

Supporting Information – NMR Spectra

The Cephalostatins 21. Synthesis of Bis-steroidal Pyrazine Rhamnosides

George R. Pettit, Ricardo F. Mendonça, John C. Knight, and Robin K. Pettit*

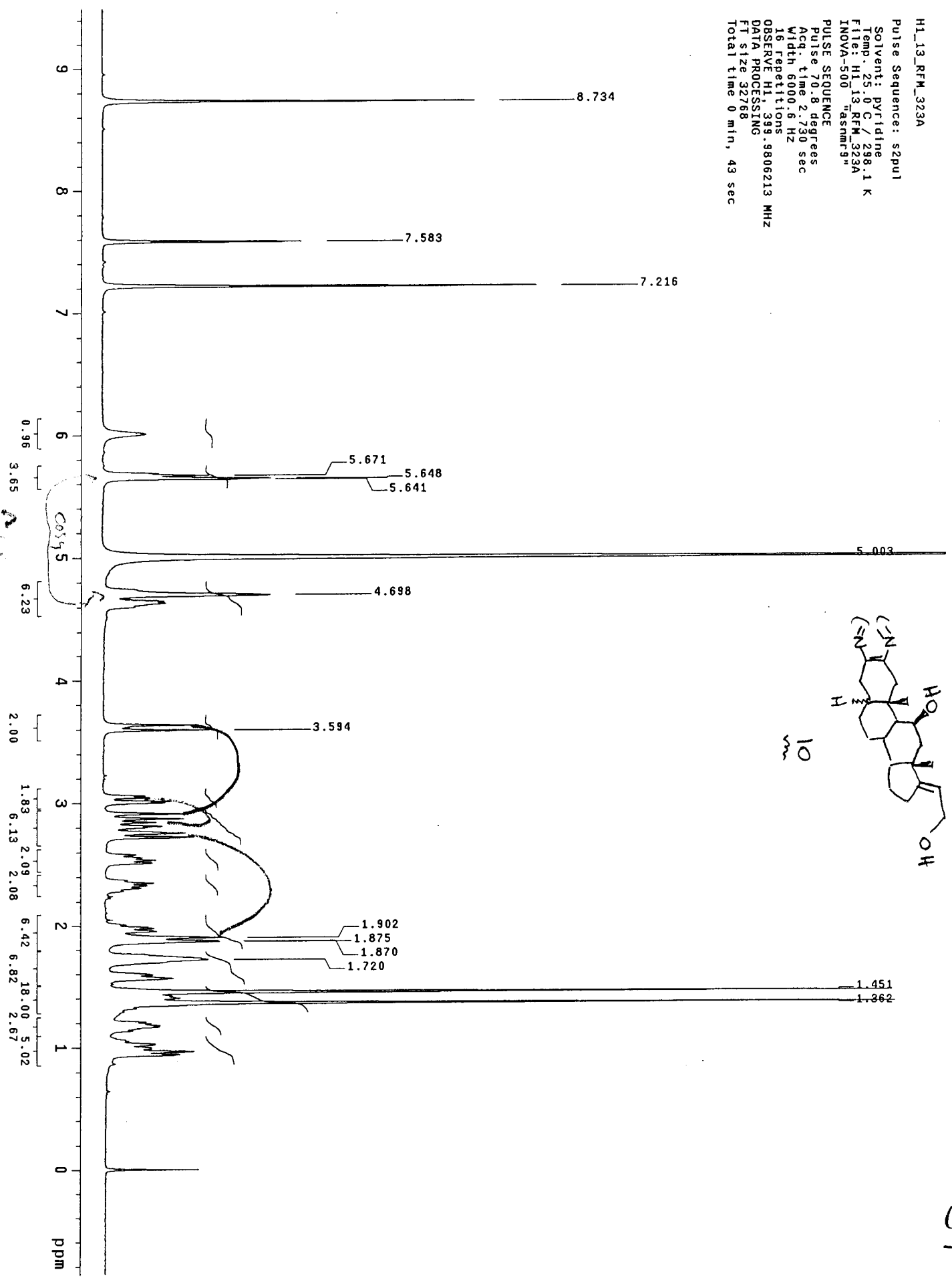
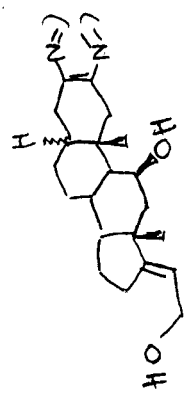
Cancer Research Institute and Department of Chemistry and Biochemistry, Arizona State
University, P.O. Box 871604, Tempe, Arizona 85287-1604

S1. ¹H NMR (C₅D₅N, 400 MHz) spectrum of bis-steroidal pyrazine **10**.

S2. ¹H NMR (C₅D₅N, 400 MHz) spectrum of α-L-rhamnoside orthoester **17b**.

S3. ¹H NMR (C₅D₅N, 400 MHz) spectrum of α-L-rhamnoside dimer **21c**.

H1_13_RFM_323A
Pulse Sequence: s2pul
Solvent: pyridine
Temp: 25.0 C / 298.1 K
File: H1_13_RFM_323A
INOVA-500 "asnmr3"
PULSE SEQUENCE
Pulse 70.8 degrees
Acq time 2.730 sec
Width 6000.6 Hz
16 repetitions
OBSERVE H1, 399.9806213 MHz
DATA PROCESSING
F1 size 32768
Total time 0 min, 43 sec



H1_187_RFM_323A, 5mg, d5-py, 3mm natorac, 400 mhz, vm

Data Collected on: asmr6-inova500
Archive directory: /home/pettit/vnmrSYS/data
Sample directory:

File: H1_187_RFM_323A

Pulse Sequence: s2pul

Solvent: Pyridine

Temp. 25.0 C / 298.1 K

Relax. delay 10.000 sec

Pulse 76.4 degrees

Acq. time 2.730 sec

Width 6000.6 Hz

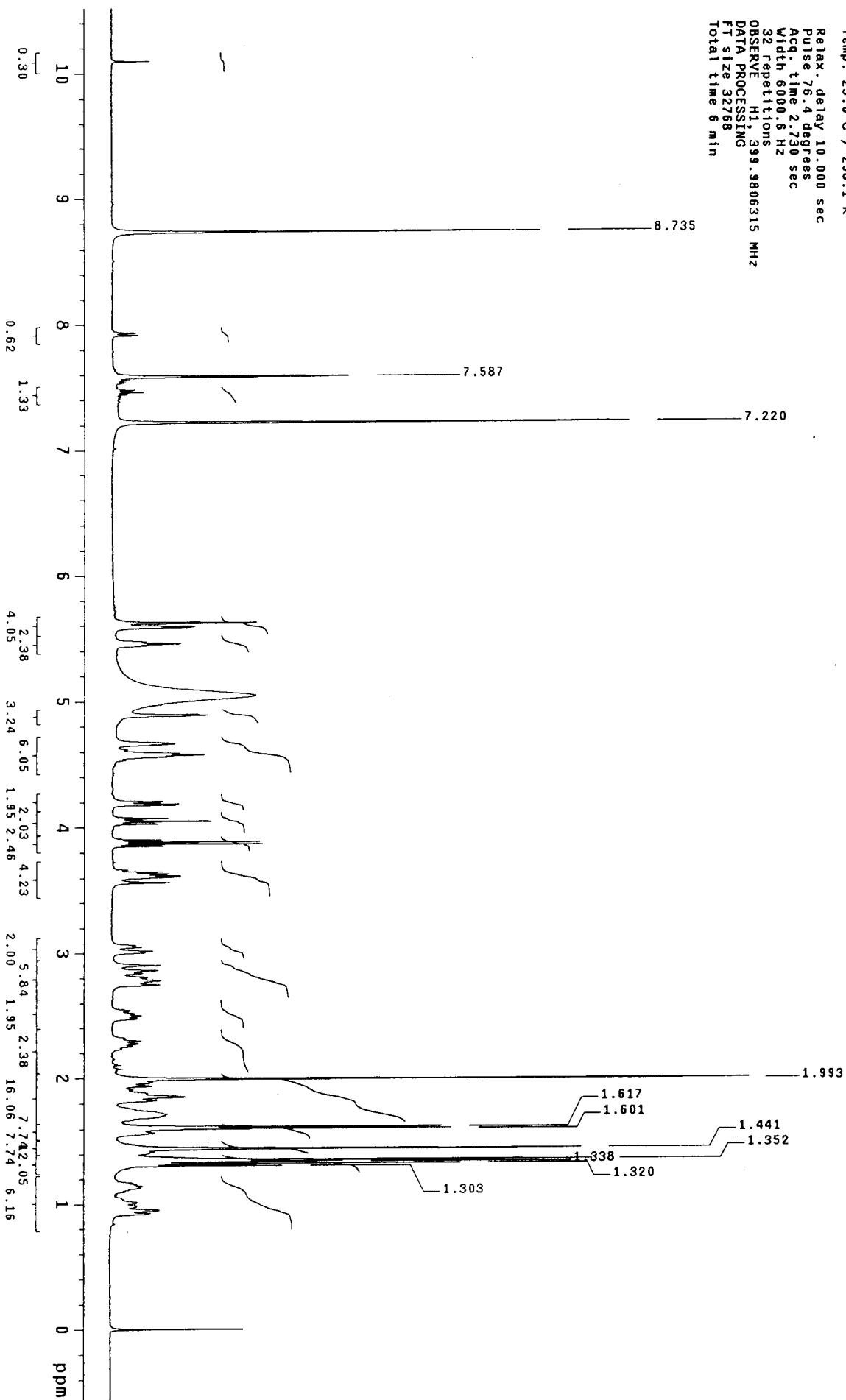
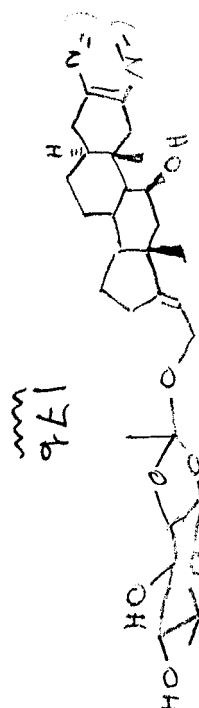
32 repetitions

OBSERVE H1: 399.9606315 MHz

DATA PROCESSING

FT size 32768

Total time 6 min



HL_245_RFM_323A, 4 mg, d5-py, pfg, 400 mhz, 071404, vm

Data Collected on:

ashmr6-inova500

Archive directory:

/home/petit/vnmr/sys/data

Sample directory:

File: HL_245_RFM_323A

Pulse Sequence: szpul

Solvent: Pyridine

Temp: 25.0 C / 298.1 K

Relax. delay 10.000 sec

Pulse 68.0 degrees

Acq. time 2.730 sec

Width 6000.6 Hz

32 repetitions

OBSERVE H1, 399.9812456 MHz

DATA PROCESSING

FT size 32768

Total time 6 min

