

Supporting Information

Enantioselective bioreduction of heptan-2-one and octan-2-one catalyzed by *Daucus carota* cells

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Received 20 September 2019; accepted (revised) 22 January 2020



R = C₅H₁₁, C₆H₁₃

Sp-492 Vorobyeva EV-4 50mg in CDCl3, TMS 1H AV500 26.04.2017 PA1

SW(H1)=19.99ppm/ Q1(H1)=7.00ppm/ Obs.Freq.:500.13MHz/ D1=2.0s/ T=295.2K/ Probe:BBQ/ Exp.Time: 7 sec/ Time4Date: 11:12:02 26 Apr 2017.

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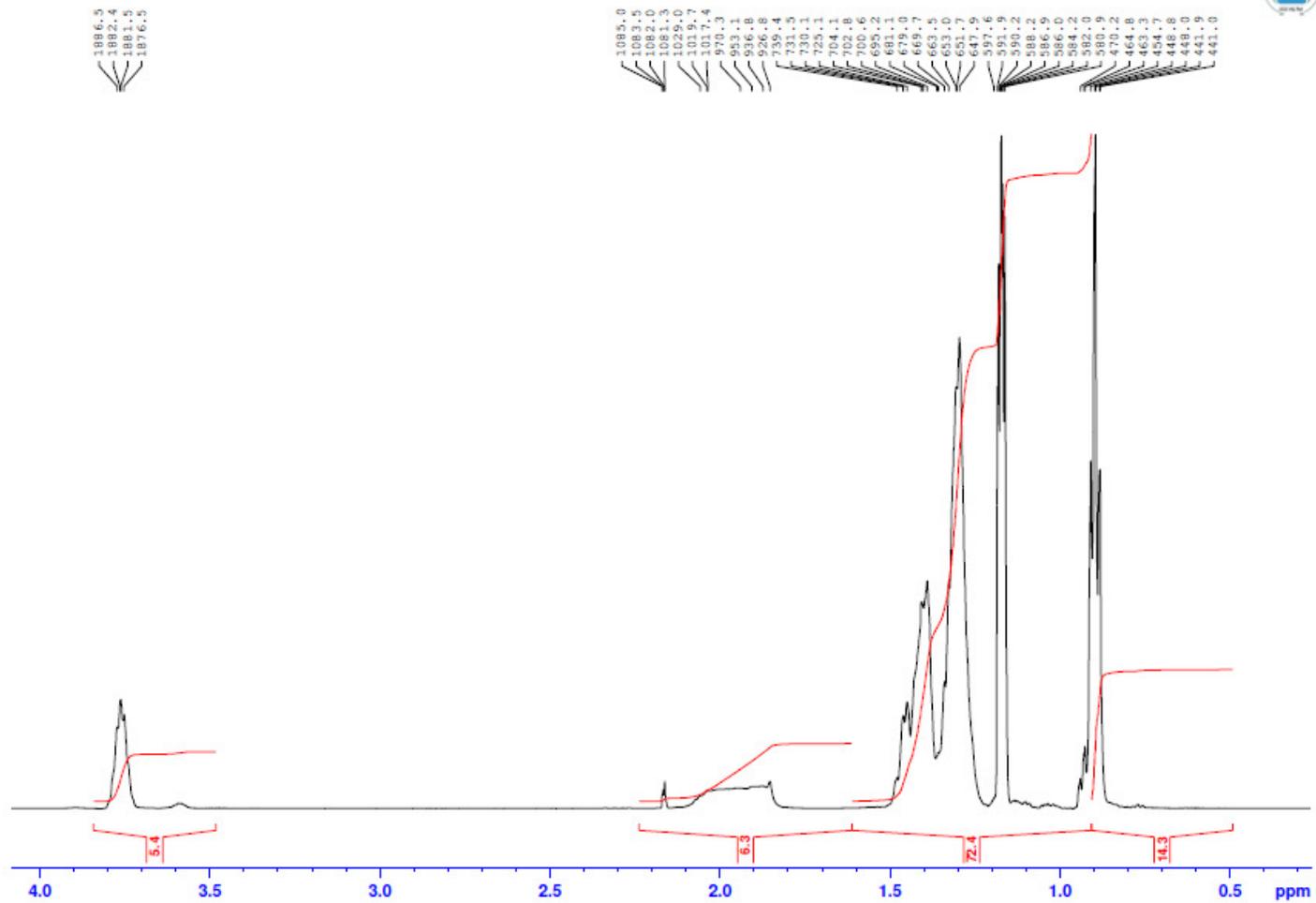


Figure S1. ^1H NMR (300 MHz) spectra of (2S)-(+)-heptan-2-ol in CDCl_3 .

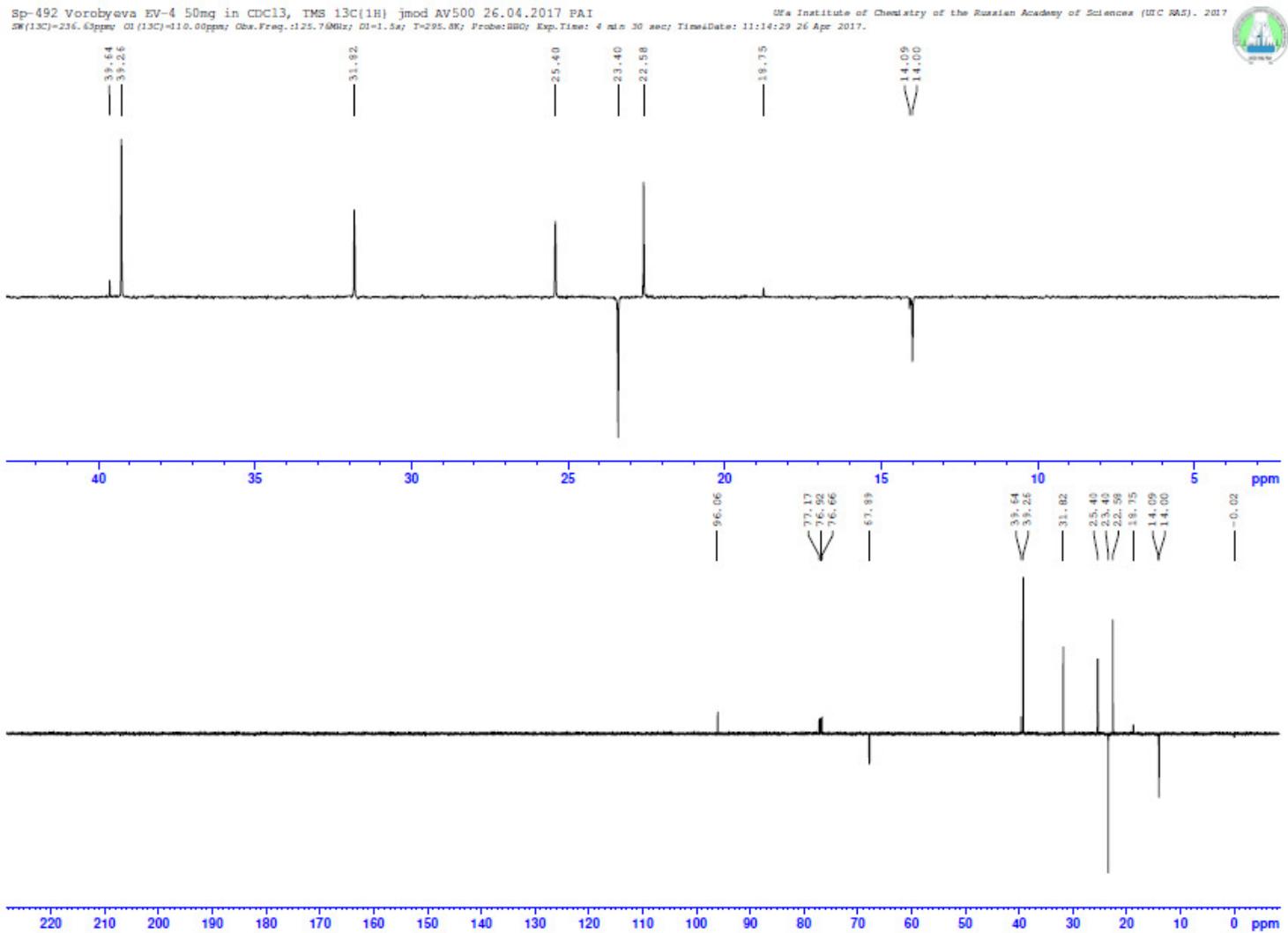


Figure S2. ¹³C NMR spectra of (2S)-(+)-heptan-2-ol in CDCl₃.

Sp-493 Vorobyeva EV-5 50mg in CDCl3, TMS 1H AV500 26.04.2017 PAI
SW(H1)=19.93ppm; DI(H1)=7.00ppm; Gb: Freq.: 500.13MHz; DI=2.0s; T=295.2K; Probe: BBO; Exp. Time: 7 sec; TimeDate: 11:20:03 26 Apr 2017.

Ufa Institute of Chemistry of the Russian Academy of Sciences (IUC RAS). 2017

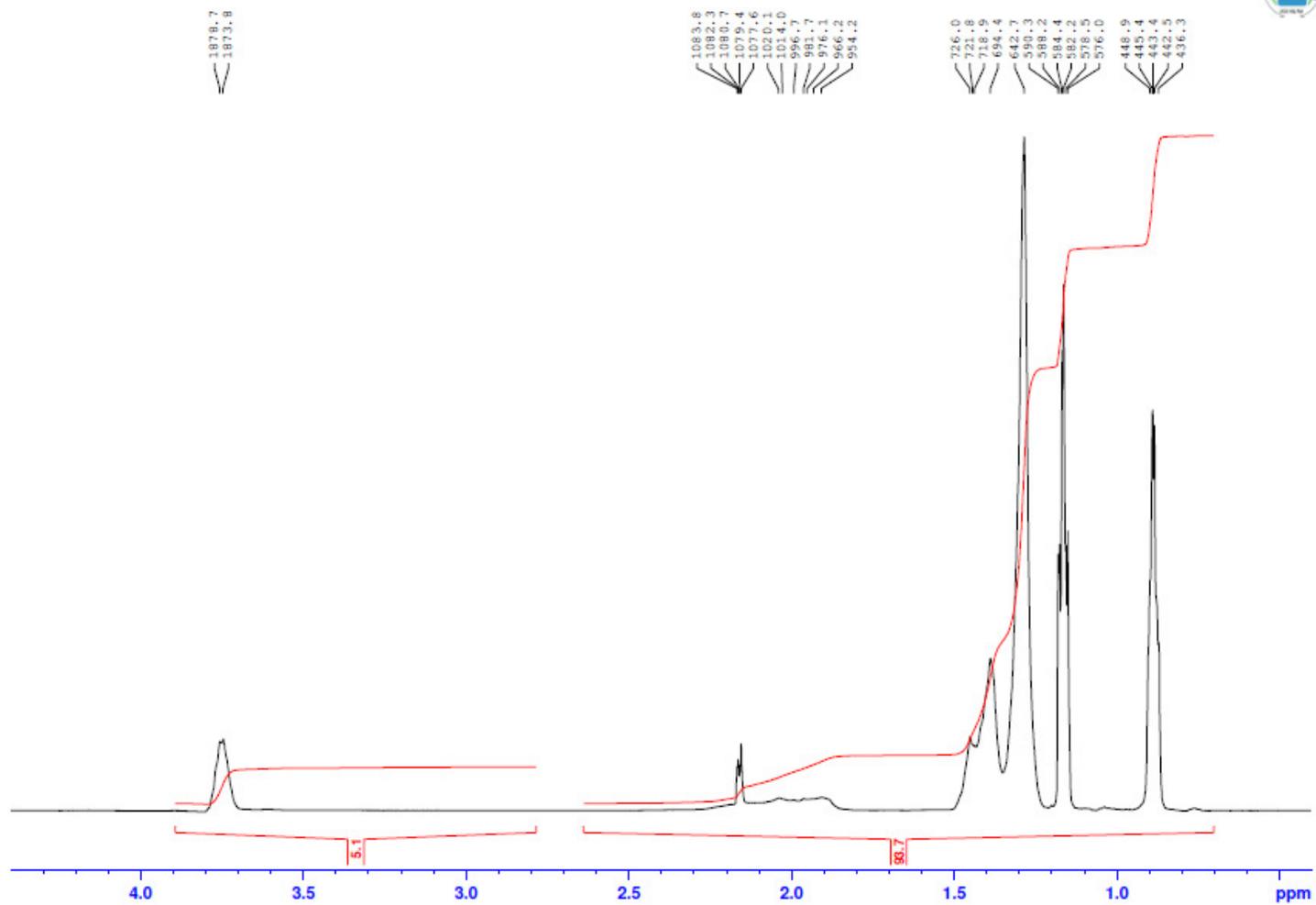


Figure S3. ^1H NMR (300 MHz) spectra of (2S)-(+)-octan-2-ol in CDCl_3 .

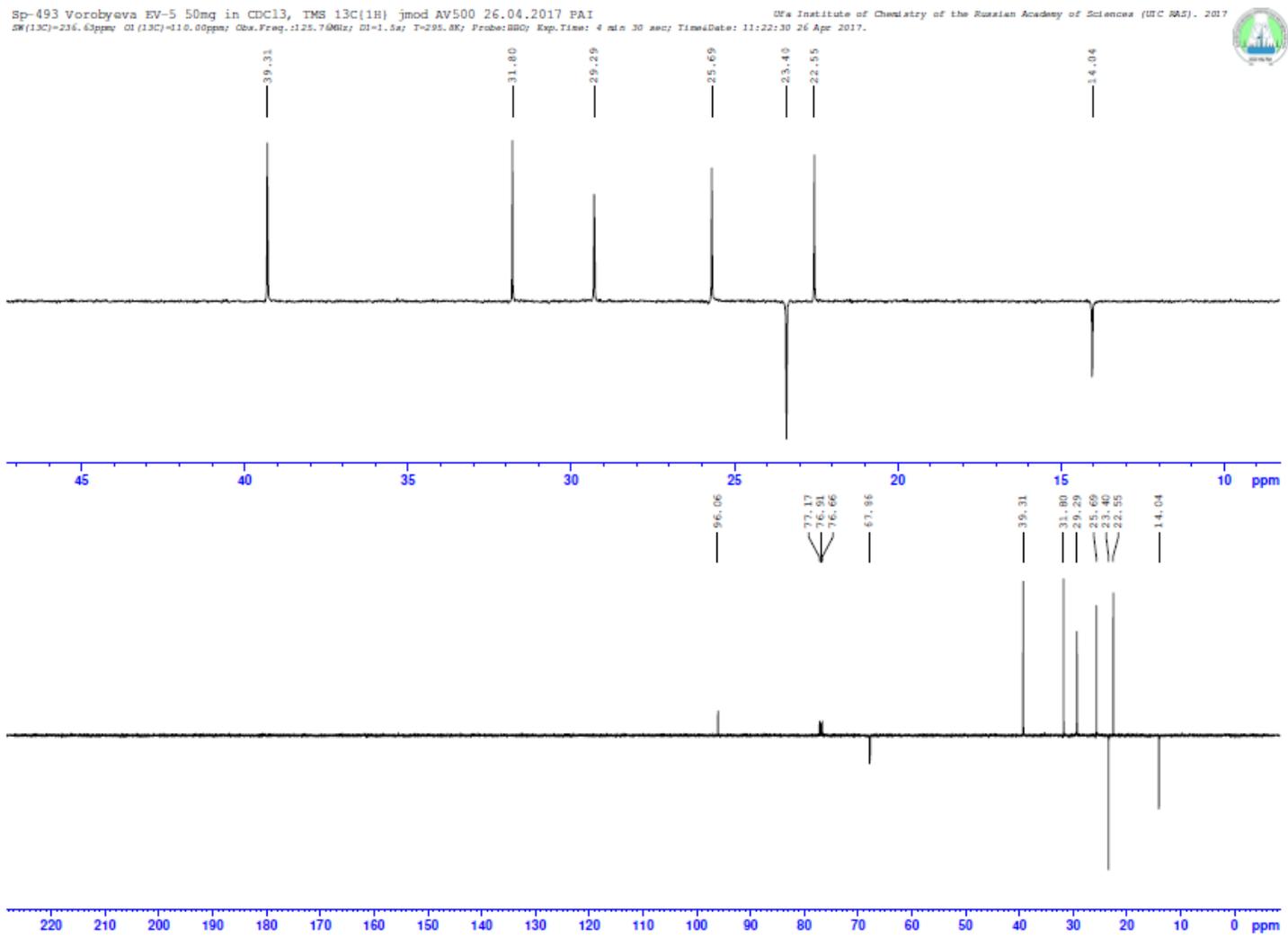


Figure S4. ¹³C NMR spectra of (2S)-(+)-octan-2-ol in CDCl₃.

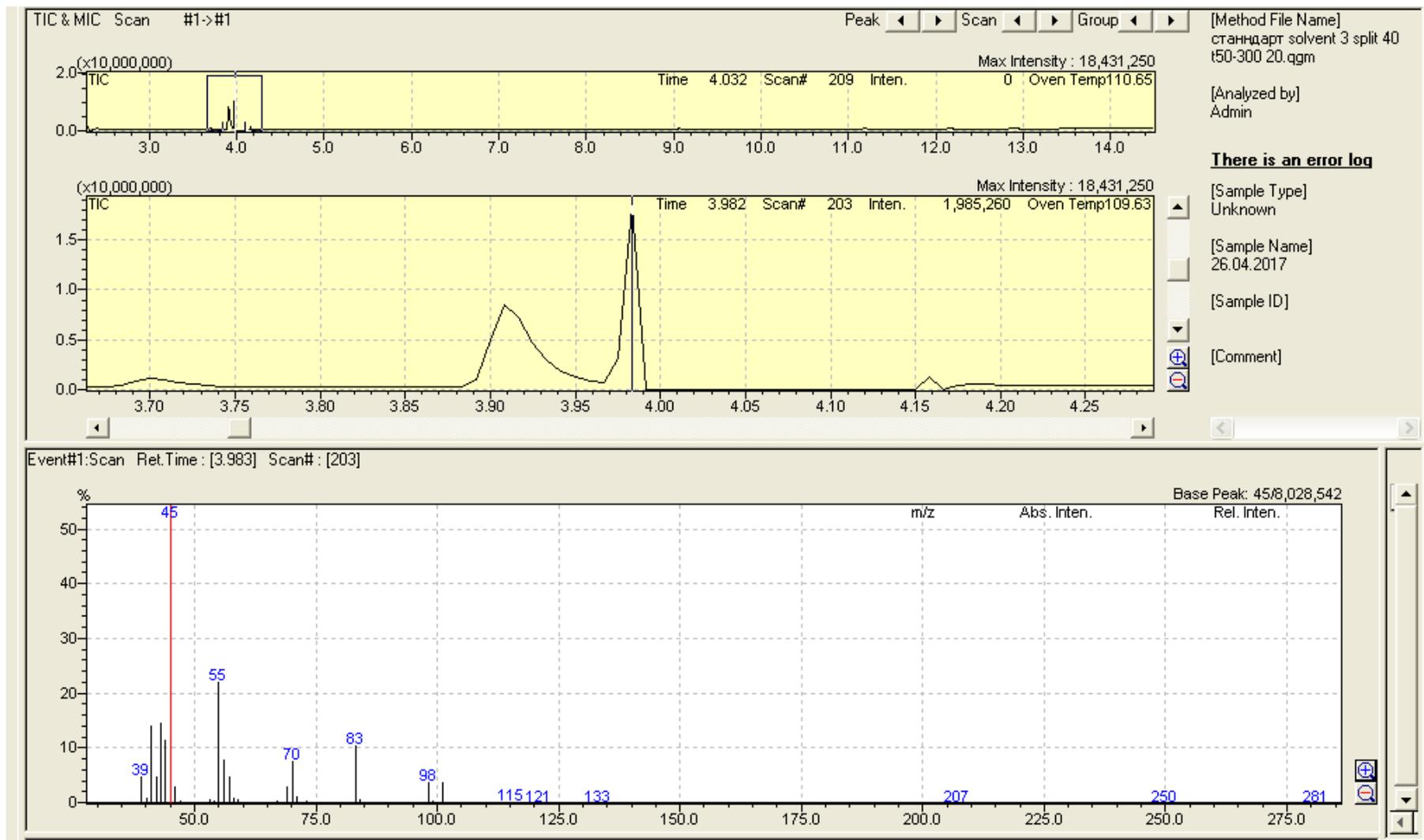


Figure S5.GC-MS Spectra of (2S)-(+)-heptan-2-ol (Retention Time 3.982).

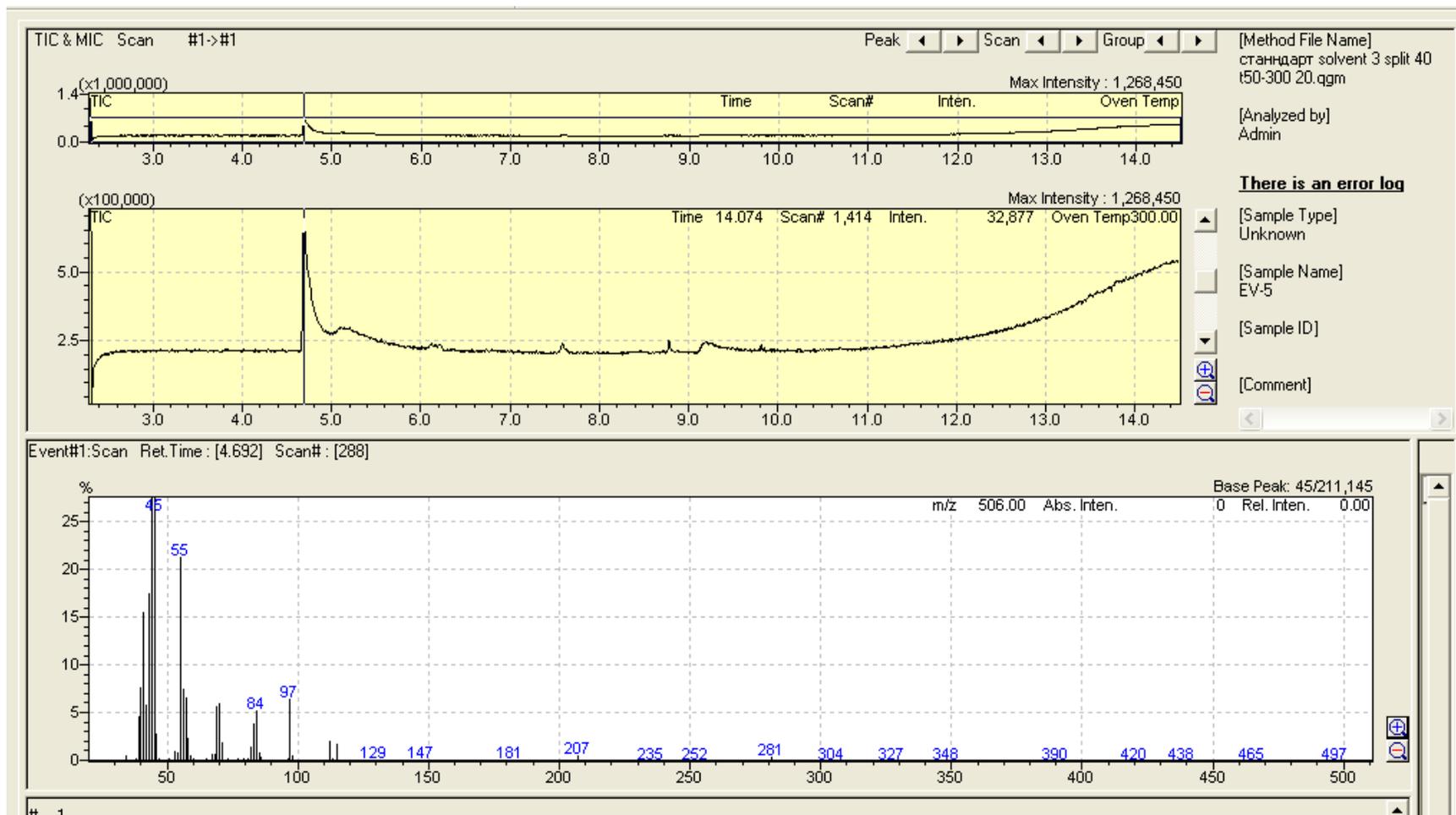


Figure S6.GC-MS Spectra of (2S)-(+)-octan-2-ol (Retention Time 4.693).

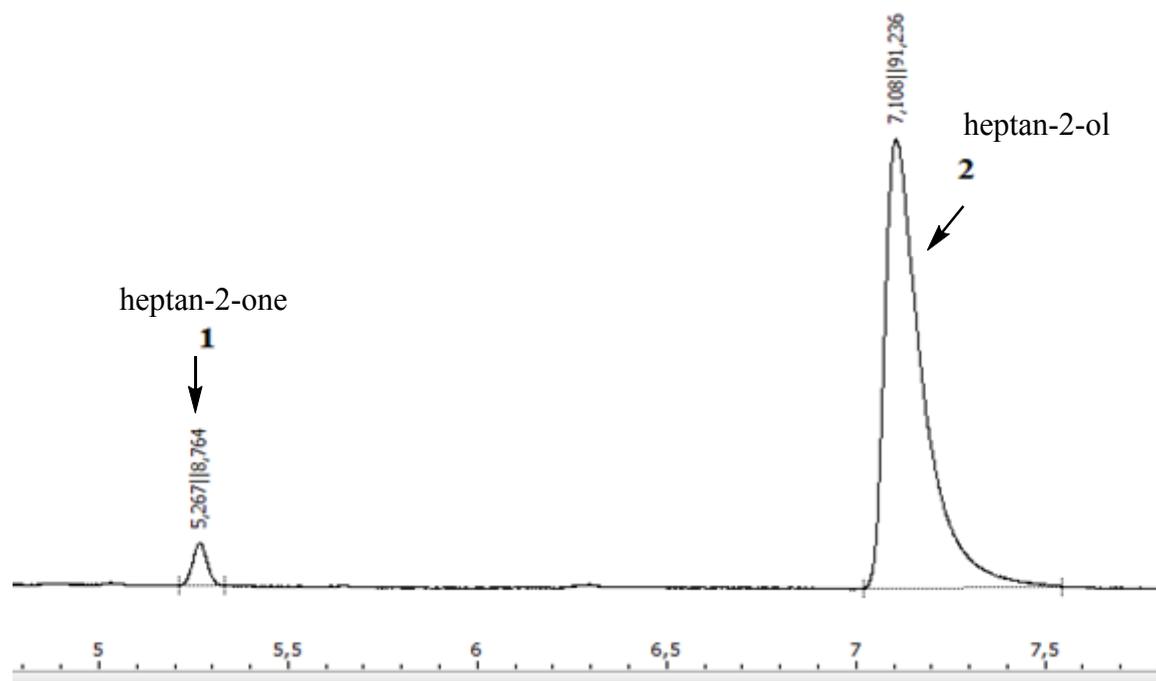


Figure S7.GC chromatogram of products of reduction of heptan-2-one catalyzed by NaBH_4 (1- heptan-2-one, 2 - (R, S)-heptan-2-ol).

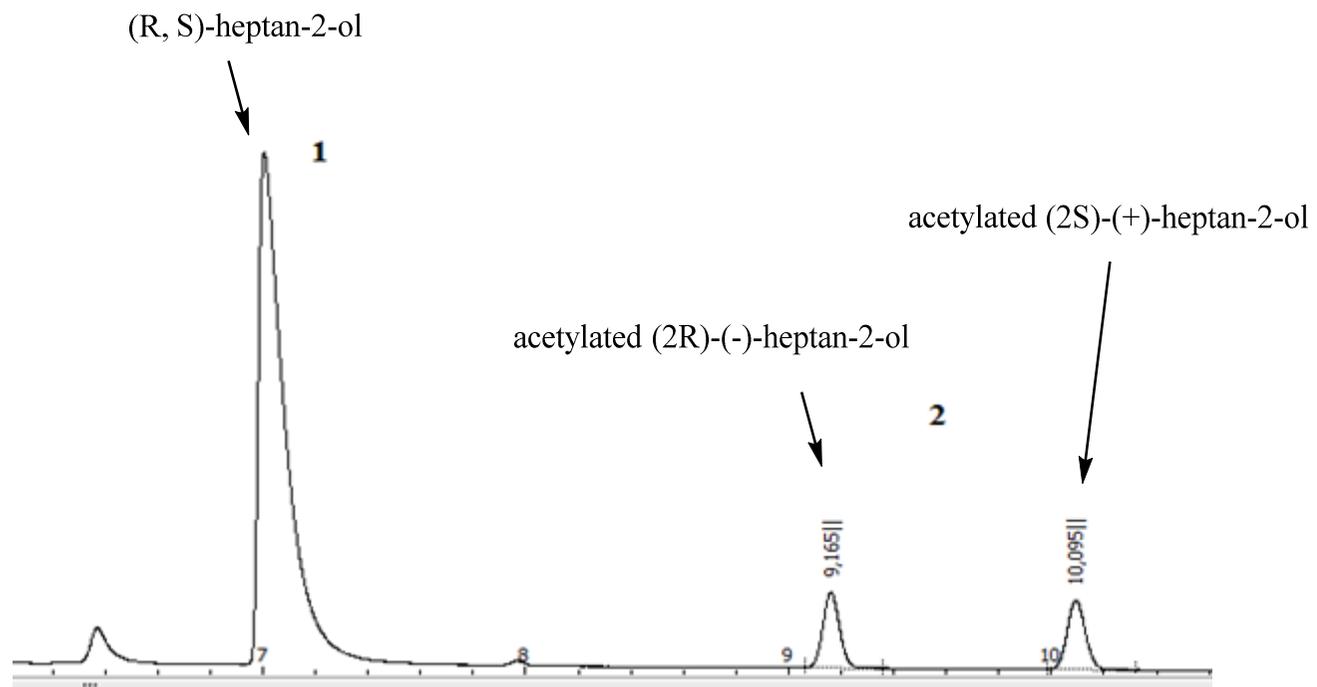


Figure S8.GC chromatogram of racemic acetylated (R)-(-)- and (S)-(+)-heptan-2-ol.

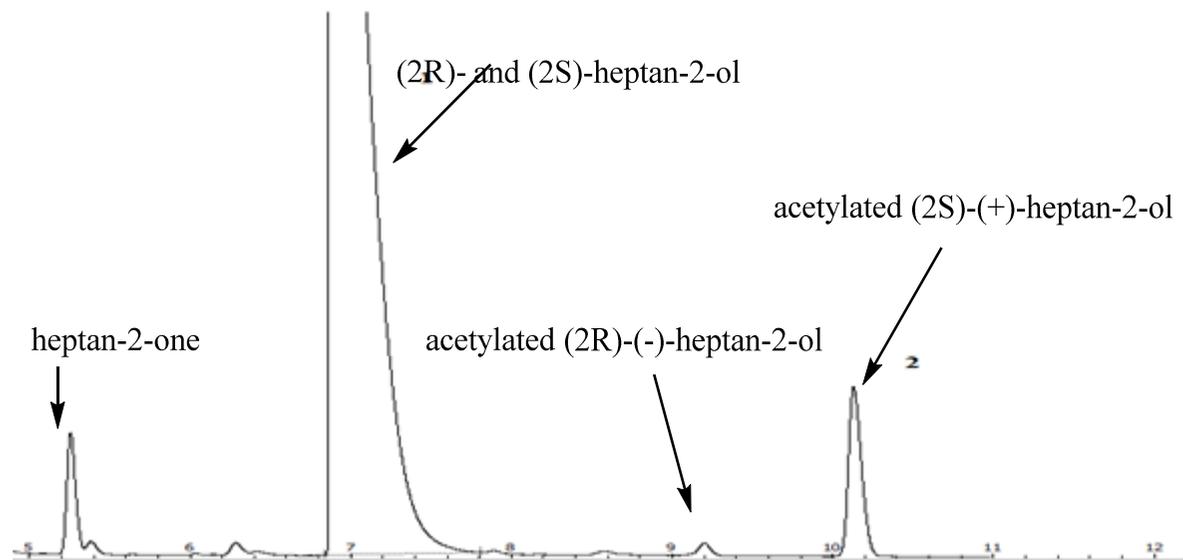


Figure S9.GC chromatogram of products obtained in bioreduction of heptan-2-one catalyzed by *D. carota* cells in the presence of glucose (acetylated (R)-(-)- and (S)-(+)-heptan-2-ol).

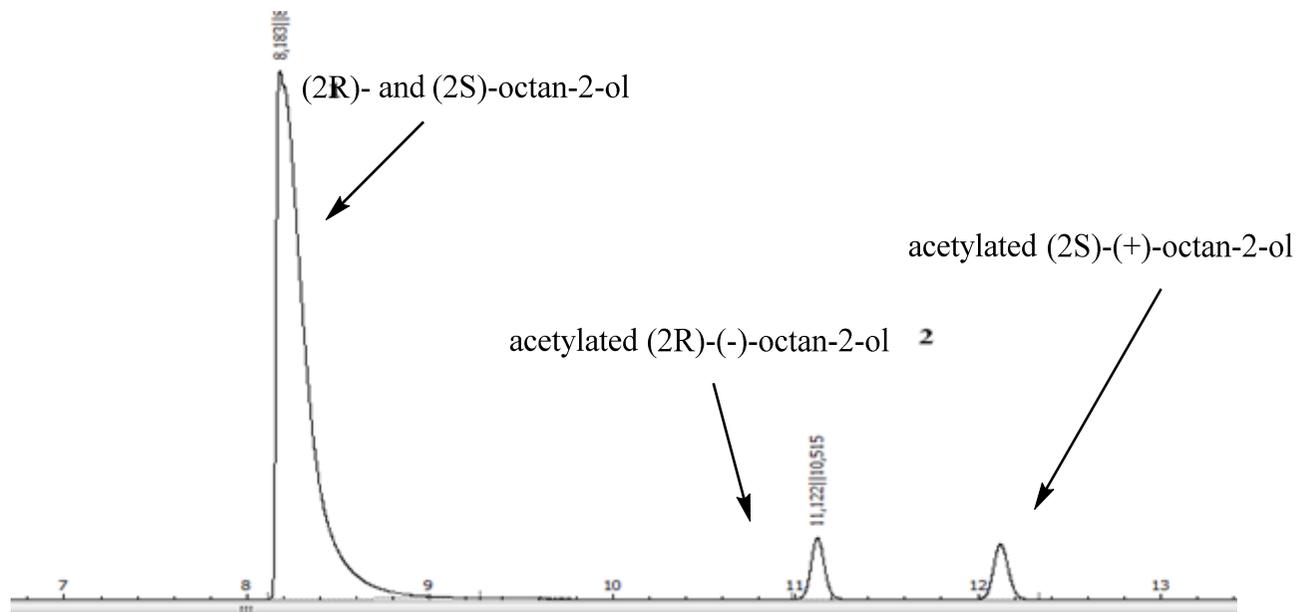


Figure S10. GC chromatogram of racemic acetylated (R)-(-)- and (S)-(+)-octan-2-ol.

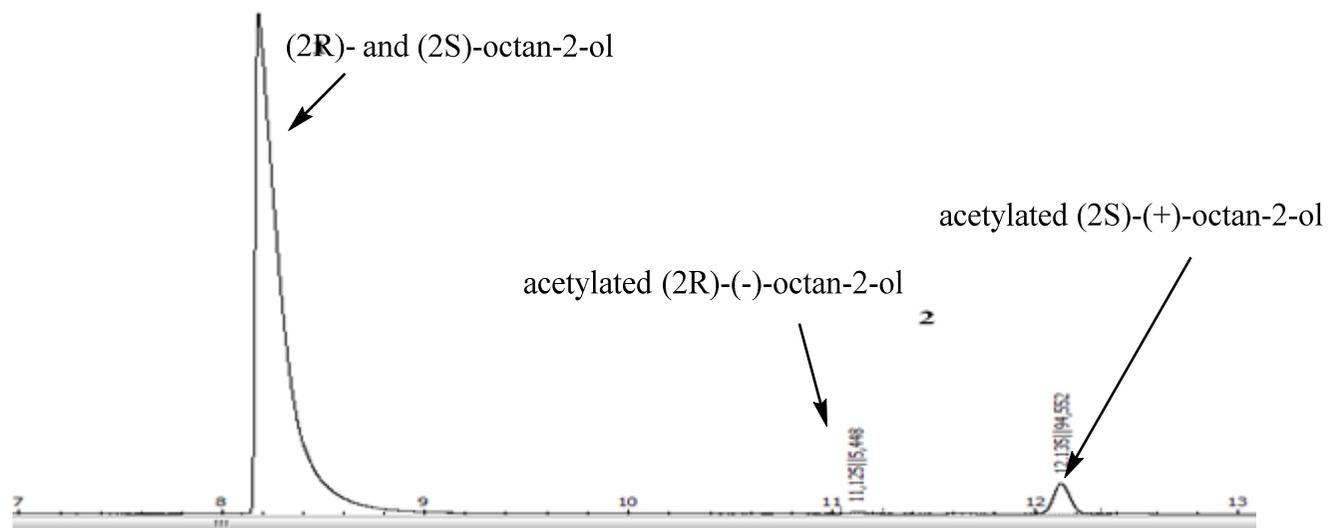


Figure S11. GC chromatogram of products obtained in bioreduction of octan-2-one catalyzed by *D. carota* cells in the presence of 2-propanol (3%) (acetylated (R)-(-)- and (S)-(+)-heptan-2-ol).