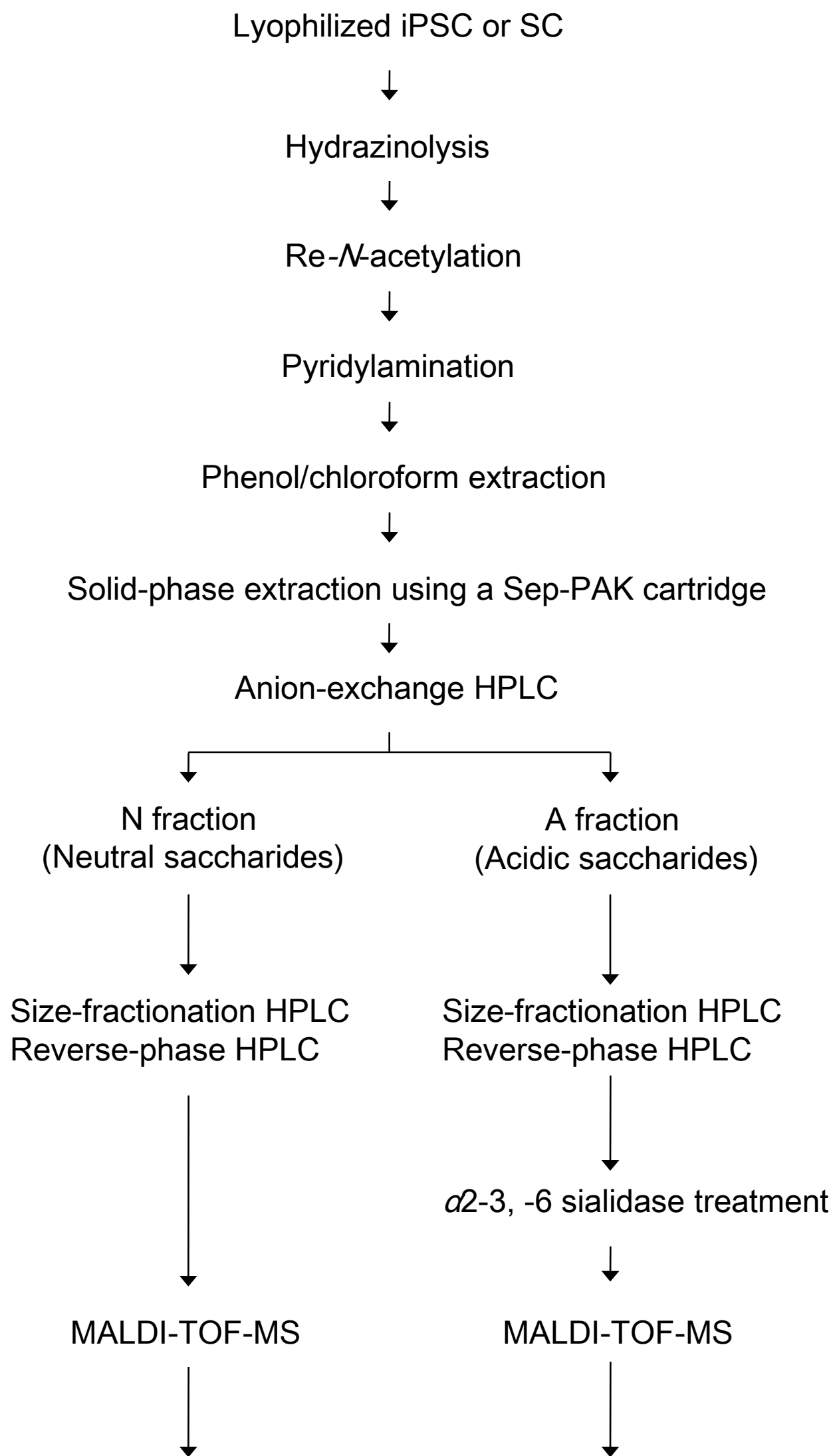


Table S1. Yields of glycans obtained in two separate experiments.

No.	Yields (%)		Yields (%)		No.	Yields (%)		Yields (%)		No.	Yields (%)		Yields (%)	
	SC 1st	SC 2nd	iPSC 1st	iPSC 2nd		SC 1st	SC 2nd	iPSC 1st	iPSC 2nd		SC 1st	SC 2nd	iPSC 1st	iPSC 2nd
<i>N-linked glycans</i> <i>Pauci-mannose and High-mannose</i>					<i>Asialo complex</i>					<i>Sialylated complex</i>				
1	4.7	5.2	3.6	3.3	15	N.D.	N.D.	0.6	0.4	31	N.D.	N.D.	0.4	0.6
2	0.3	0.5	0.4	0.3	16	N.D.	N.D.	0.4	0.4	32	N.D.	N.D.	1.0	1.1
3	0.3	0.4	0.3	0.6	17	N.D.	N.D.	0.5	0.5	33	N.D.	N.D.	0.4	0.6
4	N.D.	N.D.	0.4	0.6	18	N.D.	N.D.	0.7	0.8	34	N.D.	N.D.	0.6	0.7
5	0.6	0.7	4.7	6.6	19	N.D.	N.D.	0.4	0.4	35	N.D.	N.D.	0.9	1.0
6	14.3	11.7	8.5	9.3	20	N.D.	N.D.	0.5	0.4	36	N.D.	N.D.	0.4	0.3
7	5.4	5.5	5.4	8.4	21	N.D.	N.D.	0.6	0.7	37	N.D.	N.D.	0.5	0.8
8	3.1	4.1	2.9	2.7	22	N.D.	N.D.	0.9	0.9	38	N.D.	N.D.	1.2	1.6
9	13.3	15.3	19.6	15.7	23	N.D.	N.D.	0.4	0.2	39	N.D.	N.D.	0.4	0.2
10	13.1	15.3	21.8	19.9	24	15.2	11.2	0.4	0.4	40	N.D.	N.D.	0.5	0.4
11	0.3	0.4	4.6	3.8	25	4.8	4.2	N.D.	N.D.	41	1.9	1.9	N.D.	N.D.
12	N.D.	N.D.	2.4	2.5	26	N.D.	N.D.	0.4	0.1	42	2.5	2.9	N.D.	N.D.
<i>Fucosyl-pauci-mannose</i>					27	N.D.	N.D.	0.5	0.8	43	1.6	1.3	N.D.	N.D.
13	10.7	10.9	9.3	9.3	28	N.D.	N.D.	0.7	0.5	44	4.7	5.6	N.D.	N.D.
14	1.8	1.8	2.7	2.8	29	0.7	0.8	N.D.	N.D.					
					30	0.5	0.3	N.D.	N.D.					
<i>O-linked glycans</i> <i>Asialo</i>					<i>Sialylated</i>					The figures are percentage taking the total amount of <i>N</i> -linked or <i>O</i> -linked glycans from each sample to be 100. N.D.: not detected				
45	11.1	8.6	10.3	11.4	50	7.8	9.2	9.7	8.7					
46	5.6	4.8	13.4	13.2	51	15.0	13.4	11.7	14.0					
47	N.D.	N.D.	4.0	3.7	52	28.0	30.4	16.2	22.6					
48	N.D.	N.D.	4.2	3.9	53	11.0	12.0	1.3	1.7					
49	N.D.	N.D.	8.7	10.4	54	21.5	21.5	10.5	10.4					



Matching analysis with standard glycan by reverse-phase HPLC. If standard glycans were not available, glycans were treated with glycosidases and further analyzed by MALDI-TOF-MS and reverse-phase HPLC.

Fig. S1. Flow diagram used in this study for separation and identification of glycans.

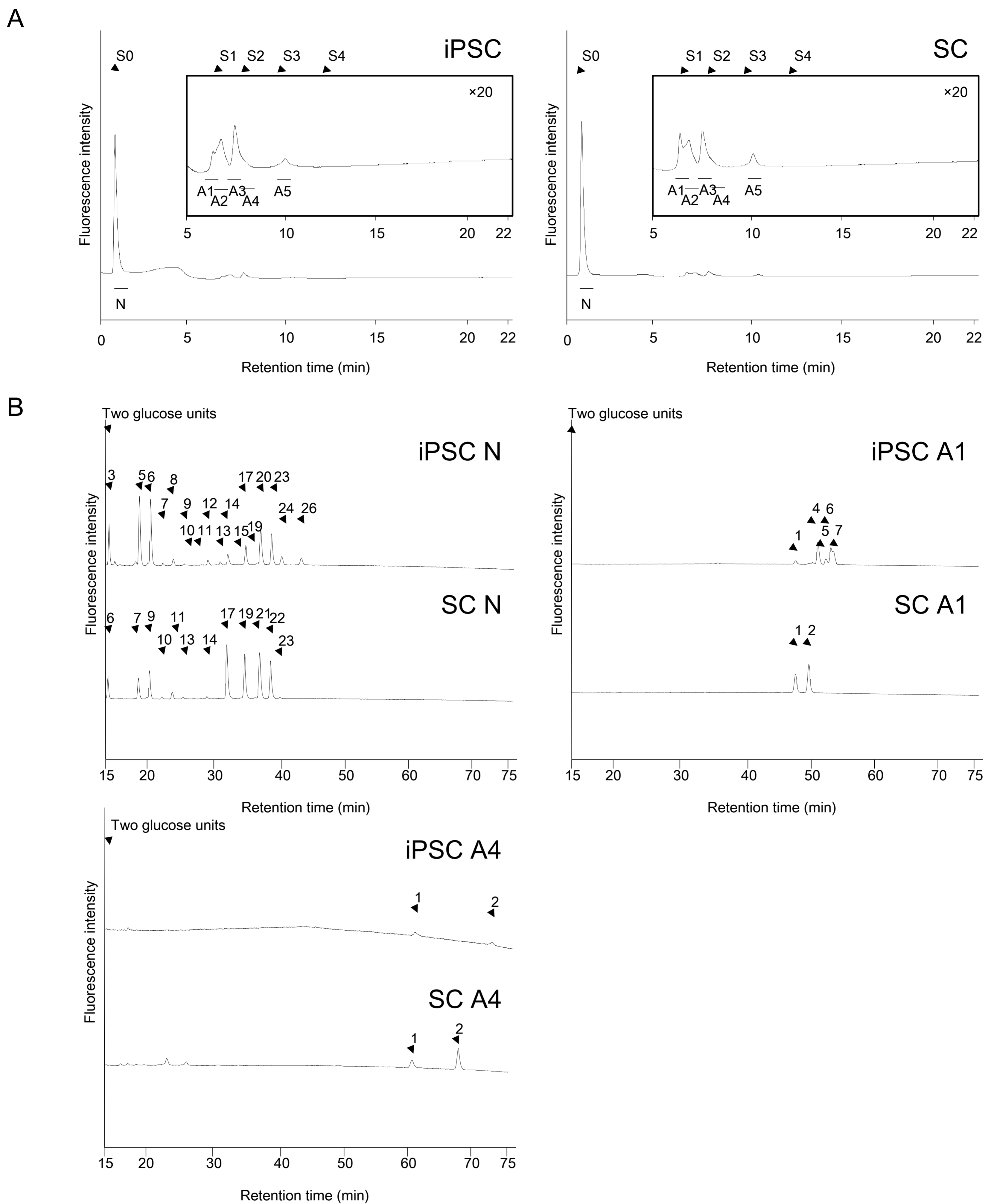


Fig. S2. Comparison of HPLC profiles of glycans derived from iPSC and SC. (A) Anion-exchange HPLC profiles. For a detailed explanation, see “Materials and methods”. S0, S1, S2, and S3 are standard glycans binding sialic acid. (B) Size-fractionation HPLC profiles of neutral fraction (N), monosialylated *N*-linked glycan fraction (A1), and disialylated *N*-linked glycan fraction (A4). Following anion-exchange HPLC, further purification was performed. For a detailed explanation, see “Materials and methods”. Each peak was pooled, and when necessary was further purified by reversed-phase HPLC, or subjected to further structural analysis. Arrowheads indicate the peak numbers.

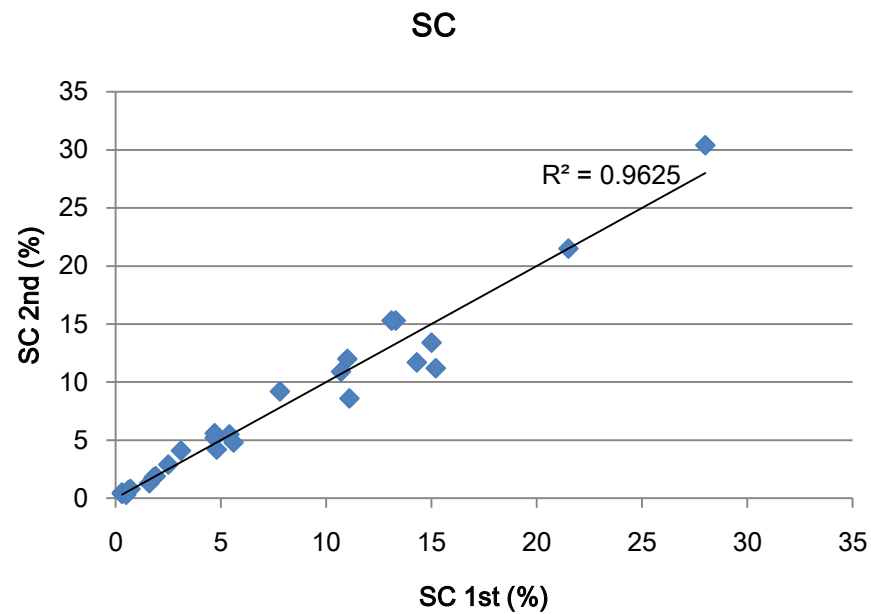
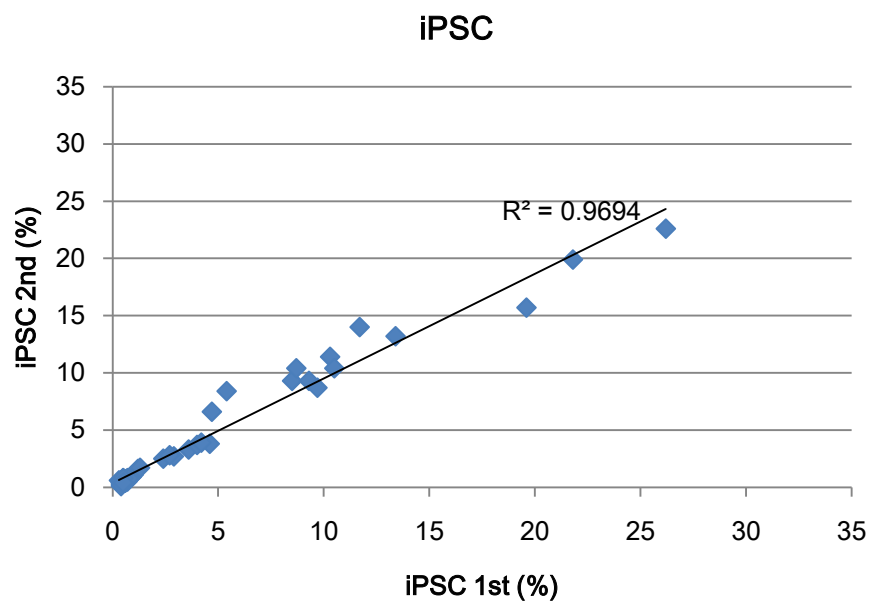


Fig. S3. Correlation diagrams for glycan yields obtained from iPSC and SC in two separated experiment.

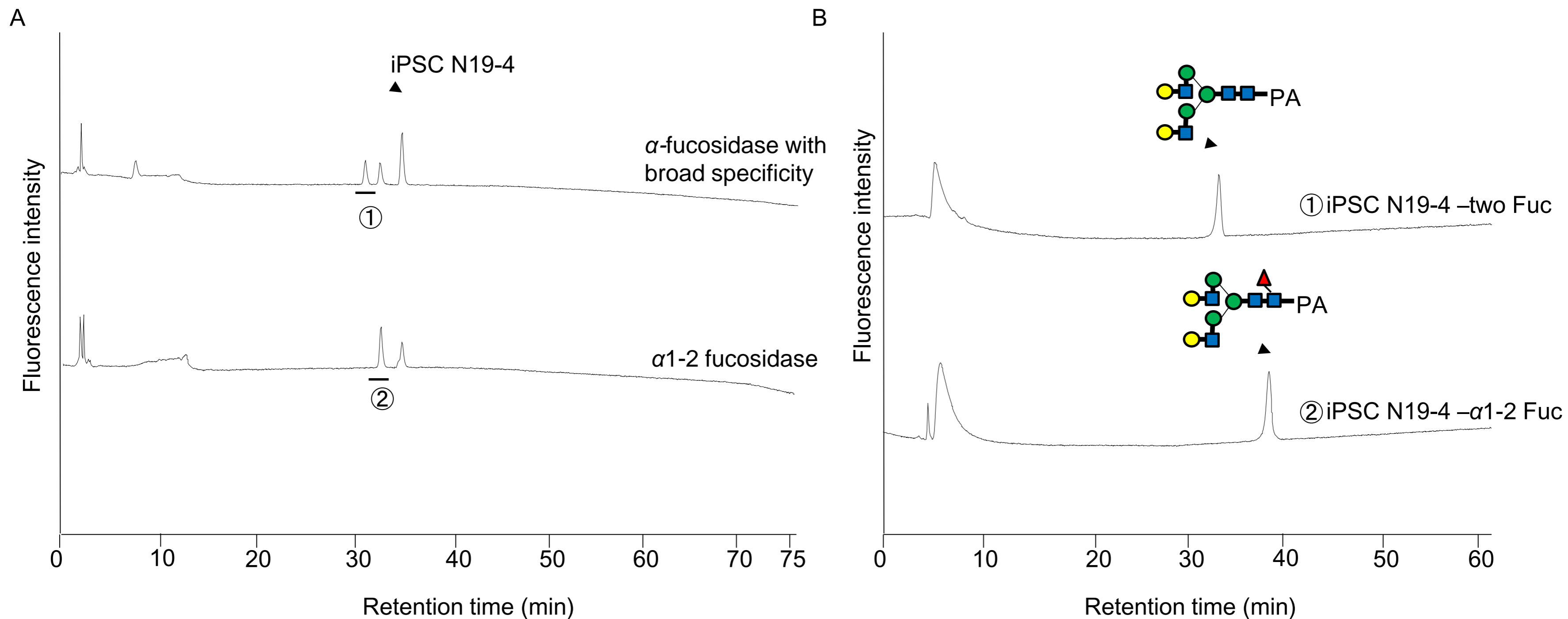


Figure S4. HPLC analysis of the α -1-2 fucosylated *N*-linked glycan from iPSC. (A) The fraction of iPSC N19-4 was treated with α -1-2 fucosidase or α -fucosidase with broad specificity, and the reaction mixtures were analyzed by size-fractionation HPLC. The two peaks indicated by horizontal bars were pooled, and were further analyzed by reversed-phase HPLC (B). Arrowheads indicate the elution positions of standard core-fucosylated and non-fucosylated biantennary glycans.