

Supplementary Table 1. Glycan probes included in the microarray and the binding signals with murine Fc-MelLec and FLAG-tagged human Langerin. The signals are means of fluorescence intensities of duplicate spots, printed at 5 fmol per spot level; errors represented half of the difference between the two values.

Position	Probe	Structure	MelLec		Langerin	
			Fluorescence intensity	Error	Fluorescence intensity	Error
1	Galactocerebrosides	Gal β -Cer	179	330	36	43
2	H-Di	Fuc α -2Gal	15	19	-	8
3	A-Tri	GalNAc α -3Gal Fuc α -2	98	234	-	13
4	B-Tri	Gal α -3Gal Fuc α -2	28	151	91	7
5	B-Tri-AO	Gal α -3Gal-AO Fuc α -2	-	266	33,169	2,874
6	GSC-426	3-deoxy, 3-carboxymethyl-Gal β -C30	233	50	-	30
7	Sulfatide	SU-3Gal β -Cer	122	57	-	9
8	GSF-1	SU-3Gal β -C30	-	146	27	35
9	GSC-209	GlcA β -3Gal β -Cer42	111	160	9	56
10	GSC-210	SU-3GlcA β -3Gal β -Cer42	99	64	-	1
11	GSC-187	NeuAc α -3Gal β -C29	-	101	-	44
12	GSC-40	NeuAc α - (S) -3Gal β -Cer42	50	150	-	29
13	GSC-230	NeuAc α -8NeuAc α -3Gal β -Cer36	-	159	-	40
14	GSC-27	NeuAc α -6Gal β -Cer36	158	13	7	29
15	GSC-144	KDN α -6Gal β -Cer36	28	126	27	6
16	GSC-13	NeuAc α - (S) -6Gal β -Cer36	2	44	16	7
17	GSC-72	NeuAc α - (S) -6Gal β - (S) -Cer36	184	78	-	23
18	GSC-231	NeuAc α -8NeuAc α -6Gal β -Cer36	110	260	30	32

19	GSC-439	NeuAc α -8NeuAc α -8NeuAc α -6Gal β -Cer36	61	16	-	23
20	Glucocerebrosides	Glc β -Cer	-	234	29	4
21	GSF-19	SU-6Glc β -C30	-	58	27	18
22	GSC-60	NeuAc α -6Glc β -Cer36	-	67	-	7
23	GSC-9	NeuAc α - (S) -6Glc β -Cer36	7	52	4	82
24	GSC-62	NeuAc α -2Glc β -Cer36	-	62	9	11
25	GSC-59	NeuAc α -6GlcNAc β -Cer36	-	97	7	45
26	GSC-95	NeuAc α - (S) -6GlcNAc β -Cer36	12	21	18	24
27	GSC-232	NeuAc α -8NeuAc α -6Glc β -Cer36	-	158	-	9
28	Lactocerebrosides	Gal β -4Glc β -Cer	-	15	-	2
29	Lac	Gal β -4Glc	-	334	137	59
30	Lac-AO	Gal β -4Glc-AO	-	144	-	15
31	GSC-432	3-deoxy, 3-carboxymethyl-Gal β -4Glc β -C30	-	59	-	41
32	GSC-296	GlcA β -3Gal β -4Glc β -C30	102	9	77	26
33	GSC-353	SU-3GlcA β -3Gal β -4Glc β -C30	-	49	241	34
34	GalNAc α -3Gal β -4Glc	GalNAc α -3Gal β -4Glc	-	35	53	28
35	Globotri-AO	Gal α -4Gal β -4Glc β -AO	-	159	8	21
36	Ceramide trihexoside	Gal α -4Gal β -4Glc β -Cer	-	54	47	5
37	Globoside (P-antigen)	GalNAc β -3Gal α -4Gal β -4Glc β -Cer	-	67	-	30
38	Forssmann glycolipid	GalNAc α -3GalNAc β -3Gal α -4Gal β -4Glc β -Cer	-	78	60	45

39	Fuc(3)-Lac-AO	Gal α -4Gal-AO Fuc α -3	-	232	-	18
40	GSC-430	3-deoxy, 3-carboxymethyl-Gal β -3Glc β -C30 Fuc α -4	-	7	-	35
41	GSC-260	3-deoxy, 3-carboxymethyl-Gal β -4Glc β -C30 Fuc α -3	48	46	38	28
42	GSC-150	SU-3Gal β -4Glc β -C30 Fuc α -3	-	123	160	19
43	GSC-160	SU-3Gal β -4Glc β -Cer36 Fuc α -3	137	117	437	62
44	NeuAc α -(3')Lac	NeuAc α -3Gal β -4Glc	-	146	-	34
45	NeuAc α -(3')Lac-AO	NeuAc α -3Gal β -4Glc-AO	-	221	-	14
46	Neu4,5Ac-(3')Lac	Neu4,5Ac α -3Gal β -4Glc	-	103	-	47
47	Neu4,5Ac-(3')Lac-AO	Neu4,5Ac α -3Gal β -4Glc-AO	-	151	-	33
48	GSC-16	NeuAc α -3Gal β -4Glc β -Cer32	301	57	14	42
49	GSC-178	NeuAc α -3Gal β -4Glc β -Cer34	355	20	44	42
50	GSC-17	NeuAc α -3Gal β -4Glc β -Cer36	63	28	62	81
51	GSC-18	NeuAc α -3Gal β -4Glc β -Cer42	5	217	31	9
52	GSC-197	KDN α -3Gal β -4Glc β -Cer28	80	117	-	81
53	GSC-199	KDN α -3Gal β -4Glc β -C30	-	12	-	50
54	GSC-198	KDN α -3Gal β -4Glc β -Cer34	42	229	-	44
55	GSC-75	(4-deoxy) NeuAc α -3Gal β -4Glc β -Cer36	-	42	23	16
56	GSC-76	(7-deoxy) NeuAc α -3Gal β -4Glc β -Cer36	46	96	-	83
57	GSC-77	(8-deoxy) NeuAc α -3Gal β -4Glc β -Cer36	15	191	20	30
58	GSC-153	(4,8-deoxy) NeuAc α -3Gal β -4Glc β -Cer36	62	114	102	112

59	GSC-51	(9-deoxy) NeuAc α -3Gal β -4Glc β -Cer36	-	63	4	41
60	GSC-78	(4-OMe) NeuAc α -3Gal β -4Glc β -Cer36	-	13	-	34
61	GSC-79	(9-OMe) NeuAc α -3Gal β -4Glc β -Cer36	-	59	10	63
62	GSC-23	(C7) NeuAc α -3Gal β 1-4Glc β -Cer36	-	5	36	30
63	GSC-24	(C8) NeuAc α -3Gal β 1-4Glc β -Cer36	29	6	-	34
64	GSC-50	(C8 diastereoisomer) NeuAc α -3Gal β -4Glc β -Cer36	-	104	-	26
65	GSC-229	NeuAc α -8NeuAc α -3Gal β -4Glc β -Cer36	-	212	-	48
66	GSC-96	NeuAc α -9NeuAc α -3Gal β -4Glc β -Cer36	-	103	-	51
67	GSC-437	NeuAc α -8NeuAc α -8NeuAc α -3Gal β -4Glc β -Cer36	27	106	30	54
68	Neu α -(3')Lac	Neu α -3Gal β -4Glc	-	146	-	51
69	Neu α -(3')Lac-AO	Neu α -3Gal β -4Glc-AO	-	614	-	17
70	NeuAc α -(6')Lac	NeuAc α -6Gal β -4Glc	-	73	-	35
71	NeuAc α -(6')Lac-AO	NeuAc α -6Gal β -4Glc-AO	-	24	-	40
72	GSC-61	NeuAc α -6Gal β -4Glc β -Cer36	131	26	41	37
73	GSC-12	NeuAc α -(S)-6Gal β -4Glc β -Cer36	68	93	108	55
74	GSC-234	NeuAc α -(S)-6Gal β -(S)-4Glc β -Cer36	181	120	20	56
75	GSC-73	NeuAc α -(S)-6Gal β -4Glc β -(S)-Cer36	-	263	40	22
76	Neu α -(6')Lac	Neu α -6Gal β -4Glc	-	406	-	24
77	Neu α -(6')Lac-AO	Neu α -6Gal β -4Glc-AO	-	138	-	3
78	NeuAc β -(3')Lac	NeuAc β -3Gal β -4Glc	-	240	-	10

79	NeuAc β -(3')Lac-AO	NeuAc β -3Gal β -4Glc-AO	-	14	23	20
80	NeuAc β -(6')Lac	NeuAc β -6Gal β -4Glc	104	165	5	16
81	NeuAc β -(6')Lac-AO	NeuAc β -6Gal β -4Glc-AO	-	103	-	15
82	GSC-161	NeuAc α -3Gal β -4Glc β -C30 Fuca-3	-	117	-	19
83	GSC-162	NeuAc α -3Gal β -4Glc β -Cer36 Fuca-3	12	1	-	17
84	LacNAc(1-3)	Gal β -3GlcNAc	114	114	62	24
85	LacNAc(1-3)-AO	Gal β -3GlcNAc-AO	-	104	11	23
86	LacNAc	Gal β -4GlcNAc	-	154	31	3
87	LacNAc-AO	Gal β -4GlcNAc-AO	-	13	-	55
88	Gal α -4Gal β -4GlcNAc	Gal α -4Gal β -4GlcNAc	133	33	60	2
89	SU(3')-LN	SU-3Gal β -4GlcNAc	-	62	-	32
90	Lea-Tri	Gal β -3GlcNAc Fuca-4	-	103	117	91
91	Lea-Tri-AO	Gal β -3GlcNAc-AO Fuca-4	-	122	15,797	1,013
92	Lex-Tri	Gal β -4GlcNAc Fuca-3	-	37	-	17
93	Lex-Tri-AO	Gal β -4GlcNAc-AO Fuca-3	-	56	-	48
94	Lex-Tri-(Me)AO	Gal β -4GlcNAc-(Me)AO Fuca-3	-	258	5	9
95	SU(3')-Lea-Tri	SU-3Gal β -3GlcNAc Fuca-4	-	77	27,114	1,598
96	SU(3')-Lex-Tri	SU-3Gal β -4GlcNAc Fuca-3	-	211	18,301	484
97	NeuAc α -(3')LN1-3	NeuAc α -3Gal β -3GlcNAc	-	50	-	38
98	NeuAc α -(3')LN1-3-AO	NeuAc α -3Gal β -3GlcNAc-AO	-	69	-	31

99	NeuAc α -(3')LN	NeuAc α -3Gal β -4GlcNAc	-	48	-	30
100	NeuAc α -(3')LN-AO	NeuAc α -3Gal β -4GlcNAc-AO	-	4	-	38
101	PI-1	NeuAc α -3(6-NAc)Gal β -4GlcNAc	-	85	-	8
102	PI-1-AO	NeuAc α -3(6-NAc)Gal β -4GlcNAc-AO	-	16	-	21
103	PI-2	NeuAc α -3(6-NBz)Gal β -4GlcNAc	-	78	-	64
104	PI-2-AO	NeuAc α -3(6-NBz)Gal β -4GlcNAc-AO	-	219	5	5
105	NeuAc α -(6')LN	NeuAc α -6Gal β -4GlcNAc	-	257	-	8
106	NeuAc α -(6')LN-AO	NeuAc α -6Gal β -4GlcNAc-AO	-	142	-	48
107	Neu5,9Ac-(6')LN	Neu5,9Ac α -6Gal β -4GlcNAc	-	15	-	12
108	SA(3')-Lea-Tri	NeuAc α -3Gal β -3GlcNAc Fuca-4	-	31	-	5
109	SA(3')-Lea-Tri-AO	NeuAc α -3Gal β -3GlcNAc-AO Fuca-4	-	36	36	25
110	SA(3')-Lex-Tri	NeuAc α -3Gal β -4GlcNAc Fuca-3	-	208	-	12
111	SA(3')-Lex-Tri-AO	NeuAc α -3Gal β -4GlcNAc-AO Fuca-3	-	90	9	6
112	GSC-440	NeuAc α -3Gal β -4GlcNAc β -C30 Fuca-3	70	161	-	101
113	GSC-512	Neu4,5Ac α -3Gal β -4GlcNAc β -C30 Fuca-3	-	155	29	44
114	GSC-513	Neu5,9Ac α -3Gal β -3GlcNAc β -C30 Fuca-4	37	24	-	12
115	GSC-511	Neu5,9Ac α -3Gal β -4GlcNAc β -C30 Fuca-3	-	20	7	20
116	GSC-225	(3-carboxymethyl)Gal β -4GlcNAc β -3Gal β -Cer36 Fuca-3	-	329	-	91
117	GSC-236	SU-3Gal β -4GlcNAc β -3Gal β -C30 Fuca-3	-	27	-	66
118	GSC-479	NeuAc α -3Gal β -4GlcNAc β -3Gal β -C30 Fuca-3	1,836 (artefact)	1,896	-	8

119	GSC-105	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 Fuca α -3	141	101	-	20
120	GSC-121	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 (3-deoxy) Fuca α -3	59	13	35	7
121	GSC-123	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 (4-deoxy) Fuca α -3	-	81	6	21
122	GSC-133	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 (2-OMe) Fuca α -3	11	68	3	7
123	GSC-131	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 Quva α -3	-	77	-	47
124	GSC-163	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 Rha α -3	-	24	-	5
125	GSC-127	NeuAc α -3Gal β -4GlcNAc β -3Gal β -Cer36 (6-deoxy) L-Tal α -3	50	65	13	45
126	GSC-341	KDN α -3Gal β -4GlcNAc β -3Gal β -C30 Fuca α -3	26	32	-	26
127	GSC-177	NeuGca-3Gal β -4GlcNAc β -3Gal β -Cer36 Fuca α -3	198	109	-	31
128	GSC-175	NeuAc α -3(4-deoxy) Gal β -4GlcNAc β -3Gal β -Cer36 Fuca α -3	173	266	11	10
129	GSC-176	NeuAc α -3(6-deoxy) Gal β -4GlcNAc β -3Gal β -Cer36 Fuca α -3	-	74	23	2
130	GSC-257	NeuAc α -3(4,6-deoxy) Gal β -4GlcNAc β -3Gal β -Cer36 Fuca α -3	-	29	33	5
131	DLNN	GlcNAc β -3Gal β -4Glc	-	156	953	36
132	LNT	Gal β -3GlcNAc β -3Gal β -4Glc	145	110	-	10
133	Paragloboside	Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	81	5	37
134	LNnT	Gal β -4GlcNAc β -3Gal β -4Glc	81	238	85	43
135	B-like pentaosylceramide	Gal α -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	39	-	38
136	Klaus glycolipid	Gal β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	141	63	29
137	GSC-207	GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -C30	-	27	-	9
138	GSC-191	GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer36	-	63	-	60

139	GSC-189	GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer42	192	43	15	23
140	SU(3')-Tri	SU-3Gal β -4GlcNAc β -3Gal	11	207	41	16
141	GSC-208	SU-3GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -C30	-	106	-	18
142	GSC-192	SU-3GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer36	29	30	2,692	190
143	GSC-190	SU-3GlcA β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer42	-	148	399	80
144	Led-II pentaosylceramide	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc β -CerA	-	9	33	73
145	Led-I pentaosylceramide	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc β -CerB	96	20	-	38
146	LNFP-I	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc	-	260	845	82
147	B-hexaosylceramide	Gal α -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer Fuca-2	54	21	-	35
148	A-Hexa	GalNAc α -3Gal β -3GlcNAc β -3Gal β -4Glc Fuca-2	-	5	-	10
149	A-Hepta	GalNAc α -3Gal β -3GlcNAc β -3Gal β -4Glc Fuca-2 Fuca-4	-	83	-	23
150	LNFP-II	Gal β -3GlcNAc β -3Gal β -4Glc Fuca-4	-	96	7	7
151	LNDFH-II	Gal β -3GlcNAc β -3Gal β -4Glc Fuca-4 Fuca-3	-	286	14	6
152	Leb-hexaosylceramide	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc β -Cer Fuca-4	-	112	-	3
153	LNDFH-I	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc Fuca-4	-	11	-	51
154	LNDFH-I	Fuca-2Gal β -3GlcNAc β -3Gal β -4Glc Fuca-4 Fuca-2	-	75	-	39
155	LNFP-III	Gal β -4GlcNAc β -3Gal β -4Glc Fuca-3	-	322	5	94
156	LNFP-III-AO	Gal β -4GlcNAc β -3Gal β -4Glc-AO Fuca-3	-	104	3	54
157	LNnDFH-I	Fuca-2Gal β -4GlcNAc β -3Gal β -4Glc Fuca-3	-	104	266	58
158	LNnDFH-II	Gal β -4GlcNAc β -3Gal β -4Glc Fuca-3 Fuca-3	-	163	34	24

159	LNnDFH-V	Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3 Fuca-2	-	38	-	12
160	LNnTFH-I	Fuca-2Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3 Fuca-2	125	9	-	12
161	SU(3')-LNFP-II	SU-3Galβ-3GlcNAcβ-4Galβ-4Glc Fuca-4	-	77	-	9
162	SU(6')-LNFP-II	SU-6Galβ-3GlcNAcβ-3Galβ-4Glc Fuca-4	-	46	26	63
163	SU(3')-LNFP-III	SU-3Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3	-	123	-	5
164	SU(6')-LNFP-III	SU-6Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3	-	155	21,615	83
165	SU(3',6)-LNFP-III	SU-6 SU-3Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3	-	98	24,680	1,308
166	LSTa	NeuAcα-3Galβ-3GlcNAcβ-3Galβ-4Glc	-	91	62	6
167	GSC-272	NeuAcα-3Galβ-3GlcNAcβ-3Galβ-4Glcβ-C30	-	18	-	46
168	GSC-147	KDNα-3Galβ-3GlcNAcβ-3Galβ-4Glcβ-Cer36	-	36	-	31
169	GSC-396	NeuGcα-3Galβ-3GlcNAcβ-3Galβ-4Glcβ-C30	-	236	-	23
170	LSTb	Galβ-3GlcNAcβ-3Galβ-4Glc NeuAcα-6	-	116	-	70
171	GSC-397	NeuGcα-6Galβ-3GlcNAcβ-3Galβ-4Glcβ-C30	-	148	-	11
172	DSLNT	NeuAcα-3Galβ-3GlcNAcβ-3Galβ-4Glc NeuAcα-6	-	6	-	30
173	Sialylparagloboside	NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer	8	278	-	29
174	GSC-273	NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-C30	-	122	-	21
175	GSC-31	NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36	258	74	-	22
176	LSTc	NeuAcα-6Galβ4-GlcNAcβ3-Galβ4-Glc	-	52	-	7
177	GSC-516B	Neuα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 SU-6	-	68	15	6
178	SA(3/6)LNFP-I	NeuAcα-3/6Galβ-3GlcNAcβ-3Galβ-4Glc Fuca-2	-	121	-	49

179	SA(3')-LNFP-II	NeuAcα-3Galβ-3GlcNAcβ-3Galβ-4Glc Fuca-4	-	111	-	43
180	SA(6')-LNFP-VI	NeuAcα-6Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3	-	295	-	27
181	GSC-533	NeuAcα-3Galβ-4GlcNAβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	66	-	10
182	GSC-64	NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	121	10	18
183	SA(3')-LNFP-III	NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glc Fuca-3	-	72	3	49
184	GSC-472	Neuα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	136	147	-	25
185	GSC-97	NeuAcα-6Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	154	-	19
186	GSC-314	KDNα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-C30 Fuca-3	-	22	-	83
187	GSC-149	KDNα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	72	-	3
188	GSC-311	KDNα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-C30 Rhaα-3	-	11	-	14
189	GSC-268	SU-6 NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	41	16,424	494
190	GSC-268 deNac	SU-6 Neuα-3Galβ-4GlcNAβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	7	7,499	35
191	GSC-269	SU-6 NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	80	-	11
192	GSC-406	SU-6 Neuα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	22	-	62
193	GSC-270	SU-6 SU-6 NeuAcα-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer36 Fuca-3	-	63	16,838	910
194	pLNH	Galβ-3GlcNAcβ-3Galβ-4GlcNAcβ-3Galβ-4Glc	-	69	17	17
195	pLNnH	Galβ-4GlcNAcβ-3Galβ-4GlcNAcβ-3Galβ-4Glc	22	34	-	23
196	GSC-216	GlcAβ-3Galβ-4GlcNAcβ-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer42	-	44	-	4
197	GSC-217	SU-3GlcAβ-3Galβ-4GlcNAcβ-3Galβ-4GlcNAcβ-3Galβ-4Glcβ-Cer42	10	167	676	218

198	GSC-218	GlcA β -3Gal β -4GlcNAc β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer36	-	42	-	52
199	GSC-219	SU-3GlcA β -3Gal β -4GlcNAc β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer36	-	11	151	32
200	LNH	Gal β -4GlcNAc β -6 Gal β -4Glc Gal β -3GlcNAc β -3	-	230	19	6
201	iLNO	Gal β -3GlcNAc β -3Gal β -4GlcNAc β -6 Gal β -4Glc Gal β -3GlcNAc β -3	-	7	24	16
202	LND	Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -3GlcNAc β -3 Gal β -4Glc Gal β -3GlcNAc β -3	-	780	-	12
203	LNnH	Gal β -4GlcNAc β -6 Gal β -4Glc Gal β -4GlcNAc β -3	116	165	34	28
204	Nonaosylceramide	GlcNAc β -6 GlcNAc β -6 Gal β -4GlcNAc β -3 GlcNAc β -3 Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	130	-	52
205	I-octaosylceramide	Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4Glc β -Cer Gal β -4GlcNAc β -3	-	24	-	7
206	I-dodecaosylceramide	Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4Glc β -Cer Gal β -4GlcNAc β -3 Gal β -4GlcNAc β -3	-	377	-	88
207	I-hexadecaosylceramide	Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	81	-	15
208	I-eicosaosylceramide	Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4GlcNAc β -3Gal β -4Glc β -Cer	-	108	25	15
209	B-like decaosylceramide	Gal α -3Gal β -4GlcNAc β -6 Gal β -4GlcNAc β -3Gal β -4Glc β -Cer Gal β -4GlcNAc β -3	-	85	-	10

210	B-like pentadecaosylceramide	$ \begin{array}{c} \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \quad \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3} \end{array} $	-	448	-	45
211	B-like eicosaosylceramide	$ \begin{array}{c} \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \quad \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3} \end{array} $	-	111	15	15
212	B-like pentaicososylceramide	$ \begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \quad \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \quad \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \quad \text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \quad \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3} \end{array} $	-	36	-	4
213	pLNFH-IV	$ \begin{array}{c} \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc} \\ \\ \text{Fuca}\text{-3} \end{array} $	-	79	-	8
214	DFpLNH-II	$ \begin{array}{c} \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc} \\ \quad \\ \text{Fuca}\text{-4} \quad \text{Fuca}\text{-3} \end{array} $	-	234	-	6
215	TFpLNH-I	$ \begin{array}{c} \text{Fuca}\text{-2Gal}\beta\text{-3GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc} \\ \quad \\ \text{Fuca}\text{-4} \quad \text{Fuca}\text{-3} \end{array} $	-	179	11	14
216	MFLNH-III	$ \begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\text{-3} \quad \text{Gal}\beta\text{-4Glc} \\ \quad \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\text{-4} \end{array} $	95	51	-	59
217	DFLNH(b)	$ \begin{array}{c} \text{Fuca}\text{-3} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\text{-4} \end{array} $	-	100	-	28
218	DFLNH(c)	$ \begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4Glc} \\ \\ \text{Fuca}\text{-2Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\text{-4} \end{array} $	-	83	-	5
219	DFLNH(a)	$ \begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\text{-3} \quad \text{Gal}\beta\text{-4Glc} \\ \quad \\ \text{Fuca}\text{-2Gal}\beta\text{-3GlcNAc}\beta\text{-3} \end{array} $	-	129	-	23
220	TFLNH	$ \begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\text{-3} \quad \text{Gal}\beta\text{-4Glc} \\ \quad \\ \text{Fuca}\text{-2Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\text{-4} \end{array} $	-	8	-	25
221	MFILNO-IV	$ \begin{array}{c} \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \quad \\ \text{Fuca}\text{-3} \quad \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \end{array} $	68	60	19	8

222	TFILNO	$\begin{array}{c} \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \qquad \qquad \qquad \qquad \qquad \qquad \\ \text{Fuca}\alpha\text{-4} \qquad \qquad \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\alpha\text{-4} \end{array}$	177	77	22	6
223	MFLND	$\begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \qquad \qquad \qquad \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \qquad \qquad \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \end{array}$	38	103	7	44
224	MFLNnH(a)	$\begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \end{array}$	69	23	-	12
225	DFLNnH	$\begin{array}{c} \text{Fuca}\alpha\text{-3} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\alpha\text{-3} \end{array}$	4	102	3	1
226	B-III dodecaosylceramide	$\begin{array}{c} \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \qquad \qquad \qquad \\ \text{Fuca}\alpha\text{-2} \qquad \qquad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\alpha\text{-2} \end{array}$	216	7	70	31
227	B-IV tetradecaosylceramide	$\begin{array}{c} \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \qquad \qquad \qquad \\ \text{Fuca}\alpha\text{-2} \qquad \qquad \text{Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{Gal}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3} \\ \\ \text{Fuca}\alpha\text{-2} \end{array}$	90	55	74	4
228	MSLNH	$\begin{array}{c} \text{NeuAc}\alpha\text{-6Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4Glc} \\ \\ \text{Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \end{array}$	-	207	-	8
229	MSLNnH-I	$\begin{array}{c} \text{Gal}\beta\text{-4Glc} \\ \\ \text{NeuAc}\alpha\text{-6Gal}\beta\text{-3GlcNAc}\beta\text{-3} \\ \\ \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \end{array}$	-	40	-	29
230	DSLNNH	$\begin{array}{c} \text{NeuAc}\alpha\text{-6Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Gal}\beta\text{-4Glc} \\ \\ \text{NeuAc}\alpha\text{-6Gal}\beta\text{-4GlcNAc}\beta\text{-3} \end{array}$	52	22	-	2
231	MSMFLNH	$\begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Gal}\beta\text{-4Glc} \\ \\ \text{NeuAc}\alpha\text{-3Gal}\beta\text{-3GlcNAc}\beta\text{-3} \end{array}$	-	33	-	27
232	MFMSLNnH	$\begin{array}{c} \text{Gal}\beta\text{-4GlcNAc}\beta\text{-6} \\ \\ \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Gal}\beta\text{-4Glc} \\ \\ \text{NeuAc}\alpha\text{-6Gal}\beta\text{-3GlcNAc}\beta\text{-3} \end{array}$	-	78	34	23
233	GSC-221	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer36} \\ \\ \text{Fuca}\alpha\text{-3} \end{array}$	-	59	-	11
234	GSC-220	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-3Gal}\beta\text{-4Glc}\beta\text{-Cer36} \\ \qquad \qquad \qquad \\ \text{Fuca}\alpha\text{-3} \qquad \qquad \text{Fuca}\alpha\text{-3} \end{array}$	71	104	18	4

235	C4U	NeuAc α -3Gal β -4GlcNAc β -3Gal β -3GlcNAc SU-6 SU-6 SU-6	-	114	2	1
236	Man2(α 2)	Man α -2Man	19	85	30	7
237	Man2(α 3)	Man α -3Man	357	20	35	34
238	Man2(α 6)	Man α -6Man	70	28	346	77
239	Man3(α 3, α 6)	Man α -6Man Man α -3	304	28	27	2
240	Man5(α 3, α 6)	Man α -6Man α -6Man Man α -3 Man α -3	8	53	6,374	1,078
241	Man1GN1	Man β -4GlcNAc	-	10	69	11
242	Man2GN1	Man α -3Man β -4GlcNAc	-	22	329	84
243	Man2aGN2	Man α -6Man β -4GlcNAc β -4GlcNAc	79	28	7,091	382
244	Man3GN2	Man α -6 Man β -4GlcNAc β -4GlcNAc Man α -3	3	62	415	16
245	Man4aGN2	Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc Man α -3	-	12	112	31
246	Man4bGN2	Man α -6 Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc	-	4	4,307	23
247	Man5GN2	Man α -6 Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc Man α -3	40	48	288	33
248	Man6GN2	Man α -6 Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc Man α -2Man α -3	194	150	473	29
249	Man7(D1)GN2	Man α -6 Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc Man α -2Man α -2Man α -3	-	41	21,068	2,112
250	Man7(D1)GN2-AO	Man α -6 Man α -3Man α -6 Man β -4GlcNAc β -4GlcNAc-AO Man α -2Man α -2Man α -3	-	3	17,920	116

251	Man7(D3)GN2	<pre> Manα-2Manα-6 Manα-3Manα-6 Manβ-4GlcNAcβ-4GlcNAc Manα-2Manα-3 </pre>	-	7	5,523	357
252	Man8(D1D3)GN2	<pre> Manα-2Manα-6 Manα-3Manα-6 Manβ-4GlcNAcβ-4GlcNAc Manα-2Manα-2Manα-3 </pre>	-	229	19,073	2,315
253	Man9GN2	<pre> Manα-2Manα-6 Manα-2Manα-3Manα-6 Manβ-4GlcNAcβ-4GlcNAc Manα-2Manα-2Manα-3 </pre>	21	12	17,004	1,807
254	Man9GN2-AO	<pre> Manα-2Manα-6 Manα-2Manα-3Manα-6 Manβ-4GlcNAcβ-4GlcNAc-AO Manα-2Manα-2Manα-3 </pre>	-	65	12,074	142
255	Glc1Man9GN2	<pre> Manα-2Manα-6 Manα-6 Manα-2Manα-3 Manβ-4GlcNAcβ-4GlcNAc Glcα-3Manα-2Manα-2Manα-3 </pre>	-	120	5,074	147
256	Glc1Man9GN2-AO	<pre> Manα-2Manα-6 Manα-6 Manα-2Manα-3 Manβ-4GlcNAcβ-4GlcNAc-AO Glcα-3Manα-2Manα-2Manα-3 </pre>	-	173	5,846	418
257	Glc2Man9GN2-AO	<pre> Manα-2Manα-6 Manα-6 Manα-2Manα-3 Manβ-4GlcNAcβ-4GlcNAc-AO Glcα-3Glcα-3Manα-2Manα-2Manα-3 </pre>	-	43	361	42
258	Glc2Man7(D1)GN1-AO	<pre> Manα-6 Manα-3Manα-6 Manβ-4GlcNAc-AO Glcα-3Glcα-3Manα-2Manα-2Manα-3 </pre>	-	7	2,452	161
259	Glc3Man7(D1)GN1-AO	<pre> Manα-6 Manα-3Manα-6 Manβ-4GlcNAc-AO Glcα-2Glcα-3Glcα-3Manα-2Manα-2Manα-3 </pre>	-	19	2	7
260	Man3XylGN2	<pre> Manα-6 Xylβ-2Manβ-4GlcNAcβ-4GlcNAc Manα-3 </pre>	6	59	41	17
261	N1	<pre> Galβ-4GlcNAcβ-2Manα-6 Fucα-6 Manβ-4GlcNAcβ-4GlcNAc Manα-3 </pre>	91	90	19	10

262	N2	<pre> Manα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-2Manα-3 </pre>	14	22	25	14
263	N4	<pre> Manβ-4GlcNAcβ-4GlcNAc ? Manα-3 </pre>	-	20	37	10
264	GlcNac2Man3-AO	<pre> GlcNAcβ-2Manα-6 Man-AO GlcNAcβ-2Manα-3 </pre>	-	96	22,344	279
265	N3	<pre> (Galβ-4) GlcNAcβ-2Manα-6 Fuca-6 Manβ-4GlcNAcβ-4GlcNAc ? GlcNAcβ-2Manα-3 </pre>	-	51	34	15
266	NGA2	<pre> GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 </pre>	-	13	2,287	75
267	NGA2B	<pre> GlcNAcβ-4Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 </pre>	56	67	3,736	204
268	NGA3B	<pre> GlcNAcβ-4Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-4Manα-3 GlcNAcβ-2 GlcNAcβ-6 GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 GlcNAcβ-4 </pre>	11	31	4,831	160
269	NGA4	<pre> GlcNAcβ-2 GlcNAcβ-6 GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 GlcNAcβ-4 </pre>	-	101	26,850	1,621
270	NGA5B	<pre> GlcNAcβ-2 GlcNAcβ-4Manα-6 GlcNAcβ-6 GlcNAcβ-4Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-4Manα-3 GlcNAcβ-2 </pre>	12	13	246	12
271	GNMan5BGN2	<pre> Manα-6 Manα-3Manα-6 GlcNAcβ-4Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 </pre>	-	36	1,672	169
272	NA2	<pre> Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-2Manα-3 </pre>	66	27	-	-
273	NA3	<pre> Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-4Manα-3 Galβ-4GlcNAcβ-2 </pre>	-	49	-	9

274	NA4	<pre> Galβ-4GlcNAcβ-6 Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-4Manα-3 Galβ-4GlcNAcβ-2 </pre>	349	36	-	3
275	Fuc-GlcNAc	Fucα-6GlcNAc	-	25	48	9
276	Man3FGN2	<pre> Manα-6 Fucα-6 Manβ-4GlcNAcβ-4GlcNAc Manα-3 </pre>	-	19	998	40
277	Man3FXylGN2	<pre> Manα-6 Xylβ-2Manα-4GlcNAcβ-4GlcNAc Manα-3 Fucα-3 </pre>	-	40	112	20
278	NGA2F	<pre> GlcNAcβ-2Manα-6 Fucα-6 Manβ-4GlcNAcβ-4GlcNAc GlcNAcβ-2Manα-3 </pre>	-	92	8,514	879
279	NA2F	<pre> Galβ-4GlcNAcβ-2Manα-6 Fucα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-2Manα-3 </pre>	-	102	-	16
280	NA2F-AO	<pre> Galβ-4GlcNAcβ-2Manα-6 Fucα-6 Manβ-4GlcNAcβ-4GlcNAc-AO Galβ-4GlcNAcβ-2Manα-3 </pre>	-	64	-	51
281	NA2FB	<pre> Galβ-4GlcNAcβ-2Manα-6 Fucα-6 GlcNAcβ-4Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-2Manα-3 </pre>	-	68	-	11
282	NA3-Lex	<pre> Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc Galβ-4GlcNAcβ-4Manα-3 Galβ-4GlcNAcβ-2 +Fuca-3 </pre>	-	181	-	15
283	A2(2-6)	<pre> NeuAcα-6Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc NeuAcα-6Galβ-4GlcNAcβ-2Manα-3 </pre>	-	34	-	9
284	AGP-Bi-Ac2	<pre> NeuAcα-Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc NeuAcα-Galβ-4GlcNAcβ-2Manα-3 </pre>	23	63	5	19
285	AGP-Bi-Gc2	<pre> NeuGcα-Galβ-4GlcNAcβ-2Manα-6 Manβ-4GlcNAcβ-4GlcNAc NeuGcα-Galβ-4GlcNAcβ-2Manα-3 </pre>	-	3	-	40
286	AGP-Bi-AcGc	<pre> ? Manβ-4GlcNAcβ-4GlcNAc NeuAcα-Galβ-4GlcNAcβ-2Manα-3 </pre>	-	45	24	32

287	A3	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-2Man}\alpha\text{-6} \\ \\ \text{Man}\beta\text{-4GlcNAc}\beta\text{-4GlcNAc} \\ \\ \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-4Man}\alpha\text{-3} \\ \\ \text{NeuAc}\alpha\text{-6Gal}\beta\text{-4GlcNAc}\beta\text{-2} \end{array}$	-	3	-	4
288	A2F(2-3)	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-2Man}\alpha\text{-6} \\ \\ \text{Man}\beta\text{-4GlcNAc}\beta\text{-4GlcNAc} \\ \\ \text{NeuAc}\alpha\text{-3Gal}\beta\text{-4GlcNAc}\beta\text{-2Man}\alpha\text{-3} \\ \\ \text{Fuc}\alpha\text{-6} \end{array}$	-	135	-	9
289	GM4	NeuAc α -3Gal β -Cer	-	44	10	28
290	SM3	SU-3Gal β -4Glc β -Cer	-	52	48	4
291	Haematoside	NeuAc α -3Gal β -4Glc β -Cer	-	137	17	21
292	GM3	NeuAc α -3Gal β -4Glc β -Cer	8	27	30	26
293	GM3(Gc)	NeuGc α -3Gal β -4Glc-Cer	-	171	-	19
294	Asialo-GM2	GalNAc β -4Gal β -4Glc β -Cer	-	48	38	8
295	SM2	$\begin{array}{c} \text{GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{SU-3} \end{array}$	8	66	-	16
296	SB2	$\begin{array}{c} \text{SU-3GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{SU-3} \end{array}$	-	108	5,365	124
297	GM2	$\begin{array}{c} \text{GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{NeuAc}\alpha\text{-3} \end{array}$	-	81	16	20
298	GSC-576	$\begin{array}{c} \text{GalNAc}\beta\text{-4Gal}\beta\text{-3Glc}\beta\text{-C30} \\ \\ \text{NeuAc}\alpha\text{-3} \end{array}$	-	37	-	1
299	GSC-108	$\begin{array}{c} \text{GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer36} \\ \\ \text{NeuAc}\alpha\text{-3} \end{array}$	231	48	-	32
300	GSC-193	$\begin{array}{c} \text{GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer36} \\ \\ \text{KDN}\alpha\text{-3} \end{array}$	174	43	-	6
301	Asialo-GM1	Gal β -3GalNAc β -4Gal β -4Glc β -Cer	-	65	-	32
302	Asialo-GM1-Tetra	Gal β -3GalNAc β -4Gal β -4Glc	-	104	46	23
303	SM1a	$\begin{array}{c} \text{Gal}\beta\text{-3GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{SU-3} \end{array}$	-	178	-	32
304	SB1a	$\begin{array}{c} \text{SU-3Gal}\beta\text{-3GalNAc}\beta\text{-4Gal}\beta\text{-4Glc}\beta\text{-Cer} \\ \\ \text{SU-3} \end{array}$	-	54	479	69
305	GM1b	NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer*	-	6	-	17

306	GSC-335	SU-6 NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer36	37	140	-	5
307	GM1	Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -3	-	80	-	17
308	GM1-penta	Gal β -3GalNAc β -4Gal β -4Glc NeuAc α -3	-	223	-	15
309	GM1(Gc)	Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuGc α -3	-	163	25	8
310	GM1(Gc)-penta	Gal β -3GalNAc β -4Gal β -4Glc NeuGc α -3	-	23	26	2
311	GD1a	NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -3	-	23	-	33
312	GD1a-hexa	NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc NeuAc α -3	-	129	-	17
313	GalNAc-GD1a(Ac,Gc)	GalNAc β -4Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuGc α -3 NeuAc α -3 GalNAc β -4Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -3 NeuGc α -3	-	31	-	15
314	GSC-195	KDN α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer36 KDN α -3	93	49	24	20
315	GD3	NeuAc α -8NeuAc α -3Gal β -4Glc β -Cer	-	7	-	11
316	GD3-tetra	NeuAc α -8NeuAc α -3Gal β -4Glc	-	66	-	25
317	GD3-tetra-AO	NeuAc α -8NeuAc α -3Gal β -4Glc-AO	-	14	-	38
318	GD2	GalNAc β -4Gal β -4Glc β -Cer NeuAc α -8NeuAc α -3	-	23	8	8
319	GD1b	Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -8NeuAc α -3	96	121	-	6
320	GT1a	NeuAc α -8NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -3	-	60	10	6
321	GT1b	NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -8NeuAc α -3	-	92	11	11
322	GQ1b	NeuAc α -8NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer NeuAc α -8NeuAc α -3	-	63	-	3
323	GSC-442	GalNAc β -4Gal β -4Glc β -Cer36 NeuAc α -6	-	74	-	31
324	GSC-68	NeuAc α -6Gal β -3GalNAc β -4Gal β -4Glc β -Cer36	-	23	-	38
325	GSC-155	Gal β -3GalNAc β -4Gal β -4Glc β -Cer36 NeuAc α -6	92	-	20	30

326	GSC-107	NeuAc α -6Gal β -3GalNAc β -4Gal β -4Glc β -Cer36 NeuAc α -6	-	1	-	7
327	GSC-118	NeuAc α -3Gal β -3GalNAc β -4Gal β -4Glc β -Cer36 NeuAc α -6	48	93	-	11
328	GalNAc-Ser	GalNAc-Ser	-	15	57	4
329	GalNAc-Thr	GalNAc-Thr	-	124	9	33
330	BSM-Di-A1-AO	NeuGc α -6GalNAc-AO	-	24	-	3
331	BSM-Di-A2-AO	NeuAc α -6GalNAc-AO	-	57	-	10
332	GalNAc α -3GalNAc	GalNAc α -3GalNAc	-	39	88	8
333	Gal β -3GalNAc	Gal β -3GalNAc	-	29	2	41
334	Gal β -3GalNAc-AO	Gal β -3GalNAc-AO	-	48	73	15
335	Gal β -6GalNAc	Gal β -6GalNAc	-	95	-	11
336	Gal β -6GalNAc-AO	Gal β -6GalNAc-AO	-	66	-	3
337	Man-Ser	Man α -Ser	-	40	808	59
338	Man-Ser-Succ	Man-Ser-Succ	-	61	6,683	183
339	Man-Thr	Man-Thr	49	6	499	148
340	Man-Thr-Succ	Man-Thr-Succ	-	4	12,723	407
341	A8/1	GlcNAc α -4Gal β -OX	-	93	63	2
342	A8/2	SU-6 Fuc α -3GlcNAc β -OY	-	117	8,113	608
343	A15/1	SU-6GlcNAc β -OY	-	1	23,568	644
344	A15/3	GlcNAc α -4Gal β -3Gal β -OX Fuc α -2	-	6	102	11
345	B13/a	GlcA β -3Gal β -3GlcNAc β -OX	-	129	6	4

346	Notch-1	Fuca-Thr	-	88	142	37
347	Notch-2	GlcNAc β -3Fuca-Thr	-	24	16,976	1,332
348	Notch-3	Gal β -4GlcNAc β -3Fuca-Thr	-	17	-	10
349	GSC-488	NeuAc α -3Gal β -3GalNAc β -C30	-	54	-	51
350	GSC-491	NeuAc α -3Gal β -3 (6-deoxy-6-CH ₂ COOH) GalNAc β -C30	-	96	50	32
351	GSC-489	$\begin{array}{c} \text{SU-6} \\ \\ \text{NeuAc}\alpha\text{-3Gal}\beta\text{-3GalNAc}\beta\text{-C30} \end{array}$	-	86	32	11
352	DST	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-3GalNAc} \\ \\ \text{NeuAc}\alpha\text{-6} \end{array}$	-	15	-	37
353	DST-AO	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-3GalNAc-AO} \\ \\ \text{NeuAc}\alpha\text{-6} \end{array}$	-	112	10	11
354	GSC-490	$\begin{array}{c} \text{NeuAc}\alpha\text{-3Gal}\beta\text{-3GalNAc}\beta\text{-C30} \\ \\ \text{NeuAc}\alpha\text{-6} \end{array}$	-	78	62	8
355	GlcNAc β 1-3Fuc-AO	GlcNAc β -3Fuc-AO	-	65	666	61
356	GlcNAc β 1-2Fuc-AO	GlcNAc β -2Fuc-AO	-	14	19,094	706
357	GlcNAc β 1-4Fuc-AO	GlcNAc β -4Fuc-AO	-	233	-	39
358	GlcNAc β -2Man-AO	GlcNAc β -2Man-AO	-	12	17	15
359	SA2(α 8)	NeuAc α -8NeuAc	-	40	56	33
360	SA3(α 8)	NeuAc α -8NeuAc α -8NeuAc	-	20	-	9
361	SA4(α 8)	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc	-	90	-	31
362	SA5(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc*	-	89	-	20
363	SA6(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc*	-	27	-	21
364	SA7(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc*	-	34	83	82
365	SA8(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc*	-	13	-	4

366	SA9(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α *	-	3	-	13
367	SA10(α 8)*	NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α -8NeuAc α *	-	43	-	7
368	HA-S4*	GlcA β -3GlcNAc β -4GlcA β -3GlcNAc*	-	23	16	20
369	HA-S14*	GlcA β -3GlcNAc β -4GlcA β -3GlcNAc β -4GlcA β -3GlcNAc β -4GlcA β -3GlcNAc β -4GlcA β -3GlcNAc β -4GlcA β -3GlcNAc β -4GlcA β -3GlcNAc*	-	50	-	24
370	Hep-Di IS	Δ UA-4GlcNS SU-2 6-SU	-	49	1,896	97
371	Hep-Di-IS-AO	Δ UA-4GlcNS-AO SU-2 6-SU	-	176	1,236	83
372	CSA-4*	Δ UA-3GalNAc β -4GlcA β -3GalNAc* SU-4 SU-4	2	76	806	62
373	CSA-14*	Δ UA-3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc* SU-4 SU-4 SU-4 SU-4 SU-4 -4GlcA β -3GalNAc β -4GlcA β -3GalNAc* SU-4 SU-4	-	42	-	20
374	CSB-4*	Δ UA-3GalNAc β -4IdoA α -3GalNAc* SU-4 SU-4	-	86	714	32
375	CSB-14*	Δ UA-3GalNAc β -4IdoA α -3GalNAc β -4IdoA α -3GalNAc β -4IdoA α -3GalNAc β -4IdoA α -3GalNAc β -4IdoA α -3GalNAc β -4IdoA α -3GalNAc* SU-4 SU-4 SU-4 SU-4 SU-4 -4IdoA α -3GalNAc β -4IdoA α -3GalNAc* SU-4 SU-4	-	68	721	4
376	CSC-4*	Δ UA-3GalNAc β -4GlcA β -3GalNAc* SU-6 SU-6	-	1	1,165	5
377	CSC-14*	Δ UA-3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc β -4GlcA β -3GalNAc* SU-6 SU-6 SU-6 SU-6 SU-6 -4GlcA β -3GalNAc β -4GlcA β -3GalNAc* SU-6 SU-6	-	24	-	115
378	Hep-4-AO*	Δ UA-4GlcNS α -4IdoA α -4GlcNS-AO* SU-2 6-SU SU-2 SU-6	-	13	5,166	401
379	Hep-14-AO*	Δ UA-4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS α -4IdoA α -4GlcNS-AO* SU-2 6-SU SU-2 SU-6 SU-2 SU-6 SU-2 SU-6 SU-2 SU-6 -4IdoA α -4GlcNS α -4IdoA α -4GlcNS-AO* SU-2 SU-6 SU-2 SU-6	-	49	4,422	64
380	HS-S4-AO*	GlcA β -4GlcNAc α -4GlcA β -4aMan-AO* (Variously 6S and NS?)	-	2	1,817	388
381	HS-S8-AO*	GlcA β -4GlcNAc α -4GlcA β -4GlcNAc α -4GlcA β -4GlcNAc α -4GlcA β -4aMan-AO* (Variously 6S and NS?)	-	89	8,060	485
382	GN2	GlcNAc β -4GlcNAc	-	52	-	15

383	GN2-AO	GlcNAc β -4GlcNAc-AO	-	17	20,120	6
384	GN3	GlcNAc β -4GlcNAc β -4GlcNAc	-	71	3,386	303
385	GN3-AO	GlcNAc β -4GlcNAc β -4GlcNAc-AO	-	39	21,753	841
386	GN4-AO*	GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc-AO*	-	13	7,573	599
387	GN5-AO*	GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc-AO*	-	139	3,307	374
388	GN6-AO*	GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc-AO*	-	56	60	7
389	GN7-AO*	GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc-AO*	-	10	181	32
390	GN8-AO*	GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc β -4GlcNAc-AO*	-	50	235	15
391	Man4(β 4)	Man β -4Man β -4Man β -4Man	-	176	1,924	481
392	Man5(β 4)	Man β -4Man β -4Man β -4Man β -4Man	-	93	13,621	1
393	Man6(β 4)	Man β -4Man β -4Man β -4Man β -4Man β -4Man	-	57	16,512	135
394	Xyl5(β 4)	Xyl β -4Xyl β -4Xyl β -4Xyl β -4Xyl	-	55	-	8
395	Xyl6(β 4)	Xyl β -4Xyl β -4Xyl β -4Xyl β -4Xyl β -4Xyl	-	63	47	16
396	Ara6(α 5)	Ara α -5Ara α -5Ara α -5Ara α -5Ara α -5Ara	-	43	35	14
397	Ara7(α 5)	Ara α -5Ara α -5Ara α -5Ara α -5Ara α -5Ara α -5Ara	-	224	16	26
398	Glc2(α 2)-AO	Glc α -2Glc-AO	-	28	81	34
399	Nigerose-AO	Glc α -3Glc-AO	-	73	-	1
400	Malto-2-AO	Glc α -4Glc-AO	-	105	-	16
401	Malto-3-AO	Glc α -4Glc α -4Glc-AO	-	25	21	13
402	Malto-4-AO	Glc α -4Glc α -4Glc α -4Glc-AO	-	14	-	6

403	Malto-5-AO	Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO	8	34	-	4
404	Malto-6-AO	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO	-	34	17	18
405	Malto-7-AO	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO	-	14	17	22
406	Malto-8-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	-	24	11	2
407	Malto-9-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	97	11	-	10
408	Malto-10-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	-	59	-	31
409	Malto-11-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	-	18	-	24
410	Malto-12-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	44	8	-	28
411	Malto-13-AO*	Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glcα-4Glc-AO*	-	74	10	11
412	Dext-2-AO	Glcα-6Glc-AO	-	34	-	3
413	Dext-3-AO	Glcα-6Glcα-6Glc-AO	-	102	16	21
414	Dext-4-AO	Glcα-6Glcα-6Glcα-6Glc-AO	-	11	-	31
415	Dext-5-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO	-	134	38	1
416	Dext-6-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO	-	177	-	41
417	Dext-7-AO	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO	-	41	-	6
418	Dext-8-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO*	-	16	47	47
419	Dext-9-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO*	-	7	-	23
420	Dext-10-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO*	-	77	-	36
421	Dext-11-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO*	-	54	-	5
422	Dext-12-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc-AO*	-	88	3	3

423	Dext-13-AO*	Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glcα-6Glc- AO*	-	1	13	40
424	Lam-2-AO	Glcβ-3Glc-AO	-	49	13	2
425	Lam-3-AO	Glcβ-3Glcβ-3Glc-AO	-	80	16	5
426	Lam-4-AO	Glcβ-3Glcβ-3Glcβ-3Glc-AO	-	12	63	52
427	Lam-5-AO	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO	-	113	15	7
428	Lam-6-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO	-	2,270	-	2
429	Lam-7-AO	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO	-	72	6	3
430	Curd-8-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	50	-	17
431	Curd-9-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	28	15	53
432	Curd-10-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	122	-	9
433	Curd-11-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	84	8	32
434	Curd-12-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	19	26	37
435	Curd-13-AO*	Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glcβ-3Glc-AO*	-	71	-	108
436	Cellobiose-AO	Glcβ-4Glc-AO	-	210	36	49
437	Cello-3-AO	Glcβ-4Glcβ-4Glc-AO	-	89	-	22
438	Cello-4-AO	Glcβ-4Glcβ-4Glcβ-4Glc-AO	-	12	-	24
439	Cello-5-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glc-AO*	-	5	-	95
440	Cello-6-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glc-AO	-	109	-	29
441	Cello-7-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glc-AO*	-	37	-	70
442	Cello-8-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glc-AO*	-	28	453	479

443	Cello-9-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-AO*	-	17	-	63
444	Cello-10-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-AO*	-	6	-	13
445	Cello-11-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-AO*	-	22	-	85
446	Cello-12-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-AO*	-	13	13	14
447	Cello-13-AO*	Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-4Glcβ-AO*	-	50	50	21
448	Gentiobiose-AO	Glcβ-6Glc-AO	-	14	43	49
449	Pust-3-AO	Glcβ-6Glcβ-6Glc-AO	-	190	117	17
450	Pust-4-AO	Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	33	2	54
451	Pust-5-AO	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	47	26	4
452	Pust-6-AO	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	38	36	46
453	Pust-7-AO*	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	59	129	29
454	Pust-8-AO*	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	41	-	76
455	Pust-9-AO*	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	38	14	66
456	Pust-10-AO*	Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glcβ-6Glc-AO*	-	107	1,058	163
457	Sophorose-AO	Glcβ-2Glc-AO	-	115	73	12
458	Gal	Gal	179	28	35	4
459	Gal-AO	Gal-AO	19	166	10	6
460	GalNAc	GalNAc	367	127	146	23
461	GalNAc-AO	GalNAc-AO	-	60	54	17
462	Glc	Glc	148	75	50	9

463	Glc-AO	Glc-AO	-	106	-	35
464	GN	GlcNAc	-	182	38	6
465	GN-AO	GlcNAc-AO	-	93	18	8
466	Man	Man	-	55	15	19
467	Man-AO	Man-AO	155	62	34	5
468	Fuc	Fuc	-	233	122	44
469	Fuc-AO	Fuc-AO	-	109	37	3
470	NeuAc	NeuAc	-	72	32	1
471	NeuAc-AO	NeuAc-AO	-	60	46	9
472	NeuGc	NeuGc	-	63	44	6
473	NeuGc-AO	NeuGc-AO	-	5	-	25
474	Rha	Rha	129	6	38	7
475	Rha-AO	Rha-AO	-	137	38	19
476	Gal α -6Glc-AO	Gal α -6Glc-AO	-	21	7	27
477	(6P)-Glc-AO	P-6Glc-AO	-	190	20	33
478	(6P)-Man	P-6Man	229	29	65	2
479	(6P)-Man-AO	P-6Man-AO	-	222	8	22
480	(6P)-Man5	P-6Man α -3Man α -3Man α -3Man α -2Man	-	33	3,403	173
481	(6P)-Fructose-AO	P-6Fructose-AO	-	104	10	14
482	SU-Tyr	SU-Tyr	-	121	806	68

483	SU-Cholesterol	SU-Cholesterol	52	6	8	21
484	GN-Asn	GlcNAc-Asn	-	48	8,665	471
485	Xyl3Glc4	Glcβ-4Glcβ-4Glcβ-4Glc Xylα-6 Xylα-6 Xylα-6	-	17	21	13
486	GSC-284	GalNAcβ-6Galβ-4Glcβ-Cer36 NeuAcα-3	-	61	11	5
487	GSC-575	GalNAcβ-4Galβ-3Galβ-C30 NeuAcα-3	-	300	-	8
488	GSC-70	NeuAcα-6Galβ-6GalNAcβ-4Galβ-4Glcβ-Cer36	66	61	10	29
489	GSC-154	NeuAcα-3Galβ-4GlcNAcβ-6Galβ-4Glcβ-Cer36 Fucα-3	215	65	2	44
490	GSC-446	NeuAcα-3Galβ-4GlcNAcβ-6GalNAcα-3Galβ-4Glc-C30	137	125	18	26
491	GSC-441	NeuAcα-3Galβ-4GlcNAcβ-6GalNAcα-3Galβ-4Glcβ-C30	5	41	-	15
492	GSC-384	NeuAcα-3Galβ-4GlcNAcβ-4GalNAcβ-3Galβ-4Glcβ-C30 Fucα-3	22	94	-	-
493	Glc(α6,α4,α4)	Glcα-6Glcα-4Glcα-4Glc	-	6	-	14
494	Glc(α6,α4,α4)-AO	Glcα-6Glcα-4Glcα-4Glc-AO	-	72	-	59
495	O1-AO	GlcNAcβ-3 Gal-AO GlcNAcβ-6	-	49	24,240	1,323
496	Rutinoside-AO	Rhaα-6Glc-AO	-	47	7	-

-, less than 1.

The oligosaccharide probes are all lipid-linked. Unless otherwise indicated they are NGLs prepared from reducing oligosaccharides by reductive amination with the amino lipid, 1,2-dihexadecyl-*sn*-glycero-3-phosphoethanolamine (DHPE). AO, NGLs prepared from reducing oligosaccharides by oxime ligation with an aminoxy (AO) functionalized DHPE (PMID: 17656321); Cer, natural glycolipids with various ceramide moieties; Cer36, synthetic glycolipids with ceramide having a total of 36 carbon atoms; C30, a synthetic lipid [2-(tetradecyl)hexadecanol] with 30 carbon atoms. OX and OY designate, respectively, the C1-4 fragment and the C5-6 fragments of GalNAcol of reduced oligosaccharides after mild periodate oxidation followed by reductive amination with DHPE (PMID: 12968363). ΔUA, 4,5-unsaturated hexuronic acid; aMan, 2,5-anhydro-mannose; aGal, 3,6-anhydro-galactose.

Asterisks that follow the names of certain probes indicate that predominant components are shown.