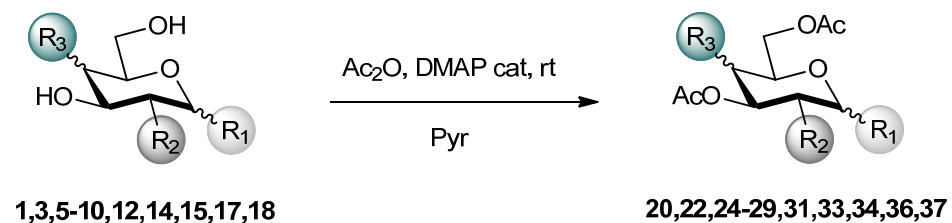


Table 1: Per-*O*-acetylation of carbohydrates.



Substrate	R1	R2	R3 ^b	X	Product	Yield	TLC ^c
1	αOH	OH	eq OH	single	20	95 ^d	Hexane:AcOEt 5:5 v/v
2	βOH	OH	eq OH	single	21	ND ^d	Hexane:AcOEt 5:5 v/v
3	αOH	NHAc	eq OH	single	22	96 ^d	CH ₂ Cl ₂ :MeOH 95:5 v/v
4	βOH	NHAc	eq OH	single	23	ND ^d	CH ₂ Cl ₂ :MeOH 95:5 v/v
5	βOMe	OH	eq OH	single	24	ND ^d	Hexane:AcOEt 4:6 v/v
6	βOBu	OH	eq OH	single	25	97	Hexane:AcOEt 4:6 v/v
7	βOPh	OH	eq OH	single	26	ND ^d	Hexane:AcOEt 4:6 v/v

8	β OPhNO ₂	OH	eq OH	single	27	ND ^d	Hexane:AcOEt 4:6 v/v
9	β OPhNO ₂	NHAc	eq OH	single	28	ND ^d	CH ₂ Cl ₂ :MeOH 95:5 v/v
10^a	β OPhNO ₂	OAc	eq OH	single	29	ND ^d	Hexane:AcOEt 4:6 v/v
11	H	H	eq OH	double	30	ND ^d	Hexane:AcOEt 5:5 v/v
12	α OH	OH	ax OH	single	31	98	Hexane:AcOEt 5:5 v/v
13	β OH	OH	ax OH	single	32	ND ^d	Hexane:AcOEt 5:5 v/v
14	α OH	NHAc	ax OH	single	33	98	CH ₂ Cl ₂ :MeOH 95:5 v/v
15	β SProp _{iso}	OH	ax OH	single	34	95	Hexane:AcOEt 5:5 v/v
16	H	H	ax OH	double	35	ND ^d	Hexane:AcOEt 5:5 v/v
17	OH	OH	eqGal	single	36	ND ^d	MeOH:Toluene 1:9 v/v
18	β OMe	NHAc	eqGal	single	37	70	Acetone:CH ₂ Cl ₂ 5:5 v/v
19	H	H	eqGal	double	38	ND ^d	AcOEt:CH ₂ Cl ₂ 3:7 v/v

^a Xylo product; ^b eq: equatorial, ax: axial; ^c Generally, the R_f of products vary within 0.4 and 0.6 (See Supplementary Figure 3); ^d product purchased; ND Not determined