

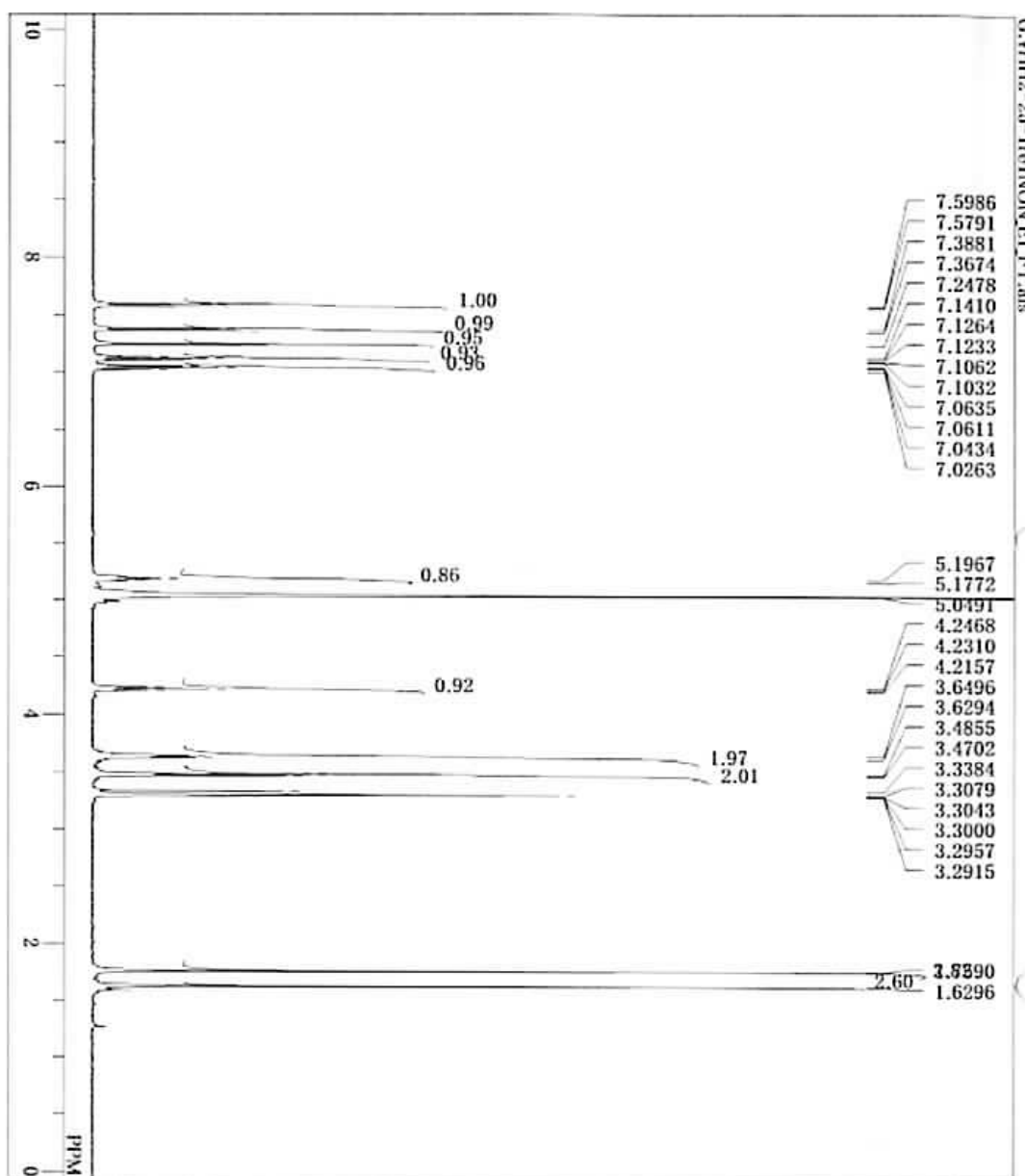
## SUPPORTING INFORMATION

### Palladium-Catalyzed mono-*N*-Allylation of Unprotected Amino Acids with 1,1-Dimethylallyl Alcohol in Water.

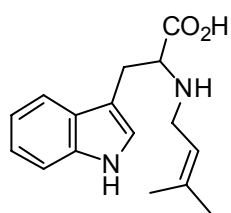
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[hidemasa.hikawa@phar.toho-u.ac.jp](mailto:hidemasa.hikawa@phar.toho-u.ac.jp)

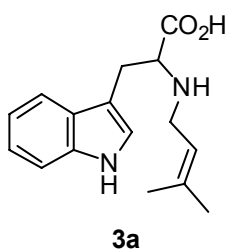
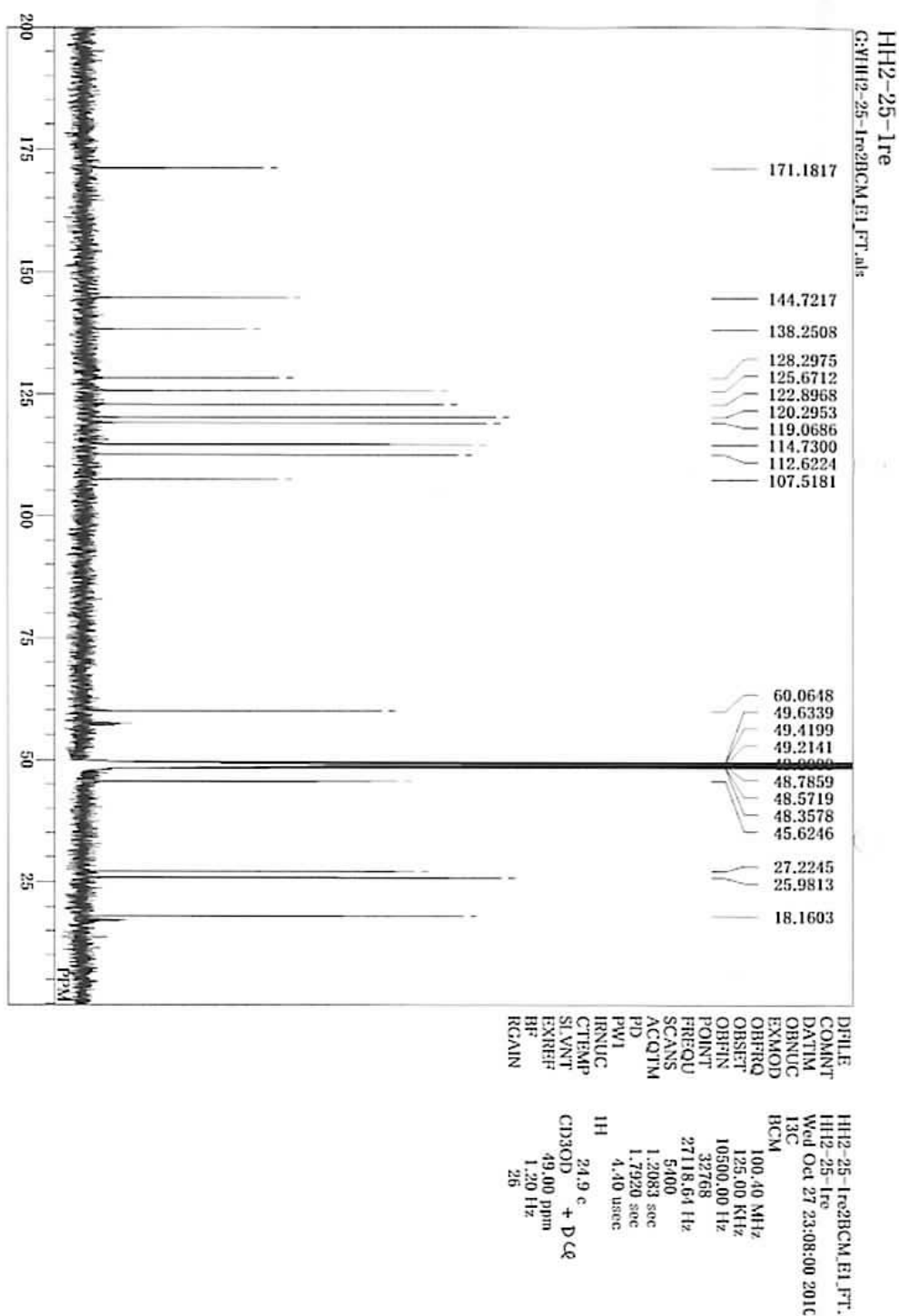
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| <b>2. Copies of HPLC analytical data: optical purity of (<i>S</i>)-3a methyl ester</b> | <b>S20</b> |

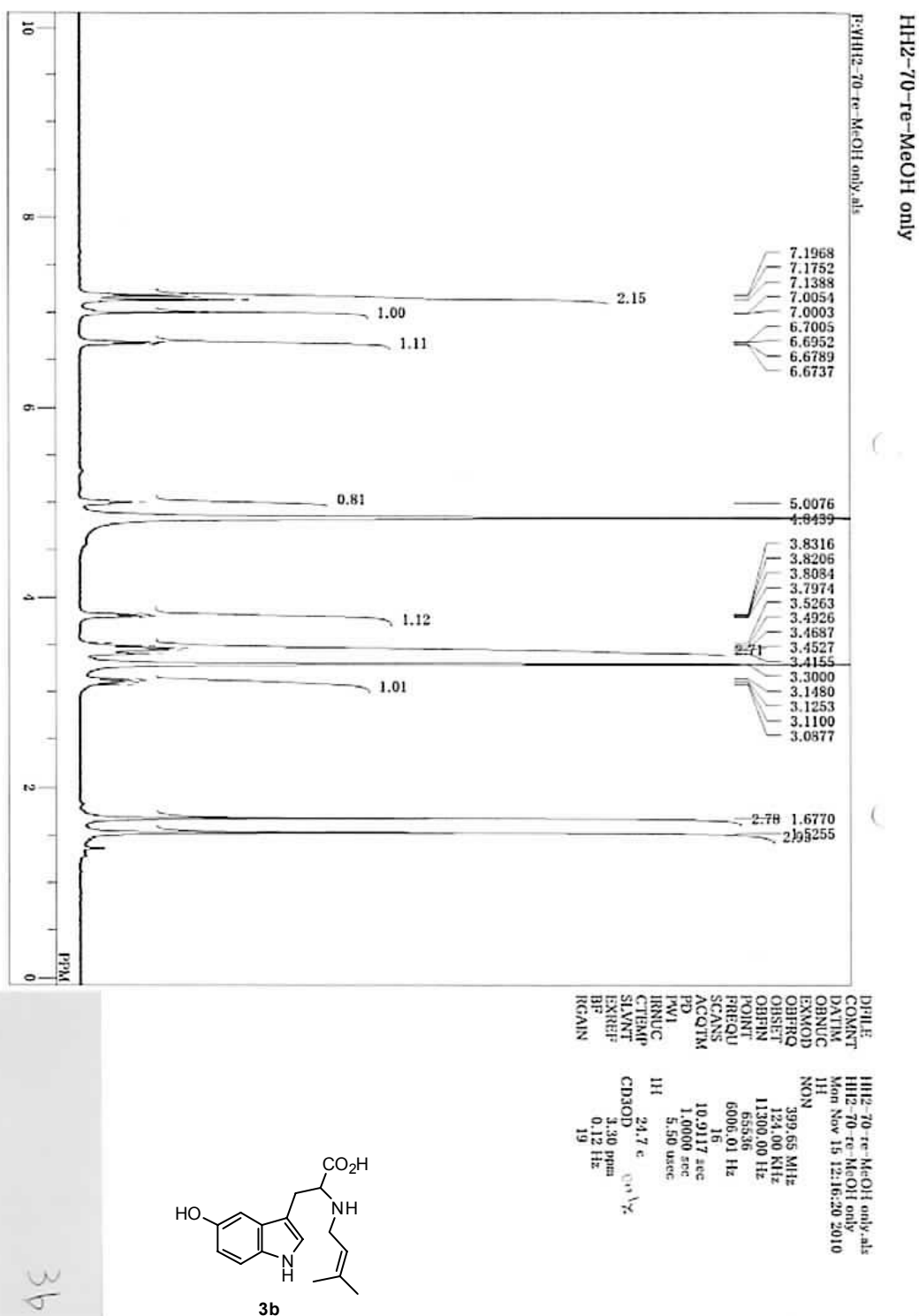


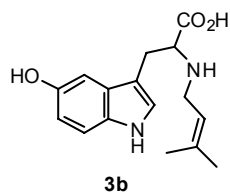
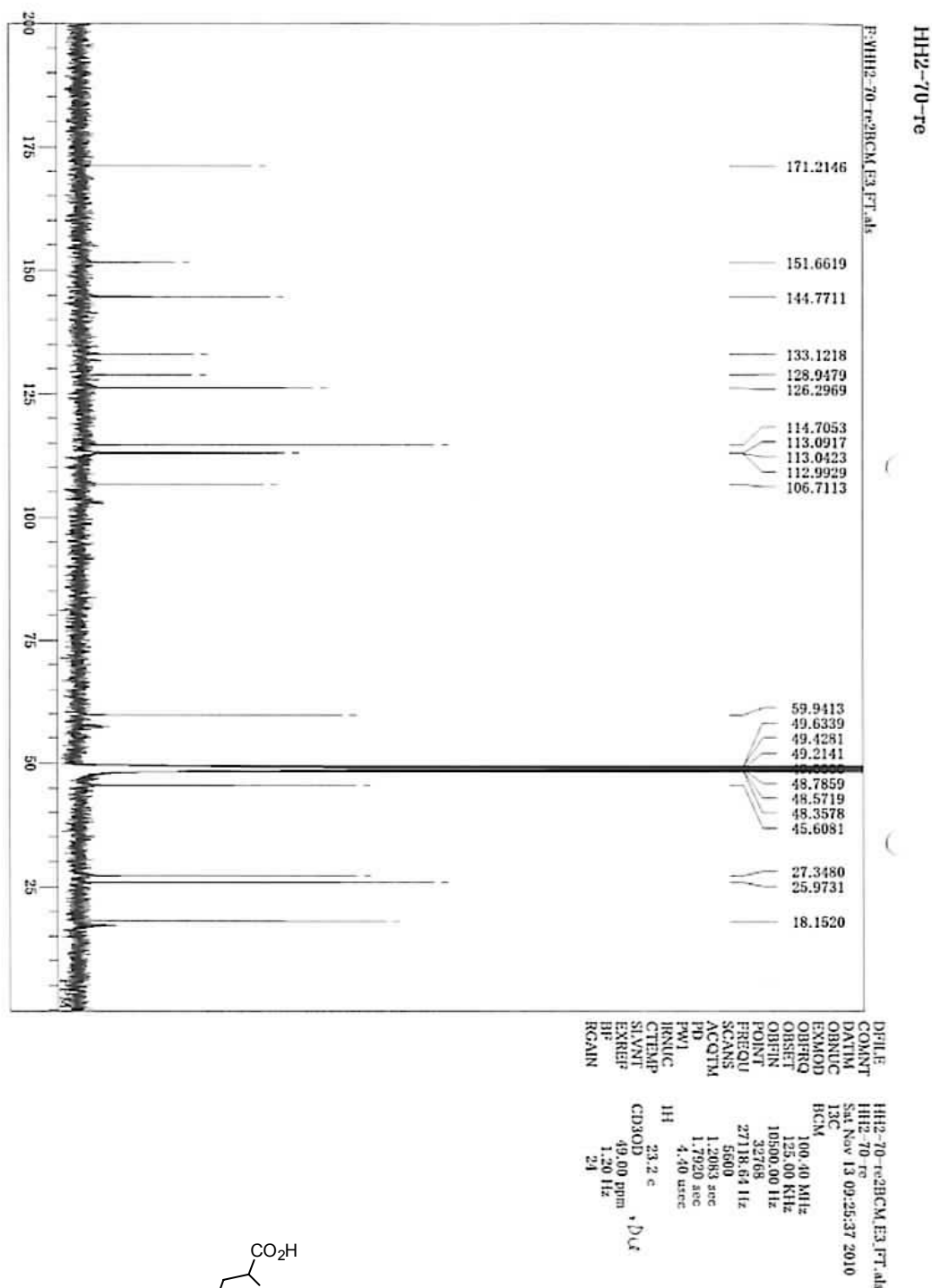
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 POINT  
 FREQU  
 SCANS  
 ACQTM  
 PD  
 PW1  
 IRNUC  
 CTEMAP  
 SLVNT  
 EXREF  
 BF  
 RGAIN  
 HH2-25-IncINON\_EL.FT.  
 HH2-25-Inc  
 Wed Oct 27 18:37:34 2010  
 HH  
 NON  
 399.65 MHz  
 124.00 KHz  
 10500.00 Hz  
 32768  
 7992.01 Hz  
 8  
 4.1001 sec  
 2.1000 sec  
 5.40 usec  
 HH  
 23.9 c  
 CD3OD + D<sub>2</sub>O  
 3.30 ppm  
 0.12 Hz  
 16

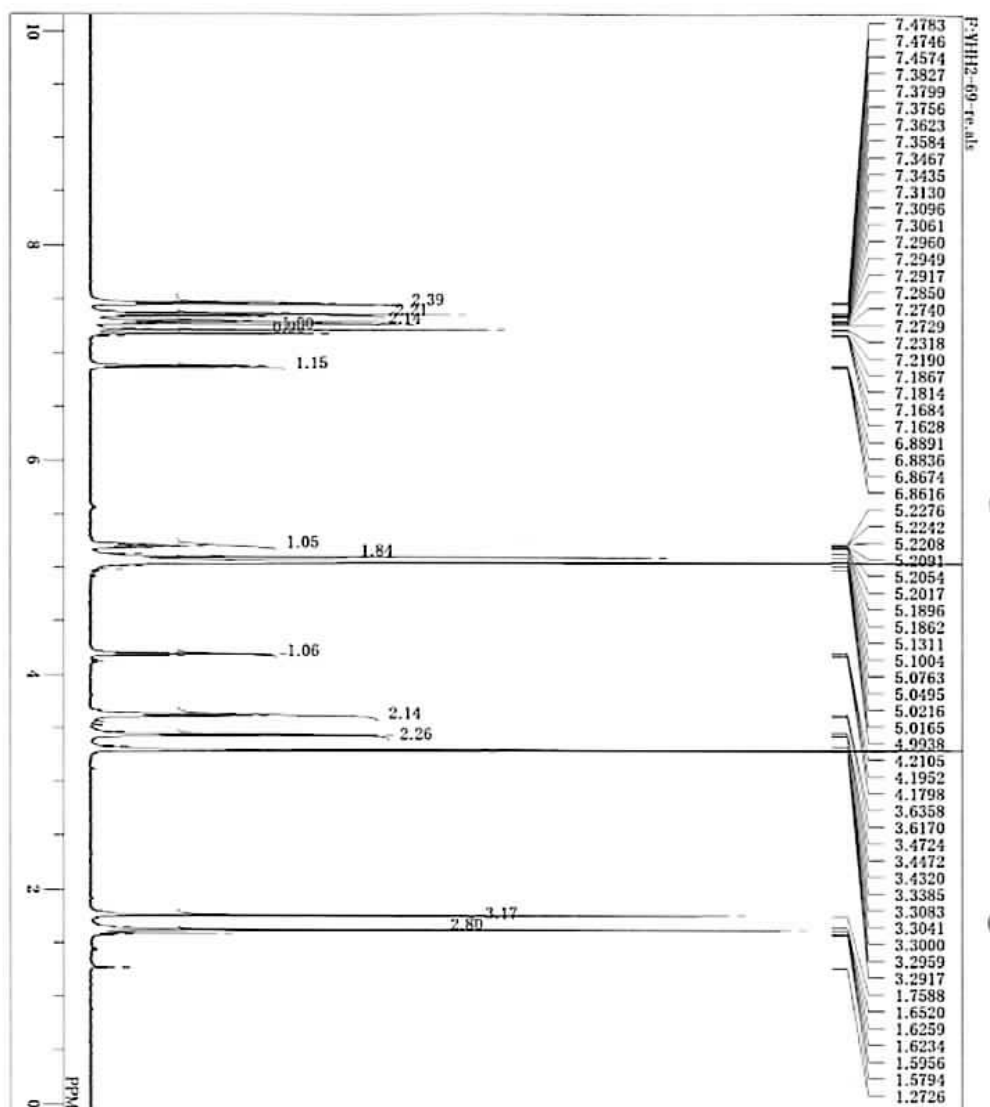


**3a**

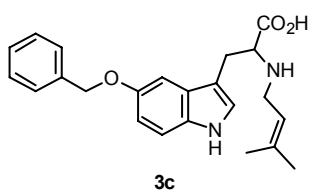




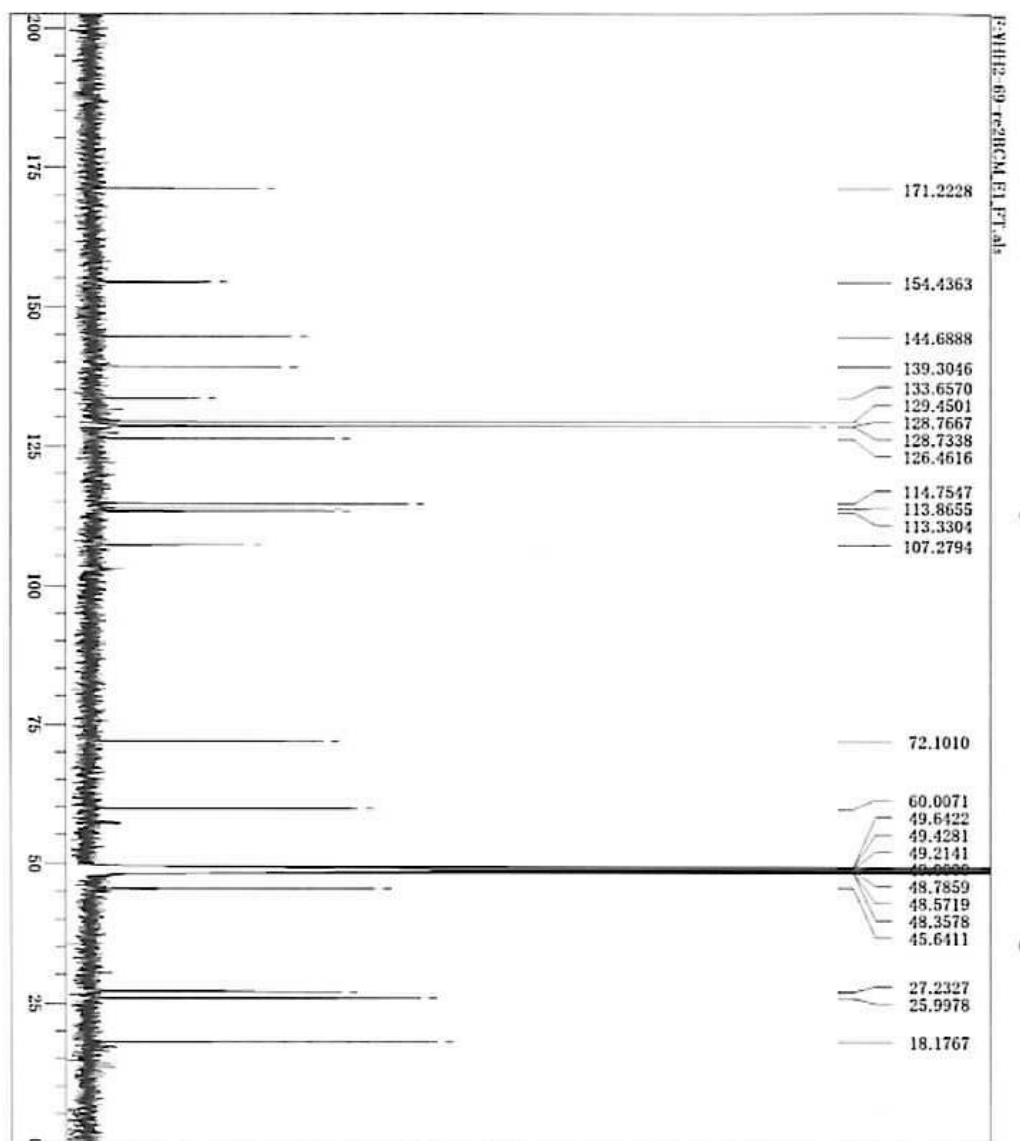




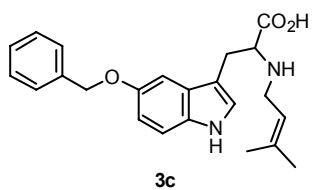
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PROCNO 1  
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OBSFQ 124.00 kHz  
OBSFQ 11300.00 Hz  
POINT 65536  
FREQ 6006.01 Hz  
SCANS 8  
AQCTM 10.9117 sec  
PD 1.0000 sec  
PWI 5.50 urec  
IRNUC 35.2 c  
CTEMP 3.30 ppm  
SLENT 0.12 Hz  
EXREP 16  
RGAIN

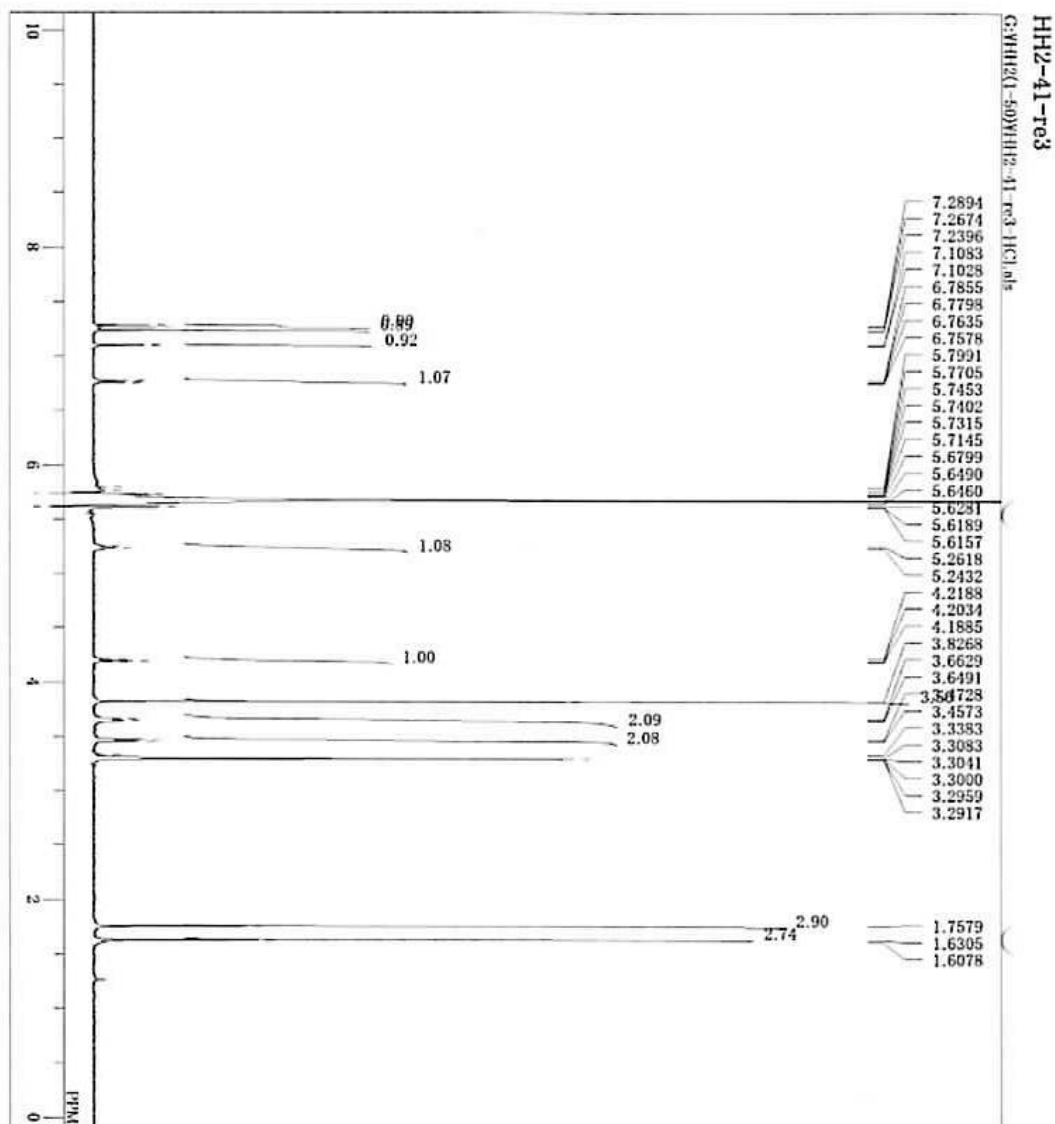


HH2-69-re

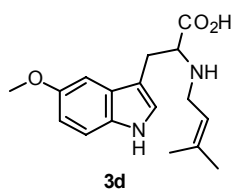


D:\FILE  
 COMMT  
 DATUM  
 13C  
 HH2-69-re  
 13C  
 100.40 MHz  
 125.00 MHz  
 10500.00 Hz  
 32768  
 27118.64 Hz  
 5600  
 1.2083 sec  
 1.7920 sec  
 4.40 usec  
 CD3OD  
 49.00 ppm  
 1.20 Hz  
 24

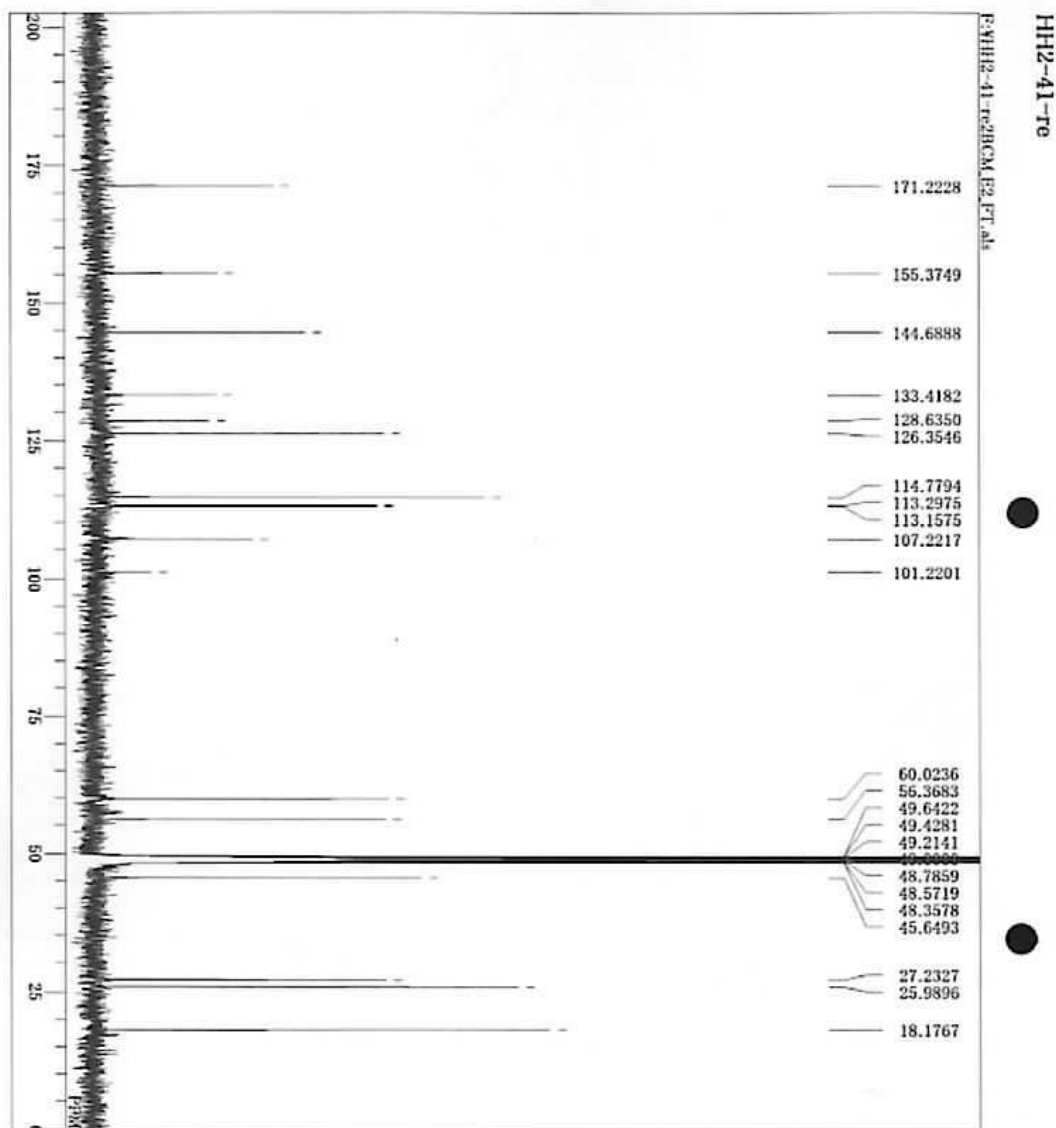




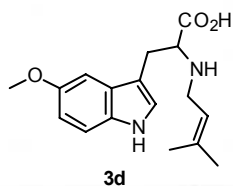
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OBSFREQ 399.65 MHz  
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OBSFN 11300.00 Hz  
POINT 65536  
FREQU 6006.01 Hz  
SCANS 8  
ACQTM 10.9117 sec  
PD 1.0000 sec  
PWL 5.50 usec  
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CTEMP 23.5 c  
SLVNT CDCl3 + PCl2  
EXREF 3.30 ppm  
BF 0.12 Hz  
RGAIN 15

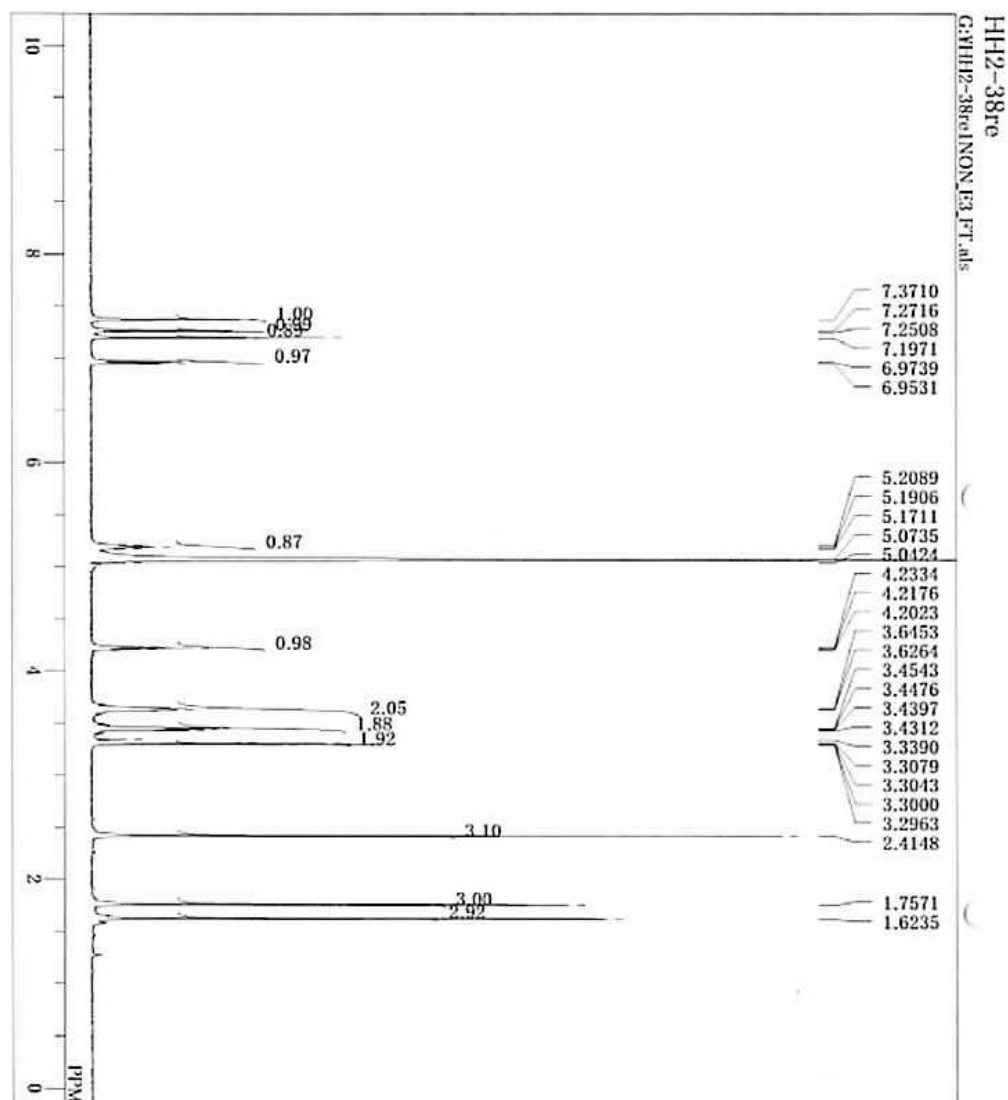




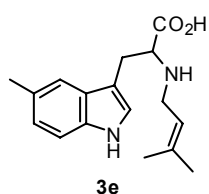


DFILE HH2-41-te2BCM.E2.FT.MS  
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 EXMROD BCM  
 OBRQ 100.40 MHz  
 OBSF 125.00 kHz  
 OBFN 10500.00 Hz  
 POINT 32768  
 FREQU 271.864 MHz  
 SCANS 5600  
 ACQTM 1.2083 sec  
 PD 1.7920 sec  
 PWT 4.40 usec  
 IRNUC 1H  
 CTEMP 24.0 c  
 STVNT CD3OD  
 EXREF 49.00 ppm  
 BP 1.20 Hz  
 RGAIN 24

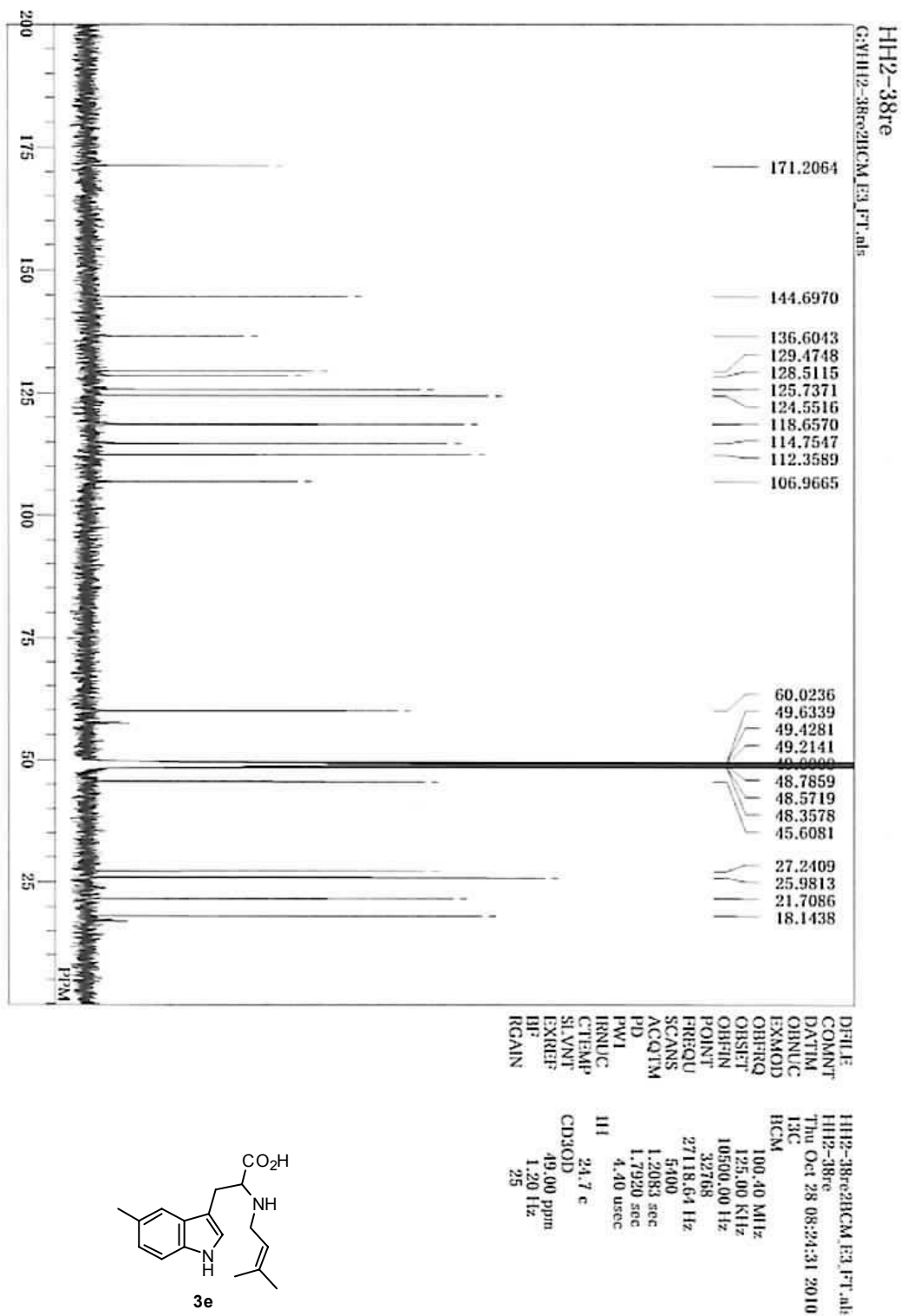


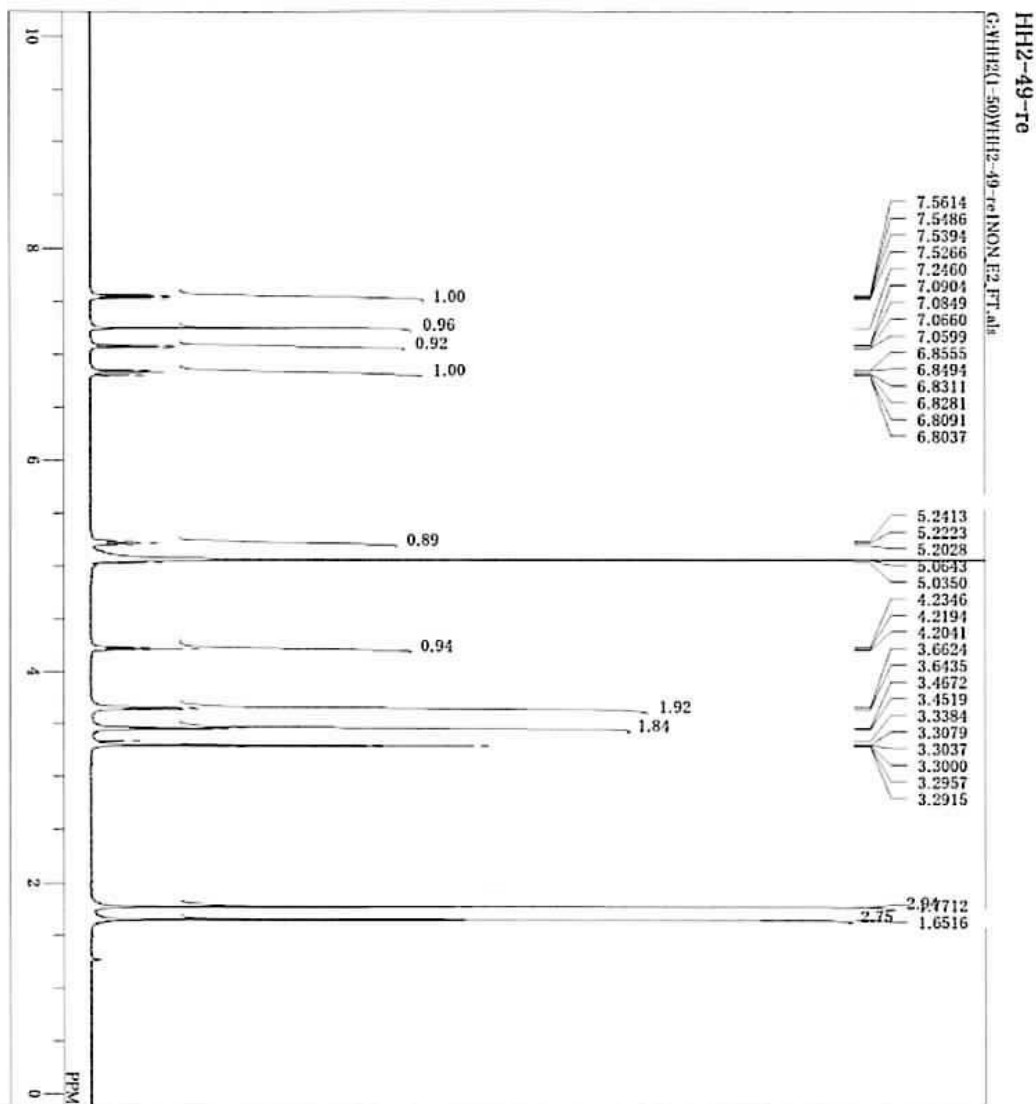


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 EXMOD NON  
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 OHSET 124.00 kHz  
 ORPIN 10500.00 Hz  
 POINT 32768  
 FREQU 7992.01 Hz  
 SCANS 8  
 ACQTM 4.1001 sec  
 PD 2.9000 sec  
 PVI 5.40 usec  
 HRNUC 1H  
 CTEMP 24.3 c  
 SLVNT CD3OD  
 EXREF 3.30 ppm  
 RF 0.12 Hz  
 RGAIN 16

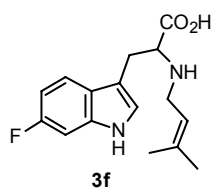


3e

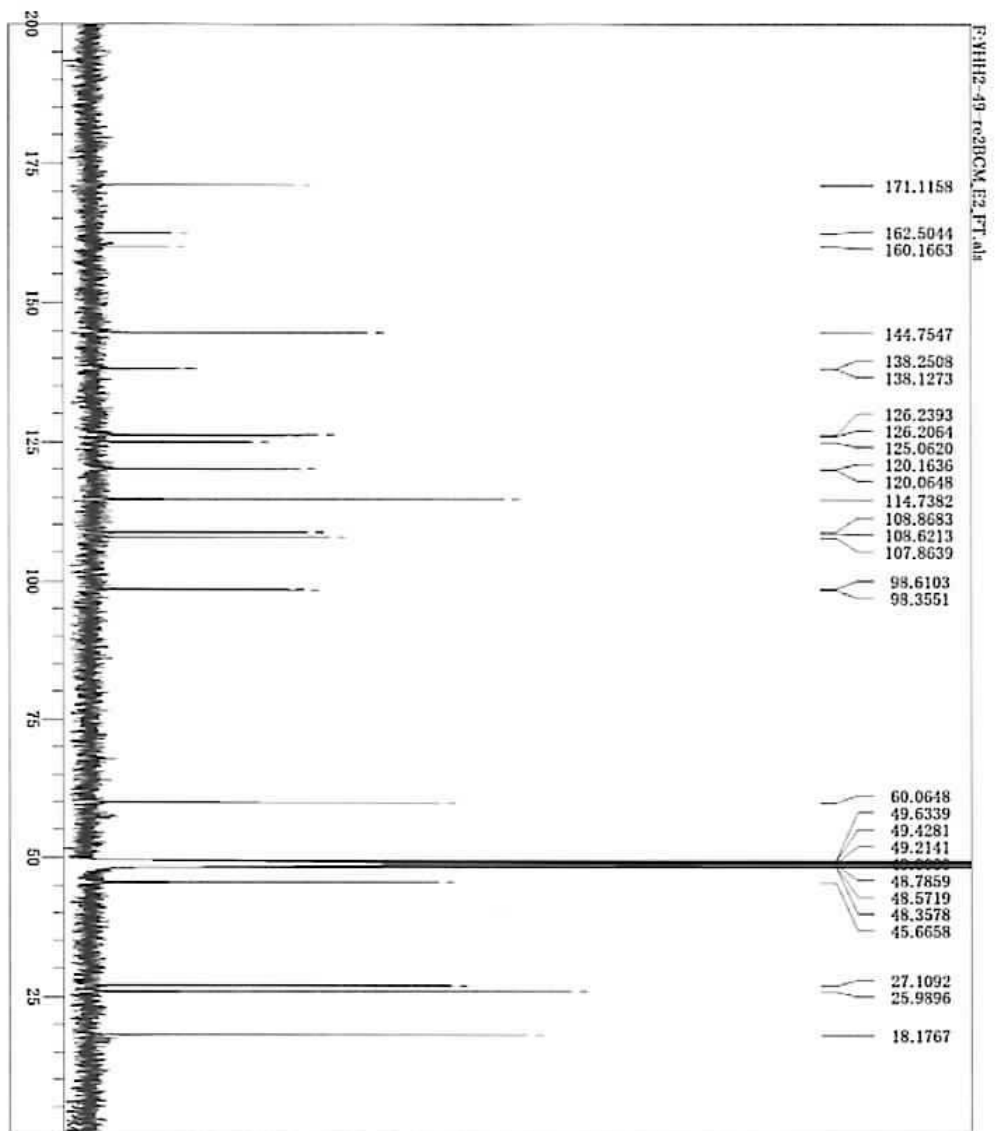




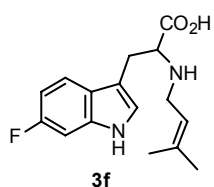
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SOLVENT: CDCl3  
PULPROG: zgpg30  
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F1 - F2: 124.00 kHz  
F2 - F3: 10500.00 Hz  
F3 - F4: 32768  
POINT: 8  
FREQ: 7992.01 Hz  
SCANS: 8  
ACQTM: 4.1001 sec  
PD: 2.9000 sec  
PWL: 5.40 usec  
IRNUC: 1H  
CTEMP: 23.4 °C  
SLOTT: 3.30 ppm  
EXREF: 0.12 Hz  
BP: 17  
RGAIN: 17



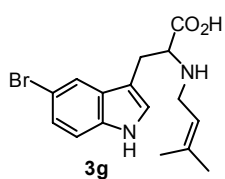
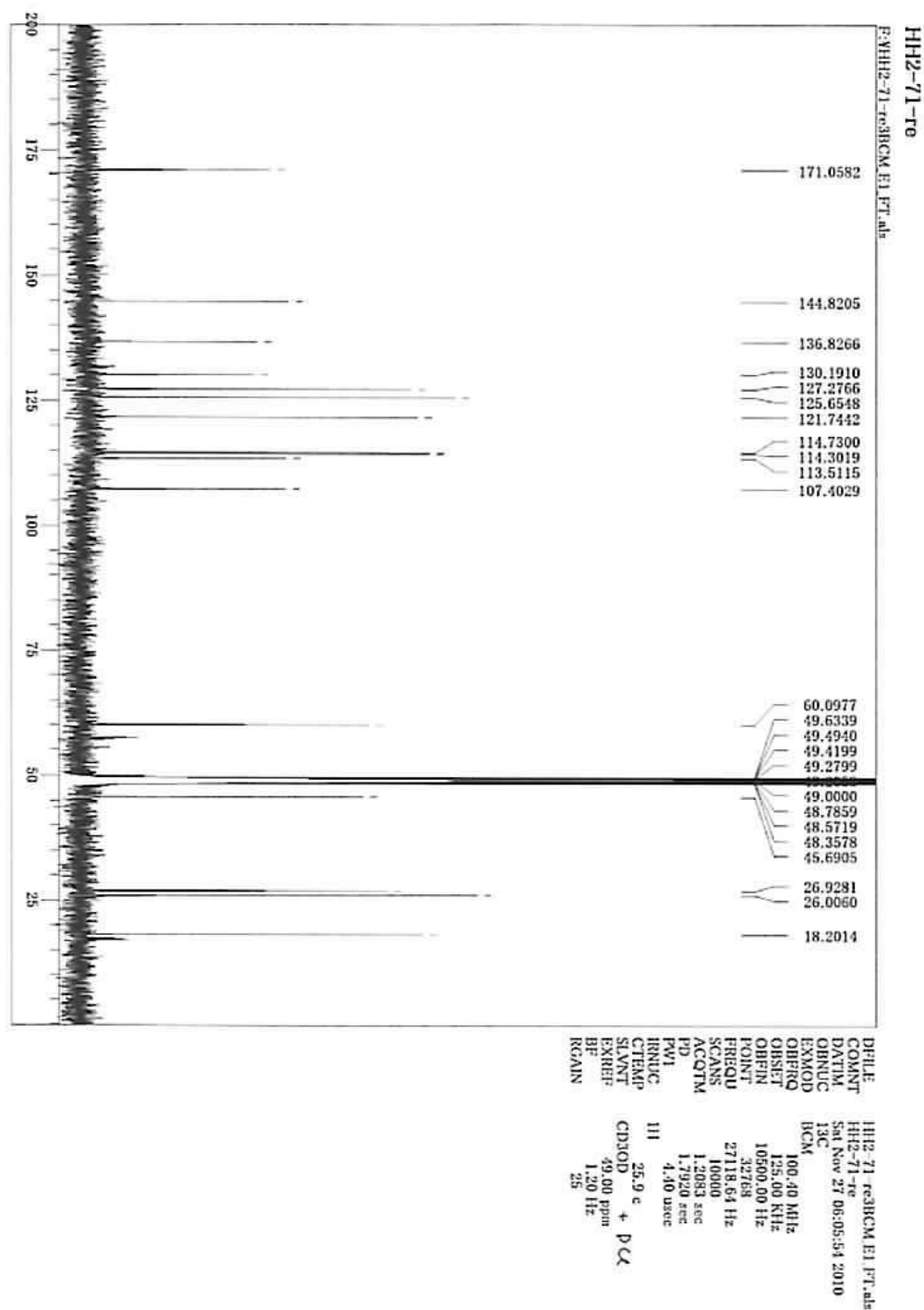
HH2-49-re

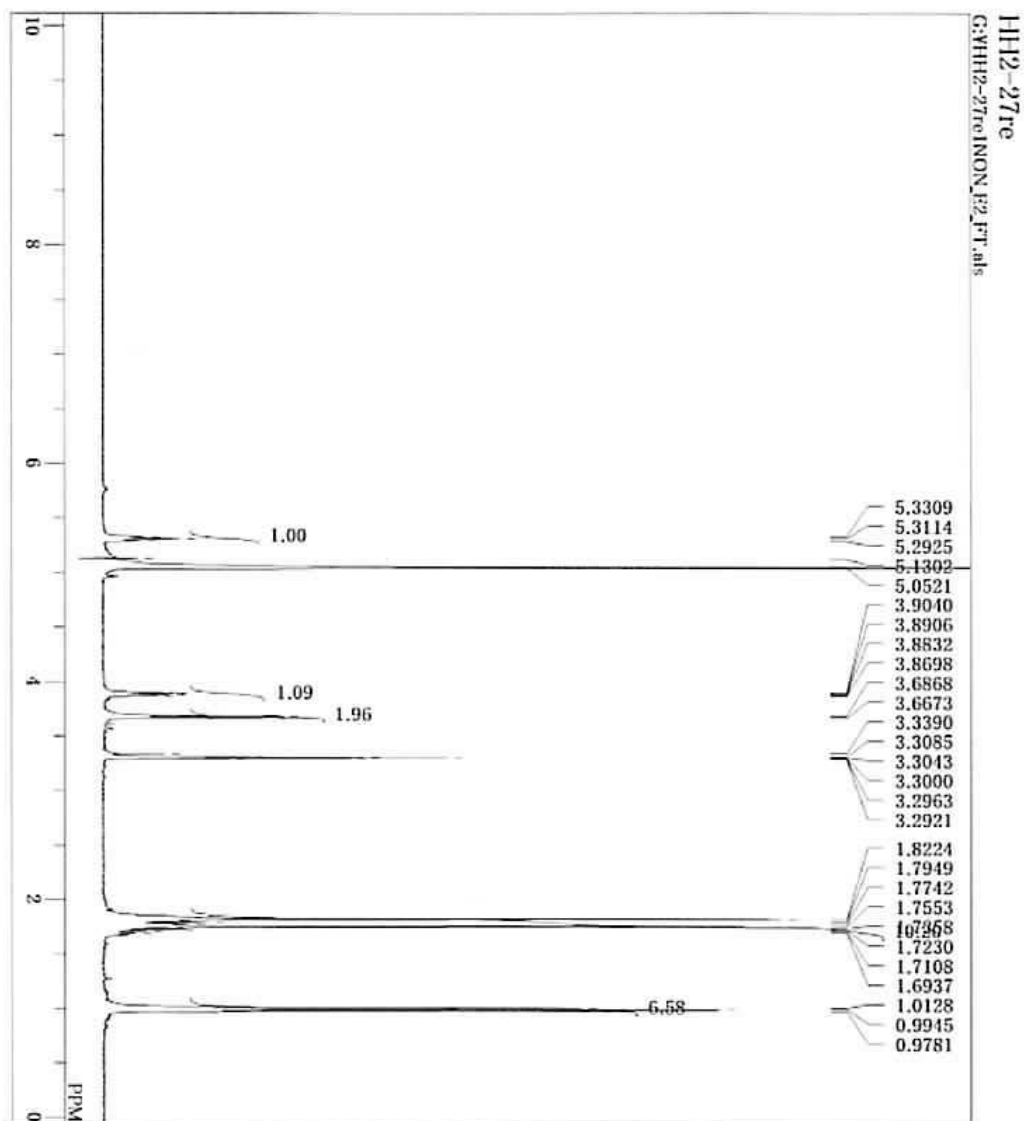


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 EXMOD BCM  
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 OUPIN 125.00 MHz  
 POINT 10500.00 Hz  
 FREQ 32768  
 SCANS 27118.64 Hz  
 ACQTM 5600  
 PD 1.2083 sec  
 1.7920 sec  
 PM1 4.40 urec  
 IRNUC 1H  
 CTEMP 23.8 c  
 SLEVP CD3OD  
 EXIDF 49.00 ppm  
 BP 1.20 Hz  
 RGAIN 25

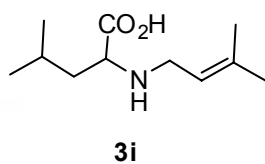




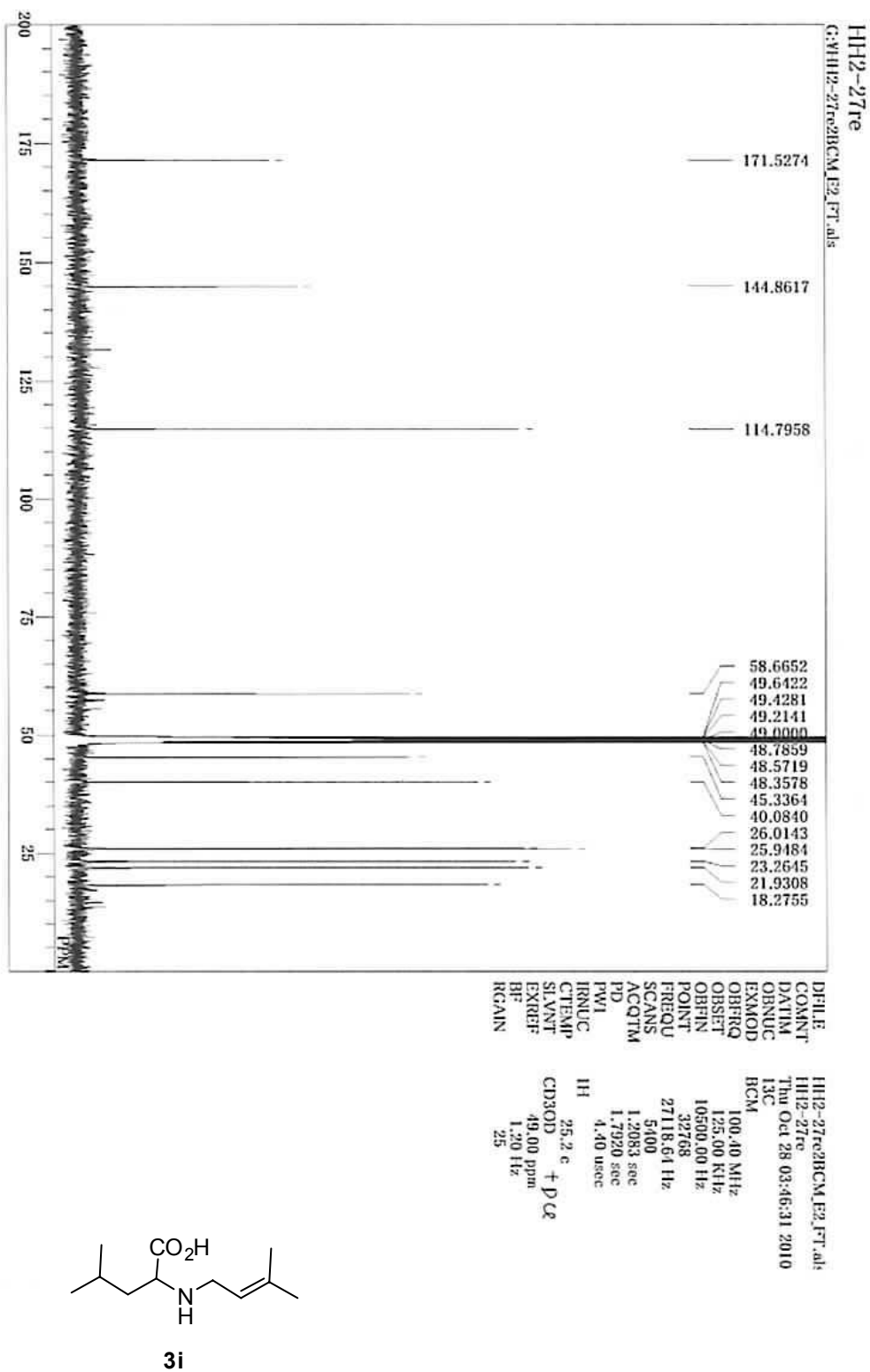


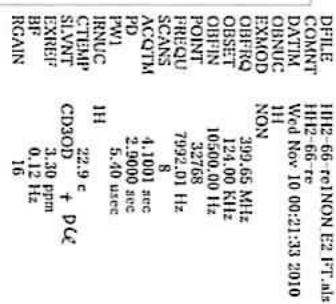


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 ORSET: 124.00 KHz  
 OHFIR: 10500.00 Hz  
 POINT: 32768  
 FREQU: 7992.01 Hz  
 SCANS: 8  
 ACQTM: 4.1001 sec  
 PD: 2.5000 sec  
 PW1: 5.40 usec  
 IRNUC: 1H  
 CTEMP: 24.9 c + p.c.  
 SLVNT: CD3OD  
 EXREF: 3.30 ppm  
 RF: 0.12 Hz  
 RGAIN: 16

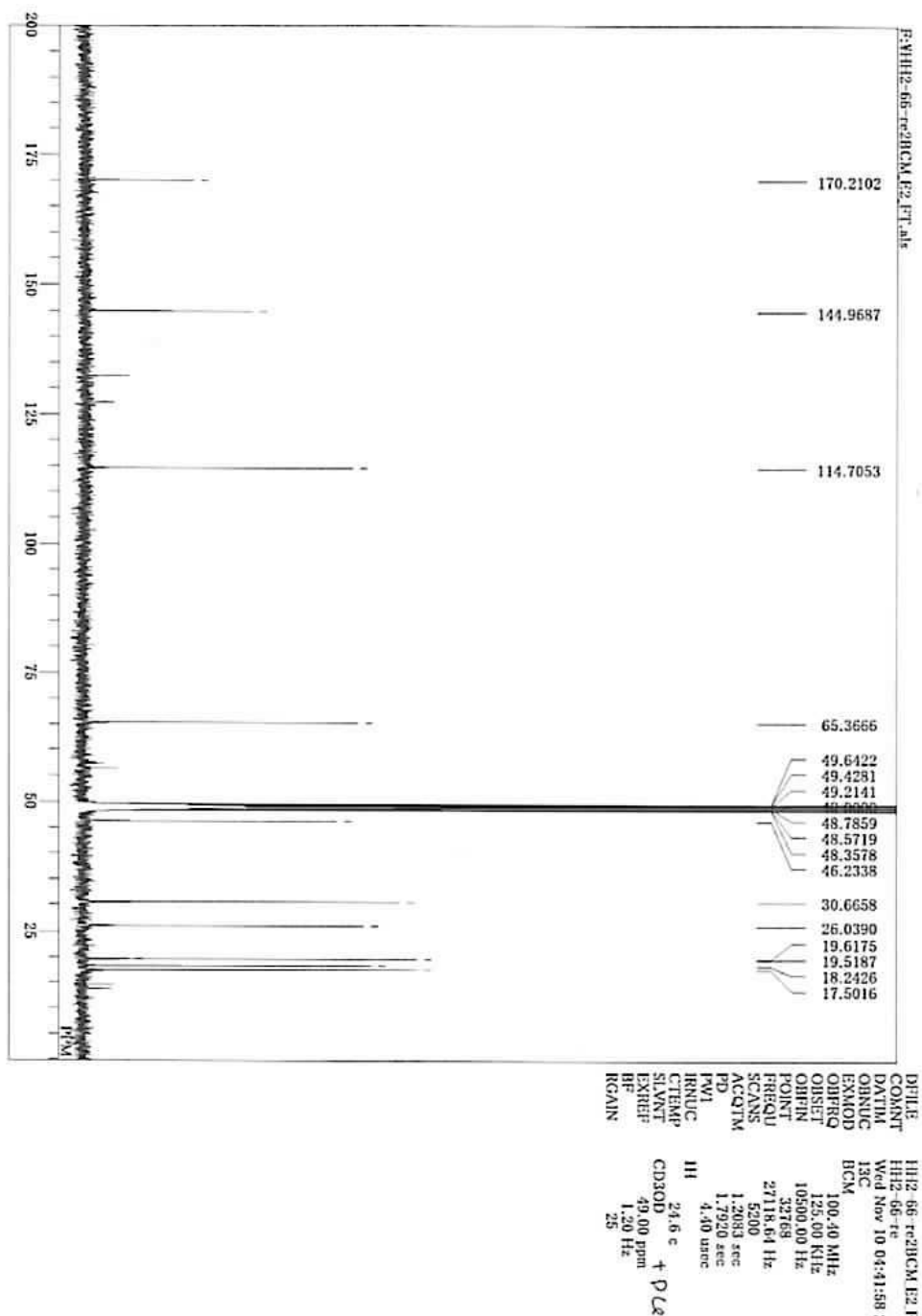






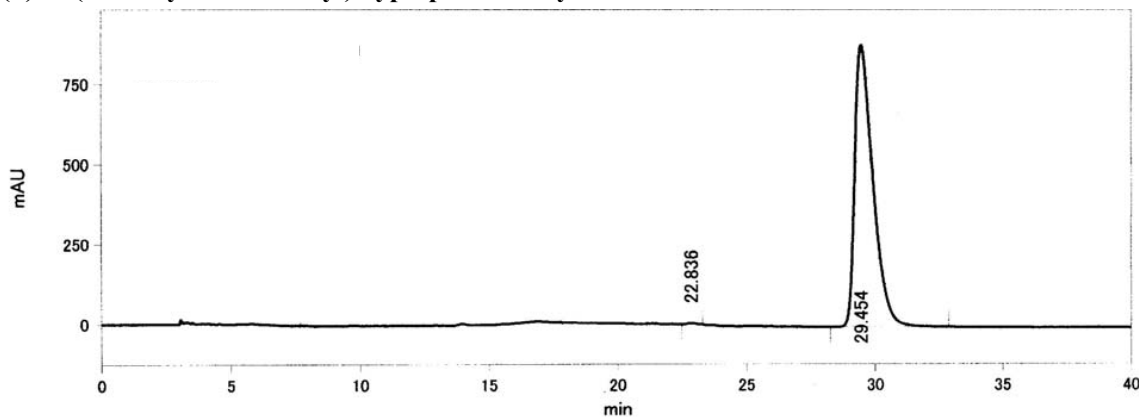


HH2-66-re



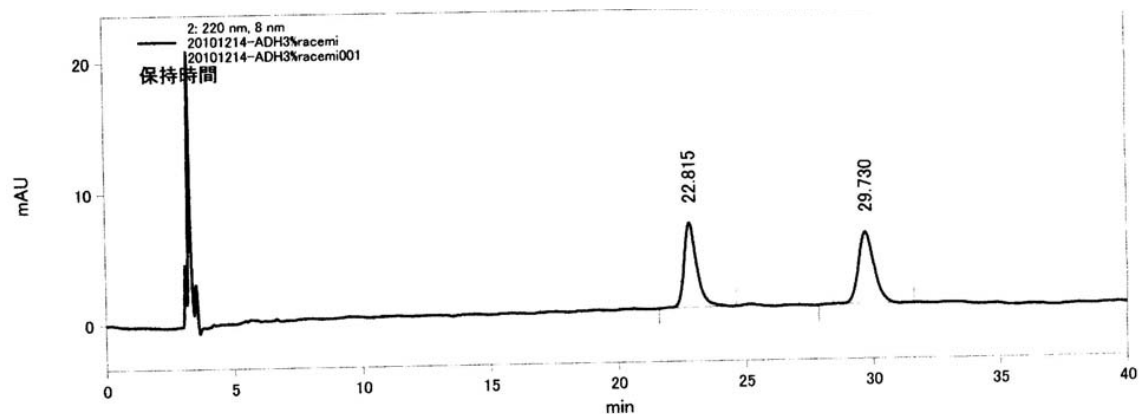
# Determination of optical purity of (S)-3a

## (S)-N-(3-methyl-2-buten-1-yl)tryptophan methyl ester



| Retention time (min) | Area% |
|----------------------|-------|
| 22.836               | 0.24  |
| 29.454               | 99.76 |

## racemate



## HPLC conditions

CHIRALCEL AD-H, *n*-hexane/EtOH=97/3, 1.0 mL/min, 220 nm (UV), column temp.: 28 °C