

Table S1. Assignment of signals in 9VdO ¹H-¹³C HMQC

Residue	H1	H2	H3	H4	H5	H6a	H6b
α Glc	5.45	3.53	3.81	3.59 ^a	NA ^b	NA	NA
	100.67	74.22	76.61	80.93	NA	NA	NA
α GlcUA	5.09	3.65	4.01	3.78	4.23/24	-	-
	97.41	73.97	76.10	74.24	75.23	-	-
α Gal	5.30	3.96	3.83	4.17	NA	3.75	NA
	102.70	79.35	73.34	73.91	NA	64.27	NA
β ManNAc	4.88	4.61	3.92	3.75	3.46	3.89/.91	3.79/.80
	102.13	55.64	69.54	79.63	79.13	63.13	63.05/.12
β Glc	4.46	3.34	3.64	3.65	3.51	3.83	3.69/.67
	105.18	75.68	76.59	81.64	77.27	62.29	62.95/3.0

^aDark gray highlight denotes residues involved in glycosidic linkages; ^b NA, not assigned