

Supplementary Table 4

List of representative peaks of N-glycans by MALDI-TOF-MS analysis in SIAT1 cell line

Composition	Mass (m/z)	Non %	SIAT1		Remarks
			NeuA %	NeuS %	
Hex ₅ HexNAc ₂	1580	20.96	14.32	6.98	
Hex ₆ HexNAc ₂	1784	55.89	49.40	27.54	
Fuc ₁ Hex ₃ HexNAc ₄	1836	5.51	0.14	2.00	
Hex ₇ HexNAc ₂	1988	52.65	40.21	27.55	
Hex ₆ HexNAc ₃	2029	0.72	11.36	0.53	
Hex ₅ HexNAc ₄	2070	5.26	23.93*	13.26*	*Product from 2792
Fuc ₁ Hex ₃ HexNAc ₅	2081	5.37	0.68	1.68	
Hex ₈ HexNAc ₂	2192	88.87	84.60	58.15	
Fuc ₁ Hex ₅ HexNAc ₄	2244	4.60	59.77*	17.16	*Product from 2966
Hex ₅ HexNAc ₅	2315	0.75	15.23*	0.31	*Product from 3037
Hex ₉ HexNAc ₂	2396	100.00	100.00	100.00	Relative intensity
Fuc ₁ Hex ₅ HexNAc ₅	2489	0.94	68.16*	0.57	*Product from 2850/3212
Hex ₆ HexNAc ₅	2519	0.49	13.14	0.32	
Hex ₁₀ HexNAc ₂	2600	0.73	2.62	5.42	
NeuAc ₁ Fuc ₁ Hex ₅ HexNAc ₄	2605	7.62	0.10	1.82	
NeuAc ₁ Fuc ₁ Hex ₅ HexNAc ₄	2635	5.77	0.12	1.59	
NeuAc ₁ Hex ₆ HexNAc ₄	2635	5.77	0.12	1.59	
Fuc ₁ Hex ₆ HexNAc ₅	2693	0.54	49.19*	0.92	*Product from 3777
Hex ₆ HexNAc ₆	2764	0.10	13.82	0.11	
NeuAc ₂ Hex ₅ HexNAc ₄	2792	7.04	0.18	1.34	
NeuAc ₁ Fuc ₁ Hex ₅ HexNAc ₅	2850	5.76	0.14**	3.44	** α 2,6-Sia
Fuc ₁ Hex ₆ HexNAc ₆	2938	0.86	88.49*	0.41	*Product from 3661/4022
NeuAc ₂ Fuc ₁ Hex ₅ HexNAc ₄	2966	17.23	0.11**	14.61	** α 2,6-Sia
Hex ₇ HexNAc ₆	2968	2.20	4.64	6.47	
NeuAc ₂ Hex ₅ HexNAc ₅	3037	6.64	0.15	2.75	
NeuAc ₁ Fuc ₁ Hex ₆ HexNAc ₅	3054	5.55	0.10**	4.37	** α 2,6-Sia
Fuc ₁ Hex ₇ HexNAc ₆	3143	1.18	32.64*	0.96	*Product from 3504/3865
NeuAc ₂ Fuc ₁ Hex ₅ HexNAc ₅	3212	39.75	0.12**	31.28	** α 2,6-Sia
NeuAc ₁ Fuc ₁ Hex ₆ HexNAc ₆	3300	1.14	0.13	9.04	
Fuc ₂ Hex ₇ HexNAc ₆	3316	0.78	1.27	0.72	
Fuc ₁ Hex ₈ HexNAc ₆	3347	0.26	2.89	0.31	
Fuc ₁ Hex ₇ HexNAc ₇	3388	0.89	15.64	0.34	
NeuAc ₂ Fuc ₁ Hex ₆ HexNAc ₅	3416	4.82	0.11	15.91*	*Product from 3777
Hex ₈ HexNAc ₇	3418	4.00	1.01	2.33	and α 2,6-Sia
NeuAc ₁ Fuc ₁ Hex ₇ HexNAc ₆	3504	1.34	0.06	12.59*	*Product from 4226/4587
Fuc ₁ Hex ₈ HexNAc ₇	3592	1.00	14.48	1.11	and α 2,6-Sia
NeuAc ₂ Fuc ₁ Hex ₆ HexNAc ₆	3661	8.78	0.10	35.27*	*Product from 4022
NeuAc ₁ Fuc ₁ Hex ₇ HexNAc ₇	3749	0.57	0.08	6.83	and α 2,6-Sia
Fuc ₂ Hex ₈ HexNAc ₇	3766	1.18	0.50	0.64	
NeuAc ₃ Fuc ₁ Hex ₆ HexNAc ₅	3777	12.24	0.05	2.35	
Fuc ₁ Hex ₉ HexNAc ₇	3796	0.67	1.03	0.18	
Fuc ₁ Hex ₈ HexNAc ₈	3837	1.97	0.20	0.02	
NeuAc ₂ Fuc ₁ Hex ₇ HexNAc ₆	3865	6.43	0.09**	9.04	** α 2,6-Sia

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Hex ₉ HexNAc ₈	3867	6.67	1.06	2.90	
NeuAc ₁ Fuc ₁ Hex ₈ HexNAc ₇	3953	0.88	0.08	6.87	
NeuAc ₃ Fuc ₁ Hex ₆ HexNAc ₆	4022	18.94	0.09**	1.36**	** α 2,3- and α 2,6-Sia
Fuc ₁ Hex ₉ HexNAc ₈	4041	0.73	7.00	0.33	
NeuAc ₂ Fuc ₁ Hex ₇ HexNAc ₇	4111	0.91	0.07	3.03	
Fuc ₂ Hex ₉ HexNAc ₈	4215	0.11	0.31	0.11	
NeuAc ₃ Fuc ₁ Hex ₇ HexNAc ₆	4226	2.67	0.08	0.71	
Fuc ₁ Hex ₁₀ HexNAc ₈	4246	0.09	0.25	0.03	
Fuc ₁ Hex ₉ HexNAc ₉	4286	0.19	0.23	0.06	
NeuAc ₂ Fuc ₁ Hex ₈ HexNAc ₇	4314	1.41	0.17	4.34	
NeuAc ₁ Fuc ₁ Hex ₉ HexNAc ₈	4403	0.50	0.07	0.47	
NeuAc ₃ Fuc ₁ Hex ₇ HexNAc ₇	4471	1.29	0.06	0.27	
Fuc ₁ Hex ₁₀ HexNAc ₉	4491	0.19	0.95	0.08	
NeuAc ₂ Hex ₈ HexNAc ₈	4559	0.15	0.06	0.75	
NeuAc ₄ Fuc ₁ Hex ₇ HexNAc ₆	4587	1.98	0.07	0.20	
Fuc ₂ Hex ₁₀ HexNAc ₉	4665	0.14	0.11	0.06	
NeuAc ₃ Fuc ₁ Hex ₈ HexNAc ₇	4675	3.68	0.06	0.16	
Fuc ₁ Hex ₁₁ HexNAc ₉	4696	0.08	0.09	0.04	
NeuAc ₂ Fuc ₁ Hex ₉ HexNAc ₈	4764	0.12	0.08	2.36	
Fuc ₁ Hex ₁₁ HexNAc ₁₀	4939	0.05	0.19	0.03	
NeuAc ₄ Fuc ₁ Hex ₈ HexNAc ₇	5036	0.86	0.06	0.09	
NeuAc ₃ Fuc ₁ Hex ₉ HexNAc ₈	5125	1.22	0.06	1.06	
NeuAc ₂ Fuc ₁ Hex ₁₀ HexNAc ₉	5213	0.04	0.07	0.17	
Fuc ₁ Hex ₁₂ HexNAc ₁₁	5388	0.02	0.08	0.03	
NeuAc ₄ Fuc ₁ Hex ₉ HexNAc ₈	5487	0.34	0.05	0.03	
NeuAc ₃ Fuc ₁ Hex ₁₀ HexNAc ₉	5574	0.06	0.10	0.08	
Fuc ₁ Hex ₁₃ HexNAc ₁₂	5838	0.01	0.05	0.02	
NeuAc ₄ Fuc ₁ Hex ₁₀ HexNAc ₉	5935	0.10	0.07	0.03	