

Supplementary Table 1. Analytical standards used for the chemical analysis.

standard	producer
<i>metals</i>	
Cu	ICP grade, Sigma-Aldrich, Switzerland
Fe	ICP grade, Sigma-Aldrich, Switzerland
Al	ICP grade, Sigma-Aldrich, Switzerland
MgSO <sub>4</sub> ·7H <sub>2</sub> O	99.5%, Emsure, Merk, Germany
Mn	ICP grade, Sigma-Aldrich, Switzerland
Zn	ICP grade, Sigma-Aldrich, Switzerland
<i>LMWSCs</i>	
sodium sulfide	99.5%, Aldrich, Sigma-Aldrich, France
sodium methanethiolate	90%, Aldrich, Sigma-Aldrich, US
dimethyl disulfide	99%, Aldrich, Sigma-Aldrich, France
carbon disulfide	99%, Aldrich, Sigma-Aldrich, USA
<i>aldehyde compounds</i>	
methional	97%, Aldrich, Sigma-Aldrich, US
2-methylpropanal	analytical standard, Sigma-Aldrich, China
3-methylbutanal	analytical standard, Sigma-Aldrich, Germany
phenylacetaldehyde	95%, Sigma-Aldrich, Germany
5-methylfurfural	analytical standard, Sigma-Aldrich, China,
benzaldehyde	99%, Sigma-Aldrich, China
hexanal	98%, Alfa Aesar, UK
furfural	99%, Aldrich, Sigma-Aldrich, USA
nonanal	95%, Sigma, Sigma-Aldrich, USA
( <i>E</i> )-2-hexenal	98%, Alfa Aesar, UK
( <i>E</i> )-2-heptenal	analytical standard, Sigma-Aldrich, USA
( <i>E</i> )-2-octenal	95%, Alfa Aesar, UK
( <i>E</i> )-2-nonenal	97%, Alfa Aesar, UK
<i>alcohols</i>	
methionol	98%, Aldrich, Sigma-Aldrich, USA
furaneol	99%, Aldrich, Sigma-Aldrich
homofuraneol	96%, Sigma-Aldrich
maltol	99%, Aldrich, Sigma-Aldrich, Germany
sotolon	analytical standard, Sigma-Aldrich, China
<i>esters</i>	
ethyl butyrate	analytical standard, Sigma-Aldrich, Germany
ethyl hexanoate	98%, Sigma-Aldrich
ethyl octanoate	98%, Sigma-Aldrich
ethyl decanoate	analytical standard, Fluke, Sigma-Aldrich, France
ethyl dodecanoate	98%, Sigma-Aldrich
propyl acetate	98%, Alfa Aesar, UK
isobutyl acetate	99%, Sigma-Aldrich, USA
butyl acetate	99%, Alfa Aesar, UK
isoamyl acetate	98%, Sigma-Aldrich, USA
phenylethyl acetate	analytical standard, Sigma-Aldrich, Germany
ethyl isobutyrate	99%, Aldrich, Sigma-Aldrich
ethyl 2-methylbutyrate	99%, Aldrich, Sigma-Aldrich, USA
ethyl isovalerate	98%, Aldrich, Sigma-Aldrich
ethyl phenylacetate	99%, Alfa Aesar, UK
ethyl propanoate	99%, Aldrich, Sigma-Aldrich
ethyl cinnamate	99%, Aldrich, Sigma-Aldrich, Germany
ethyl dihydrocinnamate	99%, Aldrich, Sigma-Aldrich, UK
<i>C6 compounds</i>	
hexanol	99%, Alfa Aesar, UK
( <i>E</i> )-2-hexenol	97%, Aldrich, Sigma-Aldrich, USA
<i>terpenes</i>	
γ-nonalactone	analytical standard, Sigma-Aldrich, China
( <i>E</i> )-geraniol	98%, Aldrich, Sigma-Aldrich, USA
eucalyptol	99%, Aldrich, Sigma-Aldrich, USA

1,4-cineole	analytical standard, Sigma-Aldrich, Switzerland
$\alpha$ -terpinene	90%, Alfa Aesar, UK
$\gamma$ -terpinene	analytical standard, Aldrich, Sigma-Aldrich
terpinolene	85%, Fluka, Sigma-Aldrich, Japan
linalool	95 – 97%, Sigma, Sigma-Aldrich, USA
$\alpha$ -terpineol	90%, Aldrich, Sigma-Aldrich, USA
( <i>E</i> )-geranylacetone	97%, Alfa Aesar, UK
citronellol	95%, Aldrich, Sigma-Aldrich, USA
nerolidol	98%, Aldrich, Sigma-Aldrich, USA
<i>C13 compounds</i>	
$\beta$ -ionone	96%, Aldrich, Sigma-Aldrich, Germany
$\beta$ -damascenone	analytical standard, Sigma-Aldrich, Switzerland
<i>protein</i>	
Bradford reagent	Sigma, Sigma-Aldrich, USA
bovine serum albumin (BSA)	96%, Sigma, Sigma-Aldrich, USA

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