

SUPPLEMENTARY MATERIAL

Germacranolides from *Carpesium divaricatum*: some new data on cytotoxic and anti-inflammatory activity

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Figures:

Fig. S1. HRESIMS spectrum of 4 β ,8 α -dihydroxy- 5 β -angeloyloxy-9 β -(2-methylbutyryloxy)-3-oxo-germacran-6 α ,12-olide (**1**)

Fig. S2. ¹H NMR spectrum of **1**

Fig. S3. HRESIMS spectrum of 4 β ,8 α -dihydroxy-5 β -angeloyloxy-9 β -(3-methylbutyryloxy)-3-oxo-germacran- 6 α ,12-olide (cardivarolide G, **2**)

Fig. S4. ¹H NMR spectrum of **2** in CDCl₃

Fig. S5. ¹H NMR spectrum of **2** in CD₃OD

Fig. S6. HRESIMS spectrum of 4 β ,8 α -dihydroxy-5 β -isobutyryloxy-9 β -(3-methylbutyryloxy)-3-oxo-germacran-6 α ,12-olide (**3**)

Fig. S7. ¹H NMR spectrum of **3**

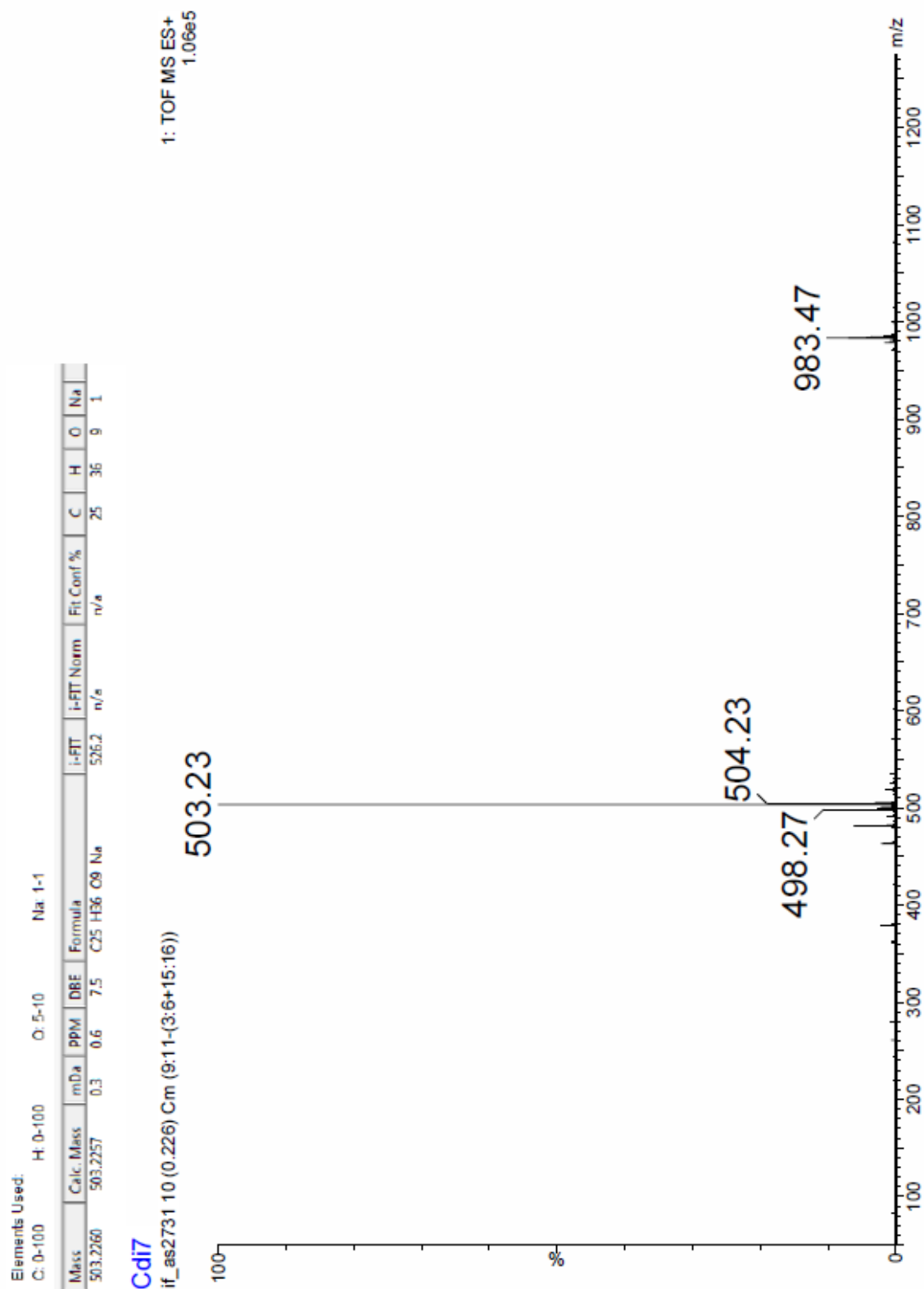


Fig. S1. HRESIMS spectrum of 4 β ,8 α -dihydroxy- 5 β -angeloyloxy-9 β -(2-methylbutyryloxy)-3-oxo-germacran-6 α ,12-olide (**1**)

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Pracownia NMR
Probka: Cdi 7



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PROCNO 1

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FIDRES 0.450018 Hz
AQ 2.2221334 sec
RG 140.97
DW 69.333 usec
DE 6.50 usec
TE 298.5 K
D1 1.00000000 sec
TD0 1
SFO1 400.1728012 MHz
NUC1 1H
P1 15.25 usec
PLW1 11.30000019 W

F2 - Processing parameters
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GB 0
PC 1.00

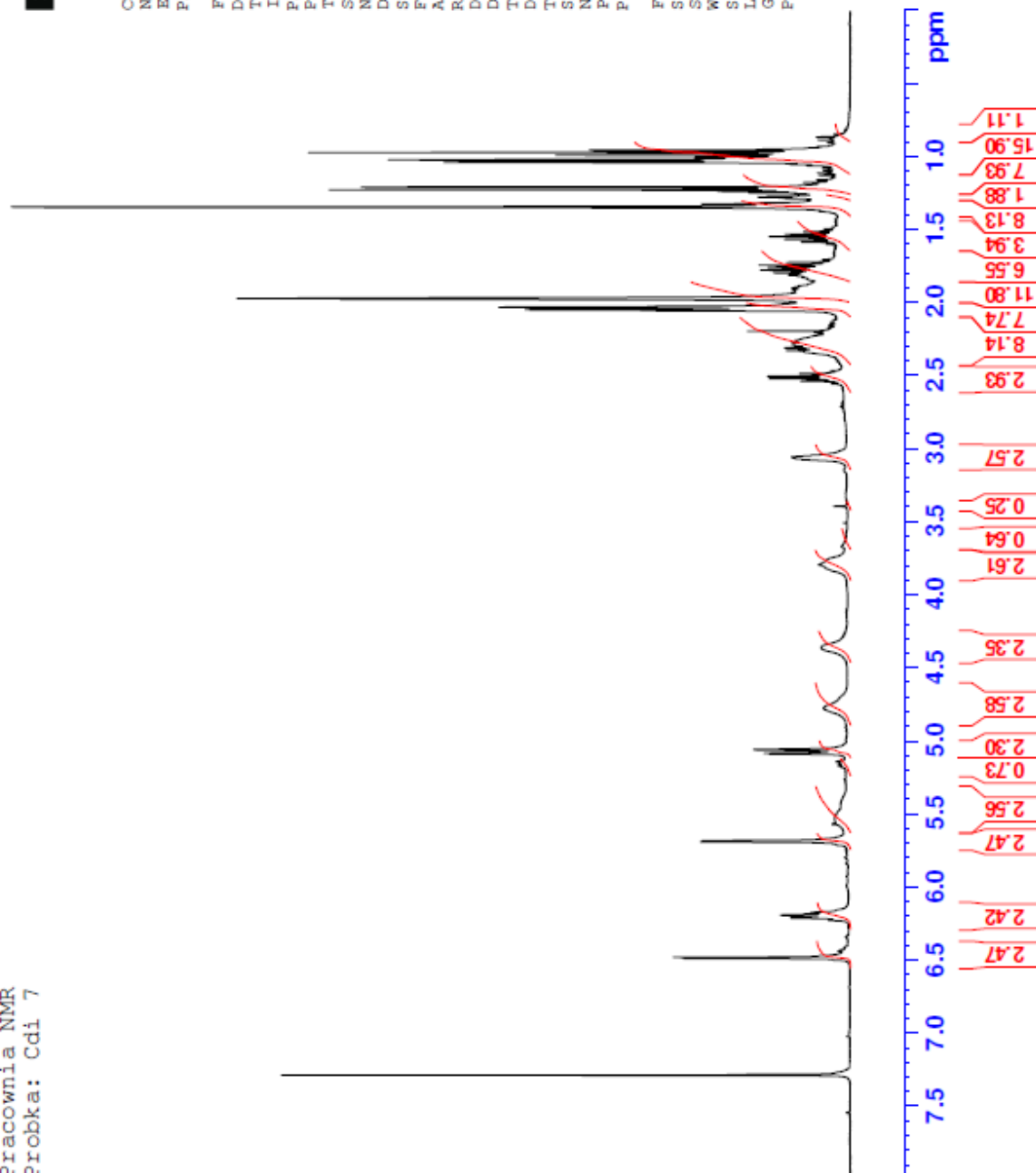


Fig. S2. ^1H NMR spectrum of **1**

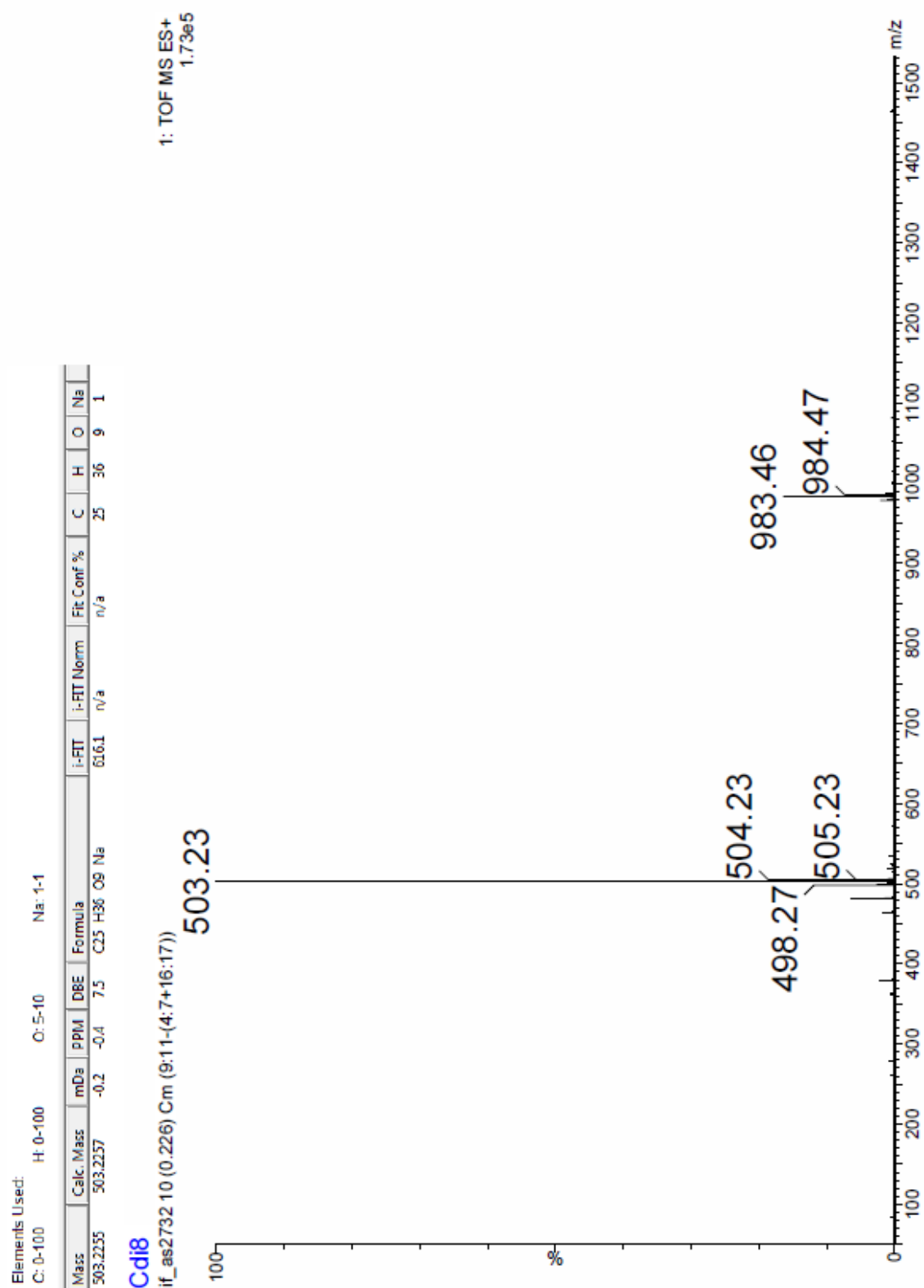


Fig. S3. HRESIMS spectrum of 4 β ,8 α -dihydroxy-5 β -angeloyloxy-9 β -(3-methylbutyryloxy)-3-oxo-germacran- 6 α ,12-olide (cardivarolide G, **2**)

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Pracownia NMR
Probka: Cdi 8



Current Data Parameters
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PROCNO 1

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SOLVENT CDCl3
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FIDRES 0.400016 Hz
AQ 2.4999001 sec
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TD0 1
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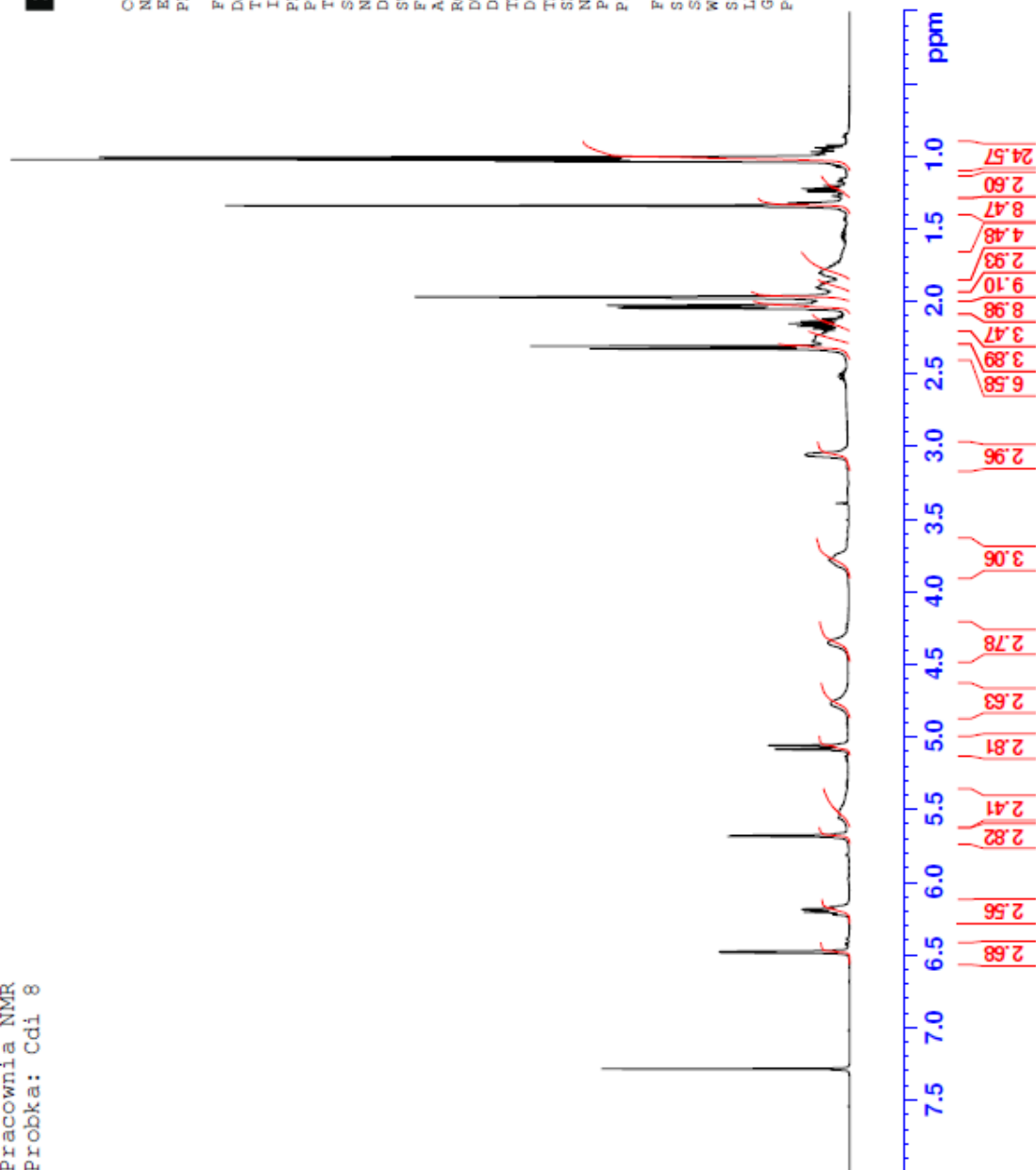


Fig. S4. ^1H NMR spectrum of **2** in CDCl_3

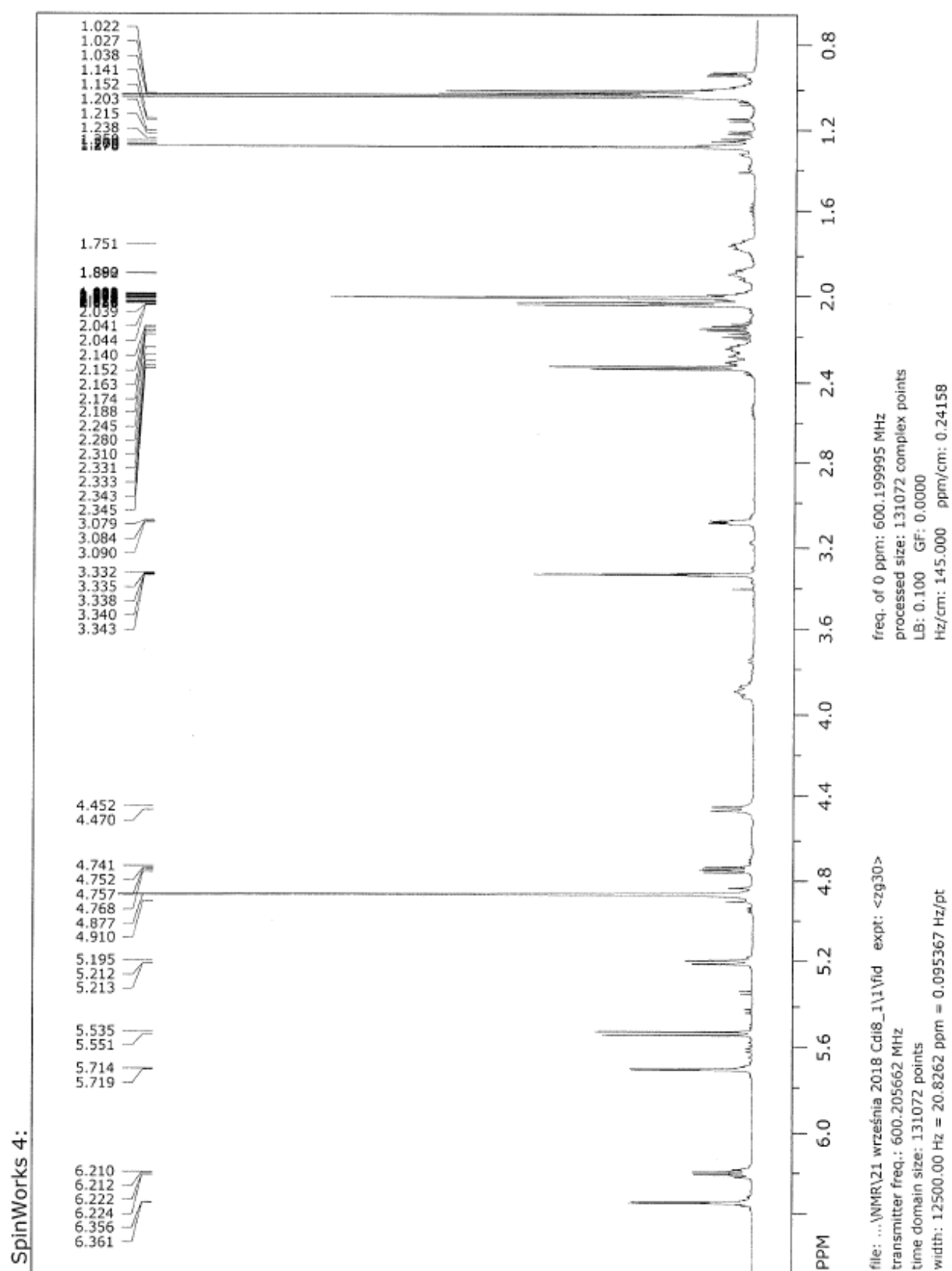


Fig. S5. ^1H NMR spectrum of **2** in CD_3OD

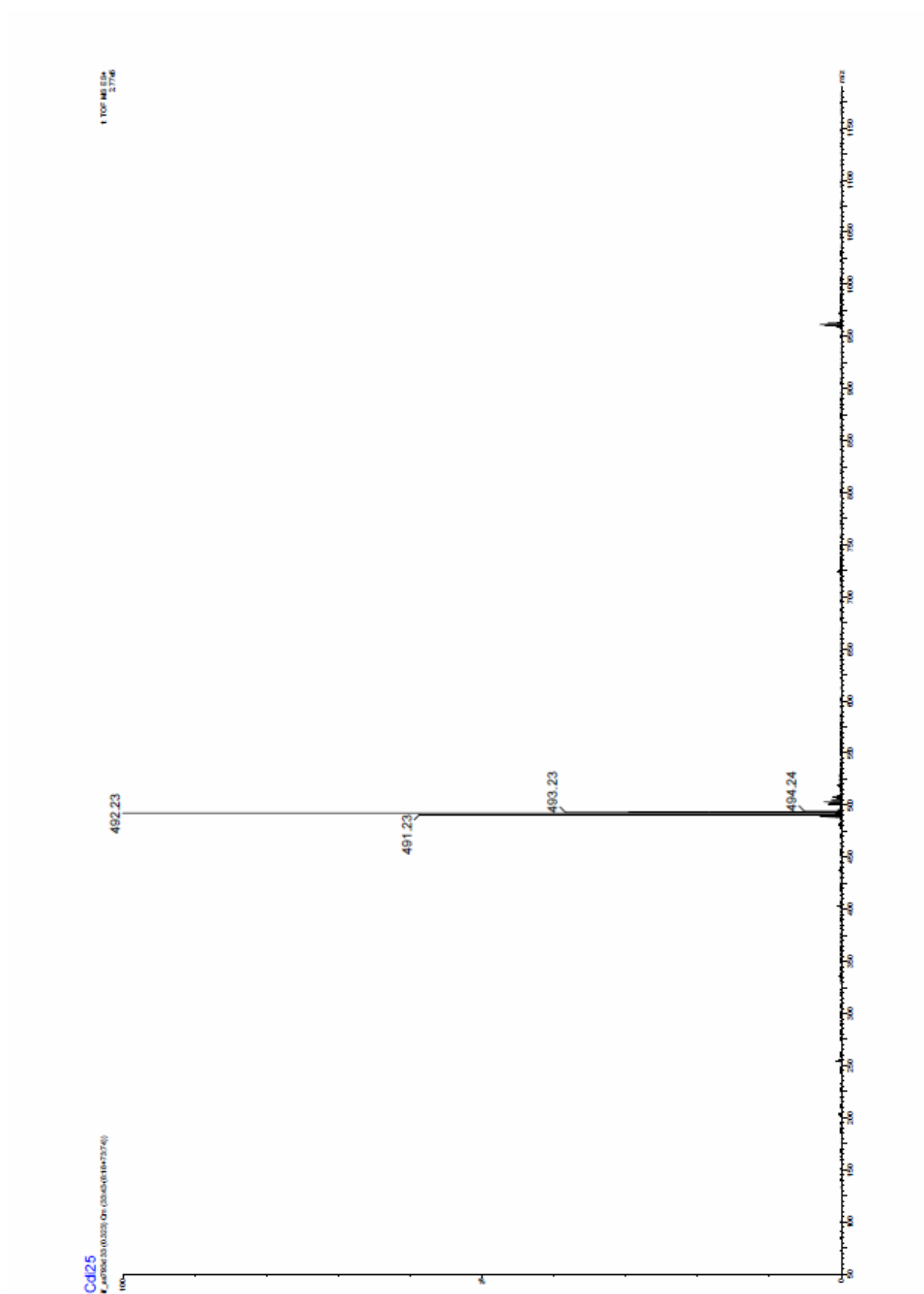


Fig. S6. HRESIMS spectrum of $4\beta,8\alpha$ -dihydroxy- 5β -isobutyryloxy- 9β -(3-methylbutyryloxy)-3-oxo-germacran- $6\alpha,12$ -olide (**3**)

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Pracownia NMR
Probka: cdi25



Current Data Parameters
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EXPNO 9
PROCNO 1

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RG 140.97
DW 78.000 usec
DE 6.50 usec
TE 296.9 K
D1 1.00000000 sec
TD0 1
SFO1 400.1728012 MHz
NUC1 1H
P1 15.25 usec
PLW1 11.30000019 W

F2 - Processing parameters

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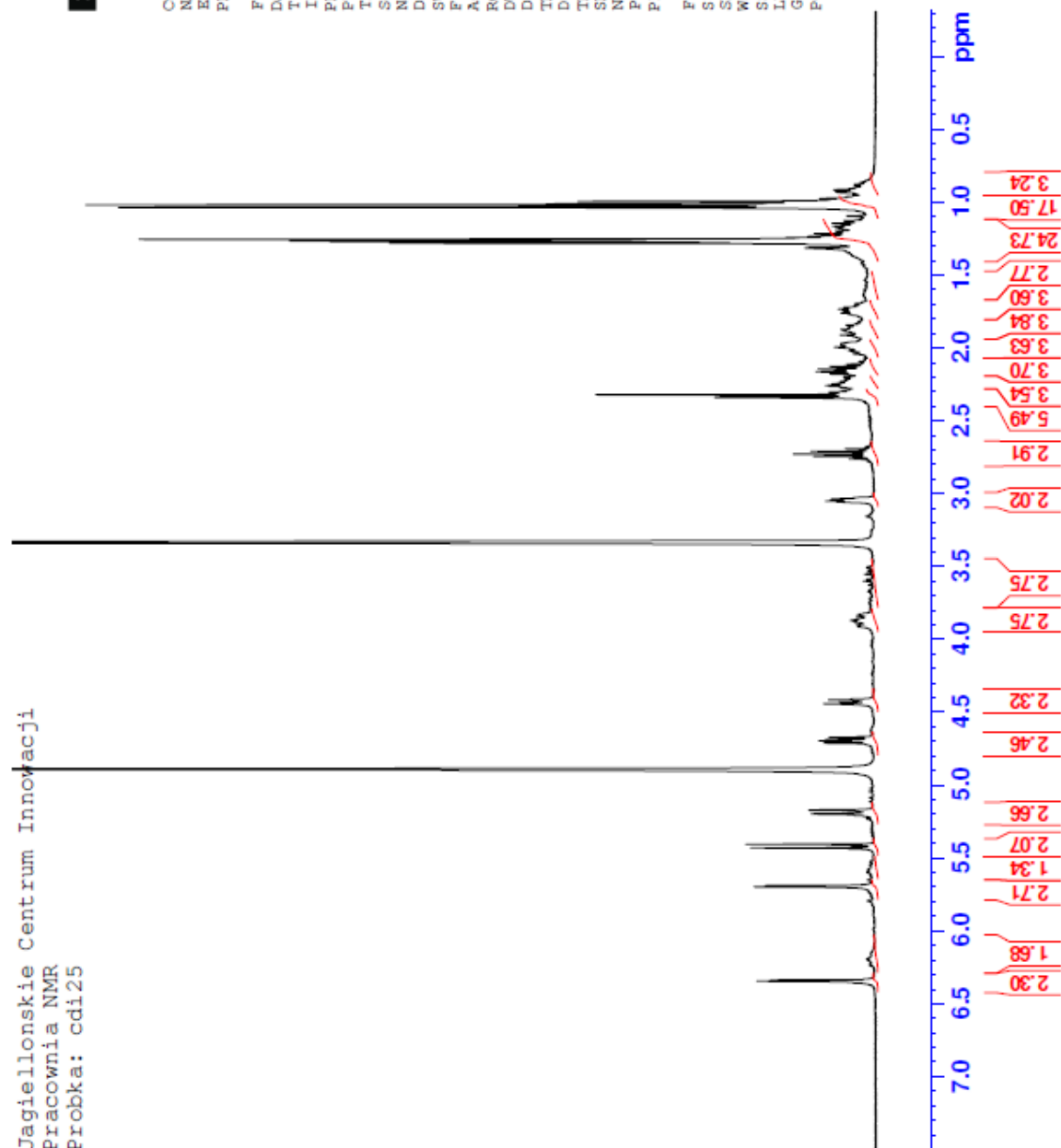


Fig. S7. ^1H NMR spectrum of **3**