromatogram presenting the composition of reaction mixture after 1 hour incubation of **3** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

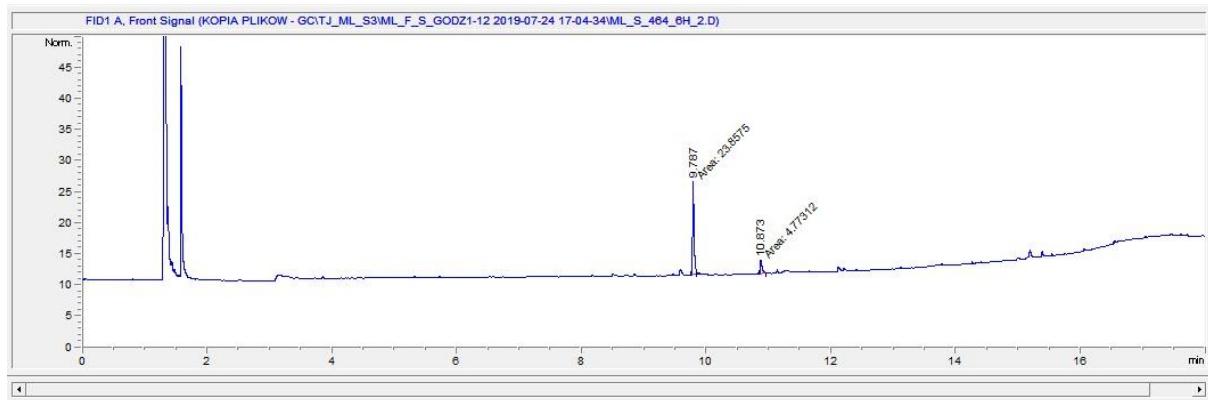
Retention time of the substrate (3-(2"-thienyl)-1-(2'-hydroxyphenyl)-prop-2-en-1-one (**3**)) – 10.8min and product (3-(2"-thienyl)-1-(2'-hydroxyphenyl)- propan-1-one (**4**)) - 9.7min.



FigureS28. Chromatogram presenting the composition of reaction mixture after 3 hours incubation of **3** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.



FigureS29. Chromatogram presenting the composition of reaction mixture after 6 hours incubation of **3** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.



FigureS30. Chromatogram presenting the composition of reaction mixture after 12 hours incubation of **3** in the culture of the *Saccharomyces cerevisiae* KCh 464 strain.

