Supporting Information

1,2-Migration of 2'-Oxoalkyl Group and Concomitant Synthesis of 2-C-Branched O-, S-Glycosides and Glycosyl Azides via 1,2-Cyclopropanated sugars

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Running Title: 2-C-Branched O-, S-Glycosides and Glycosyl Azides

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General methods. ^1H and ^{13}C NMR spectra were recorded in CDCl_3 at 400 MHz and 100 MHz, respectively, at 293 K unless otherwise noted. Chemical shifts were given in ppm downfield to the signal of internal TMS in CDCl_3 , and were assigned on the basis of 2D ^1H -COSY and ^1H - ^{13}C chemical-shift correlated experiments.

F1 (ppm)

(COSY)

(12)

F1 (ppm)

(COSY)

(12-D)

(COSY)

(NOESY)

(HSQC)

beta Glucose aldehyde

Archive directory: /export/home/vnmr2/vnmrsws/data
Sample directory: SE/se_beta_glu_ald_18Apr2003

Pulse Sequence: gCOSY

Solvent: CDCl3
Temp. 25.0 C / 298.1 K
File: gCOSY
INNOVA-400 "ibz400"

Relax. delay 1.000 sec
Acq. time 0.160 sec
Width 6387.7 Hz
2D Width 6387.7 Hz
4 repetitions
128 increments

OBSERVE H1, 399.8919989 MHz
DATA PROCESSING
Sq. sine bell 0.080 sec
F1 DATA PROCESSING
Sq. sine bell 0.020 sec
FT size 2048 x 2048
Total time 10 min, 24 sec

(30)

(30)

beta Glucose aldehyde

Archive directory: /export/home/vnmr2/vnmrsws/data
Sample directory: SE/se_beta_glu_ald_18Apr2003

Pulse Sequence: TOCSY

Solvent: CDCl₃
Temp. 25.0 C / 298.1 K
File: TOCSY
INOVA-400 "iba400"

Relax. delay 1.000 sec
Mixing 0.080 sec
Acq. time 0.160 sec
Width 6387.7 Hz
2D Width 6387.7 Hz
64 repetitions
2 K 200 increments
OBSERVE H1, 399.8919989 MHz
DATA PROCESSING
Gauss apodization 0.074 sec
F1 DATA PROCESSING
Gauss apodization 0.029 sec
FT size 2048 x 2048
Total time 9 hr, 7 min, 38 sec

(30)