Supplementary Table 1 Biotinylated SNA at 1.0, 0.1, and 0.01 µg/ml binding to v4.0 of the CFG glycan array detected with Cy5-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Structure	SNA 1.0 µg/ml 43769		SNA 0.1 µg/ml 13083		SNA 0.01 µg/ml 2794		AVG. Rank	p-value
	Maximum RFU	AVG. RFU	Rank	AVG. RFU	Rank	AVG. RFU	Rank		
353	KDNa2-6Galb1-4GlcNAc-Sp0	35479	81	13083	100	2248	80	87	2.29E-07
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	43459	99	12671	97	1673	60	85	3.86E-09
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	41668	95	11783	90	1504	54	80	2.17E-08
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	42633	97	8361	64	1279	46	69	1.02E-07
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	41634	95	8417	64	1301	47	69	1.70E-07
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	41301	94	8083	62	1274	46	67	2.49E-07
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	36250	83	9135	70	1267	45	66	2.03E-06
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	43769	100	6606	50	965	35	62	1.71E-07
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	33754	77	9467	72	831	30	60	7.26E-06
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	35848	82	7176	55	879	31	56	7.80E-06
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	38327	88	5582	43	1008	36	55	4.79E-06
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	37541	86	5539	42	1047	37	55	7.01E-06
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	33781	77	4770	36	916	33	49	5.76E-05
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	26208	60	5535	42	1217	44	49	0.00075
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	35076	80	4260	33	821	29	47	4.3E-05
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	36221	83	4756	36	358	13	44	2.5E-05
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	33423	76	3828	29	717	26	44	0.00011
206	Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	2737	6	3028	23	2794	100	43	0.26704
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	26481	61	2551	19	1326	47	42	0.00185
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	25345	58	4161	32	568	20	37	0.00203
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	27580	63	3263	25	516	18	35	0.00132
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	2226	5	2268	17	1845	66	29	0.34846
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	23168	53	2043	16	414	15	28	0.00803
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	21837	50	2161	17	319	11	26	0.01158
193	GlcAb-Sp8	1149	3	1852	14	1594	57	25	0.41801
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	23101	53	1649	13	49	2	22	0.01014
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	21907	50	1460	11	127	5	22	0.01446
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	24536	56	1268	10	-62	-2	21	0.00776
203	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1747	4	1732	13	1287	46	21	0.41104
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	13530	31	1186	9	250	9	16	0.09814
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	901	2	940	7	861	31	13	0.49645
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	875	2	1053	8	836	30	13	0.49386
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	682	2	930	7	827	30	13	0.50743
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	933	2	443	3	840	30	12	0.51673
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	710	2	948	7	627	22	10	0.51385
105	Gala1-3GalNAca-Sp16	651	1	904	7	624	22	10	0.51827
299	GlcAb1-3GlcNAcb-Sp8	760	2	762	6	610	22	10	0.52023
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	358	1	872	7	533	19	9	0.5356
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	589	1	424	3	609	22	9	0.54146
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	8322	19	203	2	66	2	8	0.26595
150	Galb1-4GlcNAcb1-3GalNAca-Sp8	354	1	446	3	508	18	7	0.55447
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	1215	3	238	2	496	18	7	0.52786
23	[3OSO3]Galb1-4Glcb-Sp8	385	1	528	4	469	17	7	0.55141

80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	453	1	473	4	464	17	7	0.55108
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	581	1	650	5	417	15	7	0.54038
128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	486	1	448	3	450	16	7	0.55132
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	279	1	345	3	476	17	7	0.56306
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	418	1	428	3	429	15	7	0.55583
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	228	1	494	4	417	15	6	0.56145
7	Rha-Sp8	331	1	394	3	428	15	6	0.56087
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	491	1	336	3	415	15	6	0.5572
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	383	1	435	3	374	13	6	0.55926
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	424	1	666	5	308	11	6	0.55075
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	254	1	492	4	349	12	6	0.56326
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	538	1	265	2	361	13	5	0.56042
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	195	0	382	3	356	13	5	0.56993
87	GalNAca1-3(Fuca1-2)Galb-Sp18	257	1	385	3	327	12	5	0.56845
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	177	0	660	5	245	9	5	0.5638
78	Fucb1-3GlcNAcb-Sp8	239	1	177	1	344	12	5	0.57703
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	137	0	71	1	372	13	5	0.58439
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	1014	2	320	2	254	9	5	0.54287
64	Fuca1-2Galb1-3GlcNAcb-Sp0	324	1	-262	-2	410	15	4	0.58879
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	113	0	487	4	250	9	4	0.57334
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	124	0	521	4	232	8	4	0.57223
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	243	1	330	3	262	9	4	0.57396
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	128	0	444	3	238	9	4	0.57498
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	79	0	454	3	230	8	4	0.57691
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	362	1	284	2	247	9	4	0.57158
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	340	1	310	2	242	9	4	0.57162
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	136	0	137	1	289	10	4	0.58512
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	1167	3	119	1	227	8	4	0.54598
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	156	0	535	4	201	7	4	0.57162
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	104	0	316	2	249	9	4	0.58076
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	134	0	503	4	207	7	4	0.57359
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	126	0	421	3	222	8	4	0.57666
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	115	0	401	3	224	8	4	0.57785
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	136	0	561	4	186	7	4	0.57199
180	(GlcNAcb1-4)5b-Sp8	178	0	455	3	201	7	4	0.574
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	168	0	132	1	267	10	4	0.58492
306	Mana1-6Manb-Sp10	148	0	172	1	259	9	4	0.58443
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	96	0	413	3	204	7	4	0.57896
179	(GlcNAcb1-4)6b-Sp8	120	0	473	4	184	7	3	0.57633
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	89	0	314	2	215	8	3	0.58284
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	81	0	350	3	207	7	3	0.58202
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	125	0	425	3	186	7	3	0.57801
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	188	0	247	2	219	8	3	0.58137
303	GlcNAcb1-4GlcNAcb-Sp10	34	0	471	4	170	6	3	0.58051
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	68	0	206	2	221	8	3	0.58786
253	Neu5Aca2-3Galb1-4Glcb-Sp8	164	0	482	4	151	5	3	0.57551
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	134	0	341	3	183	7	3	0.5812

135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	74	0	278	2	199	7	3	0.58557
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	120	0	266	2	197	7	3	0.58427
65	Fuca1-2Galb1-3GlcNAcb-Sp8	117	0	357	3	176	6	3	0.58153
37	[4OSO3]Galb1-4GlcNAcb-Sp8	58	0	393	3	172	6	3	0.58263
320	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	166	0	160	1	214	8	3	0.58602
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	84	0	262	2	197	7	3	0.5859
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	-3	0	246	2	205	7	3	0.58977
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	126	0	410	3	156	6	3	0.57981
16	GlcNAcb-Sp8	32	0	234	2	199	7	3	0.58908
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	91	0	178	1	206	7	3	0.58867
111	Gala1-3Galb-Sp8	116	0	384	3	159	6	3	0.58116
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	-85	0	628	5	110	4	3	0.58141
96	GalNAcb1-4GlcNAcb-Sp8	45	0	590	5	106	4	3	0.57781
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	152	0	317	2	154	6	3	0.58263
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	40	0	364	3	150	5	3	0.58545
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	23	0	438	3	133	5	3	0.58382
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	44	0	240	2	173	6	3	0.5894
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	115	0	335	3	144	5	3	0.58382
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	102	0	141	1	186	7	3	0.59054
197	KDNa2-3Galb1-4GlcNAcb-Sp0	128	0	204	2	169	6	3	0.58761
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	15	0	412	3	129	5	3	0.58537
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	105	0	76	1	194	7	3	0.59274
439	[6OSO3]Galb1-3GlcNAcb-Sp0	43	0	316	2	145	5	3	0.58749
146	Galb1-4[6OSO3]Glcb-Sp0	81	0	187	1	168	6	3	0.59026
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	146	0	187	1	163	6	3	0.58782
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	82	0	366	3	129	5	3	0.58451
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	31	0	268	2	153	5	3	0.58961
183	GlcNAcb1-6GalNAca-Sp8	-39	0	252	2	160	6	3	0.59282
14	GalNAcb-Sp8	84	0	254	2	151	5	3	0.5881
131	Galb1-3GalNAca-Sp8	70	0	301	2	141	5	3	0.58716
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	67	0	397	3	120	4	2	0.58423
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	100	0	298	2	139	5	2	0.58614
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	61	0	41	0	195	7	2	0.5959
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	84	0	76	1	186	7	2	0.59391
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	114	0	260	2	144	5	2	0.58692
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	30	0	354	3	128	5	2	0.58716
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	75	0	284	2	140	5	2	0.58769
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	52	0	127	1	175	6	2	0.59359
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	-112	0	287	2	149	5	2	0.59481
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	84	0	273	2	140	5	2	0.58777
273	Neu5Gca2-3Galb1-4Glcb-Sp0	80	0	198	2	155	6	2	0.59038
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	75	0	121	1	168	6	2	0.59318
95	GalNAcb1-4GlcNAcb-Sp0	18	0	411	3	104	4	2	0.58631
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	44	0	231	2	141	5	2	0.59107
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	-37	0	604	5	64	2	2	0.58231
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	42	0	128	1	159	6	2	0.5946
41	[6OSO3]Galb1-4GlcNAcb-Sp8	44	0	221	2	139	5	2	0.59156

133	Galb1-3GalNAcb-Sp8	19	0	344	3	112	4	2	0.58867
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	111	0	210	2	134	5	2	0.58948
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	58	0	277	2	122	4	2	0.5894
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	44	0	94	1	162	6	2	0.59578
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	90	0	99	1	156	6	2	0.59395
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	90	0	92	1	157	6	2	0.5942
13	Manb-Sp8	140	0	110	1	149	5	2	0.59176
109	Gala1-3Galb1-4GlcNAcb-Sp8	63	0	232	2	125	4	2	0.59091
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	45	0	131	1	144	5	2	0.59497
245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	56	0	187	1	130	5	2	0.59282
274	Neu5Gca2-6GalNAca-Sp0	102	0	112	1	143	5	2	0.59347
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	43	0	242	2	119	4	2	0.59156
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	116	0	110	1	141	5	2	0.59306
42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	72	0	114	1	142	5	2	0.59464
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4	66	0	173	1	129	5	2	0.59302
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	49	0	186	1	128	5	2	0.59322
136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	79	0	113	1	139	5	2	0.59452
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	18	0	215	2	119	4	2	0.59367
39	[6OSO3]Galb1-4Glcb-Sp0	18	0	356	3	88	3	2	0.5892
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	100	0	143	1	127	5	2	0.59294
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	38	0	138	1	131	5	2	0.5955
304	GlcNAcb1-4GlcNAcb-Sp12	-2	0	280	2	102	4	2	0.59253
175	GlcNAcb1-3Galb1-4Glcb-Sp0	56	0	133	1	127	5	2	0.59513
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	45	0	228	2	107	4	2	0.59253
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	48	0	87	1	136	5	2	0.59695
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	17	0	107	1	133	5	2	0.59752
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	14	0	274	2	93	3	2	0.59249
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	100	0	102	1	124	4	2	0.59473
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	92	0	56	0	132	5	2	0.59659
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	51	0	82	1	127	5	2	0.5974
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	18	0	262	2	88	3	2	0.59302
106	Gala1-3GalNAcb-Sp8	44	0	72	1	126	5	2	0.59813
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	5	0	174	1	107	4	2	0.59635
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	10	0	193	1	102	4	2	0.59558
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNAc-Sp21	74	0	79	1	120	4	2	0.59687
298	GalNAcb1-3Galb-Sp8	-2	0	85	1	122	4	2	0.59963
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	-20	0	449	3	44	2	2	0.58875
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	63	0	31	0	128	5	2	0.59894
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	63	0	19	0	130	5	2	0.59934
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	936	2	47	0	67	2	2	0.56512
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	1	0	16	0	130	5	2	0.60197
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	25	0	174	1	95	3	2	0.59602
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	-38	0	292	2	71	3	2	0.59477
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	31	0	43	0	120	4	2	0.60007
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	10	0	30	0	123	4	2	0.60132
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	-17	0	226	2	83	3	2	0.5961
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	41	0	84	1	108	4	2	0.59849

204	Mana1-3(Mana1-6)Mana-Sp9	32	0	56	0	112	4	2	0.59983
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	11	0	87	1	107	4	2	0.59963
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	62	0	8	0	120	4	1	0.60023
387	Galb1-3GlcNAcb1-3GalNAca-Sp14	-6	0	17	0	121	4	1	0.60257
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-8	0	246	2	72	3	1	0.59537
339	GlcNAca1-4Galb1-3GalNAc-Sp14	49	0	24	0	115	4	1	0.60031
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	-21	0	141	1	94	3	1	0.59926
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	16	0	26	0	116	4	1	0.60152
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	2	0	4	0	121	4	1	0.60278
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	-3	0	34	0	115	4	1	0.60201
113	Gala1-4Galb1-4GlcNAcb-Sp0	-1	0	26	0	116	4	1	0.60221
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	45	0	115	1	93	3	1	0.59768
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	-8	0	264	2	64	2	1	0.59497
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	47	0	87	1	96	3	1	0.59861
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	-80	0	-60	0	136	5	1	0.60805
45	Neu5Ac(9Ac)a-Sp8	-25	0	107	1	96	3	1	0.60072
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	24	0	62	0	102	4	1	0.60031
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	37	0	60	0	101	4	1	0.59991
38	6-H2PO3Mana-Sp8	32	0	116	1	89	3	1	0.59833
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	77	0	30	0	103	4	1	0.59942
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	-19	0	98	1	94	3	1	0.60092
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	-14	0	119	1	89	3	1	0.60007
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	50	0	60	0	97	3	1	0.59954
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	444	1	20	0	80	3	1	0.58586
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	58	0	97	1	88	3	1	0.59809
58	Fuca1-2Galb1-3GalNAca-Sp8	19	0	4	0	109	4	1	0.60257
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	38	0	108	1	85	3	1	0.59857
8	Neu5Aca-Sp8	-16	0	-1	0	111	4	1	0.60411
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-16	0	143	1	79	3	1	0.59959
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	6	0	84	1	90	3	1	0.60064
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	19	0	191	1	66	2	1	0.59675
252	Neu5Aca2-3Galb1-4Glcb-Sp0	40	0	47	0	95	3	1	0.60056
297	GalNAca-Sp15	75	0	120	1	77	3	1	0.59691
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	46	0	176	1	67	2	1	0.59623
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	-10	0	18	0	103	4	1	0.60342
137	Galb1-3Galb-Sp8	22	0	4	0	103	4	1	0.6027
91	GalNAcb1-3GalNAca-Sp8	0	0	-49	0	116	4	1	0.6052
385	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	-8	0	21	0	100	4	1	0.60334
15	GlcNAcb-Sp0	8	0	62	0	89	3	1	0.60148
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	35	0	-2	0	100	4	1	0.60253
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	-8	0	63	0	86	3	1	0.60221
435	Galb1-4Galb-Sp10	1	0	75	1	83	3	1	0.60148
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	12	0	16	0	94	3	1	0.60298
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	-20	0	54	0	87	3	1	0.60302
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	-5	0	26	0	91	3	1	0.60338
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	21	0	91	1	74	3	1	0.60039
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	18	0	74	1	78	3	1	0.60104

418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	11	0	-6	0	94	3	1	0.60391
190	Glcb1-6Glcb-Sp8	17	0	-10	0	94	3	1	0.60383
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	7	0	18	0	88	3	1	0.60334
110	Gala1-3Galb1-4Glcb-Sp0	6	0	57	0	79	3	1	0.60217
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	41	0	48	0	79	3	1	0.60112
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	35	0	76	1	73	3	1	0.60047
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	7	0	-10	0	92	3	1	0.60431
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	41	0	60	0	74	3	1	0.60084
119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	11	0	7	0	86	3	1	0.6037
196	KDNa2-3Galb1-3GlcNAcb-Sp0	-15	0	57	0	77	3	1	0.6031
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	-9	0	34	0	82	3	1	0.60358
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	38	0	105	1	63	2	1	0.59959
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	24	0	65	0	71	3	1	0.60144
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	35	0	73	1	67	2	1	0.60084
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	4	0	73	1	69	2	1	0.60201
170	GlcNAcb1-3GalNAca-Sp14	-22	0	-8	0	88	3	1	0.60556
12	Glcb-Sp8	-13	0	-56	0	96	3	1	0.60681
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	-13	0	-10	0	86	3	1	0.60536
289	Gala1-3(Fuca1-2)Galb-Sp18	-16	0	-12	0	86	3	1	0.60556
436	Galb1-6Galb-Sp10	44	0	92	1	58	2	1	0.60007
59	Fuca1-2Galb1-3GalNAca-Sp14	-24	0	14	0	79	3	1	0.60511
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	-23	0	-3	0	82	3	1	0.60564
104	Gala1-3GalNAca-Sp8	-10	0	42	0	71	3	1	0.60374
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	25	0	11	0	74	3	1	0.60346
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	4	0	-40	0	86	3	1	0.60588
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	-2	0	89	1	57	2	1	0.60209
357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	-5	0	-12	0	78	3	1	0.60544
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	-32	0	-6	0	79	3	1	0.60624
296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	-21	0	13	0	70	3	1	0.6054
5	Fuca-Sp8	-13	0	40	0	64	2	1	0.60423
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	33	0	-35	0	77	3	1	0.60487
1	Gala-Sp8	55	0	-12	0	68	2	1	0.60342
89	GalNAca1-3Galb-Sp8	11	0	-5	0	69	2	1	0.60487
208	Manb1-4GlcNAcb-Sp0	-31	0	15	0	67	2	1	0.60584
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	-15	0	-23	0	75	3	1	0.6064
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	-40	0	41	0	62	2	1	0.60536
278	Galb1-3GalNAca-Sp14	-37	0	-21	0	74	3	1	0.60725
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	-32	0	112	1	45	2	1	0.60286
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	0	0	7	0	65	2	1	0.60499
438	GalNAcb1-6GalNAcb-Sp8	29	0	20	0	59	2	1	0.60354
147	Galb1-4[6OSO3]Glcb-Sp8	-5	0	-18	0	69	2	1	0.60604
186	Glca1-4Glcb-Sp8	-75	0	-50	0	81	3	1	0.60966
195	GlcAb1-6Galb-Sp8	8	0	-13	0	66	2	1	0.60544
168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	-17	0	-13	0	67	2	1	0.6064
115	Gala1-4Galb1-4Glcb-Sp0	11	0	-22	0	66	2	1	0.60568
384	GlcNAcb1-2(GlcNAcb1-4)Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-39	0	-52	0	75	3	1	0.60854
355	KDNa2-3Galb1-3GalNAca-Sp14	41	0	-13	0	61	2	1	0.60431

307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	-5	0	-1	0	61	2	1	0.60568
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	3	0	-10	0	62	2	1	0.60568
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	16	0	-32	0	65	2	1	0.60592
288	6-H2PO3Glcb-Sp10	17	0	11	0	56	2	1	0.60451
263	Neu5Aca2-6Galb-Sp8	-12	0	-31	0	66	2	1	0.60697
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-39	0	-23	0	66	2	1	0.60773
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-4	0	2	0	58	2	1	0.60564
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	-10	0	-29	0	65	2	1	0.60685
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	-1	0	-25	0	63	2	1	0.6064
261	Neu5Aca2-6Galb1-4Glc-Sp0	-16	0	-37	0	67	2	1	0.60733
28	[3OSO3]Galb1-3GlcNAcb-Sp8	-28	0	-48	0	69	2	1	0.60817
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	-13	0	42	0	49	2	1	0.60475
211	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	-8	0	-50	0	68	2	1	0.60749
191	G-ol-Sp8	-26	0	-26	0	64	2	1	0.60741
302	GlcNAcb1-3Man-Sp10	-32	0	-15	0	61	2	1	0.60733
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	2	0	-23	0	61	2	1	0.60628
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	-21	0	-31	0	64	2	1	0.60741
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	-27	0	-42	0	65	2	1	0.60805
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	26	0	-16	0	56	2	1	0.60524
86	GalNAca1-3(Fuca1-2)Galb-Sp8	2	0	8	0	52	2	1	0.6054
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	-98	0	-185	-1	99	4	1	0.61527
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	11	0	-17	0	55	2	1	0.60592
4	GalNAca-Sp8	6	0	2	0	52	2	1	0.60548
160	Galb1-4GlcNAcb-Sp0	-28	0	-35	0	61	2	1	0.60797
79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	-1	0	11	0	50	2	1	0.60548
291	Galb1-3Galb1-4GlcNAcb-Sp8	18	0	20	0	46	2	1	0.60451
97	Gala1-2Galb-Sp8	-19	0	-10	0	55	2	1	0.60685
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	-24	0	-44	0	60	2	1	0.60821
44	[6OSO3]GlcNAcb-Sp8	-46	0	36	0	44	2	1	0.60652
262	Neu5Aca2-6Galb1-4Glcb-Sp8	81	0	-35	0	51	2	1	0.60399
114	Gala1-4Galb1-4GlcNAcb-Sp8	-24	0	-35	0	57	2	1	0.60797
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	12	0	-8	0	49	2	1	0.60576
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	15	0	-42	0	55	2	1	0.60677
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	-26	0	-20	0	53	2	1	0.60761
171	GlcNAcb1-3Galb-Sp8	16	0	21	0	41	1	1	0.60475
77	Fuca1-4GlcNAcb-Sp8	-3	0	21	0	42	2	1	0.60548
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	-30	0	-20	0	53	2	1	0.60777
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	1	0	-11	0	49	2	1	0.60632
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-7	0	-16	0	50	2	1	0.60681
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	-44	0	-47	0	59	2	1	0.60918
187	Glca1-4Glca-Sp8	-30	0	-11	0	49	2	1	0.60757
188	Glca1-6Glca1-6Glcb-Sp8	-9	0	2	0	44	2	1	0.6064
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	-20	0	-23	0	49	2	1	0.60765
161	Galb1-4GlcNAcb-Sp8	-31	0	-50	0	55	2	1	0.60894
9	Neu5Aca-Sp11	-50	0	-39	0	54	2	1	0.6093
234	Neu5Aca2-3Galb-Sp8	-36	0	-6	0	46	2	1	0.60773
141	Galb1-3GlcNAcb-Sp8	-8	0	1	0	42	1	0	0.60648

139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	-9	0	13	0	39	1	0	0.60616
35	[3OSO3]Galb-Sp8	-40	0	-53	0	55	2	0	0.60942
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	11	0	-28	0	45	2	0	0.60677
189	Glcb1-4Glcb-Sp8	4	0	-19	0	43	2	0	0.60677
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	-8	0	22	0	35	1	0	0.60592
140	Galb1-3GlcNAcb-Sp0	-2	0	-8	0	41	1	0	0.60664
6	Fuca-Sp9	-34	0	-53	0	53	2	0	0.60926
116	Gala1-4GlcNAcb-Sp8	12	0	-5	0	40	1	0	0.606
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	-53	0	-112	-1	66	2	0	0.61187
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	-11	0	-12	0	42	2	0	0.60713
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	-5	0	-12	0	41	1	0	0.60693
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	7	0	-28	0	43	2	0	0.60701
76	Fuca1-3GlcNAcb-Sp8	-29	0	-19	0	43	2	0	0.60809
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	-30	0	-19	0	43	2	0	0.60813
409	Neu5Aca2-3Galb1-3GalNAcb1-4-(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	0	0	-45	0	47	2	0	0.60781
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	-39	0	-20	0	43	2	0	0.60854
102	Gala1-3(Fuca1-2)Galb-Sp8	-146	0	-193	-1	87	3	0	0.61799
254	Neu5Aca2-6GalNAca-Sp8	-3	0	20	0	31	1	0	0.60596
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	-13	0	-30	0	43	2	0	0.60789
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	-13	0	42	0	27	1	0	0.60564
11	Galb-Sp8	-77	0	-86	-1	58	2	0	0.61211
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	1	0	-41	0	42	2	0	0.60781
117	Gala1-6Glcb-Sp8	-10	0	-31	0	40	1	0	0.60793
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-19	0	-6	0	35	1	0	0.60749
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-16	0	-12	0	36	1	0	0.60757
264	Neu5Aca2-8Neu5Aca-Sp8	-8	0	-7	0	33	1	0	0.60717
267	Neu5Acb2-6GalNAca-Sp8	-43	0	-16	0	36	1	0	0.60882
184	GlcNAcb1-6GalNAca-Sp14	-50	0	-46	0	43	2	0	0.61002
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	-11	0	-8	0	32	1	0	0.60737
94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	-32	0	-85	-1	50	2	0	0.61058
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-24	0	-29	0	37	1	0	0.60854
74	Fuca1-2Galb1-4Glcb-Sp0	-12	0	-21	0	33	1	0	0.60789
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	-41	0	-176	-1	68	2	0	0.61387
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	6	0	-32	0	33	1	0	0.60761
163	Galb1-4Glcb-Sp8	-9	0	-13	0	30	1	0	0.60757
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	-19	0	-22	0	32	1	0	0.60825
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	-42	0	-4	0	30	1	0	0.60854
2	Glca-Sp8	-11	0	-77	-1	43	2	0	0.6097
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	-55	0	-38	0	37	1	0	0.61014
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	-5	0	-26	0	31	1	0	0.60789
75	Fuca1-2Galb-Sp8	-11	0	-19	0	29	1	0	0.60793
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	-33	0	-25	0	31	1	0	0.60898
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	-1	0	-33	0	30	1	0	0.60805
176	GlcNAcb1-4-MDPLys	-79	0	-4	0	29	1	0	0.61006
236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-40	0	-31	0	32	1	0	0.60946
34	[3OSO3]Galb1-4GlcNAcb-Sp8	-18	0	-26	0	28	1	0	0.60854
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	-15	0	-31	0	29	1	0	0.60858

92	GalNAcb1-3(Fuca1-2)Galb-Sp8	-10	0	-40	0	30	1	0	0.6087
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	-19	0	-43	0	31	1	0	0.60914
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	-1	0	-33	0	26	1	0	0.60821
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	-29	0	2	0	20	1	0	0.60817
10	Neu5Acb-Sp8	-62	0	-29	0	28	1	0	0.61042
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	7	0	-30	0	23	1	0	0.60789
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	-16	0	-40	0	26	1	0	0.6091
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	-40	0	-84	-1	36	1	0	0.61143
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-18	0	-56	0	26	1	0	0.60982
169	GlcNAcb1-3GalNAca-Sp8	-22	0	-48	0	24	1	0	0.60974
73	Fuca1-2Galb1-4GlcNAcb-Sp8	-39	0	-45	0	24	1	0	0.6103
194	GlcAb1-3Galb-Sp8	-13	0	-38	0	20	1	0	0.60914
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	-28	0	-29	0	19	1	0	0.60942
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	-45	0	-41	0	23	1	0	0.61042
88	GalNAca1-3GalNAcb-Sp8	-11	0	-43	0	19	1	0	0.6093
33	[3OSO3]Galb1-4GlcNAcb-Sp0	-31	0	-41	0	19	1	0	0.61002
72	Fuca1-2Galb1-4GlcNAcb-Sp0	-29	0	-45	0	19	1	0	0.6101
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	2	0	23	0	1	0	0	0.60685
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	-90	0	-28	0	12	0	0	0.61215
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	-23	0	-23	0	6	0	0	0.6095
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	-49	0	-66	-1	15	1	0	0.61191
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	-61	0	-53	0	12	0	0	0.61199
192	GlcAa-Sp8	-8	0	-60	0	8	0	0	0.6103
200	Mana1-2Mana1-3Mana-Sp9	-75	0	-20	0	1	0	0	0.61167
162	Galb1-4Glcb-Sp0	-74	0	-71	-1	12	0	0	0.61323
276	Neu5Gca-Sp8	-12	0	-21	0	-7	0	0	0.6095
202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	2	0	-80	-1	5	0	0	0.61082
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	-64	0	-75	-1	7	0	0	0.61319
108	Gala1-3Galb1-3GlcNAcb-Sp0	-79	0	-94	-1	10	0	0	0.61443
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-17	0	-74	-1	0	0	0	0.61155
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	-47	0	-64	0	-1	0	0	0.61239
350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	-94	0	-129	-1	11	0	0	0.61639
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-118	0	-132	-1	13	0	0	0.61739
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	-145	0	-40	0	-7	0	0	0.61559
316	Neu5Aca2-8Neu5Acb-Sp17	-91	0	-103	-1	2	0	0	0.61559
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	125	0	-80	-1	-18	-1	0	0.60681
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	-189	0	-157	-1	15	1	0	0.62114
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	-74	0	-106	-1	-7	0	0	0.61539
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	242	1	-142	-1	-20	-1	0	0.60467
354	KDNa2-3Galb1-4Glc-Sp0	-99	0	-111	-1	-7	0	0	0.61659
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	-54	0	-100	-1	-12	0	0	0.61455
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-97	0	-100	-1	-10	0	0	0.61619
118	Galb1-2Galb-Sp8	-57	0	-114	-1	-10	0	0	0.61515
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	-155	0	-83	-1	-12	0	0	0.61791
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	-89	0	-87	-1	-28	-1	-1	0.61607
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	-14	0	-132	-1	-24	-1	-1	0.61471
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	-149	0	-115	-1	-20	-1	-1	0.61926

248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	-94	0	-89	-1	-29	-1	-1	0.61639
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	-170	0	7	0	-53	-2	-1	0.61655
27	[3OSO3]Galb1-3GalNAca-Sp8	-87	0	-99	-1	-40	-1	-1	0.61695
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	-99	0	-156	-1	-28	-1	-1	0.61922
132	Galb1-3GalNAca-Sp16	-27	0	-102	-1	-53	-2	-1	0.61519
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	-61	0	-149	-1	-41	-1	-1	0.61795
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	-92	0	-151	-1	-40	-1	-1	0.61922
40	[6OSO3]Galb1-4Glcb-Sp8	-76	0	-189	-1	-34	-1	-1	0.61986
17	GlcN(Gc)b-Sp8	-100	0	-155	-1	-43	-2	-1	0.61982
3	Mana-Sp8	-71	0	-103	-1	-60	-2	-1	0.61727
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	-106	0	-149	-1	-52	-2	-1	0.62018
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	-139	0	-176	-1	-57	-2	-1	0.62277
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-180	0	-178	-1	-57	-2	-1	0.62447
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	-181	0	-170	-1	-68	-2	-1	0.62463
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	-132	0	-148	-1	-77	-3	-1	0.62217
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	-235	-1	-109	-1	-81	-3	-1	0.62487
226	Neu5Aca2-3GalNAca-Sp8	-143	0	-121	-1	-89	-3	-1	0.62201
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	-245	-1	-108	-1	-92	-3	-2	0.62566
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	-163	0	-205	-2	-99	-4	-2	0.62654
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	-171	0	-133	-1	-116	-4	-2	0.62467
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	-135	0	-265	-2	-94	-3	-2	0.62761
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	-149	0	-239	-2	-106	-4	-2	0.62761
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	-131	0	-227	-2	-114	-4	-2	0.62674

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP ($OC_6H_4NH_2$)
Sp17	$OCH_2C_6H_4NH_2$
Sp18	$O(CH_2)_3NHCO(CH_2)_5NH_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

Supplementary Table 2 Biotinylated HPA at 1.0, 0.1, and 0.05 µg/ml binding to v4.0 of the CFG glycan array detected with Alexa488-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Structure	HPA 1.0 µg/ml 50800		HPA 0.1 µg/ml 16240		HPA 0.05 µg/ml 4572		AVG. Rank	p-values
	Maximum RFU	AVG. RFU	Rank	AVG. RFU	Rank	AVG. RFU	Rank		
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	50800	100	9556	59	4463	98	85	4.84E-10
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	36634	72	13322	82	4572	100	85	1.68E-07
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	37107	73	10244	63	4209	92	76	7.54E-07
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	37567	74	16240	100	2188	48	74	7.75E-08
88	GalNAca1-3GalNAcb-Sp8	42082	83	8935	55	3825	84	74	1.43E-07
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	36301	71	10835	67	3719	81	73	1.06E-06
89	GalNAca1-3Galb-Sp8	30550	60	13600	84	1968	43	62	9.57E-06
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	34934	69	12525	77	1666	36	61	2.43E-06
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	39470	78	9573	59	2067	45	61	9.40E-07
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	30442	60	10706	66	2496	55	60	2.77E-05
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	26234	52	15331	94	1540	34	60	3.47E-05
87	GalNAca1-3(Fuca1-2)Galb-Sp18	33984	67	9386	58	2236	49	58	1.20E-05
79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	32424	64	10844	67	1725	38	56	1.56E-05
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	29066	57	10228	63	2005	44	55	7.22E-05
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	33162	65	9847	61	1147	25	50	2.24E-05
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	34678	68	6200	38	1581	35	47	4.52E-05
86	GalNAca1-3(Fuca1-2)Galb-Sp8	26865	53	9712	60	1047	23	45	0.0002918
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	34486	68	5213	32	857	19	40	9.67E-05
4	GalNAca-Sp8	28606	56	5131	32	725	16	35	0.00088
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	30662	60	4830	30	606	13	34	0.0005028
297	GalNAca-Sp15	14740	29	7975	49	1101	24	34	0.0187325
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	14776	29	7246	45	1111	24	33	0.0220327
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	31037	61	4025	25	443	10	32	0.0006176
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	9571	19	7053	43	1117	24	29	0.0690369
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	10718	21	7058	43	691	15	27	0.0600414
80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	21782	43	4586	28	348	8	26	0.0089916
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	6068	12	6095	38	681	15	21	0.1583565
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	8535	17	5654	35	559	12	21	0.1173082
339	GlcNAca1-4Galb1-3GalNAc-Sp14	5136	10	3777	23	114	2	12	0.2657497
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	2363	5	612	4	36	1	3	0.4864925
299	GlcAb1-3GlcNAcb-Sp8	187	0	206	1	191	4	2	0.5811762
206	Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	325	1	377	2	121	3	2	0.5719695
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	1065	2	270	2	59	1	2	0.5498236
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	900	2	157	1	24	1	1	0.5619869
203	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	162	0	167	1	79	2	1	0.5879281
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	137	0	182	1	71	2	1	0.5886172
193	GlcAb-Sp8	137	0	156	1	56	1	1	0.5901858
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	137	0	160	1	55	1	1	0.590071
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	116	0	188	1	47	1	1	0.5901093
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	109	0	192	1	44	1	1	0.5903387
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	120	0	262	2	18	0	1	0.5882344
9	Neu5Aca-Sp11	86	0	179	1	39	1	1	0.5919057
92	GalNAcb1-3(Fuca1-2)Galb-Sp8	604	1	93	1	12	0	1	0.5763662
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	115	0	113	1	50	1	1	0.5928987
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	101	0	162	1	36	1	1	0.5920967
236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	89	0	102	1	53	1	1	0.5941962
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	83	0	140	1	42	1	1	0.5933949

ID	Name							
253	Neu5Aca2-3Galb1-4Glcb-Sp8	20	0	32	0	78	2	1	0.5985393
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	62	0	134	1	44	1	1	0.5943488
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	38	0	181	1	32	1	1	0.5939292
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	59	0	128	1	45	1	1	0.594654
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	78	0	111	1	49	1	1	0.5944251
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	77	0	127	1	42	1	1	0.5941199
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	112	0	143	1	34	1	1	0.5924786
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	132	0	113	1	40	1	1	0.5926314
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	331	1	90	1	27	1	1	0.5863958
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	111	0	166	1	25	1	1	0.5919821
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	129	0	121	1	36	1	1	0.5925932
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	72	0	162	1	29	1	1	0.5934712
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	76	0	114	1	41	1	1	0.5946921
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	76	0	239	1	6	0	1	0.5912562
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	58	0	82	1	51	1	1	0.5962169
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	221	0	80	0	36	1	1	0.5906446
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	63	0	101	1	45	1	1	0.5955309
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	63	0	187	1	20	0	1	0.5932041
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	104	0	72	0	48	1	1	0.594959
150	Galb1-4GlcNAcb1-3GalNAca-Sp8	63	0	94	1	46	1	1	0.5957596
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	90	0	159	1	24	1	1	0.5930895
350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	91	0	103	1	40	1	1	0.5945777
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	67	0	158	1	27	1	1	0.593891
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	52	0	104	1	40	1	1	0.5960263
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	52	0	122	1	34	1	1	0.595569
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	63	0	159	1	22	0	1	0.5941962
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	53	0	127	1	31	1	1	0.5954547
304	GlcNAcb1-4GlcNAcb-Sp12	46	0	144	1	27	1	1	0.5952259
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	89	0	69	0	44	1	1	0.5957977
320	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	78	0	92	1	39	1	1	0.5955309
140	Galb1-3GlcNAcb-Sp0	29	0	89	1	43	1	1	0.5973595
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	63	0	155	1	21	0	1	0.594387
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	75	0	109	1	33	1	1	0.5952259
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	51	0	147	1	24	1	1	0.5950353
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	93	0	153	1	19	0	1	0.5933949
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	59	0	57	0	49	1	1	0.5972072
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	51	0	74	0	44	1	1	0.5970549
8	Neu5Aca-Sp8	61	0	83	1	40	1	1	0.5964835
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	86	0	61	0	44	1	1	0.5962169
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	48	0	142	1	24	1	0	0.5953403
264	Neu5Aca2-8Neu5Aca-Sp8	129	0	127	1	20	0	0	0.592975
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	34	0	65	0	46	1	0	0.5979685
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	58	0	158	1	17	0	0	0.5946158
34	[3OSO3]Galb1-4GlcNAcb-Sp8	72	0	143	1	20	0	0	0.5945395
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	77	0	115	1	28	1	0	0.5951115
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	48	0	95	1	35	1	0	0.5967121
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	20	0	80	0	42	1	0	0.5980827
169	GlcNAcb1-3GalNAca-Sp8	60	0	115	1	28	1	0	0.5957596
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	59	0	102	1	31	1	0	0.5961788
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	28	0	66	0	44	1	0	0.5982349
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	80	0	77	0	36	1	0	0.5961407

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357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	87	0	87	1	32	1	0	0.5956452
28	[3OSO3]Galb1-3GlcNAcb-Sp8	98	0	182	1	4	0	0	0.5926696
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	54	0	114	1	27	1	0	0.5960644
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	25	0	82	1	39	1	0	0.5979305
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	44	0	57	0	44	1	0	0.5979685
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	75	0	88	1	32	1	0	0.5960644
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	50	0	102	1	30	1	0	0.5965597
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	53	0	80	0	36	1	0	0.5970549
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	56	0	75	0	37	1	0	0.5970929
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	25	0	105	1	31	1	0	0.5973595
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	58	0	130	1	21	0	0	0.5955309
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	56	0	106	1	28	1	0	0.596255
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	52	0	80	0	36	1	0	0.5970929
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	85	0	121	1	21	0	0	0.5948446
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	27	0	94	1	33	1	0	0.597626
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	66	0	114	1	24	1	0	0.5957215
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	67	0	79	0	33	1	0	0.596674
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	59	0	96	1	29	1	0	0.5964835
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	44	0	49	0	43	1	0	0.598311
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	48	0	82	1	33	1	0	0.5972833
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	124	0	86	1	25	1	0	0.5945395
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	79	0	150	1	11	0	0	0.5943488
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	79	0	114	1	21	0	0	0.5953403
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNAcb1-6)Galb1-4Glcb-Sp0	57	0	127	1	19	0	0	0.5957596
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	99	0	138	1	12	0	0	0.5940055
115	Gala1-4Galb1-4Glcb-Sp0	56	0	53	0	40	1	0	0.5978163
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	80	0	69	0	33	1	0	0.5965597
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	46	0	104	1	26	1	0	0.5967883
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	50	0	125	1	19	0	0	0.5961025
288	6-H2PO3Glcb-Sp10	31	0	96	1	29	1	0	0.5975498
137	Galb1-3Galb-Sp8	56	0	53	0	38	1	0	0.5978924
263	Neu5Aca2-6Galb-Sp8	72	0	102	1	23	1	0	0.5959882
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	80	0	90	1	25	1	0	0.5960644
27	[3OSO3]Galb1-3GalNAca-Sp8	61	0	112	1	21	0	0	0.5961025
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	106	0	118	1	15	0	0	0.594387
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	82	0	127	1	14	0	0	0.5949972
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	51	0	110	1	22	0	0	0.5965216
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	67	0	100	1	23	0	0	0.596255
118	Galb1-2Galb-Sp8	40	0	95	1	26	1	0	0.5973595
262	Neu5Aca2-6Galb1-4Glcb-Sp8	67	0	110	1	19	0	0	0.5960263
160	Galb1-4GlcNAcb-Sp0	43	0	113	1	20	0	0	0.5967883
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	49	0	57	0	35	1	0	0.5981207
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	52	0	47	0	37	1	0	0.598311
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	78	0	85	1	24	1	0	0.5963693
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	76	0	84	1	24	1	0	0.5964835
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	46	0	105	1	20	0	0	0.5969787
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	41	0	77	0	28	1	0	0.5979305
291	Galb1-3Galb1-4GlcNAcb-Sp8	61	0	76	0	27	1	0	0.5972452
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	42	0	61	0	33	1	0	0.598311
234	Neu5Aca2-3Galb-Sp8	84	0	101	1	17	0	0	0.5957977
188	Glca1-6Glca1-6Glcb-Sp8	26	0	108	1	20	0	0	0.597626

136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	61	0	83	1	24	1	0	0.5970929
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	36	0	24	0	43	1	0	0.5995662
202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	44	0	56	0	33	1	0	0.5984252
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	45	0	71	0	29	1	0	0.5979685
211	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	40	0	84	1	25	1	0	0.5978163
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	37	0	32	0	40	1	0	0.599338
74	Fuca1-2Galb1-4Glcb-Sp0	56	0	96	1	20	0	0	0.5969406
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	49	0	94	1	21	0	0	0.5972452
58	Fuca1-2Galb1-3GalNAca-Sp8	73	0	69	0	26	1	0	0.5970929
435	Galb1-4Galb-Sp10	53	0	67	0	28	1	0	0.5978543
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	73	0	115	1	13	0	0	0.5958358
354	KDNa2-3Galb1-4Glc-Sp0	56	0	87	1	22	0	0	0.5972072
12	Glcb-Sp8	47	0	81	0	25	1	0	0.597664
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	55	0	131	1	10	0	0	0.5960263
64	Fuca1-2Galb1-3GlcNAcb-Sp0	26	0	51	0	34	1	0	0.599262
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	35	0	92	1	22	0	0	0.5978163
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	19	0	70	0	29	1	0	0.5989958
190	Glcb1-6Glcb-Sp8	76	0	93	1	17	0	0	0.5964073
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	67	0	43	0	32	1	0	0.5980827
110	Gala1-3Galb1-4Glcb-Sp0	36	0	75	0	26	1	0	0.598273
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	48	0	66	0	27	1	0	0.5981207
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	48	0	84	1	22	0	0	0.597626
184	GlcNAcb1-6GalNAca-Sp14	55	0	84	1	21	0	0	0.5973975
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	33	0	65	0	28	1	0	0.5986915
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	31	0	88	1	22	0	0	0.5981207
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	73	0	97	1	16	0	0	0.5964073
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	70	0	85	1	19	0	0	0.5968644
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	45	0	77	0	23	1	0	0.5979685
141	Galb1-3GlcNAcb-Sp8	50	0	52	0	30	1	0	0.5984632
3	Mana-Sp8	38	0	86	1	21	0	0	0.5979685
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	55	0	78	0	22	0	0	0.5975879
187	Glca1-4Glca-Sp8	42	0	76	0	23	0	0	0.5981207
78	Fucb1-3GlcNAcb-Sp8	39	0	91	1	19	0	0	0.5978163
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	57	0	83	1	19	0	0	0.5974356
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	19	0	45	0	33	1	0	0.5997943
200	Mana1-2Mana1-3Mana-Sp9	52	0	26	0	35	1	0	0.5991859
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	16	0	81	0	23	1	0	0.5989197
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	48	0	46	0	30	1	0	0.5987675
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	47	0	50	0	29	1	0	0.5986915
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	53	0	43	0	30	1	0	0.5986915
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	63	0	78	0	20	0	0	0.5973595
162	Galb1-4Glcb-Sp0	42	0	94	1	17	0	0	0.597664
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	41	0	112	1	11	0	0	0.5972452
186	Glca1-4Glcb-Sp8	72	0	70	0	20	0	0	0.5973214
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	43	0	42	0	31	1	0	0.5990718
15	GlcNAcb-Sp0	54	0	70	0	22	0	0	0.5979305
385	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	84	0	66	0	20	0	0	0.5970168
72	Fuca1-2Galb1-4GlcNAcb-Sp0	56	0	86	1	16	0	0	0.5974737
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	23	0	51	0	29	1	0	0.5995662
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	63	0	63	0	22	0	0	0.5978543
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	41	0	100	1	14	0	0	0.5975879

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68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	44	0	52	0	27	1	0	0.5988056
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	70	0	132	1	2	0	0	0.5957215
133	Galb1-3GalNAcb-Sp8	8	0	35	0	35	1	0	0.6005163
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	43	0	53	0	26	1	0	0.5988436
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	26	0	73	0	22	0	0	0.5988817
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	46	0	59	0	24	1	0	0.5985773
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	32	0	48	0	28	1	0	0.599376
384	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNac-Sp21	57	0	100	1	11	0	0	0.5970929
146	Galb1-4[6OSO3]Glcb-Sp0	84	0	129	1	1	0	0	0.5953403
261	Neu5Aca2-6Galb1-4Glcb-Sp0	72	0	72	0	17	0	0	0.5973595
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	57	0	98	1	11	0	0	0.5971691
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	53	0	104	1	10	0	0	0.597131
108	Gala1-3Galb1-3GlcNAcb-Sp0	42	0	33	0	31	1	0	0.5994521
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	44	0	47	0	27	1	0	0.5989958
132	Galb1-3GalNAca-Sp16	48	0	71	0	19	0	0	0.5982349
33	[3OSO3]Galb1-4GlcNAcb-Sp0	59	0	66	0	20	0	0	0.5979685
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	66	0	98	1	10	0	0	0.5968644
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	90	0	107	1	5	0	0	0.5957977
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	33	0	59	0	24	1	0	0.5990718
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	20	0	41	0	30	1	0	0.6000223
139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	32	0	86	1	16	0	0	0.5983871
387	Galb1-3GlcNAcb1-3GalNAca-Sp14	49	0	64	0	20	0	0	0.5984252
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	31	0	26	0	33	1	0	0.6000603
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	16	0	21	0	35	1	0	0.6007443
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	39	0	60	0	22	0	0	0.5988817
109	Gala1-3Galb1-4GlcNAcb-Sp8	27	0	32	0	31	1	0	0.6000603
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	30	0	85	1	15	0	0	0.5985393
6	Fuca-Sp9	32	0	31	0	31	1	0	0.5999083
168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	48	0	93	1	11	0	0	0.5977021
11	Galb-Sp8	52	0	81	0	14	0	0	0.5978924
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	42	0	49	0	24	1	0	0.5991099
254	Neu5Aca2-6GalNAca-Sp8	20	0	57	0	24	1	0	0.5996422
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	43	0	36	0	27	1	0	0.5994521
7	Rha-Sp8	42	0	74	0	17	0	0	0.5984252
119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	32	0	53	0	23	1	0	0.599376
267	Neu5Acb2-6GalNAca-Sp8	41	0	51	0	23	1	0	0.5991099
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	42	0	57	0	21	0	0	0.5989197
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	34	0	70	0	18	0	0	0.5988436
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	87	0	112	1	1	0	0	0.5958739
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	37	0	62	0	20	0	0	0.5989577
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	45	0	93	1	10	0	0	0.5978543
196	KDNa2-3Galb1-3GlcNAcb-Sp0	47	0	40	0	25	1	0	0.5992239
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	46	0	52	0	22	0	0	0.5989197
439	[6OSO3]Galb1-3GlcNAcb-Sp0	32	0	15	0	33	1	0	0.6004403
96	GalNAcb1-4GlcNAcb-Sp8	40	0	77	0	15	0	0	0.5984632
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	31	0	104	1	8	0	0	0.5980446
208	Manb1-4GlcNAcb-Sp0	50	0	87	1	11	0	0	0.5978543
97	Gala1-2Galb-Sp8	38	0	67	0	18	0	0	0.5988056
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	53	0	81	0	12	0	0	0.5979305
303	GlcNAcb1-4GlcNAcb-Sp10	47	0	26	0	28	1	0	0.5996422
163	Galb1-4Glcb-Sp8	74	0	58	0	17	0	0	0.5978163

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306	Mana1-6Manb-Sp10	23	0	91	1	12	0	0	0.5986915
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	6	0	1	0	38	1	0	0.6017697
191	G-ol-Sp8	89	0	43	0	19	0	0	0.5977402
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	49	0	69	0	15	0	0	0.5984252
95	GalNAcb1-4GlcNAcb-Sp0	22	0	66	0	19	0	0	0.5994141
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	65	0	90	1	8	0	0	0.5972833
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29	0	33	0	27	1	0	0.6000983
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	14	0	51	0	23	1	0	0.6001363
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	28	0	65	0	18	0	0	0.599262
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	29	0	60	0	19	0	0	0.599376
35	[3OSO3]Galb-Sp8	66	0	79	0	11	0	0	0.5975498
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	28	0	68	0	17	0	0	0.5991859
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	31	0	42	0	24	1	0	0.5997943
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	39	0	49	0	21	0	0	0.599338
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	53	0	50	0	19	0	0	0.5988436
116	Gala1-4GlcNAcb-Sp8	64	0	66	0	13	0	0	0.5980446
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	29	0	49	0	21	0	0	0.5997182
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	32	0	73	0	14	0	0	0.5989577
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	62	0	70	0	12	0	0	0.5980066
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	62	0	54	0	17	0	0	0.5984252
10	Neu5Acb-Sp8	42	0	38	0	23	1	0	0.5995662
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	27	0	47	0	21	0	0	0.5998703
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	35	0	36	0	24	1	0	0.5998703
128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	23	0	32	0	26	1	0	0.6004023
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	43	0	42	0	21	0	0	0.5994521
289	Gala1-3(Fuca1-2)Galb-Sp18	52	0	64	0	14	0	0	0.5985393
192	GlcAa-Sp8	39	0	109	1	2	0	0	0.5977782
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	22	0	17	0	29	1	0	0.6008962
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	58	0	110	1	0	0	0	0.5970929
94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	60	0	93	1	5	0	0	0.5974737
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	57	0	63	0	13	0	0	0.5984252
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	44	0	45	0	19	0	0	0.599376
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	36	0	52	0	18	0	0	0.5994521
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	49	0	31	0	23	0	0	0.5995662
23	[3OSO3]Galb1-4Glcb-Sp8	52	0	44	0	19	0	0	0.5991099
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	27	0	27	0	26	1	0	0.6004403
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	48	0	71	0	11	0	0	0.5985393
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	35	0	75	0	11	0	0	0.5988817
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	61	0	80	0	7	0	0	0.5978543
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	37	0	39	0	21	0	0	0.5997943
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	24	0	29	0	25	1	0	0.6005163
176	GlcNAcb1-4-MDPLys	41	0	48	0	18	0	0	0.5994141
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	49	0	44	0	18	0	0	0.599262
5	Fuca-Sp8	46	0	99	1	3	0	0	0.5978543
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	31	0	33	0	23	1	0	0.6001743
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	25	0	34	0	23	1	0	0.6003643
76	Fuca1-3GlcNAcb-Sp8	30	0	86	1	8	0	0	0.5987675
189	Glcb1-4Glcb-Sp8	48	0	51	0	16	0	0	0.5991099
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	33	0	18	0	27	1	0	0.6005163
41	[6OSO3]Galb1-4GlcNAcb-Sp8	34	0	42	0	19	0	0	0.5998703
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	37	0	59	0	14	0	0	0.5993

ID	Name								
226	Neu5Aca2-3GalNAca-Sp8	45	0	50	0	16	0	0	0.599262
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	11	0	9	0	30	1	0	0.6015798
194	GlcAb1-3Galb-Sp8	50	0	98	1	1	0	0	0.5978163
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	41	0	37	0	19	0	0	0.5997943
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	7	0	31	0	24	1	0	0.6011241
114	Gala1-4Galb1-4GlcNAcb-Sp8	28	0	63	0	13	0	0	0.5995281
276	Neu5Gca-Sp8	78	0	33	0	16	0	0	0.5986534
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	28	0	31	0	21	0	0	0.6004403
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	65	0	35	0	17	0	0	0.5990338
113	Gala1-4Galb1-4GlcNAcb-Sp0	40	0	66	0	10	0	0	0.5990718
2	Glca-Sp8	55	0	63	0	10	0	0	0.5986154
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	41	0	44	0	16	0	0	0.5996422
307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	52	0	62	0	10	0	0	0.5987675
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	74	0	93	1	-1	0	0	0.5971691
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	19	0	43	0	18	0	0	0.6004403
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	26	0	58	0	13	0	0	0.5997943
298	GalNAcb1-3Galb-Sp8	26	0	40	0	18	0	0	0.6002883
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	45	0	38	0	17	0	0	0.5996802
273	Neu5Gca2-3Galb1-4Glcb-Sp0	32	0	29	0	20	0	0	0.6004023
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	32	0	34	0	19	0	0	0.6002503
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	7	0	22	0	24	1	0	0.6014659
75	Fuca1-2Galb-Sp8	14	0	83	1	7	0	0	0.5995281
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	19	0	9	0	27	1	0	0.60139
1	Gala-Sp8	47	0	66	0	8	0	0	0.5988817
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	30	0	24	0	21	0	0	0.6006303
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	15	0	13	0	26	1	0	0.601428
436	Galb1-6Galb-Sp10	38	0	26	0	20	0	0	0.6002883
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	44	0	31	0	18	0	0	0.5999463
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	42	0	43	0	15	0	0	0.5996802
245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	15	0	12	0	26	1	0	0.6014659
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	30	0	59	0	11	0	0	0.5996802
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	61	0	68	0	6	0	0	0.5983491
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	52	0	78	0	4	0	0	0.5983871
197	KDNa2-3Galb1-4GlcNAcb-Sp0	33	0	42	0	15	0	0	0.6000603
355	KDNa2-3Galb1-3GalNAca-Sp14	45	0	37	0	16	0	0	0.5997562
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	35	0	26	0	19	0	0	0.6004403
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	48	0	49	0	12	0	0	0.599338
161	Galb1-4GlcNAcb-Sp8	51	0	55	0	9	0	0	0.5991099
73	Fuca1-2Galb1-4GlcNAcb-Sp8	27	0	51	0	12	0	0	0.6000603
274	Neu5Gca2-6GalNAca-Sp0	30	0	48	0	13	0	0	0.6000223
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	20	0	31	0	19	0	0	0.6008203
302	GlcNAcb1-3Man-Sp10	26	0	40	0	15	0	0	0.6004023
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	40	0	54	0	10	0	0	0.5995281
135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	33	0	32	0	17	0	0	0.6003643
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	21	0	16	0	22	0	0	0.6012381
353	KDNa2-6Galb1-4GlcNAc-Sp0	33	0	70	0	6	0	0	0.599338
316	Neu5Aca2-8Neu5Acb-Sp17	32	0	40	0	14	0	0	0.6002123
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	40	0	81	0	2	0	0	0.5988056
179	(GlcNAcb1-4)6b-Sp8	38	0	39	0	14	0	0	0.6000223
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	56	0	47	0	10	0	0	0.5991859
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	32	0	31	0	16	0	0	0.6004783

91	GalNAcb1-3GalNAca-Sp8	41	0	35	0	14	0	0	0.6000603
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	11	0	29	0	19	0	0	0.6012381
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	45	0	8	0	21	0	0	0.6006683
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	26	0	44	0	13	0	0	0.6003263
183	GlcNAcb1-6GalNAca-Sp8	19	0	4	0	25	1	0	0.6016558
195	GlcAb1-6Galb-Sp8	29	0	54	0	9	0	0	0.5999843
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	31	0	47	0	11	0	0	0.6000983
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	35	0	56	0	8	0	0	0.5997182
102	Gala1-3(Fuca1-2)Galb-Sp8	38	0	43	0	12	0	0	0.5999463
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	18	0	45	0	13	0	0	0.6005923
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	28	0	41	0	13	0	0	0.6003643
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	19	0	52	0	11	0	0	0.6003643
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	37	0	42	0	12	0	0	0.6000223
278	Galb1-3GalNAca-Sp14	30	0	29	0	16	0	0	0.6006303
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	39	0	47	0	10	0	0	0.5998323
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	42	0	73	0	2	0	0	0.5990338
131	Galb1-3GalNAca-Sp8	103	0	16	0	12	0	0	0.5985013
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	17	0	14	0	21	0	0	0.6015039
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	9	0	19	0	20	0	0	0.6016558
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	37	0	30	0	14	0	0	0.6004023
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	48	0	49	0	8	0	0	0.5994901
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	51	0	56	0	5	0	0	0.5992239
77	Fuca1-4GlcNAcb-Sp8	24	0	85	1	-1	0	0	0.599376
104	Gala1-3GalNAca-Sp8	17	0	33	0	15	0	0	0.6010102
44	[6OSO3]GlcNAcb-Sp8	37	0	48	0	9	0	0	0.5999083
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	61	0	78	0	-2	0	0	0.598273
438	GalNAcb1-6GalNAcb-Sp8	16	0	45	0	11	0	0	0.6007443
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	23	0	62	0	6	0	0	0.6000223
248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	40	0	40	0	10	0	0	0.6000603
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	6	0	22	0	18	0	0	0.6017317
204	Mana1-3(Mana1-6)Mana-Sp9	24	0	23	0	16	0	0	0.6010862
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	28	0	43	0	10	0	0	0.6004023
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	16	0	17	0	17	0	0	0.6015798
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	47	0	34	0	10	0	0	0.6000223
180	(GlcNAcb1-4)5b-Sp8	9	0	49	0	9	0	0	0.6009342
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	27	0	37	0	11	0	0	0.6006303
111	Gala1-3Galb-Sp8	25	0	36	0	11	0	0	0.6007443
59	Fuca1-2Galb1-3GalNAca-Sp14	43	0	45	0	7	0	0	0.5998703
105	Gala1-3GalNAca-Sp16	28	0	25	0	13	0	0	0.6009722
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	14	0	36	0	11	0	0	0.6011621
17	GlcN(Gc)b-Sp8	28	0	46	0	7	0	0	0.6004023
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	40	0	18	0	14	0	0	0.6007443
147	Galb1-4[6OSO3]Glcb-Sp8	26	0	70	0	1	0	0	0.5997943
16	GlcNAcb-Sp8	75	0	30	0	8	0	0	0.5991859
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	33	0	12	0	16	0	0	0.6011621
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	30	0	41	0	8	0	0	0.6004783
252	Neu5Aca2-3Galb1-4Glcb-Sp0	25	0	20	0	14	0	0	0.6012381
45	Neu5Ac(9Ac)a-Sp8	37	0	47	0	5	0	0	0.6000983
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	42	0	30	0	9	0	0	0.6004023
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32	0	26	0	11	0	0	0.6008583
42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	20	0	50	0	5	0	0	0.6006303

ID	Structure								
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	13	0	13	0	16	0	0	0.6018836
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	55	0	38	0	5	0	0	0.5997562
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	13	0	26	0	13	0	0	0.6015039
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	15	0	18	0	14	0	0	0.6016937
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	25	0	33	0	9	0	0	0.6009342
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	33	0	48	0	4	0	0	0.6002503
37	[4OSO3]Galb1-4GlcNAcb-Sp8	12	0	7	0	17	0	0	0.6021113
40	[6OSO3]Galb1-4Glcb-Sp8	26	0	34	0	8	0	0	0.6008962
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	40	0	25	0	9	0	0	0.6006683
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	33	0	46	0	4	0	0	0.6003263
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	36	0	22	0	10	0	0	0.6008962
65	Fuca1-2Galb1-3GlcNAcb-Sp8	24	0	16	0	13	0	0	0.6014659
13	Manb-Sp8	22	0	27	0	9	0	0	0.6012761
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	14	0	8	0	15	0	0	0.6020733
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	12	0	18	0	12	0	0	0.6018836
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	21	0	28	0	8	0	0	0.601314
175	GlcNAcb1-3Galb1-4Glcb-Sp0	22	0	22	0	10	0	0	0.601428
117	Gala1-6Glcb-Sp8	41	0	61	0	-3	0	0	0.5997182
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	22	0	16	0	11	0	0	0.6016178
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	25	0	25	0	7	0	0	0.601314
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	51	0	19	0	7	0	0	0.6005543
171	GlcNAcb1-3Galb-Sp8	34	0	38	0	2	0	0	0.6006683
170	GlcNAcb1-3GalNAca-Sp14	25	0	18	0	8	0	0	0.6015419
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	28	0	29	0	5	0	0	0.6011241
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	23	0	31	0	4	0	0	0.6012761
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	13	0	36	0	4	0	0	0.6014659
38	6-H2PO3Mana-Sp8	18	0	20	0	7	0	0	0.6017697
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	24	0	35	0	2	0	0	0.6011621
14	GalNAcb-Sp8	16	0	20	0	7	0	0	0.6018456
39	[6OSO3]Galb1-4Glcb-Sp0	30	0	16	0	7	0	0	0.6014659
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29	0	34	0	2	0	0	0.6010102
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	32	0	15	0	6	0	0	0.6014659
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	10	0	12	0	9	0	0	0.6023011
106	Gala1-3GalNAcb-Sp8	20	0	41	0	-1	0	0	0.6012001
296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	41	0	26	0	1	0	0	0.6008962
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	18	0	13	0	7	0	0	0.6020354
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	16	0	40	0	-1	0	0	0.60139
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	11	0	1	0	10	0	0	0.6026426

Spacer Abbreviation	Chemical Structure
Sp0	CH₂CH₂NH₂
Sp8	CH₂CH₂CH₂NH₂
Sp9	CH₂CH₂CH₂CH₂CH₂NH₂
Sp10	NHCOCH₂NH
Sp11	OCH₂C₆H₄-p-NHCOCH₂NH
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP (OC₆H₄NH₂)
Sp17	OCH₂C₆H₄NH₂
Sp18	O(CH₂)₃NHCO(CH₂)₅NH₂
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST

MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

Supplementary Table 3 Biotinylated PNA at 10.0, 1.0, and 0.1 µg/ml binding to v4.0 of the CFG glycan array detected with Alexa488-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Structure	PNA 10.0 µg/ml 52982		PNA 1.0 µg/ml 27697		PNA 0.1 µg/ml 1717		AVG. RANK	p-values
	Maximum RFU	RFU	RANK	RFU	RANK	RFU	RANK		
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	52982	100	26049	94	1717	100	98	2.97E-15
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	43294	82	27697	100	1480	86	89	1.43E-12
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	38795	73	24450	88	1603	93	85	2.37E-10
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	39068	74	19750	71	1636	95	80	3.49E-09
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	35262	67	22337	81	1333	78	75	8.49E-09
133	Galb1-3GalNAcb-Sp8	38479	73	22386	81	1134	66	73	1.39E-09
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	33645	64	18571	67	760	44	58	2.22E-07
131	Galb1-3GalNAca-Sp8	38639	73	15376	56	742	43	57	8.66E-08
136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	33579	63	17332	63	193	11	46	5.77E-07
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	35763	68	11714	42	155	9	40	3.11E-06
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	38992	74	9299	34	96	6	38	2.18E-06
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	27750	52	9253	33	68	4	30	0.0002596
135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	38861	73	2398	9	21	1	28	5.05E-05
278	Galb1-3GalNAca-Sp14	30977	58	4169	15	30	2	25	0.0005142
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	27165	51	1648	6	62	4	20	0.0039387
132	Galb1-3GalNAca-Sp16	21154	40	2165	8	45	3	17	0.0174144
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	25462	48	84	0	6	0	16	0.0099696
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	21482	41	315	1	55	3	15	0.0249813
206	**Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12**	317	1	347	1	339	20	7	0.5433488
299	**GlcAb1-3GlcNAcb-Sp8**	167	0	78	0	262	15	5	0.5628108
203	**Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12**	195	0	137	0	182	11	4	0.5625371
128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	3453	7	32	0	38	2	3	0.4438468
150	**Galb1-4GlcNAcb1-3GalNAca-Sp8**	80	0	63	0	144	8	3	0.5713976
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	143	0	59	0	143	8	3	0.5691369
193	GlcAb-Sp8	147	0	62	0	138	8	3	0.5690589
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	156	0	59	0	137	8	3	0.5688639
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	195	0	98	0	124	7	3	0.5663274
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	138	0	121	0	118	7	3	0.5678886
8	Neu5Aca-Sp8	121	0	72	0	118	7	2	0.5704624
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	104	0	56	0	116	7	2	0.5718261
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	59	0	92	0	115	7	2	0.5722155
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	115	0	122	0	111	6	2	0.5690199
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	64	0	46	0	115	7	2	0.5738116
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	105	0	49	0	111	6	2	0.5722545
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	124	0	43	0	111	6	2	0.5717481
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	104	0	57	0	105	6	2	0.5722155
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	111	0	72	0	103	6	2	0.5714365
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	111	0	47	0	103	6	2	0.5724102
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	124	0	68	0	94	5	2	0.5714365
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	91	0	91	0	93	5	2	0.571865
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	65	0	29	0	98	6	2	0.5750953
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	113	0	89	0	91	5	2	0.5711638
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	66	0	44	0	94	5	2	0.5746286

350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	181	0	61	0	89	5	2	0.5696828
354	KDNa2-3Galb1-4Glc-Sp0	32	0	90	0	91	5	2	0.5742785
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	94	0	84	0	88	5	2	0.5722155
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	72	0	125	0	85	5	2	0.5715923
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	91	0	15	0	89	5	2	0.5749786
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	66	0	62	0	86	5	2	0.5742396
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	99	0	116	0	80	5	2	0.5710859
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	74	0	48	0	81	5	2	0.5746675
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	44	0	60	0	81	5	2	0.5753675
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNAc-Sp21	58	0	73	0	77	5	2	0.574473
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	78	0	54	0	77	5	2	0.5744341
33	[3OSO3]Galb1-4GlcNAcb-Sp0	76	0	34	0	78	5	2	0.5752509
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp	47	0	76	0	76	4	2	0.5748231
307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	78	0	60	0	75	4	2	0.5742785
147	Galb1-4[6OSO3]Glcb-Sp8	70	0	24	0	77	5	2	0.5759118
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	28	0	42	0	77	5	2	0.5768446
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	79	0	76	0	73	4	2	0.5736948
357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	104	0	86	0	71	4	2	0.5724102
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	42	0	29	0	77	4	2	0.5768057
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	137	0	101	0	69	4	2	0.5706183
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	88	0	64	0	73	4	2	0.5738116
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	140	0	94	0	69	4	2	0.5707742
146	Galb1-4[6OSO3]Glcb-Sp0	77	0	22	0	75	4	2	0.5757952
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Ma	88	0	82	0	70	4	2	0.5732278
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	55	0	44	0	73	4	2	0.575873
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	131	0	41	0	69	4	1	0.5731889
80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	52	0	42	0	70	4	1	0.5761839
194	GlcAb1-3Galb-Sp8	57	0	70	0	68	4	1	0.5749786
385	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	69	0	53	0	69	4	1	0.5751342
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	29	0	39	0	70	4	1	0.5771943
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	54	0	40	0	69	4	1	0.5762228
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	115	0	121	0	62	4	1	0.570969
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	32	0	33	0	70	4	1	0.5773108
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	105	0	107	0	63	4	1	0.571865
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	14	0	15	0	71	4	1	0.57867
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	57	0	123	0	63	4	1	0.573111
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	36	0	26	0	70	4	1	0.5774273
72	Fuca1-2Galb1-4GlcNAcb-Sp0	63	0	44	0	68	4	1	0.5757563
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	120	0	63	0	63	4	1	0.5729942
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	88	0	56	0	64	4	1	0.574473
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	77	0	59	0	64	4	1	0.5747842
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	65	0	15	0	66	4	1	0.5768834
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	61	0	40	0	65	4	1	0.5761062
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	78	0	24	0	65	4	1	0.5760673
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	30	0	17	0	67	4	1	0.5781264
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	63	0	32	0	65	4	1	0.5763394
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	72	0	53	0	63	4	1	0.5752509

ID	Structure								
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	106	0	37	0	63	4	1	0.5745508
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	26	0	29	0	66	4	1	0.5778546
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	69	0	62	0	62	4	1	0.5750564
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	95	0	94	0	59	3	1	0.5729164
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	53	0	53	0	63	4	1	0.5759896
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	67	0	59	0	60	4	1	0.5753286
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	59	0	32	0	62	4	1	0.5766114
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	42	0	13	0	63	4	1	0.5779711
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	90	0	40	0	60	3	1	0.5751731
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	106	0	73	0	57	3	1	0.5733835
191	G-ol-Sp8	18	0	86	0	59	3	1	0.5762228
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	71	0	55	0	59	3	1	0.5753675
94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	39	0	61	0	59	3	1	0.5763783
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	87	0	75	0	56	3	1	0.5740839
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	61	0	48	0	59	3	1	0.5760284
28	[3OSO3]Galb1-3GlcNAcb-Sp8	42	0	53	0	58	3	1	0.5766114
248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	21	0	41	0	60	3	1	0.5778158
79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	56	0	47	0	58	3	1	0.5763005
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	37	0	53	0	58	3	1	0.5768057
273	Neu5Gca2-3Galb1-4Glcb-Sp0	30	0	6	0	61	4	1	0.5787865
1	Gala-Sp8	59	0	14	0	59	3	1	0.5774273
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	50	0	19	0	59	3	1	0.5775827
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	57	0	47	0	57	3	1	0.5763005
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	35	0	44	0	57	3	1	0.577272
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	115	0	48	0	54	3	1	0.5741228
306	Mana1-6Manb-Sp10	34	0	22	0	58	3	1	0.5781264
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	53	0	27	0	57	3	1	0.5772331
261	Neu5Aca2-6Galb1-4Glcb-Sp0	97	0	14	0	56	3	1	0.5760673
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	36	0	67	0	55	3	1	0.5764171
9	Neu5Aca-Sp11	68	0	60	0	54	3	1	0.5754842
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	106	0	15	0	55	3	1	0.5757174
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	34	0	64	0	55	3	1	0.5766114
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	61	0	55	0	54	3	1	0.5759507
304	GlcNAcb1-4GlcNAcb-Sp12	34	0	60	0	54	3	1	0.5768057
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	96	0	26	0	54	3	1	0.5757174
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	64	0	31	0	55	3	1	0.576728
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	65	0	14	0	56	3	1	0.5773108
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	102	0	44	0	52	3	1	0.574862
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	30	0	53	0	54	3	1	0.5772331
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	42	0	23	0	55	3	1	0.5778934
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	82	0	37	0	53	3	1	0.575873
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	54	0	51	0	53	3	1	0.5764171
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	71	0	69	0	51	3	1	0.5751342
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	17	0	41	0	54	3	1	0.5782041
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	81	0	59	0	51	3	1	0.5751342
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	35	0	21	0	54	3	1	0.5782818
263	Neu5Aca2-6Galb-Sp8	48	0	44	0	52	3	1	0.5769612

316	Neu5Aca2-8Neu5Acb-Sp17	44	0	22	0	54	3	1	0.5778934
118	Galb1-2Galb-Sp8	46	0	72	0	50	3	1	0.5760284
96	GalNAcb1-4GlcNAcb-Sp8	26	0	39	0	53	3	1	0.5779711
88	GalNAca1-3GalNAcb-Sp8	33	0	58	0	51	3	1	0.5770389
187	Glca1-4Glca-Sp8	32	0	33	0	53	3	1	0.5779711
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	52	0	16	0	53	3	1	0.5778546
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	67	0	60	0	50	3	1	0.5756786
192	GlcAa-Sp8	34	0	45	0	52	3	1	0.5774662
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	47	0	53	0	50	3	1	0.576728
179	(GlcNAcb1-4)6b-Sp8	48	0	40	0	51	3	1	0.5771554
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	59	0	85	0	48	3	1	0.5750953
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	80	0	47	0	49	3	1	0.5757174
384	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNac-Sp21	82	0	59	0	48	3	1	0.575212
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	70	0	51	0	49	3	1	0.5759507
17	GlcN(Gc)b-Sp8	33	0	23	0	50	3	1	0.5784371
320	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	65	0	34	0	48	3	1	0.5768446
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	46	0	26	0	49	3	1	0.5778546
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	48	0	7	0	50	3	1	0.5784759
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	17	0	29	0	49	3	1	0.5788641
291	Galb1-3Galb1-4GlcNAcb-Sp8	27	0	45	0	48	3	1	0.5778934
78	Fucb1-3GlcNAcb-Sp8	19	0	41	0	48	3	1	0.5783594
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	169	0	60	0	42	2	1	0.5720208
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	35	0	25	0	48	3	1	0.5783594
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	38	0	15	0	49	3	1	0.5785924
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	96	0	61	0	44	3	1	0.5747453
74	Fuca1-2Galb1-4Glcb-Sp0	55	0	48	0	46	3	1	0.5767669
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	40	0	31	0	48	3	1	0.5779323
115	Gala1-4Galb1-4Glcb-Sp0	23	0	47	0	47	3	1	0.5780099
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	54	0	64	0	45	3	1	0.5762228
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	52	0	90	0	43	3	1	0.5753675
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	39	0	39	0	46	3	1	0.5777381
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	62	0	24	0	46	3	1	0.5774273
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	75	0	19	0	46	3	1	0.5771166
264	Neu5Aca2-8Neu5Aca-Sp8	80	0	44	0	45	3	1	0.5759896
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	81	0	50	0	44	3	1	0.5757563
4	GalNAca-Sp8	59	0	46	0	45	3	1	0.576728
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	72	0	15	0	46	3	1	0.5773885
387	Galb1-3GlcNAcb1-3GalNAca-Sp14	74	0	49	0	44	3	1	0.5760673
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	20	0	42	0	46	3	1	0.5783594
7	Rha-Sp8	44	0	18	0	46	3	1	0.5783594
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	19	0	34	0	46	3	1	0.5787088
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	42	0	75	0	43	2	1	0.5763394
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	52	0	32	0	45	3	1	0.5775439
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	37	0	51	0	44	3	1	0.5774273
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	27	0	15	0	47	3	1	0.579097
196	KDNa2-3Galb1-3GlcNAcb-Sp0	33	0	48	0	44	3	1	0.5776992
116	Gala1-4GlcNAcb-Sp8	73	0	43	0	43	3	1	0.5763783

202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	55	0	44	0	44	3	1	0.577
139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	20	0	24	0	46	3	1	0.5790582
13	Manb-Sp8	38	0	28	0	45	3	1	0.5782429
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	32	0	11	0	46	3	1	0.579097
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	58	0	55	0	42	2	1	0.5765337
59	Fuca1-2Galb1-3GalNAca-Sp14	56	0	40	0	43	3	1	0.5771554
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	96	0	23	0	43	3	1	0.5762617
92	GalNAcb1-3(Fuca1-2)Galb-Sp8	68	0	44	0	43	2	1	0.5765337
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	53	0	52	0	43	2	1	0.5768057
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	43	0	33	0	44	3	1	0.5778934
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	34	0	23	0	45	3	1	0.5785924
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	40	0	29	0	44	3	1	0.5781653
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	50	0	44	0	43	2	1	0.5772331
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	109	0	77	0	39	2	1	0.5738116
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	44	0	22	0	44	3	1	0.5782818
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	53	0	33	0	42	2	1	0.5775827
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	51	0	16	0	43	3	1	0.5782818
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	35	0	36	0	43	2	1	0.5781264
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	50	0	62	0	41	2	1	0.5766114
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	55	0	38	0	42	2	1	0.5773108
91	GalNAcb1-3GalNAca-Sp8	15	0	91	0	40	2	1	0.5768834
339	GlcNAca1-4Galb1-3GalNAc-Sp14	77	0	51	0	40	2	1	0.5760284
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	21	0	11	0	44	3	1	0.5796015
161	Galb1-4GlcNAcb-Sp8	51	0	50	0	40	2	1	0.5770777
44	[6OSO3]GlcNAcb-Sp8	36	0	29	0	42	2	1	0.5783982
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	50	0	77	0	38	2	1	0.5761451
211	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	45	0	57	0	40	2	1	0.5770389
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	28	0	60	0	40	2	1	0.5775827
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	104	0	46	0	38	2	1	0.5752509
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	51	0	42	0	40	2	1	0.5773885
45	Neu5Ac(9Ac)a-Sp8	15	0	12	0	43	2	1	0.5798343
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	29	0	43	0	40	2	1	0.5782041
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	50	0	39	0	40	2	1	0.5775439
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	67	0	19	0	40	2	1	0.5776604
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	138	0	27	0	37	2	1	0.5747064
12	Glcb-Sp8	44	0	39	0	39	2	1	0.5778158
245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	35	0	9	0	41	2	1	0.5792522
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	34	0	38	0	40	2	1	0.5782041
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	47	0	15	0	40	2	1	0.5785924
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	19	0	30	0	40	2	1	0.579097
195	GlcAb1-6Galb-Sp8	80	0	59	0	36	2	1	0.5757563
89	GalNAca1-3Galb-Sp8	34	0	49	0	39	2	1	0.5778158
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	65	0	33	0	38	2	1	0.577272
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	25	0	40	0	39	2	1	0.5785147
137	Galb1-3Galb-Sp8	111	0	81	0	34	2	1	0.5737726
226	Neu5Aca2-3GalNAca-Sp8	32	0	41	0	39	2	1	0.5782041
355	KDNa2-3Galb1-3GalNAca-Sp14	43	0	45	0	38	2	1	0.5776604

42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	26	0	26	0	39	2	1	0.5790194
76	Fuca1-3GlcNAcb-Sp8	53	0	44	0	37	2	1	0.5773497
176	GlcNAcb1-4-MDPLys	70	0	57	0	36	2	1	0.5762228
23	[3OSO3]Galb1-4Glcb-Sp8	38	0	25	0	39	2	1	0.5785924
175	GlcNAcb1-3Galb1-4Glcb-Sp0	24	0	24	0	39	2	1	0.5791746
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	55	0	56	0	36	2	1	0.5768446
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	20	0	28	0	39	2	1	0.5791746
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	58	0	35	0	37	2	1	0.577505
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	31	0	30	0	38	2	1	0.5787088
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	80	0	36	0	36	2	1	0.5766503
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	61	0	49	0	35	2	1	0.5769223
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	19	0	24	0	38	2	1	0.5794075
97	Gala1-2Galb-Sp8	32	0	31	0	37	2	1	0.57867
102	Gala1-3(Fuca1-2)Galb-Sp8	41	0	53	0	35	2	1	0.5775439
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	22	0	27	0	37	2	1	0.5792134
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	70	0	13	0	36	2	1	0.5779323
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	44	0	23	0	36	2	1	0.5785535
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	62	0	22	0	36	2	1	0.5778934
188	Glca1-6Glca1-6Glcb-Sp8	52	0	37	0	35	2	1	0.5777381
276	Neu5Gca-Sp8	34	0	25	0	36	2	1	0.5788641
110	Gala1-3Galb1-4Glcb-Sp0	28	0	14	0	37	2	1	0.5794851
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	66	0	14	0	35	2	1	0.5780876
289	Gala1-3(Fuca1-2)Galb-Sp18	42	0	32	0	35	2	1	0.5783206
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	35	0	68	0	33	2	1	0.577272
140	Galb1-3GlcNAcb-Sp0	65	0	67	0	32	2	1	0.5761839
184	GlcNAcb1-6GalNAca-Sp14	13	0	39	0	35	2	1	0.5791746
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	32	0	31	0	35	2	1	0.5787476
34	[3OSO3]Galb1-4GlcNAcb-Sp8	52	0	57	0	32	2	1	0.5770777
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	37	0	10	0	35	2	1	0.5793686
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	36	0	8	0	35	2	1	0.5794851
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	45	0	8	0	35	2	1	0.5791358
105	Gala1-3GalNAca-Sp16	44	0	31	0	33	2	1	0.5783594
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	29	0	25	0	34	2	1	0.5791358
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	22	0	30	0	34	2	1	0.5792134
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	56	0	70	0	30	2	1	0.5764949
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	11	0	9	0	35	2	1	0.5804162
234	Neu5Aca2-3Galb-Sp8	62	0	55	0	30	2	1	0.5768446
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	37	0	20	0	33	2	1	0.5790582
288	6-H2PO3Glcb-Sp10	31	0	59	0	31	2	1	0.5778546
160	Galb1-4GlcNAcb-Sp0	42	0	64	0	30	2	1	0.577272
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	19	0	18	0	34	2	1	0.5797955
274	Neu5Gca2-6GalNAca-Sp0	44	0	24	0	32	2	1	0.57867
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	34	0	69	0	30	2	1	0.5773885
75	Fuca1-2Galb-Sp8	85	0	41	0	30	2	1	0.5764949
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	44	0	36	0	31	2	1	0.5782429
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	18	0	23	0	33	2	1	0.5796791
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	62	0	33	0	30	2	1	0.5776992

436	Galb1-6Galb-Sp10	30	0	8	0	33	2	1	0.5797955
119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	103	0	59	0	27	2	1	0.575212
5	Fuca-Sp8	48	0	57	0	29	2	1	0.5773497
2	Glca-Sp8	31	0	46	0	30	2	1	0.5783982
197	KDNa2-3Galb1-4GlcNAcb-Sp0	13	0	16	0	33	2	1	0.5801446
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	66	0	42	0	29	2	1	0.5772331
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	33	0	27	0	31	2	1	0.5790194
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	46	0	51	0	29	2	1	0.5776604
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	45	0	21	0	31	2	1	0.5787865
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	24	0	13	0	32	2	1	0.5798731
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	60	0	39	0	29	2	1	0.5775827
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	92	0	22	0	29	2	1	0.577
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	31	0	64	0	28	2	1	0.5777769
302	GlcNAcb1-3Man-Sp10	34	0	29	0	30	2	1	0.5789417
168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	116	0	41	0	27	2	1	0.5754064
303	GlcNAcb1-4GlcNAcb-Sp10	21	0	27	0	30	2	1	0.5795239
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	34	0	49	0	29	2	1	0.5782041
117	Gala1-6Glcb-Sp8	33	0	26	0	30	2	1	0.579097
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	49	0	20	0	29	2	1	0.5787476
297	GalNAca-Sp15	41	0	13	0	30	2	1	0.579291
262	Neu5Aca2-6Galb1-4Glcb-Sp8	56	0	68	0	26	2	1	0.576728
108	Gala1-3Galb1-3GlcNAcb-Sp0	16	0	28	0	30	2	1	0.5796791
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	32	0	62	0	26	2	1	0.5778934
16	GlcNAcb-Sp8	27	0	14	0	30	2	1	0.5797955
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	27	0	42	0	27	2	1	0.5788253
11	Galb-Sp8	72	0	46	0	26	1	1	0.5769612
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	17	0	25	0	29	2	1	0.5797955
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	56	0	43	0	26	2	1	0.5776992
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	10	0	10	0	30	2	1	0.5806101
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	25	0	29	0	28	2	1	0.5793686
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	59	0	25	0	27	2	1	0.5782429
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	15	0	11	0	29	2	1	0.5804162
86	GalNAca1-3(Fuca1-2)Galb-Sp8	38	0	15	0	28	2	1	0.5794075
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	45	0	39	0	26	2	1	0.5782818
298	GalNAcb1-3Galb-Sp8	43	0	14	0	28	2	1	0.5792522
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	31	0	15	0	28	2	1	0.5796791
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	63	0	45	0	25	1	1	0.5773885
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	23	0	32	0	27	2	1	0.5793686
40	[6OSO3]Galb1-4Glcb-Sp8	11	0	21	0	28	2	1	0.5802222
27	[3OSO3]Galb1-3GalNAca-Sp8	52	0	67	0	24	1	1	0.577
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	24	0	32	0	27	2	1	0.5793298
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	28	0	27	0	27	2	1	0.5793686
77	Fuca1-4GlcNAcb-Sp8	32	0	-1	0	29	2	1	0.5802222
10	Neu5Acb-Sp8	58	0	26	0	26	2	1	0.5782818
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	88	0	24	0	25	1	1	0.5772331
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	12	0	16	0	28	2	1	0.5803774
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	50	0	20	0	26	2	1	0.5788253

ID	Structure							
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	13	0	40	0	26	2	1	0.5794851
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	56	0	44	0	24	1	1	0.5777381
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	46	0	23	0	26	2	1	0.5788641
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	17	0	19	0	27	2	1	0.5801058
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	65	0	35	0	24	1	1	0.5777381
190	Glcb1-6Glcb-Sp8	43	0	33	0	25	1	1	0.5786312
15	GlcNAcb-Sp0	11	0	34	0	25	1	1	0.5798343
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	24	0	6	0	26	2	1	0.5803774
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	28	0	18	0	25	1	1	0.5797955
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	46	0	30	0	24	1	1	0.57867
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	24	0	24	0	25	1	1	0.5797179
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	10	0	11	0	26	2	1	0.5807264
253	Neu5Aca2-3Galb1-4Glcb-Sp8	26	0	3	0	26	2	1	0.5804162
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	58	0	57	0	22	1	1	0.5772331
6	Fuca-Sp9	57	0	18	0	24	1	1	0.5787088
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	18	0	14	0	26	1	1	0.5802998
41	[6OSO3]Galb1-4GlcNAcb-Sp8	10	0	21	0	25	1	1	0.5803774
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	57	0	36	0	23	1	1	0.5780488
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	103	0	24	0	22	1	1	0.5767669
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	82	0	35	0	22	1	1	0.5771554
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	23	0	24	0	25	1	1	0.5797567
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	39	0	10	0	25	1	1	0.5796791
170	GlcNAcb1-3GalNAca-Sp14	26	0	17	0	25	1	1	0.5799119
14	GalNAcb-Sp8	30	0	9	0	25	1	1	0.580067
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	176	0	18	0	20	1	1	0.5742396
163	Galb1-4Glcb-Sp8	39	0	47	0	22	1	1	0.5783594
73	Fuca1-2Galb1-4GlcNAcb-Sp8	28	0	29	0	23	1	0	0.5794463
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	22	0	39	0	23	1	0	0.579291
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	68	0	10	0	22	1	0	0.57867
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	55	0	17	0	22	1	0	0.5789029
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	27	0	5	0	24	1	0	0.5803774
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	46	0	16	0	22	1	0	0.579291
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	26	0	33	0	22	1	0	0.5794075
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	25	0	32	0	22	1	0	0.5794851
169	GlcNAcb1-3GalNAca-Sp8	44	0	55	0	20	1	0	0.5779323
37	[4OSO3]Galb1-4GlcNAcb-Sp8	27	0	21	0	22	1	0	0.5798343
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	37	0	10	0	22	1	0	0.5798731
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	20	0	10	0	23	1	0	0.5804937
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	63	0	72	0	17	1	0	0.5766503
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	10	0	6	0	23	1	0	0.5810366
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	30	0	16	0	22	1	0	0.5799119
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	56	0	23	0	20	1	0	0.5787088
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	66	0	68	0	17	1	0	0.5766892
186	Glca1-4Glcb-Sp8	53	0	71	0	17	1	0	0.5770777
35	[3OSO3]Galb-Sp8	39	0	46	0	19	1	0	0.5785147
180	(GlcNAcb1-4)5b-Sp8	12	0	0	0	23	1	0	0.5811917
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	53	0	52	0	18	1	0	0.5777769

#	Glycan								
3	Mana-Sp8	44	0	69	0	17	1	0	0.577505
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	90	0	42	0	17	1	0	0.5767669
58	Fuca1-2Galb1-3GalNAca-Sp8	30	0	33	0	20	1	0	0.5793298
296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	33	0	17	0	20	1	0	0.5798343
141	Galb1-3GlcNAcb-Sp8	26	0	25	0	20	1	0	0.5797955
267	Neu5Acb2-6GalNAca-Sp8	44	0	13	0	20	1	0	0.5795627
189	Glcb1-4Glcb-Sp8	24	0	21	0	20	1	0	0.5800283
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	4	0	17	0	20	1	0	0.5809591
353	KDNa2-6Galb1-4GlcNAc-Sp0	33	0	25	0	19	1	0	0.5795627
113	Gala1-4Galb1-4GlcNAcb-Sp0	45	0	63	0	16	1	0	0.5777381
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	16	0	13	0	19	1	0	0.5806876
204	Mana1-3(Mana1-6)Mana-Sp9	21	0	5	0	20	1	0	0.5807652
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	37	0	19	0	18	1	0	0.5796791
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	16	0	7	0	19	1	0	0.5809203
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	-4	0	20	0	19	1	0	0.5811917
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	68	0	92	0	12	1	0	0.575873
162	Galb1-4Glcb-Sp0	59	0	64	0	14	1	0	0.5772331
114	Gala1-4Galb1-4GlcNAcb-Sp8	42	0	42	0	16	1	0	0.57867
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	50	0	49	0	15	1	0	0.5781264
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	83	0	30	0	15	1	0	0.5775827
208	Manb1-4GlcNAcb-Sp0	31	0	54	0	15	1	0	0.57867
435	Galb1-4Galb-Sp10	33	0	25	0	17	1	0	0.5796403
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	52	0	43	0	15	1	0	0.5782818
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	30	0	15	0	17	1	0	0.5801446
95	GalNAcb1-4GlcNAcb-Sp0	57	0	25	0	16	1	0	0.5787476
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	20	0	28	0	17	1	0	0.5800283
236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	54	0	46	0	14	1	0	0.5781264
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	22	0	20	0	16	1	0	0.5802998
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	24	0	28	0	15	1	0	0.5799507
200	Mana1-2Mana1-3Mana-Sp9	23	0	37	0	14	1	0	0.5796791
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	55	0	26	0	14	1	0	0.5788641
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	39	0	31	0	14	1	0	0.579291
39	[6OSO3]Galb1-4Glcb-Sp0	18	0	3	0	16	1	0	0.5811142
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	23	0	14	0	15	1	0	0.5805325
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	35	0	23	0	15	1	0	0.5797179
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	20	0	12	0	16	1	0	0.5806876
65	Fuca1-2Galb1-3GlcNAcb-Sp8	16	0	19	0	15	1	0	0.5806101
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	35	0	42	0	12	1	0	0.579097
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	11	0	19	0	15	1	0	0.580804
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	12	0	10	0	15	1	0	0.5811142
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	15	0	13	0	14	1	0	0.5809203
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	20	0	22	0	13	1	0	0.5804162
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	19	0	21	0	13	1	0	0.5804937
104	Gala1-3GalNAca-Sp8	22	0	24	0	13	1	0	0.580261
439	[6OSO3]Galb1-3GlcNAcb-Sp0	16	0	29	0	12	1	0	0.5803386
111	Gala1-3Galb-Sp8	24	0	17	0	13	1	0	0.5804549
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	29	0	20	0	12	1	0	0.5801834

ID	Structure								
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	23	0	40	0	11	1	0	0.5796791
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	41	0	34	0	10	1	0	0.5792522
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	52	0	32	0	10	1	0	0.5789029
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	11	0	20	0	10	1	0	0.5809591
38	6-H2PO3Mana-Sp8	20	0	3	0	10	1	0	0.5812693
183	GlcNAcb1-6GalNAca-Sp8	3	0	-1	0	11	1	0	0.5820445
87	GalNAca1-3(Fuca1-2)Galb-Sp18	49	0	6	0	8	0	0	0.5801058
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	71	0	4	0	8	0	0	0.5793298
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	27	0	24	0	8	0	0	0.580261
106	Gala1-3GalNAcb-Sp8	14	0	5	0	8	0	0	0.5815018
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	46	0	45	0	5	0	0	0.5788253
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	37	0	11	0	7	0	0	0.5804162
171	GlcNAcb1-3Galb-Sp8	42	0	28	0	6	0	0	0.5796015
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	18	0	20	0	6	0	0	0.5808427
109	Gala1-3Galb1-4GlcNAcb-Sp8	5	0	4	0	8	0	0	0.5818894
252	Neu5Aca2-3Galb1-4Glcb-Sp0	29	0	14	0	6	0	0	0.5806489
438	GalNAcb1-6GalNAcb-Sp8	12	0	12	0	6	0	0	0.5813856
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	16	0	2	0	7	0	0	0.5815794
254	Neu5Aca2-6GalNAca-Sp8	2	0	16	0	6	0	0	0.5816181
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	22	0	2	0	6	0	0	0.5813856
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	38	0	11	0	5	0	0	0.5804549
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	37	0	20	0	4	0	0	0.5801834
64	Fuca1-2Galb1-3GlcNAcb-Sp0	4	0	14	0	3	0	0	0.5817344

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP ($OC_6H_4NH_2$)
Sp17	$OCH_2C_6H_4NH_2$
Sp18	$O(CH_2)_3NHCO(CH_2)_5NH_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

Supplementary Table 4a Biotinylated Con A at 0.01, and 0.001 µg/ml binding to v4.0 of the CFG glycan array detected with Cy5-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Structure	Con A 0.01 µg/ml 26599		Con A 0.001 µg/ml 2989		AVG. RANK	p value
	Maximum RFU	RFU	RANK	RFU	RANK		
206	Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	25552	96	2989	100	98	1.05E-10
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	23490	88	2857	96	92	2.56E-09
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	22295	84	2786	93	89	1.44E-08
204	Mana1-3(Mana1-6)Mana-Sp9	26599	100	2274	76	88	6.34E-11
202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	23567	89	2245	75	82	5.36E-09
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	19646	74	2510	84	79	5.63E-07
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	24990	94	1836	61	78	1.30E-09
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	23313	88	1993	67	77	1.06E-08
307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	20309	76	2105	70	73	4.15E-07
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	22076	83	1686	56	70	7.94E-08
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	20824	78	1600	54	66	4.10E-07
200	Mana1-2Mana1-3Mana-Sp9	16160	61	1639	55	58	5.79E-05
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	16941	64	1254	42	53	3.96E-05
203	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	12290	46	1381	46	46	0.0018984
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	13421	50	1247	42	46	0.0008845
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	10072	38	926	31	34	0.0115203
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	11144	42	786	26	34	6.39E-03
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	7696	29	694	23	26	0.0478491
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	7312	27	390	13	20	0.0660296
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	5167	19	630	21	20	0.1439176
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	2468	9	914	31	20	0.3081518
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	5961	22	384	13	18	0.1169523
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	3576	13	639	21	17	0.2435678
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	5136	19	302	10	15	1.64E-01
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	4106	15	348	12	14	0.2264862
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	4832	18	258	9	13	0.1844815
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	3841	14	307	10	12	0.2484784
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	3812	14	278	9	12	0.2527715
193	GlcAb-Sp8	1707	6	506	17	12	0.4093728
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	860	3	466	16	9	0.4908964
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	2931	11	200	7	9	0.3289887
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1649	6	334	11	9	0.4302824
299	GlcAb1-3GlcNAcb-Sp8	632	2	448	15	9	0.5137226
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	886	3	412	14	9	0.4934944
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	2201	8	221	7	8	0.3905917
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	2998	11	104	3	7	0.3314324
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	570	2	326	11	7	0.5307705
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	2033	8	151	5	6	4.12E-01
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1841	7	170	6	6	0.4277252
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	1806	7	172	6	6	0.4307394
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	1695	6	155	5	6	0.4424674
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNAc-Sp21	1828	7	136	5	6	0.4320193
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	909	3	228	8	6	0.5084348
350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	1814	7	120	4	5	0.4347645
320	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1082	4	193	6	5	0.4956287
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	489	2	258	9	5	0.5445359
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	859	3	216	7	5	0.5141863

128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	618	2	238	8	5	0.5344702
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	1695	6	117	4	5	0.4459594
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	1220	5	166	6	5	4.85E-01
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	432	2	251	8	5	0.5504332
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	456	2	239	8	5	0.5493282
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	612	2	218	7	5	0.5368735
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	980	4	174	6	5	0.5068575
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	1422	5	120	4	5	4.71E-01
80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	585	2	207	7	5	0.5403835
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	1378	5	116	4	5	0.4753204
105	Gala1-3GalNAca-Sp16	936	4	161	5	4	0.5121457
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1143	4	137	5	4	0.4951647
23	[3OSO3]Galb1-4Glcb-Sp8	465	2	209	7	4	0.5512616
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	1169	4	126	4	4	0.4937728
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNacb-LVaNKT	1370	5	103	3	4	0.4772658
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	490	2	191	6	4	0.5506173
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	292	1	205	7	4	0.5675043
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1434	5	74	2	4	0.4740237
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	1165	4	103	3	4	0.4962783
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	462	2	161	5	4	0.5559518
87	GalNAca1-3(Fuca1-2)Galb-Sp18	361	1	172	6	4	0.564209
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	467	2	158	5	4	0.555768
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	1202	5	65	2	3	4.96E-01
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	703	3	120	4	3	0.5375203
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	1652	6	12	0	3	0.4595973
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	288	1	162	5	3	0.5717994
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	170	1	175	6	3	0.5813634
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	273	1	163	5	3	0.5730772
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	815	3	97	3	3	0.5292899
7	Rha-Sp8	569	2	118	4	3	0.5500649
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	141	1	163	5	3	0.5850853
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	191	1	155	5	3	0.5812726
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	457	2	125	4	3	0.5597166
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	1043	4	50	2	3	0.5125168
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	549	2	103	3	3	0.5532857
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	437	2	114	4	3	0.5625597
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	338	1	124	4	3	0.5707036
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	271	1	129	4	3	0.5763593
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	250	1	131	4	3	0.5780894
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	307	1	123	4	3	0.5736246
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	256	1	127	4	3	0.5779074
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	150	1	139	5	3	0.586445
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	580	2	90	3	3	0.5516297
384	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNac-Sp21	593	2	87	3	3	0.5507093
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	211	1	128	4	3	0.5819085
150	Galb1-4GlcNAcb1-3GalNAca-Sp8	443	2	102	3	3	0.5631096
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	209	1	126	4	3	0.5822719
179	(GlcNAcb1-4)6b-Sp8	240	1	121	4	2	0.579909
273	Neu5Gca2-3Galb1-4Glcb-Sp0	251	1	120	4	2	0.5789994
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	163	1	129	4	2	0.5861731
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	264	1	118	4	2	0.5779984

303	GlcNAcb1-4GlcNAcb-Sp10	116	0	132	4	2	0.5901564
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	499	2	88	3	2	0.5592578
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	249	1	115	4	2	0.5796362
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	194	1	119	4	2	0.5842689
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	532	2	80	3	2	0.5569624
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	204	1	116	4	2	0.5836337
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	144	1	122	4	2	0.588528
16	GlcNAcb-Sp8	253	1	109	4	2	0.5798181
439	[6OSO3]Galb1-3GlcNAcb-Sp0	248	1	109	4	2	0.5802727
42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	185	1	114	4	2	0.5855386
253	Neu5Aca2-3Galb1-4-Glcb-Sp8	264	1	105	4	2	0.5791814
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	313	1	98	3	2	0.575357
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	201	1	110	4	2	0.5844503
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	152	1	115	4	2	0.5884374
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	132	0	115	4	2	0.5902468
78	Fucb1-3GlcNAcb-Sp8	256	1	101	3	2	0.5802727
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	153	1	111	4	2	0.588709
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	352	1	89	3	2	0.5726209
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	998	4	16	1	2	0.5198421
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	106	0	116	4	2	0.5925057
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	884	3	28	1	2	0.5292899
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	186	1	105	4	2	0.5862638
183	GlcNAcb1-6GalNAca-Sp8	182	1	106	4	2	0.5865356
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	218	1	102	3	2	5.84E-01
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	151	1	106	4	2	0.5893423
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	239	1	94	3	2	0.5824535
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	190	1	98	3	2	0.5865356
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	227	1	92	3	2	0.5837245
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	200	1	94	3	2	0.5859919
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	170	1	97	3	2	0.5884374
133	Galb1-3GalNAcb-Sp8	233	1	90	3	2	0.5833614
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	122	0	102	3	2	0.5923251
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	124	0	101	3	2	0.5922348
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	240	1	88	3	2	0.5829075
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	406	2	67	2	2	0.5696986
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	184	1	92	3	2	5.88E-01
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	143	1	95	3	2	0.5910603
39	[6OSO3]Galb1-4Glcb-Sp0	199	1	89	3	2	0.5865356
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	425	2	63	2	2	0.5683274
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	206	1	83	3	2	0.586445
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	93	0	96	3	2	0.5954828
135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	152	1	89	3	2	0.5907892
109	Gala1-3Galb1-4GlcNAcb-Sp8	187	1	85	3	2	0.5879848
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	188	1	84	3	2	0.5879848
146	Galb1-4[6OSO3]Glcb-Sp0	287	1	72	2	2	0.5800909
306	Mana1-6Manb-Sp10	388	1	61	2	2	0.5718907
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	92	0	93	3	2	0.5958433
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	229	1	77	3	2	0.5849039
385	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	140	1	87	3	2	0.5920542
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	48	0	97	3	2	0.5994437
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	304	1	67	2	2	0.5789994

111	Gala1-3Galb-Sp8	221	1	76	3	2	0.5857199
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	263	1	71	2	2	0.5823627
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	278	1	69	2	2	0.5811817
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	97	0	88	3	2	0.5958433
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	111	0	85	3	2	0.5948518
65	Fuca1-2Galb1-3GlcNAcb-Sp8	306	1	63	2	2	0.5791814
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	151	1	80	3	2	0.5916929
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	133	0	81	3	2	0.593228
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	122	0	82	3	2	5.94E-01
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	103	0	83	3	2	0.5957532
357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	552	2	32	1	2	0.5595331
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	237	1	67	2	2	0.5850853
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	383	1	50	2	2	0.5733509
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	150	1	75	3	2	0.5922348
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	67	0	84	3	2	0.5989042
245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	107	0	79	3	2	0.5957532
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	169	1	72	2	2	0.5907892
131	Galb1-3GalNAca-Sp8	263	1	61	2	2	0.5832707
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	177	1	71	2	2	0.5901564
102	Gala1-3(Fuca1-2)Galb-Sp8	62	0	83	3	2	0.5994437
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	220	1	65	2	2	0.5868074
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	214	1	66	2	2	0.5872604
197	KDNa2-3Galb1-4GlcNAcb-Sp0	139	1	74	2	1	0.5933182
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	290	1	56	2	1	0.5812726
96	GalNAcb1-4GlcNAcb-Sp8	85	0	78	3	1	0.5978246
180	(GlcNAcb1-4)5b-Sp8	201	1	65	2	1	0.588528
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	199	1	65	2	1	0.588709
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	660	2	13	0	1	0.5513536
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	117	0	74	2	1	0.5953026
41	[6OSO3]Galb1-4GlcNAcb-Sp8	179	1	67	2	1	0.5903372
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	96	0	76	3	1	0.5970144
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	194	1	65	2	1	0.5891614
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	86	0	76	3	1	0.5979146
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	91	0	76	3	1	0.5974645
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	60	0	78	3	1	0.6000729
106	Gala1-3GalNAcb-Sp8	108	0	72	2	1	0.5962938
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	124	0	69	2	1	0.5951223
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	231	1	57	2	1	0.5865356
176	GlcNAcb1-4-MDPLys	-10	0	83	3	1	0.6059029
37	[4OSO3]Galb1-4GlcNAcb-Sp8	278	1	50	2	1	0.5829075
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	161	1	63	2	1	0.5923251
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	124	0	67	2	1	0.5953026
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	391	1	36	1	1	0.5738982
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	150	1	62	2	1	0.5934085
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	92	0	69	2	1	0.5980045
45	Neu5Ac(9Ac)a-Sp8	90	0	68	2	1	0.5982745
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	143	1	61	2	1	0.5941303
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	277	1	44	1	1	5.84E-01
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	358	1	34	1	1	0.577088
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	269	1	44	1	1	0.5842689
110	Gala1-3Galb1-4Glcb-Sp0	74	0	64	2	1	0.6000729

296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	45	0	67	2	1	0.6024077
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	121	0	58	2	1	0.5963839
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	146	1	55	2	1	0.5944009
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	107	0	58	2	1	0.5976445
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	-68	0	78	3	1	0.611531
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	183	1	49	2	1	0.5916025
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	168	1	51	2	1	0.5927766
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	60	0	63	2	1	0.6014203
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	96	0	58	2	1	0.5986343
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	84	0	59	2	1	0.5996235
435	Galb1-4Galb-Sp10	97	0	58	2	1	0.5985444
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	53	0	63	2	1	0.6020487
15	GlcNAcb-Sp0	76	0	60	2	1	0.6002526
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	99	0	57	2	1	0.5984544
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	103	0	56	2	1	0.5981845
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	24	0	65	2	1	0.60447
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	89	0	57	2	1	0.5993538
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	57	0	58	2	1	0.6021385
58	Fuca1-2Galb1-3GalNAca-Sp8	113	0	52	2	1	0.5976445
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	89	0	54	2	1	0.5996235
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	102	0	52	2	1	0.5986343
163	Galb1-4Glcb-Sp8	38	0	58	2	1	0.6038426
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	154	1	45	1	1	0.5945813
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	122	0	48	2	1	0.5971944
175	GlcNAcb1-3Galb1-4Glcb-Sp0	80	0	52	2	1	0.600612
88	GalNAca1-3GalNAcb-Sp8	57	0	55	2	1	0.6024077
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	32	0	58	2	1	0.6043804
276	Neu5Gca-Sp8	-9	0	61	2	1	0.6077815
186	Glca1-4Glcb-Sp8	56	0	53	2	1	0.6026768
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	298	1	25	1	1	0.5833614
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	61	0	52	2	1	0.6023179
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	41	0	54	2	1	6.04E-01
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	101	0	47	2	1	0.599174
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	106	0	46	2	1	0.5988142
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	75	0	49	2	1	0.6013305
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	73	0	49	2	1	0.6015101
298	GalNAcb1-3Galb-Sp8	100	0	46	2	1	0.5993538
339	GlcNAca1-4Galb1-3GalNAc-Sp14	124	0	43	1	1	0.5974645
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	79	0	48	2	1	0.6010611
304	GlcNAcb1-4GlcNAcb-Sp12	116	0	44	1	1	0.5980945
76	Fuca1-3GlcNAcb-Sp8	39	0	52	2	1	0.6042908
196	KDNa2-3Galb1-3GlcNAcb-Sp0	61	0	50	2	1	0.6024974
297	GalNAca-Sp15	122	0	43	1	1	0.5976445
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	58	0	50	2	1	0.6027665
208	Manb1-4GlcNAcb-Sp0	49	0	51	2	1	0.603484
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	198	1	33	1	1	0.5916929
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	67	0	48	2	1	0.6021385
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	82	0	46	2	1	0.6009713
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	48	0	49	2	1	0.603753
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	82	0	45	2	1	0.6010611
28	[3OSO3]Galb1-3GlcNAcb-Sp8	34	0	50	2	1	0.6049179

438	GalNAcb1-6GalNAcb-Sp8	109	0	41	1	1	0.5989941
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	91	0	43	1	1	0.6004323
171	GlcNAcb1-3Galb-Sp8	30	0	50	2	1	0.6052762
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	63	0	46	2	1	0.6026768
136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	124	0	39	1	1	0.5978246
387	Galb1-3GlcNAcb1-3GalNAca-Sp14	109	0	40	1	1	0.599084
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	23	0	49	2	1	0.6059924
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	73	0	44	1	1	0.601959
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	20	0	49	2	1	0.6062609
113	Gala1-4Galb1-4GlcNAcb-Sp0	136	1	36	1	1	0.5970144
44	[6OSO3]GlcNAcb-Sp8	14	0	49	2	1	0.6067978
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	72	0	42	1	1	0.6022282
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	57	0	43	1	1	0.603484
86	GalNAca1-3(Fuca1-2)Galb-Sp8	111	0	37	1	1	0.599174
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	59	0	43	1	1	0.6033047
95	GalNAcb1-4GlcNAcb-Sp0	68	0	41	1	1	0.6026768
274	Neu5Gca2-6GalNAca-Sp0	78	0	40	1	1	0.6018692
89	GalNAca1-3Galb-Sp8	132	0	34	1	1	0.5975545
254	Neu5Aca2-6GalNAca-Sp8	42	0	43	1	1	0.6048284
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	114	0	35	1	1	0.599084
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	64	0	40	1	1	0.6031253
75	Fuca1-2Galb-Sp8	7	0	46	2	1	0.6076921
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	114	0	34	1	1	0.599174
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	61	0	40	1	1	0.6033944
79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	121	0	33	1	1	0.5986343
252	Neu5Aca2-3Galb1-4Glcb-Sp0	81	0	37	1	1	0.6018692
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	79	0	37	1	1	0.6020487
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	99	0	34	1	1	0.6005222
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	6	0	45	2	1	0.6078709
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	44	0	40	1	1	0.6049179
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	146	1	29	1	1	0.5967442
12	Glcb-Sp8	50	0	40	1	1	0.6043804
4	GalNAca-Sp8	125	0	31	1	1	0.5984544
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-139	-1	61	2	1	0.6193532
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	27	0	42	1	1	0.6062609
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	-6	0	45	2	1	0.6089432
8	Neu5Aca-Sp8	88	0	34	1	1	0.6015101
38	6-H2PO3Mana-Sp8	80	0	35	1	1	0.6021385
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	54	0	38	1	1	6.04E-01
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	36	0	40	1	1	0.6056344
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	-11	0	45	2	1	0.6093897
261	Neu5Aca2-6Galb1-4Glcb-Sp0	15	0	42	1	1	0.6073344
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	21	0	41	1	1	0.6068873
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	57	0	36	1	1	0.6041115
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	-127	0	57	2	1	0.6186441
14	GalNAcb-Sp8	194	1	20	1	1	0.593228
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-4	0	42	1	1	0.6090325
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	74	0	33	1	1	0.6028563
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	56	0	35	1	1	0.6042908
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	-33	0	45	2	1	0.6113527
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	60	0	34	1	1	0.6040219

168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	54	0	34	1	1	0.6045596
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	-85	0	50	2	1	0.6155369
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	61	0	33	1	1	0.6040219
13	Manb-Sp8	128	0	25	1	1	0.5987243
263	Neu5Aca2-6Galb-Sp8	21	0	37	1	1	0.607245
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	33	0	36	1	1	0.6062609
91	GalNAcb1-3GalNAca-Sp8	50	0	34	1	1	0.6049179
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	41	0	34	1	1	0.6057239
187	Glca1-4Glca-Sp8	32	0	35	1	1	0.6064399
97	Gala1-2Galb-Sp8	46	0	33	1	1	0.6053658
190	Glcb1-6Glcb-Sp8	61	0	31	1	1	0.6042012
234	Neu5Aca2-3Galb-Sp8	23	0	35	1	1	0.607245
211	Fuca1-2[6OSO3]Galb1-4GlcNAcb-Sp0	24	0	35	1	1	0.6071556
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	79	0	29	1	1	0.6027665
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	40	0	33	1	1	0.6059029
11	Galb-Sp8	-48	0	43	1	1	0.6128677
10	Neu5Acb-Sp8	8	0	37	1	1	0.6084071
137	Galb1-3Galb-Sp8	64	0	30	1	1	0.6040219
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	51	0	31	1	1	0.6050971
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	21	0	35	1	1	0.6074239
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	57	0	30	1	1	0.6046492
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	44	0	31	1	1	0.6057239
5	Fuca-Sp8	51	0	30	1	1	0.6051866
9	Neu5Aca-Sp11	-4	0	36	1	1	0.6095683
104	Gala1-3GalNAca-Sp8	65	0	28	1	1	0.6041115
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	-69	0	43	1	1	0.6147367
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	20	0	33	1	1	0.6076921
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	81	0	26	1	1	0.6028563
267	Neu5Acb2-6GalNAca-Sp8	80	0	26	1	1	0.602946
262	Neu5Aca2-6Galb1-4Glcb-Sp8	13	0	33	1	1	0.6083178
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	125	0	20	1	1	0.5994437
1	Gala-Sp8	80	0	25	1	1	0.6030356
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-27	0	37	1	1	6.12E-01
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	99	0	23	1	1	0.6015101
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	10	0	31	1	1	0.6087645
436	Galb1-6Galb-Sp10	71	0	24	1	1	0.6039323
355	KDNa2-3Galb1-3GalNAca-Sp14	71	0	24	1	1	0.6039323
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	10	0	31	1	1	0.6087645
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-222	-1	57	2	1	6.27E-01
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	47	0	26	1	1	0.6059029
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-17	0	34	1	1	0.6109068
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	57	0	25	1	1	0.6050971
34	[3OSO3]Galb1-4GlcNAcb-Sp8	4	0	31	1	1	0.6093004
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	11	0	30	1	1	0.6087645
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	-29	0	34	1	1	0.6119767
184	GlcNAcb1-6GalNAca-Sp14	20	0	28	1	1	0.608139
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	61	0	23	1	1	0.6049179
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	-2	0	30	1	0	0.6099253
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	15	0	28	1	0	0.6085858
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	-1	0	30	1	0	0.6098361
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	54	0	23	1	0	0.6055448

236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	41	0	24	1	0	0.6066189
114	Gala1-4Galb1-4GlcNAcb-Sp8	13	0	27	1	0	0.6088538
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	-18	0	31	1	0	0.6112636
147	Galb1-4[6OSO3]Glcb-Sp8	55	0	23	1	0	0.6054553
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	62	0	22	1	0	0.6049179
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	66	0	21	1	0	0.6046492
115	Gala1-4Galb1-4Glcb-Sp0	53	0	22	1	0	0.6057239
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	57	0	21	1	0	0.6054553
353	KDNa2-6Galb1-4GlcNAc-Sp0	102	0	16	1	0	6.02E-01
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	-132	0	41	1	0	0.6205047
191	G-ol-Sp8	35	0	22	1	0	0.6073344
140	Galb1-3GlcNAcb-Sp0	47	0	20	1	0	0.6064399
59	Fuca1-2Galb1-3GalNAca-Sp14	7	0	24	1	0	0.6096575
27	[3OSO3]Galb1-3GalNAca-Sp8	-23	0	27	1	0	0.6120658
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-42	0	29	1	0	0.61358
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	-129	0	39	1	0	0.6204162
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	-16	0	26	1	0	0.611531
291	Galb1-3Galb1-4GlcNAcb-Sp8	68	0	16	1	0	0.6049179
288	6-H2PO3Glcb-Sp10	83	0	14	0	0	0.603753
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	-44	0	28	1	0	0.613847
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	72	0	15	1	0	0.6046492
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	32	0	18	1	0	0.6079603
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	39	0	17	1	0	0.6074239
162	Galb1-4Glcb-Sp0	113	0	9	0	0	0.6015101
35	[3OSO3]Galb-Sp8	25	0	18	1	0	0.6085858
278	Galb1-3GalNAca-Sp14	21	0	18	1	0	0.6089432
302	GlcNAcb1-3Man-Sp10	6	0	20	1	0	0.6101038
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	-13	0	22	1	0	0.6116202
141	Galb1-3GlcNAcb-Sp8	44	0	15	1	0	0.6071556
248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	-58	0	27	1	0	0.6151813
189	Glcb1-4Glcb-Sp8	73	0	11	0	0	0.6049179
264	Neu5Aca2-8Neu5Aca-Sp8	28	0	16	1	0	0.6084965
160	Galb1-4GlcNAcb-Sp0	55	0	13	0	0	0.6063504
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	50	0	13	0	0	0.6067978
108	Gala1-3Galb1-3GlcNAcb-Sp0	-31	0	22	1	0	0.6132239
77	Fuca1-4GlcNAcb-Sp8	92	0	7	0	0	0.6035737
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	22	0	15	1	0	0.6091218
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	84	0	8	0	0	0.6042012
316	Neu5Aca2-8Neu5Acb-Sp17	-55	0	24	1	0	0.6151813
194	GlcAb1-3Galb-Sp8	-2	0	17	1	0	0.6110852
92	GalNAcb1-3(Fuca1-2)Galb-Sp8	11	0	16	1	0	0.6100146
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	-102	0	29	1	0	0.6189101
117	Gala1-6Glcb-Sp8	20	0	14	0	0	0.6093897
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	34	0	12	0	0	0.6083178
161	Galb1-4GlcNAcb-Sp8	38	0	11	0	0	0.6080497
116	Gala1-4GlcNAcb-Sp8	37	0	11	0	0	0.608139
139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	64	0	8	0	0	0.6059924
226	Neu5Aca2-3GalNAca-Sp8	-135	-1	30	1	0	0.6217436
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	6	0	14	0	0	0.6106392
192	GlcAa-Sp8	-15	0	16	1	0	0.6123332
169	GlcNAcb1-3GalNAca-Sp8	38	0	10	0	0	0.608139

94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	-3	0	15	0	0	0.6113527
118	Galb1-2Galb-Sp8	-40	0	18	1	0	0.6143809
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	-31	0	16	1	0	0.613758
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	-11	0	14	0	0	0.612155
6	Fuca-Sp9	30	0	8	0	0	0.6090325
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	26	0	9	0	0	0.6093004
74	Fuca1-2Galb1-4Glcb-Sp0	2	0	11	0	0	0.6112636
289	Gala1-3(Fuca1-2)Galb-Sp18	30	0	8	0	0	0.6090325
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	5	0	10	0	0	0.6110852
188	Glca1-6Glca1-6Glcb-Sp8	16	0	9	0	0	0.6101931
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	10	0	8	0	0	0.6108176
72	Fuca1-2Galb1-4GlcNAcb-Sp0	7	0	8	0	0	0.6110852
195	GlcAb1-6Galb-Sp8	25	0	6	0	0	0.6096575
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	-62	0	15	1	0	0.6166031
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	29	0	5	0	0	0.6093897
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	53	0	1	0	0	0.6076027
119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	25	0	5	0	0	0.6097468
3	Mana-Sp8	-48	0	12	0	0	0.6156258
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	-187	-1	27	1	0	0.6265985
73	Fuca1-2Galb1-4GlcNAcb-Sp8	-21	0	6	0	0	0.613758
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	13	0	2	0	0	0.6110852
354	KDNa2-3Galb1-4Glc-Sp0	-32	0	6	0	0	0.6147367
33	[3OSO3]Galb1-4GlcNAcb-Sp0	3	0	1	0	0	0.6120658
170	GlcNAcb1-3GalNAca-Sp14	34	0	-4	0	0	0.6097468
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	14	0	-2	0	0	0.6113527
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-97	0	10	0	0	0.6201505
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	-10	0	-4	0	0	0.613669
2	Glca-Sp8	5	0	-6	0	0	0.6125114
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	-188	-1	14	0	0	0.6278311
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	-165	-1	8	0	0	0.6263342
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	-77	0	-5	0	0	0.6197077
132	Galb1-3GalNAca-Sp16	-91	0	-5	0	0	0.6209473
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	-80	0	-12	0	0	0.6205933
17	GlcN(Gc)b-Sp8	-136	-1	-9	0	0	0.6252764
40	[6OSO3]Galb1-4Glcb-Sp8	-137	-1	-28	-1	-1	0.6270389
64	Fuca1-2Galb1-3GlcNAcb-Sp0	-106	0	-35	-1	-1	0.6249236
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	-131	0	-35	-1	-1	0.6271269
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	-157	-1	-35	-1	-1	0.629414

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP ($OC_6H_4NH_2$)
Sp17	$OCH_2C_6H_4NH_2$

Sp18	O(CH$_2$)$_3$NHCO(CH$_2$)$_5$NH$_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

Supplementary Table 4b Biotinylated Con A at 1.0, 0.01, and 0.001 µg/ml binding to v4.0 of the CFG glycan array detected with Cy5-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Structure	Con A 1.0 µg/ml 60832		Con A 0.01 µg/ml 26599		Con A 0.001 µg/ml 2989		AVG. RANK	p-values
	Maximum RFU	RFU	RANK	RFU	RANK	RFU	RANK		
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	43349	71	23490	88	2857	96	85	3.19E-05
206	Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	30126	50	25552	96	2989	100	82	0.0004886
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	37072	61	22295	84	2786	93	79	0.0002169
204	Mana1-3(Mana1-6)Mana-Sp9	37025	61	26599	100	2274	76	79	8.61E-05
202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	37735	62	23567	89	2245	75	75	0.0001548
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	41741	69	24990	94	1836	61	75	4.31E-05
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	38344	63	23313	88	1993	67	72	0.0001509
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	36154	59	19646	74	2510	84	72	0.0005295
307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	40807	67	20309	76	2105	70	71	0.0001676
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	60832	100	16941	64	1254	42	69	2.21E-06
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	33294	55	22076	83	1686	56	65	0.0007
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	37798	62	20824	78	1600	54	65	0.0003421
200	Mana1-2Mana1-3Mana-Sp9	37736	62	16160	61	1639	55	59	0.0009742
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	42422	70	13421	50	1247	42	54	0.0006948
203	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	35519	58	12290	46	1381	46	50	0.0035225
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	36607	60	11144	42	786	26	43	0.0039865
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	35632	59	10072	38	926	31	42	0.0056706
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	41257	68	7312	27	390	13	36	0.0036808
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	33065	54	7696	29	694	23	36	0.0137937
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	54802	90	1422	5	120	4	33	0.0008181
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	38876	64	3576	13	639	21	33	0.0105252
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	42661	70	4832	18	258	9	32	0.0046172
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	37069	61	5961	22	384	13	32	0.0099664
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	48582	80	2201	8	221	7	32	0.0024771
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	33245	55	5167	19	630	21	32	0.0201948
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	41416	68	3812	14	278	9	31	0.0069359
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	37868	62	5136	19	302	10	31	0.0101503
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	43621	72	2931	11	200	7	30	0.0055464
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	48607	80	1652	6	12	0	29	0.00286
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	45986	76	1695	6	117	4	29	0.0045771
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-N(LT)AVL	43058	71	1220	5	166	6	27	0.008354
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	44754	74	998	4	16	1	26	0.0066205
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	36779	60	1649	6	334	11	26	0.0210795
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNAc-Sp21	40010	66	1828	7	136	5	26	0.012673
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	31622	52	3841	14	307	10	26	0.0327532
393	Galb1-4GlcNacb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	30019	49	4106	15	348	12	25	0.0392587
350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	39735	65	1814	7	120	4	25	0.0133217
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	37828	62	2033	8	151	5	25	0.0173693
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	40848	67	1202	5	65	2	25	0.0123825
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	39072	64	1370	5	103	3	24	0.0159658
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb-Sp12	32746	54	1841	7	170	6	22	0.0377509
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	37597	62	884	3	28	1	22	0.021907
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	32967	54	1695	6	155	5	22	0.0374385
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	28946	48	2998	11	104	3	21	0.0542215
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp22	32937	54	1165	4	103	3	21	0.0407261
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	30024	49	1806	7	172	6	21	0.0545438
320	Neu5Aca2-3GlcNAcb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3GlcNAcb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	29652	49	1082	4	193	6	20	0.0625167
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	32571	54	1043	4	50	2	20	0.043824
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	32132	53	815	3	97	3	20	0.047605
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	29826	49	1143	4	137	5	19	0.0611295
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	30274	50	1434	5	74	2	19	0.0561064
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	28572	47	980	4	174	6	19	0.072468
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	29685	49	703	3	120	4	18	0.0658599

ID	Structure							
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	27552	45	1169	4	126	4	18	0.0804893
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	25962	43	1378	5	116	4	17	0.0945272
357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	27555	45	552	2	32	1	16	0.0874239
384	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNacb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNac-Sp21	25026	41	593	2	87	3	15	0.1146511
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	2903	5	2468	9	914	31	15	0.5128295
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	20772	34	549	2	103	3	13	0.1761827
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	19979	33	580	2	90	3	13	0.1892252
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	21266	35	660	2	13	0	13	0.1678384
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	21683	36	74	0	33	1	12	0.170226
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	18685	31	532	2	80	3	12	0.213357
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	18675	31	352	1	89	3	12	0.2167185
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	15686	26	425	2	63	2	10	0.2754735
306	Mana1-6Manb-Sp10	14940	25	388	1	61	2	9	0.2923783
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	12174	20	437	2	114	4	8	0.353036
193	GlcAb-Sp8	1238	2	1707	6	506	17	8	0.5840566
299	GlcAb1-3GlcNAcb-Sp8	4602	8	632	2	448	15	8	0.5280977
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	12858	21	231	1	57	2	8	0.3431454
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	12473	21	383	1	50	2	8	0.3487711
411	Fuca1-3(Galb1-4)GlcNAcb1-3GalNAca-Sp14	12991	21	298	1	25	1	8	0.3392279
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	7346	12	456	2	239	8	7	0.4683413
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	1363	2	860	3	466	16	7	0.6028427
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	9202	15	457	2	125	4	7	0.424569
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	10944	18	122	0	48	2	7	0.391755
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	1691	3	886	3	412	14	7	0.5954725
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	10118	17	269	1	44	1	6	0.4085257
3	Mana-Sp8	9464	16	-48	0	12	0	5	0.433452
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	1661	3	570	2	326	11	5	0.6060742
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	1221	2	909	3	228	8	4	0.6109321
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	5028	8	227	1	92	3	4	0.5365636
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	979	2	859	3	216	7	4	0.6183195
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	553	1	489	2	258	9	4	0.6364521
128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	640	1	618	2	238	8	4	0.6317661
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	667	1	432	2	251	8	4	0.6352586
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	5232	9	277	1	44	1	4	0.5313594
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	5541	9	198	1	33	1	4	0.5258209
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	2659	4	288	1	162	5	4	0.5925147
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	688	1	612	2	218	7	4	0.6312388
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	1481	2	292	1	205	7	3	0.6201598
105	Gala1-3GalNAca-Sp16	829	1	936	4	161	5	3	0.6214173
80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	657	1	585	2	207	7	3	0.6328916
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	3195	5	264	1	118	4	3	0.5809304
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	3711	6	190	1	98	3	3	0.5704239
23	[3OSO3]Galb1-4Glcb-Sp8	635	1	465	2	209	7	3	0.6362374
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	191	0	490	2	191	6	3	0.6466135
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	561	1	462	2	161	5	3	0.639216
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	2267	4	153	1	111	4	3	0.6067099
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	933	2	170	1	175	6	3	0.6369769
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	558	1	467	2	158	5	3	0.6392398
87	GalNAca1-3(Fuca1-2)Galb-Sp18	434	1	361	1	172	6	3	0.6443667
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	1759	3	499	2	88	3	3	0.6112245
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	957	2	141	1	163	5	3	0.6373822
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	2045	3	240	1	88	3	2	0.6105665
7	Rha-Sp8	648	1	569	2	118	4	2	0.6356168
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	1439	2	144	1	122	4	2	0.6267475
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	127	0	273	1	163	5	2	0.6538856
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	764	1	250	1	131	4	2	0.6401436
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	3215	5	-69	0	43	1	2	0.5905399

ID	Glycan							
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	3459	6	-44	0	28	1	2	0.5842549
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	2603	4	101	0	47	2	2	0.6013225
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	156	0	191	1	155	5	2	0.6553146
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	391	1	271	1	129	4	2	0.6485251
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	1239	2	200	1	94	3	2	0.6308792
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	1963	3	161	1	63	2	2	0.6150926
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	1027	2	151	1	106	4	2	0.6368338
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	502	1	163	1	129	4	2	0.6484543
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	864	1	106	0	116	4	2	0.6415453
150	Galb1-4GlcNAcb1-3GalNAca-Sp8	381	1	443	2	102	3	2	0.645337
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	166	0	338	1	124	4	2	0.6523605
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	314	1	209	1	126	4	2	0.6518672
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	1970	3	99	0	57	2	2	0.6165736
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	647	1	201	1	110	4	2	0.6445798
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	74	0	256	1	127	4	2	0.6563674
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	48	0	150	1	139	5	2	0.6591689
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	20	0	307	1	123	4	2	0.6565311
179	(GlcNAcb1-4)6b-Sp8	169	0	240	1	121	4	2	0.654659
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	98	0	211	1	128	4	2	0.6568349
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	255	0	249	1	115	4	2	0.6525718
273	Neu5Gca2-3Galb1-4Glcb-Sp0	57	0	251	1	120	4	2	0.6570452
303	GlcNAcb1-4GlcNAcb-Sp10	79	0	116	0	132	4	2	0.659402
16	GlcNAcb-Sp8	226	0	253	1	109	4	2	0.6532993
78	Fucb1-3GlcNAcb-Sp8	386	1	256	1	101	3	2	0.6496561
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	175	0	204	1	116	4	2	0.6554785
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	63	0	194	1	119	4	2	0.6582594
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	183	0	152	1	115	4	2	0.6565311
42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	109	0	185	1	114	4	2	0.6575124
253	Neu5Aca2-3Galb1-4Glcb-Sp8	68	0	264	1	105	4	2	0.6568349
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	94	0	313	1	98	3	2	0.6552444
439	[6OSO3]Galb1-3GlcNAcb-Sp0	16	0	248	1	109	4	2	0.6583294
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	441	1	124	0	101	3	2	0.6514677
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	137	0	132	0	115	4	2	0.6580727
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	198	0	218	1	102	3	2	0.65494
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	440	1	406	2	67	2	1	0.6456444
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	283	0	170	1	97	3	1	0.6541904
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	34	0	186	1	105	4	1	0.6594486
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	284	0	184	1	92	3	1	0.653956
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	182	0	122	0	102	3	1	0.6575591
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	62	0	239	1	94	3	1	0.6578159
183	GlcNAcb1-6GalNAca-Sp8	-56	0	182	1	106	4	1	0.661613
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	229	0	143	1	95	3	1	0.6561336
133	Galb1-3GalNAcb-Sp8	54	0	233	1	90	3	1	0.658236
146	Galb1-4[6OSO3]Glcb-Sp0	263	0	287	1	72	2	1	0.6525014
385	Fuca1-2Galb1-3GalNAca-3(Fuca1-2)Galb1-4Glcb-Sp0	275	0	140	1	87	3	1	0.6553146
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	196	0	188	1	84	3	1	0.6561102
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	467	1	177	1	71	2	1	0.6503153
355	KDNa2-3Galb1-3GalNAca-Sp14	1626	3	71	0	24	1	1	0.6263624
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	118	0	93	0	96	3	1	0.6598679
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	145	0	92	0	93	3	1	0.6593321
39	[6OSO3]Galb1-4Glcb-Sp0	-31	0	199	1	89	3	1	0.6610317
339	GlcNAca1-4Galb1-3GalNAc-Sp14	1046	2	124	0	43	1	1	0.6385257
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	142	0	304	1	67	2	1	0.6550571
135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	33	0	152	1	89	3	1	0.6606362
111	Gala1-3Galb-Sp8	124	0	221	1	76	3	1	0.6572088
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	14	0	206	1	83	3	1	0.6599611
65	Fuca1-2Galb1-3GlcNAcb-Sp8	179	0	306	1	63	2	1	0.6542372

109	Gala1-3Galb1-4GlcNAcb-Sp8	0	0	187	1	85	3	1	0.6606827
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	371	1	199	1	65	2	1	0.6521961
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	90	0	263	1	71	2	1	0.6571387
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	255	0	150	1	75	3	1	0.6558295
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	20	0	229	1	77	3	1	0.6594253
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp0	132	0	133	0	81	3	1	0.6589591
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	146	0	103	0	83	3	1	0.6592854
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	25	0	278	1	69	2	1	0.6583527
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	-8	0	48	0	97	3	1	0.6638185
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	71	0	151	1	80	3	1	0.6599844
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	89	0	122	0	82	3	1	0.6601939
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	33	0	97	0	88	3	1	0.6619384
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	172	0	169	1	72	2	1	0.6573956
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	1095	2	99	0	34	1	1	0.6381685
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	99	0	237	1	67	2	1	0.6576292
180	(GlcNAcb1-4)5b-Sp8	214	0	201	1	65	2	1	0.6558295
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	0	0	111	0	85	3	1	0.6624494
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	863	1	82	0	46	2	1	0.6437983
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	209	0	86	0	76	3	1	0.658376
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	188	0	96	0	76	3	1	0.6586326
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	186	0	91	0	76	3	1	0.6587959
96	GalNAcb1-4GlcNAcb-Sp8	111	0	85	0	78	3	1	0.6606362
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	62	0	214	1	66	2	1	0.6590523
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	1045	2	60	0	34	1	1	0.6402862
398	GalNAca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	265	0	150	1	62	2	1	0.6558997
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	97	0	117	0	74	2	1	0.6603103
131	Galb1-3GalNAca-Sp8	22	0	263	1	61	2	1	0.6589591
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	74	0	290	1	56	2	1	0.6572321
245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	14	0	107	0	79	3	1	0.6623565
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	2	0	67	0	84	3	1	0.6634475
197	KDNa2-3Galb1-4GlcNAcb-Sp0	44	0	139	1	74	2	1	0.6610317
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	14	0	220	1	65	2	1	0.6600542
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	81	0	194	1	65	2	1	0.659099
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	436	1	84	0	59	2	1	0.6535104
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	255	0	143	1	61	2	1	0.6563207
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	103	0	124	0	69	2	1	0.6601241
59	Fuca1-2Galb1-3GalNAca-Sp14	1286	2	7	0	24	1	1	0.6360465
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	139	0	124	0	67	2	1	0.6593321
102	Gala1-3(Fuca1-2)Galb-Sp8	-54	0	62	0	83	3	1	0.6648844
106	Gala1-3GalNAcb-Sp8	63	0	108	0	72	2	1	0.6613573
41	[6OSO3]Galb1-4GlcNAcb-Sp8	-9	0	179	1	67	2	1	0.6614968
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	317	1	168	1	51	2	1	0.6545184
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	-7	0	60	0	78	3	1	0.6639576
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	44	0	391	1	36	1	1	0.65604
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	159	0	358	1	34	1	1	0.6541669
37	[4OSO3]Galb1-4GlcNAcb-Sp8	-1	0	278	1	50	2	1	0.659402
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	212	0	183	1	49	2	1	0.6566713
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	503	1	67	0	48	2	1	0.6525953
176	GlcNAcb1-4-MDPLys	-65	0	-10	0	83	3	1	0.6668043
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	132	0	146	1	55	2	1	0.6592621
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	-19	0	92	0	69	2	1	0.6637026
45	Neu5Ac(9Ac)a-Sp8	-23	0	90	0	68	2	1	0.6638649
110	Gala1-3Galb1-4Glcb-Sp0	77	0	74	0	64	2	1	0.6620081
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	113	0	107	0	58	2	1	0.6605431
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	827	1	81	0	26	1	1	0.6451478
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	149	0	103	0	56	2	1	0.6598446
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	59	0	121	0	58	2	1	0.6614735

ID	Name								
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	111	0	96	0	58	2	1	0.6608456
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	81	0	60	0	63	2	1	0.6622636
15	GlcNAcb-Sp0	98	0	76	0	60	2	1	0.6615665
435	Galb1-4Galb-Sp10	72	0	97	0	58	2	1	0.6617292
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	1122	2	-102	0	29	1	1	0.6424234
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	108	0	89	0	57	2	1	0.6611015
296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	-6	0	45	0	67	2	1	0.664537
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	152	0	89	0	54	2	1	0.6601474
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	278	0	75	0	49	2	1	0.6576525
58	Fuca1-2Galb1-3GalNAca-Sp8	92	0	113	0	52	2	1	0.6610317
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	107	0	102	0	52	2	1	0.6609387
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	-19	0	53	0	63	2	1	0.6647455
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-2	0	24	0	65	2	1	0.664977
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	173	0	106	0	46	2	1	0.6594486
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	14	0	57	0	58	2	1	0.664004
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	156	0	73	0	49	2	1	0.6605431
387	Galb1-3GlcNAcb1-3GalNAca-Sp14	259	0	109	0	40	1	1	0.6575124
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	52	0	154	1	45	1	1	0.6611712
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	-114	0	-68	0	78	3	1	0.6693881
186	Glca1-4Glcb-Sp8	97	0	56	0	53	2	1	0.6622172
88	GalNAca1-3GalNAcb-Sp8	54	0	57	0	55	2	1	0.6631458
304	GlcNAcb1-4GlcNAcb-Sp12	146	0	116	0	44	1	1	0.6598912
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	136	0	79	0	48	2	1	0.6608921
163	Galb1-4Glcb-Sp8	3	0	38	0	58	2	1	0.6646991
298	GalNAcb1-3Galb-Sp8	107	0	100	0	46	2	1	0.6611247
76	Fuca1-3GlcNAcb-Sp8	112	0	39	0	52	2	1	0.6622869
175	GlcNAcb1-3Galb1-4Glcb-Sp0	-17	0	80	0	52	2	1	0.6643285
136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	149	0	124	0	39	1	1	0.6597514
438	GalNAcb1-6GalNAcb-Sp8	107	0	109	0	41	1	1	0.6610317
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	2	0	61	0	52	2	1	0.6643285
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	2	0	41	0	54	2	1	0.6647455
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	-53	0	32	0	58	2	1	0.666134
196	KDNa2-3Galb1-3GlcNAcb-Sp0	31	0	61	0	50	2	1	0.6637026
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	25	0	58	0	50	2	1	0.6639113
208	Manb1-4GlcNAcb-Sp0	20	0	49	0	51	2	1	0.6642126
297	GalNAca-Sp15	9	0	122	0	43	1	1	0.6629602
276	Neu5Gca-Sp8	-72	0	-9	0	61	2	1	0.667451
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	34	0	82	0	45	2	1	0.6632619
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	154	0	114	0	35	1	1	0.6599611
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	87	0	20	0	49	2	1	0.6633779
86	GalNAca1-3(Fuca1-2)Galb-Sp8	113	0	111	0	37	1	1	0.6609387
89	GalNAca1-3Galb-Sp8	120	0	132	0	34	1	1	0.6603569
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	18	0	91	0	43	1	1	0.6634706
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	40	0	73	0	44	1	1	0.6633547
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	464	1	-29	0	34	1	1	0.6560868
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	12	0	63	0	46	2	1	0.6641894
171	GlcNAcb1-3Galb-Sp8	3	0	30	0	50	2	1	0.6650697
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	157	0	79	0	37	1	1	0.6606595
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	164	0	146	1	29	1	1	0.6591223
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	-30	0	48	0	49	2	1	0.66544
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	59	0	57	0	43	1	1	0.6633083
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	383	1	99	0	23	1	1	0.6552444
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	7	0	23	0	49	2	1	0.6651623
28	[3OSO3]Galb1-3GlcNAcb-Sp8	-30	0	34	0	50	2	1	0.6657408
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	41	0	72	0	42	1	1	0.6634011
274	Neu5Gca2-6GalNAca-Sp0	69	0	78	0	40	1	1	0.6626584
113	Gala1-4Galb1-4GlcNAcb-Sp0	12	0	136	1	36	1	1	0.6627281

79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	107	0	121	0	33	1	1	0.6609387
254	Neu5Aca2-6GalNAca-Sp8	57	0	42	0	43	1	1	0.6637026
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	73	0	114	0	34	1	1	0.6618687
44	[6OSO3]GlcNAcb-Sp8	5	0	14	0	49	2	1	0.6654169
252	Neu5Aca2-3Galb1-4Glcb-Sp0	85	0	81	0	37	1	1	0.6622869
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	11	0	59	0	43	1	1	0.6643748
95	GalNAcb1-4GlcNAcb-Sp0	12	0	68	0	41	1	1	0.6641894
75	Fuca1-2Galb-Sp8	42	0	7	0	46	2	1	0.6647918
4	GalNAca-Sp8	84	0	125	0	31	1	1	0.661427
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	6	0	64	0	40	1	1	0.6644443
13	Manb-Sp8	158	0	128	0	25	1	1	0.6597747
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	33	0	44	0	40	1	1	0.6642821
12	Glcb-Sp8	33	0	50	0	40	1	1	0.6641431
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	-12	0	61	0	40	1	1	0.6649307
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	42	0	54	0	38	1	1	0.6638881
38	6-H2PO3Mana-Sp8	37	0	80	0	35	1	1	0.6634706
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	3	0	6	0	45	2	1	0.6657408
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	4	0	27	0	42	1	1	0.6653011
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	11	0	-11	0	45	2	0	0.665949
8	Neu5Aca-Sp8	-4	0	88	0	34	1	0	0.6642589
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	27	0	57	0	36	1	0	0.6642126
14	GalNAcb-Sp8	38	0	194	1	20	1	0	0.661148
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	11	0	21	0	41	1	0	0.6653011
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	-31	0	-6	0	45	2	0	0.6668043
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29	0	-4	0	42	1	0	0.66544
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	33	0	56	0	35	1	0	0.6641199
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	-17	0	36	0	40	1	0	0.6656251
261	Neu5Aca2-6Galb1-4Glcb-Sp0	-26	0	15	0	42	1	0	0.6662727
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	43	0	61	0	33	1	0	0.6638185
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	85	0	51	0	31	1	0	0.6631226
211	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	57	0	24	0	35	1	0	0.6643053
91	GalNAcb1-3GalNAca-Sp8	27	0	50	0	34	1	0	0.6644211
187	Glca1-4Glca-Sp8	43	0	32	0	35	1	0	0.6644443
190	Glcb1-6Glcb-Sp8	41	0	61	0	31	1	0	0.6639113
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	36	0	41	0	34	1	0	0.6644211
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	39	0	40	0	33	1	0	0.664398
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	448	1	84	0	8	0	0	0.6544247
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	37	0	79	0	29	1	0	0.663633
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	-3	0	33	0	36	1	0	0.6654632
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-118	0	-139	-1	61	2	0	0.6715045
168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	-22	0	54	0	34	1	0	0.6654632
236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	199	0	41	0	24	1	0	0.6608689
5	Fuca-Sp8	58	0	51	0	30	1	0	0.6637721
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	86	0	125	0	20	1	0	0.6616363
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	30	0	57	0	30	1	0	0.6642821
234	Neu5Aca2-3Galb-Sp8	-2	0	23	0	35	1	0	0.6656945
97	Gala1-2Galb-Sp8	-15	0	46	0	33	1	0	0.6655094
436	Galb1-6Galb-Sp10	99	0	71	0	24	1	0	0.6624959
1	Gala-Sp8	63	0	80	0	25	1	0	0.6630994
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	27	0	44	0	31	1	0	0.6646296
263	Neu5Aca2-6Galb-Sp8	-56	0	21	0	37	1	0	0.6669429
137	Galb1-3Galb-Sp8	-8	0	64	0	30	1	0	0.6650002
267	Neu5Acb2-6GalNAca-Sp8	27	0	80	0	26	1	0	0.6639113
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	-105	0	-33	0	45	2	0	0.6691347
104	Gala1-3GalNAca-Sp8	7	0	65	0	28	1	0	0.664676
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	-23	0	21	0	35	1	0	0.6662265
10	Neu5Acb-Sp8	-41	0	8	0	37	1	0	0.6668967

11	Galb-Sp8	-47	0	-48	0	43	1	0	0.6681895
262	Neu5Aca2-6Galb1-4Glcb-Sp8	8	0	13	0	33	1	0	0.6657408
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	-9	0	20	0	33	1	0	0.6659721
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	-163	0	-127	0	57	2	0	0.6723541
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	114	0	-18	0	31	1	0	0.6640503
9	Neu5Aca-Sp11	-30	0	-4	0	36	1	0	0.6669429
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	8	0	10	0	31	1	0	0.6658565
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	12	0	10	0	31	1	0	0.6657639
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	-155	0	-85	0	50	2	0	0.6713666
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	57	0	54	0	23	1	0	0.6638881
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	15	0	57	0	25	1	0	0.6647455
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-37	0	-27	0	37	1	0	0.6676126
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	69	0	66	0	21	1	0	0.6633779
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	-4	0	47	0	26	1	0	0.6653937
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	10	0	11	0	30	1	0	0.6658102
114	Gala1-4Galb1-4GlcNAcb-Sp8	36	0	13	0	27	1	0	0.6652317
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	7	0	61	0	23	1	0	0.6648844
184	GlcNAcb1-6GalNAca-Sp14	-4	0	20	0	28	1	0	0.6659721
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	44	0	57	0	21	1	0	0.6641662
34	[3OSO3]Galb1-4GlcNAcb-Sp8	-32	0	4	0	31	1	0	0.6669198
147	Galb1-4[6OSO3]Glcb-Sp8	18	0	55	0	23	1	0	0.6647686
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	19	0	62	0	22	1	0	0.6646065
353	KDNa2-6Galb1-4GlcNAc-Sp0	35	0	102	0	16	1	0	0.6634475
115	Gala1-4Galb1-4Glcb-Sp0	29	0	53	0	22	1	0	0.6645833
191	G-ol-Sp8	61	0	35	0	22	1	0	0.6642589
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	-64	0	-17	0	34	1	0	0.6680741
291	Galb1-3Galb1-4GlcNAcb-Sp8	79	0	68	0	16	1	0	0.6632155
162	Galb1-4Glcb-Sp0	127	0	113	0	9	0	0	0.6612178
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	-44	0	-1	0	30	1	0	0.6673356
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	-50	0	-2	0	30	1	0	0.6674972
288	6-H2PO3Glcb-Sp10	62	0	83	0	14	0	0	0.6633083
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	-80	0	15	0	28	1	0	0.6678434
140	Galb1-3GlcNAcb-Sp0	10	0	47	0	20	1	0	0.6652086
278	Galb1-3GalNAca-Sp14	58	0	21	0	18	1	0	0.6647455
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	7	0	72	0	15	1	0	0.6648149
302	GlcNAcb1-3Man-Sp10	51	0	6	0	20	1	0	0.6652086
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	24	0	32	0	18	1	0	0.665278
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-42	0	-42	0	29	1	0	0.6682587
94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	155	0	-3	0	15	0	0	0.6631226
35	[3OSO3]Galb-Sp8	7	0	25	0	18	1	0	0.6658333
27	[3OSO3]Galb1-3GalNAca-Sp8	-62	0	-23	0	27	1	0	0.6683279
141	Galb1-3GlcNAcb-Sp8	22	0	44	0	15	1	0	0.665116
189	Glcb1-4Glcb-Sp8	20	0	73	0	11	0	0	0.6645833
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	-18	0	39	0	17	1	0	0.6661109
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	2	0	-13	0	22	1	0	0.666735
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	-79	0	-16	0	26	1	0	0.6685815
264	Neu5Aca2-8Neu5Aca-Sp8	16	0	28	0	16	1	0	0.665602
77	Fuca1-4GlcNAcb-Sp8	40	0	92	0	7	0	0	0.6637721
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	-140	0	-132	0	41	1	0	0.6723082
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	-95	0	-129	0	39	1	0	0.6712517
160	Galb1-4GlcNAcb-Sp0	0	0	55	0	13	0	0	0.6654169
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	-3	0	50	0	13	0	0	0.665602
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	36	0	34	0	12	0	0	0.6650928
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-296	0	-222	-1	57	2	0	0.6775697
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	-11	0	22	0	15	1	0	0.6663883
194	GlcAb1-3Galb-Sp8	-10	0	-2	0	17	1	0	0.6668736
116	Gala1-4GlcNAcb-Sp8	10	0	37	0	11	0	0	0.6656483

139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	-2	0	64	0	8	0	0	0.6653706
92	GalNAcb1-3(Fuca1-2)Galb-Sp8	-49	0	11	0	16	1	0	0.6674972
169	GlcNAcb1-3GalNAca-Sp8	2	0	38	0	10	0	0	0.6658333
117	Gala1-6Glcb-Sp8	-31	0	20	0	14	0	0	0.6669198
316	Neu5Aca2-8Neu5Acb-Sp17	-78	0	-55	0	24	1	0	0.6695033
108	Gala1-3Galb1-3GlcNAcb-Sp0	-106	0	-31	0	22	1	0	0.6696415
161	Galb1-4GlcNAcb-Sp8	-50	0	38	0	11	0	0	0.6670122
248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	-155	0	-58	0	27	1	0	0.6712747
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	-61	0	6	0	14	0	0	0.6679357
74	Fuca1-2Galb1-4Glcb-Sp0	4	0	2	0	11	0	0	0.6665963
192	GlcAa-Sp8	-61	0	-15	0	16	1	0	0.668374
188	Glca1-6Glca1-6Glcb-Sp8	13	0	16	0	9	0	0	0.6661109
118	Galb1-2Galb-Sp8	-58	0	-40	0	18	1	0	0.6688351
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	-17	0	26	0	9	0	0	0.6665732
195	GlcAb1-6Galb-Sp8	38	0	25	0	6	0	0	0.6653937
289	Gala1-3(Fuca1-2)Galb-Sp18	-19	0	30	0	8	0	0	0.6665501
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	-17	0	5	0	10	0	0	0.6670353
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	-59	0	-11	0	14	0	0	0.6682818
6	Fuca-Sp9	-42	0	30	0	8	0	0	0.6670815
119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	38	0	25	0	5	0	0	0.6654169
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	26	0	29	0	5	0	0	0.665602
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	33	0	53	0	1	0	0	0.664977
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	-74	0	-31	0	16	1	0	0.6690425
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	-42	0	10	0	8	0	0	0.6675434
72	Fuca1-2Galb1-4GlcNAcb-Sp0	-49	0	7	0	8	0	0	0.6677742
226	Neu5Aca2-3GalNAca-Sp8	-176	0	-135	-1	30	1	0	0.673455
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	-93	0	-62	0	15	1	0	0.6702169
73	Fuca1-2Galb1-4GlcNAcb-Sp8	-28	0	-21	0	6	0	0	0.6679819
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	-51	0	13	0	2	0	0	0.6678203
170	GlcNAcb1-3GalNAca-Sp14	3	0	34	0	-4	0	0	0.6662265
33	[3OSO3]Galb1-4GlcNAcb-Sp0	-52	0	3	0	1	0	0	0.6680972
354	KDNa2-3Galb1-4Glc-Sp0	-98	0	-32	0	6	0	0	0.6698487
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	-56	0	14	0	-2	0	0	0.6680049
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	-199	0	-187	-1	27	1	0	0.6752407
2	Glca-Sp8	11	0	5	0	-6	0	0	0.6667581
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	-129	0	-97	0	10	0	0	0.6719639
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	-69	0	-10	0	-4	0	0	0.6689043
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	-144	0	-188	-1	14	0	0	0.6743025
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	-30	0	-77	0	-5	0	0	0.6695724
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	-124	0	-165	-1	8	0	0	0.673455
132	Galb1-3GalNAca-Sp16	-117	0	-91	0	-5	0	0	0.671895
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	-172	0	-80	0	-12	0	0	0.6730653
17	GlcN(Gc)b-Sp8	-166	0	-136	-1	-9	0	0	0.6741423
40	[6OSO3]Galb1-4Glcb-Sp8	-103	0	-137	-1	-28	-1	-1	0.673157
64	Fuca1-2Galb1-3GlcNAcb-Sp0	-147	0	-106	0	-35	-1	-1	0.6736154
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	-149	0	-131	0	-35	-1	-1	0.6742339
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	-129	0	-157	-1	-35	-1	-1	0.6743712

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine

Sp15	Serine
Sp16	PNP (OC$_6$H$_4$NH$_2$)
Sp17	OCH$_2$C$_6$H$_4$NH$_2$
Sp18	O(CH$_2$)$_3$NHCO(CH$_2$)$_5$NH$_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

	anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15	UEA-I 30.0 μg/ml 46990		UEA-I 3.0 μg/ml 38353		UEA-I 0.3 μg/ml 22500			
Chart Number	Structure	RFU	RANK	RFU	RANK	RFU	RANK	AVG. RANK	p-values
251	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	40272	86	38353	100	22500	100	95	2.84E-15
213	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	34799	74	34447	90	21617	96	87	1.30E-12
212	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	35543	76	33865	88	17823	79	81	9.73E-12
73	Fuca1-2Galb1-4GlcNAcb-Sp8	31712	67	33552	87	18201	81	79	7.20E-11
112	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	35159	75	34019	89	13377	59	74	1.15E-10
72	Fuca1-2Galb1-4GlcNAcb-Sp0	46990	100	25897	68	9662	43	70	1.16E-10
74	Fuca1-2Galb1-4Glcb-Sp0	34309	73	26087	68	12321	55	65	1.35E-08
90	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	37338	79	24405	64	6633	29	58	9.15E-08
237	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	31500	67	22492	59	10228	45	57	5.13E-07
211	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	29464	63	23064	60	10367	46	56	8.70E-07
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	26680	57	18996	50	3967	18	41	9.52E-05
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	29912	64	15503	40	3082	14	39	0.0001359
70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	25178	54	8029	21	1238	6	27	0.0057483
71	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	20078	43	11855	31	1264	6	26	0.0075841
357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	18185	39	4654	12	492	2	18	0.0498243
76	Fuca1-3GlcNAcb-Sp8	12444	26	5676	15	757	3	15	0.0978973
75	Fuca1-2Galb-Sp8	11532	25	4488	12	672	3	13	0.131253
77	Fuca1-4GlcNAcb-Sp8	6969	15	3324	9	461	2	9	0.257858
5	Fuca-Sp8	5169	11	1420	4	117	1	5	0.3710018
143	Galb1-4(Fuca1-3)GlcNAcb-Sp8	2796	6	1499	4	205	1	4	0.4386476
210	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	2730	6	1614	4	110	0	4	0.440085
6	Fuca-Sp9	3720	8	840	2	86	0	3	0.4340911
441	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	3415	7	725	2	66	0	3	0.4478471
66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	1334	3	157	0	27	0	1	0.5326343
67	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	757	2	211	1	72	0	1	0.5476674
51	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	110	0	211	1	128	1	0	0.5661579
216	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	79	0	176	0	129	1	0	0.5681834
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	23	0	182	0	140	1	0	0.5693979
240	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	29	0	176	0	133	1	0	0.5696159
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	52	0	141	0	142	1	0	0.5697092
299	GlcAb1-3GlcNAcb-Sp8	124	0	146	0	103	0	0	0.5685261
256	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	67	0	244	1	70	0	0	0.5682769
206	Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	130	0	179	0	74	0	0	0.5682146
388	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	137	0	88	0	121	1	0	0.5693668
99	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	141	0	137	0	78	0	0	0.5690555
193	GlcAb-Sp8	89	0	112	0	116	1	0	0.5702695
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	171	0	95	0	86	0	0	0.56918
31	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	109	0	148	0	84	0	0	0.5695225
440	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	153	0	82	0	101	0	0	0.5696781
337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	91	0	169	0	78	0	0	0.5696159
218	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	73	0	174	0	71	0	0	0.5702384
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	78	0	164	0	72	0	0	0.5703628
92	GalNAcb1-3(Fuca1-2)Galb-Sp8	60	0	124	0	104	0	0	0.5711718
28	[3OSO3]Galb1-3GlcNAcb-Sp8	82	0	172	0	61	0	0	0.5703317
1	Gala-Sp8	17	0	130	0	114	1	0	0.5720115
287	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	61	0	174	0	67	0	0	0.5707362
358	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	74	0	137	0	79	0	0	0.5711096
203	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	83	0	104	0	94	0	0	0.5713895
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	64	0	131	0	85	0	0	0.5714206
118	Galb1-2Galb-Sp8	94	0	129	0	70	0	0	0.5710162
280	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	74	0	157	0	62	0	0	0.5710162
50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	62	0	111	0	94	0	0	0.5718249
35	[3OSO3]Galb-Sp8	56	0	129	0	85	0	0	0.5717317

387	Galb1-3GlcNAcb1-3GalNAca-Sp14	76	0	117	0	83	0	0	0.571545
94	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	72	0	147	0	65	0	0	0.5712962
235	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	82	0	135	0	67	0	0	0.5712962
29	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	55	0	105	0	97	0	0	0.5721359
374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	77	0	93	0	93	0	0	0.5719493
340	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	129	0	72	0	80	0	0	0.5713895
331	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	81	0	129	0	68	0	0	0.5714828
349	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	126	0	63	0	85	0	0	0.5716073
281	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	62	0	131	0	74	0	0	0.5718249
350	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	101	0	101	0	72	0	0	0.5716073
140	Galb1-3GlcNAcb-Sp0	16	0	129	0	96	0	0	0.5726334
192	GlcAa-Sp8	30	0	113	0	97	0	0	0.5726644
27	[3OSO3]Galb1-3GalNAca-Sp8	81	0	119	0	70	0	0	0.5717317
64	Fuca1-2Galb1-3GlcNAcb-Sp0	269	1	26	0	32	0	0	0.5699583
20	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	82	0	34	0	117	1	0	0.572882
378	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	62	0	117	0	76	0	0	0.5721981
243	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	55	0	93	0	92	0	0	0.5726644
142	Galb1-4(Fuca1-3)GlcNAcb-Sp0	51	0	103	0	88	0	0	0.5726023
146	Galb1-4[6OSO3]Glcb-Sp0	70	0	129	0	62	0	0	0.5720115
215	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	101	0	117	0	53	0	0	0.5717006
305	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	68	0	115	0	71	0	0	0.5722292
8	Neu5Aca-Sp8	66	0	99	0	80	0	0	0.572509
348	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	94	0	105	0	60	0	0	0.5720737
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	55	0	117	0	71	0	0	0.5725712
352	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	29	0	93	0	97	0	0	0.5733172
147	Galb1-4[6OSO3]Glcb-Sp8	80	0	124	0	54	0	0	0.5721048
33	[3OSO3]Galb1-4GlcNAcb-Sp0	41	0	109	0	81	0	0	0.5729442
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	70	0	95	0	75	0	0	0.5726644
356	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	56	0	121	0	66	0	0	0.5725712
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	64	0	106	0	67	0	0	0.5727577
9	Neu5Aca-Sp11	64	0	113	0	62	0	0	0.5726955
239	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	75	0	117	0	54	0	0	0.5724779
3	Mana-Sp8	39	0	142	0	55	0	0	0.5727888
242	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	59	0	108	0	65	0	0	0.5729131
167	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	76	0	96	0	63	0	0	0.5728199
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	35	0	95	0	81	0	0	0.5735657
307	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	48	0	79	0	84	0	0	0.5735657
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	70	0	116	0	51	0	0	0.5727577
116	Gala1-4GlcNAcb-Sp8	18	0	91	0	90	0	0	0.5739386
282	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	59	0	99	0	66	0	0	0.5731618
21	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	66	0	74	0	77	0	0	0.5733793
137	Galb1-3Galb-Sp8	74	0	119	0	47	0	0	0.5726644
329	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	79	0	85	0	64	0	0	0.5730374
354	KDNa2-3Galb1-4Glc-Sp0	49	0	117	0	59	0	0	0.5731307
355	KDNa2-3Galb1-3GalNAca-Sp14	49	0	86	0	77	0	0	0.5735347
163	Galb1-4Glcb-Sp8	70	0	84	0	66	0	0	0.5732861
169	GlcNAcb1-3GalNAca-Sp8	57	0	89	0	69	0	0	0.5734415
265	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	67	0	126	0	43	0	0	0.5727888
380	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	69	0	111	0	50	0	0	0.5729753
84	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	81	0	39	0	86	0	0	0.5737211
332	(Neu5Aca2-3-Galb1-3)(((Neu5Aca2-3-Galb1-4(Fuca1-3))GlcNAcb1-6)GalNAc-Sp14	59	0	108	0	55	0	0	0.5732239
290	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	75	0	82	0	62	0	0	0.5733172
335	GlcNAca1-4Galb1-3GlcNAcb-Sp0	42	0	75	0	81	0	0	0.5739697
311	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	30	0	105	0	69	0	0	0.5737832
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	63	0	88	0	63	0	0	0.5734725
385	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	49	0	97	0	64	0	0	0.5735968
315	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	50	0	127	0	46	0	0	0.5731928

ID	Glycan								
53	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	65	0	128	0	38	0	0	0.5729442
97	Gala1-2Galb-Sp8	50	0	104	0	59	0	0	0.5735036
321	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	69	0	73	0	67	0	0	0.5736279
257	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	59	0	99	0	57	0	0	0.5734415
279	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	197	0	31	0	30	0	0	0.5721048
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	63	0	123	0	40	0	0	0.5730996
246	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	82	0	92	0	49	0	0	0.5731928
334	GlcNAca1-4Galb1-4GlcNAcb-Sp0	58	0	75	0	71	0	0	0.5737832
285	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	58	0	87	0	63	0	0	0.573659
144	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	75	0	105	0	44	0	0	0.5731618
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	46	0	102	0	59	0	0	0.57369
258	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	73	0	104	0	44	0	0	0.573255
232	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	57	0	97	0	56	0	0	0.5735968
122	Galb1-3(Fuca1-4)GlcNAc-Sp8	85	0	81	0	52	0	0	0.5733482
32	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	55	0	121	0	42	0	0	0.5733482
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	56	0	88	0	61	0	0	0.5737522
313	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	70	0	92	0	52	0	0	0.5734725
139	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	41	0	124	0	47	0	0	0.5735347
361	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	46	0	90	0	63	0	0	0.5739386
316	Neu5Aca2-8Neu5Acb-Sp17	85	0	42	0	72	0	0	0.5739386
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	68	0	73	0	62	0	0	0.5738143
304	GlcNAcb1-4GlcNAcb-Sp12	51	0	103	0	52	0	0	0.5737211
363	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	30	0	117	0	53	0	0	0.5739075
267	Neu5Acb2-6GalNAca-Sp8	48	0	83	0	64	0	0	0.5740629
91	GalNAcb1-3GalNAca-Sp8	37	0	112	0	53	0	0	0.5738454
7	Rha-Sp8	78	0	106	0	37	0	0	0.573255
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	38	0	101	0	57	0	0	0.5740318
376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	12	0	101	0	70	0	0	0.5744356
161	Galb1-4GlcNAcb-Sp8	51	0	87	0	59	0	0	0.5740007
48	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	26	0	112	0	56	0	0	0.5740939
209	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	47	0	82	0	64	0	0	0.574125
194	GlcAb1-3Galb-Sp8	66	0	113	0	36	0	0	0.5734415
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	73	0	88	0	48	0	0	0.5736279
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	36	0	123	0	44	0	0	0.5738143
328	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	57	0	113	0	40	0	0	0.5735968
368	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	88	0	69	0	51	0	0	0.573659
30	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	80	0	89	0	42	0	0	0.5735657
233	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	51	0	85	0	57	0	0	0.574125
333	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	44	0	88	0	58	0	0	0.5742182
383	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	73	0	77	0	51	0	0	0.5738765
98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	67	0	83	0	50	0	0	0.5739075
375	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	62	0	54	0	69	0	0	0.5743735
291	Galb1-3Galb1-4GlcNAcb-Sp8	40	0	94	0	56	0	0	0.5742182
168	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	18	0	92	0	68	0	0	0.5745909
306	Mana1-6Manb-Sp10	28	0	110	0	52	0	0	0.5742182
115	Gala1-4Galb1-4Glcb-Sp0	60	0	87	0	48	0	0	0.5740629
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	59	0	90	0	46	0	0	0.5740629
326	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	62	0	80	0	50	0	0	0.5741561
236	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	72	0	90	0	39	0	0	0.5738765
234	Neu5Aca2-3Galb-Sp8	44	0	108	0	42	0	0	0.5740939
42	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	80	0	80	0	40	0	0	0.5739075
121	Galb1-3(Fuca1-4)GlcNAcb-Sp0	65	0	80	0	47	0	0	0.5741561
259	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	67	0	70	0	52	0	0	0.5742492
339	GlcNAca1-4Galb1-3GalNAc-Sp14	42	0	114	0	37	0	0	0.574125
320	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	76	0	69	0	48	0	0	0.574125
371	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	78	0	32	0	67	0	0	0.574622
43	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	74	0	26	0	73	0	0	0.5747462

119	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	83	0	71	0	42	0	0	0.5740318
145	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	56	0	83	0	47	0	0	0.5743424
195	GlcAb1-6Galb-Sp8	38	0	91	0	51	0	0	0.5745288
89	GalNAca1-3Galb-Sp8	66	0	103	0	31	0	0	0.5739075
59	Fuca1-2Galb1-3GalNAca-Sp14	45	0	92	0	47	0	0	0.5744046
12	Glcb-Sp8	48	0	75	0	55	0	0	0.5745909
120	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	43	0	74	0	57	0	0	0.5747151
165	GlcNAca1-6Galb1-4GlcNAcb-Sp8	62	0	101	0	32	0	0	0.5740629
220	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	65	0	78	0	44	0	0	0.5743114
95	GalNAcb1-4GlcNAcb-Sp0	30	0	106	0	44	0	0	0.5745288
56	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	53	0	71	0	53	0	0	0.574622
351	[6OSO3]GlcNAcb1-3Gal b1-4GlcNAc-b-Sp0	73	0	54	0	54	0	0	0.5744977
224	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	66	0	59	0	54	0	0	0.5745599
136	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	61	0	77	0	45	0	0	0.5744356
189	Glcb1-4Glcb-Sp8	27	0	94	0	52	0	0	0.5747462
323	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	39	0	65	0	63	0	0	0.5749325
156	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	91	0	37	0	54	0	0	0.5744667
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	36	0	74	0	59	0	0	0.5748704
309	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	43	0	76	0	54	0	0	0.5747462
123	Galb1-3(Fuca1-4)GlcNAcb-Sp8	62	0	77	0	45	0	0	0.5744046
359	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	76	0	76	0	38	0	0	0.5742182
17	GlcN(Gc)b-Sp8	66	0	58	0	53	0	0	0.574622
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	77	0	41	0	57	0	0	0.5746841
219	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	33	0	73	0	60	0	0	0.5749636
150	Galb1-4GlcNAcb1-3GalNAca-Sp8	98	0	43	0	46	0	0	0.5743114
442	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N	60	0	81	0	42	0	0	0.5744356
40	[6OSO3]Galb1-4Glcb-Sp8	70	0	21	0	71	0	0	0.5750878
344	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	74	0	66	0	43	0	0	0.5744356
138	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	93	0	69	0	32	0	0	0.5740939
284	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	47	0	78	0	49	0	0	0.5747151
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	48	0	95	0	38	0	0	0.5744977
185	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	25	0	105	0	43	0	0	0.5747462
319	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	49	0	45	0	67	0	0	0.5751188
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	53	0	88	0	40	0	0	0.5744977
46	Neu5Ac(9Ac)a2-6Galb1-4GlcNAcb-Sp8	46	0	59	0	60	0	0	0.5749946
162	Galb1-4Glcb-Sp0	30	0	72	0	59	0	0	0.5751188
266	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	68	0	87	0	31	0	0	0.5743424
301	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	55	0	54	0	58	0	0	0.5749325
296	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	41	0	71	0	53	0	0	0.5749946
272	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	59	0	62	0	51	0	0	0.5747772
330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	39	0	98	0	38	0	0	0.5746841
261	Neu5Aca2-6Galb1-4Glcb-Sp0	44	0	82	0	45	0	0	0.5748083
187	Glca1-4Glca-Sp8	37	0	69	0	55	0	0	0.5751188
382	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	47	0	91	0	37	0	0	0.5746841
226	Neu5Aca2-3GalNAca-Sp8	59	0	86	0	34	0	0	0.5745599
292	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	95	0	33	0	47	0	0	0.5746841
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	56	0	75	0	41	0	0	0.5747772
148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	69	0	51	0	49	0	0	0.5748704
302	GlcNAcb1-3Man-Sp10	45	0	95	0	34	0	0	0.5747151
78	Fucb1-3GlcNAcb-Sp8	50	0	93	0	32	0	0	0.5746841
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	52	0	40	0	62	0	0	0.5753362
372	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	52	0	55	0	53	0	0	0.5751499
113	Gala1-4Galb1-4GlcNAcb-Sp0	48	0	93	0	32	0	0	0.5747462
111	Gala1-3Galb-Sp8	52	0	34	0	65	0	0	0.5754293
102	Gala1-3(Fuca1-2)Galb-Sp8	49	0	90	0	33	0	0	0.5747772
184	GlcNAcb1-6GalNAca-Sp14	22	0	92	0	45	0	0	0.5751809
176	GlcNAcb1-4-MDPLys	51	0	88	0	33	0	0	0.5747772

397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	55	0	42	0	57	0	0	0.5753362
191	G-ol-Sp8	39	0	75	0	46	0	0	0.5751499
384	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNac-Sp21	14	0	99	0	43	0	0	0.5752741
34	[3OSO3]Galb1-4GlcNAcb-Sp8	40	0	96	0	32	0	0	0.5749015
11	Galb-Sp8	33	0	94	0	37	0	0	0.5750257
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	45	0	40	0	62	0	0	0.5755535
262	Neu5Aca2-6Galb1-4Glcb-Sp8	26	0	94	0	40	0	0	0.5751499
336	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	44	0	85	0	37	0	0	0.5749636
52	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp8	51	0	89	0	31	0	0	0.5748083
186	Glca1-4Glcb-Sp8	36	0	94	0	35	0	0	0.5749946
208	Manb1-4GlcNAcb-Sp0	47	0	80	0	38	0	0	0.5749946
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	48	0	59	0	49	0	0	0.5752741
23	[3OSO3]Galb1-4Glcb-Sp8	52	0	66	0	43	0	0	0.5751188
22	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	82	0	35	0	46	0	0	0.5750567
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	59	0	66	0	38	0	0	0.5750567
362	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	30	0	101	0	32	0	0	0.5750567
248	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	42	0	82	0	37	0	0	0.5751188
260	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	47	0	75	0	37	0	0	0.5751809
324	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	46	0	73	0	39	0	0	0.575212
158	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	47	0	20	0	69	0	0	0.5758949
300	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	55	0	78	0	31	0	0	0.5750257
10	Neu5Acb-Sp8	43	0	57	0	49	0	0	0.5754914
312	Neu5Aca2-3Galb1-3GalNAca-Sp14	55	0	64	0	38	0	0	0.575243
172	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	55	0	52	0	45	0	0	0.5753983
166	GlcNAcb1-2Galb1-3GalNAca-Sp8	51	0	79	0	29	0	0	0.5751809
222	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	50	0	75	0	32	0	0	0.575243
128	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	44	0	41	0	55	0	0	0.5757708
271	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	63	0	31	0	51	0	0	0.5756156
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	53	0	67	0	34	0	0	0.5753362
86	GalNAca1-3(Fuca1-2)Galb-Sp8	75	0	65	0	25	0	0	0.5749946
188	Glca1-6Glca1-6Glcb-Sp8	26	0	70	0	45	0	0	0.5757397
4	GalNAca-Sp8	34	0	67	0	44	0	0	0.5756156
360	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	54	0	74	0	30	0	0	0.575212
263	Neu5Aca2-6Galb-Sp8	31	0	82	0	36	0	0	0.5754914
57	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	48	0	58	0	41	0	0	0.5755535
392	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	71	0	32	0	45	0	0	0.5755224
250	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	39	0	63	0	42	0	0	0.5756466
238	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	40	0	67	0	39	0	0	0.5755845
268	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	47	0	27	0	59	0	0	0.575988
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	59	0	29	0	51	0	0	0.5758018
132	Galb1-3GalNAca-Sp16	71	0	45	0	36	0	0	0.5753983
379	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	38	0	49	0	50	0	0	0.5758639
65	Fuca1-2Galb1-3GlcNAcb-Sp8	114	0	42	0	17	0	0	0.5747462
126	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	47	0	78	0	28	0	0	0.5753672
270	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	70	0	72	0	20	0	0	0.5750878
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	26	0	83	0	35	0	0	0.5756466
44	[6OSO3]GlcNAcb-Sp8	60	0	51	0	38	0	0	0.5754914
108	Gala1-3Galb1-3GlcNAcb-Sp0	64	0	43	0	40	0	0	0.5755535
79	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	35	0	60	0	43	0	0	0.5758328
325	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	36	0	46	0	51	0	0	0.575988
244	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	33	0	88	0	28	0	0	0.5754914
298	GalNAcb1-3Galb-Sp8	44	0	63	0	37	0	0	0.5756466
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	77	0	37	0	36	0	0	0.5754603
322	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	60	0	57	0	32	0	0	0.5754914
96	GalNAcb1-4GlcNAcb-Sp8	79	0	57	0	23	0	0	0.5751809
288	6-H2PO3Glcb-Sp10	50	0	53	0	39	0	0	0.5757087
347	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	54	0	56	0	36	0	0	0.5755845

276	Neu5Gca-Sp8	44	0	72	0	31	0	0	0.5755535
134	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	62	0	53	0	33	0	0	0.5755224
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	44	0	57	0	39	0	0	0.5757708
345	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	55	0	36	0	46	0	0	0.5758639
435	Galb1-4Galb-Sp10	42	0	55	0	40	0	0	0.5758639
190	Glcb1-6Glcb-Sp8	29	0	73	0	35	0	0	0.5758639
221	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	62	0	59	0	28	0	0	0.5754914
274	Neu5Gca2-6GalNAca-Sp0	49	0	71	0	27	0	0	0.5755535
19	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	52	0	62	0	30	0	0	0.5756466
24	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	42	0	40	0	48	0	0	0.5760811
171	GlcNAcb1-3Galb-Sp8	23	0	60	0	45	0	0	0.5761432
314	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	39	0	51	0	42	0	0	0.5760191
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	35	0	55	0	41	0	0	0.5760501
202	Mana1-2Mana1-6(Mana1-3)Mana1-6[Mana1-2Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	40	0	78	0	25	0	0	0.5756776
100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	37	0	90	0	19	0	0	0.5755845
160	Galb1-4GlcNAcb-Sp0	32	0	52	0	44	0	0	0.5761432
228	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	29	0	31	0	57	0	0	0.5764846
103	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	59	0	43	0	36	0	0	0.5758328
200	Mana1-2Mana1-3Mana-Sp9	53	0	75	0	20	0	0	0.5755224
114	Gala1-4Galb1-4GlcNAcb-Sp8	65	0	51	0	28	0	0	0.5756466
88	GalNAca1-3GalNAcb-Sp8	39	0	53	0	39	0	0	0.5760501
80	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	35	0	38	0	49	0	0	0.5763294
227	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	33	0	62	0	37	0	0	0.5760191
124	Galb1-4GlcNAcb1-6GalNAca-Sp8	49	0	70	0	24	0	0	0.5756776
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	24	0	74	0	33	0	0	0.5760501
294	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	80	0	48	0	21	0	0	0.5754914
289	Gala1-3(Fuca1-2)Galb-Sp18	45	0	69	0	26	0	0	0.5757708
58	Fuca1-2Galb1-3GalNAca-Sp8	53	0	82	0	13	0	0	0.5755224
275	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	53	0	34	0	40	0	0	0.5761743
55	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	36	0	60	0	33	0	0	0.5761122
293	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	37	0	25	0	53	0	0	0.5765466
179	(GlcNAcb1-4)6b-Sp8	68	0	42	0	28	0	0	0.5758328
264	Neu5Aca2-8Neu5Aca-Sp8	36	0	67	0	28	0	0	0.5760501
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	32	0	39	0	46	0	0	0.5764846
164	GlcNAca1-3Galb1-4GlcNAcb-Sp8	33	0	62	0	33	0	0	0.5761432
223	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	45	0	47	0	36	0	0	0.5761432
177	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	60	0	56	0	23	0	0	0.5758018
159	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	51	0	43	0	35	0	0	0.5761122
135	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	36	0	30	0	50	0	0	0.5765156
286	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	22	0	79	0	27	0	0	0.5761432
47	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	39	0	26	0	50	0	0	0.5765466
198	Mana1-2Mana1-2Mana1-3Mana-Sp9	34	0	79	0	21	0	0	0.575957
101	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	49	0	40	0	37	0	0	0.5762053
199	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	45	0	43	0	37	0	0	0.5762363
278	Galb1-3GalNAca-Sp14	48	0	62	0	24	0	0	0.575957
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	47	0	20	0	49	0	0	0.5765156
214	Neu5Aca2-3Galb1-3GalNAca-Sp8	46	0	51	0	32	0	0	0.5761122
283	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	24	0	82	0	24	0	0	0.5760811
149	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	58	0	23	0	41	0	0	0.5763294
370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	53	0	45	0	30	0	0	0.5761432
178	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	37	0	66	0	26	0	0	0.5761122
373	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	58	0	6	0	50	0	0	0.5765777
225	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	48	0	36	0	37	0	0	0.5763604
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	48	0	57	0	24	0	0	0.5761122
297	GalNAca-Sp15	57	0	38	0	31	0	0	0.5762053
310	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	17	0	84	0	23	0	0	0.5762674
196	KDNa2-3Galb1-3GlcNAcb-Sp0	47	0	58	0	22	0	0	0.5761743

245	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	71	0	19	0	34	0	0	0.5762674
346	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	42	0	39	0	36	0	0	0.5762846
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	42	0	51	0	28	0	0	0.5763604
175	GlcNAcb1-3Galb1-4Glcb-Sp0	32	0	41	0	38	0	0	0.5766707
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	31	0	26	0	48	0	0	0.5768569
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	64	0	29	0	30	0	0	0.5762984
110	Gala1-3Galb1-4Glcb-Sp0	53	0	31	0	33	0	0	0.5764846
273	Neu5Gca2-3Galb1-4Glcb-Sp0	73	0	24	0	28	0	0	0.5762363
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	29	0	21	0	50	0	0	0.577012
342	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	63	0	32	0	27	0	0	0.5763294
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	43	0	24	0	41	0	0	0.5767638
303	GlcNAcb1-4GlcNAcb-Sp10	34	0	56	0	26	0	0	0.5765156
277	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	45	0	48	0	25	0	0	0.5764535
341	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	70	0	22	0	28	0	0	0.5763915
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	42	0	36	0	33	0	0	0.5766707
318	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	57	0	38	0	24	0	0	0.5764225
87	GalNAca1-3(Fuca1-2)Galb-Sp18	42	0	22	0	40	0	0	0.5768879
295	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	34	0	27	0	41	0	0	0.57695
247	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	43	0	23	0	38	0	0	0.5768879
249	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	30	0	51	0	28	0	0	0.5767328
16	GlcNAcb-Sp8	51	0	14	0	39	0	0	0.5768879
127	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	33	0	49	0	26	0	0	0.5767638
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	31	0	41	0	32	0	0	0.5768879
229	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	31	0	29	0	38	0	0	0.577074
93	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	34	0	42	0	27	0	0	0.5769189
308	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	38	0	72	0	7	0	0	0.5764846
133	Galb1-3GalNAcb-Sp8	36	0	11	0	44	0	0	0.5772912
62	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	29	0	41	0	29	0	0	0.577043
253	Neu5Aca2-3Galb1-4Glcb-Sp8	47	0	12	0	37	0	0	0.5771361
125	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	36	0	41	0	25	0	0	0.57695
151	Galb1-4GlcNAcb1-3GalNAc-Sp14	58	0	35	0	17	0	0	0.5767018
364	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	38	0	15	0	38	0	0	0.5772912
2	Glca-Sp8	26	0	37	0	29	0	0	0.5772602
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	34	0	38	0	25	0	0	0.5771051
174	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	23	0	43	0	27	0	0	0.5772291
45	Neu5Ac(9Ac)a-Sp8	56	0	22	0	22	0	0	0.577012
367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	57	0	8	0	30	0	0	0.5771671
105	Gala1-3GalNAca-Sp16	24	0	27	0	34	0	0	0.5774773
109	Gala1-3Galb1-4GlcNAcb-Sp8	53	0	13	0	29	0	0	0.5771671
255	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	23	0	22	0	38	0	0	0.5775393
201	Mana1-6[Mana1-2Mana1-3]Mana1-6[Mana1-2Mana1-3]Manb1-4GlcNAcb1-4GlcNAcb-Sp12	19	0	44	0	26	0	0	0.5773532
15	GlcNAcb-Sp0	45	0	34	0	20	0	0	0.577043
26	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	57	0	8	0	27	0	0	0.5772602
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	9	0	32	0	35	0	0	0.5777564
117	Gala1-6Glcb-Sp8	16	0	24	0	36	0	0	0.5777564
155	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	38	0	15	0	31	0	0	0.5775083
14	GalNAcb-Sp8	34	0	27	0	25	0	0	0.5774462
181	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	35	0	9	0	35	0	0	0.5776633
390	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	26	0	20	0	33	0	0	0.5776633
154	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	37	0	32	0	20	0	0	0.5773532
437	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	36	0	27	0	24	0	0	0.5774152
439	[6OSO3]Galb1-3GlcNAcb-Sp0	38	0	28	0	22	0	0	0.5773842
85	GlcNAcb1-3Galb1-3GalNAca-Sp8	51	0	24	0	18	0	0	0.5772291
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	26	0	19	0	32	0	0	0.5777254
37	[4OSO3]Galb1-4GlcNAcb-Sp8	15	0	41	0	23	0	0	0.5776633
183	GlcNAcb1-6GalNAca-Sp8	48	0	13	0	24	0	0	0.5774773
41	[6OSO3]Galb1-4GlcNAcb-Sp8	47	0	26	0	17	0	0	0.5773222

ID	Structure								
39	[6OSO3]Galb1-4Glcb-Sp0	22	0	12	0	37	0	0	0.5779114
130	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	30	0	16	0	30	0	0	0.5777564
36	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	19	0	18	0	33	0	0	0.5779424
353	KDNa2-6Galb1-4GlcNAc-Sp0	17	0	25	0	29	0	0	0.5779114
107	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	42	0	22	0	18	0	0	0.5775703
217	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	14	0	33	0	25	0	0	0.5778804
369	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	42	0	19	0	20	0	0	0.5776013
317	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	31	0	16	0	26	0	0	0.5778494
63	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	22	0	16	0	30	0	0	0.5780044
83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	11	0	29	0	27	0	0	0.5780354
153	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	54	0	14	0	14	0	0	0.5775703
231	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	30	0	20	0	22	0	0	0.5778804
230	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	17	0	27	0	24	0	0	0.5780044
18	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	26	0	16	0	26	0	0	0.5780044
254	Neu5Aca2-6GalNAca-Sp8	26	0	30	0	17	0	0	0.5778494
173	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	39	0	17	0	18	0	0	0.5778184
141	Galb1-3GlcNAcb-Sp8	16	0	23	0	25	0	0	0.5781284
197	KDNa2-3Galb1-4GlcNAcb-Sp0	30	0	10	0	26	0	0	0.5780664
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	24	0	6	0	31	0	0	0.5782215
269	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	48	0	22	0	10	0	0	0.5776323
81	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	26	0	9	0	27	0	0	0.5781905
389	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	16	0	21	0	23	0	0	0.5782525
13	Manb-Sp8	42	0	12	0	16	0	0	0.5779424
180	(GlcNAcb1-4)5b-Sp8	15	0	9	0	30	0	0	0.5784385
391	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	28	0	4	0	27	0	0	0.5782835
38	6-H2PO3Mana-Sp8	23	0	21	0	18	0	0	0.5781905
106	Gala1-3GalNAcb-Sp8	19	0	35	0	12	0	0	0.5780664
49	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	29	0	10	0	20	0	0	0.5782835
436	Galb1-6Galb-Sp10	21	0	17	0	19	0	0	0.5783455
157	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	41	0	8	0	14	0	0	0.5781595
207	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4 GlcNAcb-Sp12	8	0	12	0	27	0	0	0.5786554
60	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	21	0	6	0	24	0	0	0.5785315
82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	20	0	25	0	13	0	0	0.5783145
252	Neu5Aca2-3Galb1-4Glcb-Sp0	11	0	16	0	22	0	0	0.5785935
365	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	29	0	20	0	11	0	0	0.5782525
438	GalNAcb1-6GalNAcb-Sp8	15	0	22	0	16	0	0	0.5784695
170	GlcNAcb1-3GalNAca-Sp14	20	0	13	0	19	0	0	0.5785005
366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	30	0	7	0	16	0	0	0.5784695
152	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	19	0	12	0	19	0	0	0.5785625
182	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	10	0	19	0	16	0	0	0.5787174
104	Gala1-3GalNAca-Sp8	15	0	19	0	13	0	0	0.5786554
131	Galb1-3GalNAca-Sp8	17	0	7	0	19	0	0	0.5787794
241	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	7	0	9	0	22	0	0	0.5789344
205	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	22	0	12	0	11	0	0	0.5787174
129	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	24	0	3	0	15	0	0	0.5788104
61	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	30	0	9	0	7	0	0	0.5786864
204	Mana1-3(Mana1-6)Mana-Sp9	26	0	8	0	10	0	0	0.5787484

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine

Sp15	Serine
Sp16	PNP (OC$_6$H$_4$NH$_2$)
Sp17	OCH$_2$C$_6$H$_4$NH$_2$
Sp18	O(CH$_2$)$_3$NHCO(CH$_2$)$_5$NH$_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2

Supplementary Table 6 Biotinylated Gal-8 at 50 and 5 µg/ml binding to v4.2 of the CFG glycan array detected with Alexa488-labeled Streptavidin and sorted according to Rank based on percent of maximum RFU.

anomeric configuration of monosaccharides indicated as a=α and b=β, highlighted structures defined as binding glycans by z-score with p-values <0.15

Chart Number	Glycan Structure	Gal-8 50 µg/ml 50972		Gal-8 5 µg/ml 881		AVG Rank	p-values
		Maximum RFU					
		Ave RFU	Rank	Ave RFU	Rank		
162	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp8	36724	72	881	100	86	0.0003091
86	GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	39555	78	596	68	73	0.000116
332	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	37356	73	559	63	68	0.0002752
367	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	50972	100	303	34	67	7.65E-07
368	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	37256	73	420	48	60	0.000301
85	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	37082	73	408	46	60	0.0003226
26	[3OSO3]Galb1-4[6OSO3]Glcb-Sp8	20864	41	683	78	59	0.0360847
333	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	37959	74	375	43	59	0.000235
370	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	43390	85	256	29	57	2.73E-05
378	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	44767	88	178	20	54	1.55E-05
290	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	31780	62	382	43	53	0.0020358
104	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	33722	66	248	28	47	0.0011231
161	Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	36274	71	203	23	47	0.0004676
101	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp8	37443	73	178	20	47	0.0003072
424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	43643	86	58	7	46	2.67E-05
105	Gala1-3(Fuca1-2)Galb1-4Glcb-Sp0	32214	63	256	29	46	0.0018437
390	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	36896	72	173	20	46	0.0003768
360	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	43593	86	16	2	44	2.77E-05
386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glcb-Sp0	42650	84	29	3	44	4.12E-05
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	34202	67	166	19	43	0.0009812
377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	39922	78	50	6	42	0.0001246
81	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	36324	71	104	12	42	0.0004759
457	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	40126	79	32	4	41	0.0001157
387	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	40180	79	20	2	41	0.0001138
327	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	34584	68	106	12	40	0.0008786
84	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	36585	72	69	8	40	0.0004385
25	[3OSO3]Galb1-4[6OSO3]Glcb-Sp0	23080	45	284	32	39	0.023741
331	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	36480	72	13	1	37	0.0004649
454	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	34525	68	42	5	36	0.0009166
410	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	34427	68	36	4	36	0.0009498
160	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32994	65	31	4	34	0.0015386
451	GalNAca1-3Fuca1-2Galb1-4GlcNAcb1-3(GalNAca1-3Fuca1-2Galb1-4GlcNAcb1-6)GalNAc-Sp14	39367	77	-81	-9	34	0.000163
329	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32412	64	18	2	33	0.0018677
450	Gala1-3Fuca1-2Galb1-4GlcNAcb1-3(Gala1-3Fuca1-2Galb1-4GlcNAcb1-6)GalNAc-Sp14	32387	64	18	2	33	0.0018828
340	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29392	58	65	7	33	0.0046783
154	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	31987	63	16	2	32	0.0021419
455	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	28148	55	54	6	31	0.0067235
180	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29823	59	7	1	30	0.0041883
291	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	21693	43	97	11	27	0.0341785
330	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glcb-Sp0	22095	43	48	5	24	0.0315576
73	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	23913	47	9	1	24	0.020752
411	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3GalNAca-Sp14	20805	41	11	1	21	0.0423493
493	(Fuca1-2)Galb1-3[6OSO3]GlcNAcb-Sp0	18723	37	44	5	21	0.0646789
159	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	19372	38	8	1	19	0.0572035
273	Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	15786	31	19	2	17	0.1118386

72	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	15725	31	8	1	16	0.1132316
260	Neu5Aca2-3Galb1-4Glcb-Sp0	7203	14	152	17	16	0.3588823
286	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	13512	27	13	1	14	0.1620635
421	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	10469	21	64	7	14	0.2472578
398	GalNaca1-3GalNacb1-3Gala1-4Galb1-4GlcNacb-Sp0	13371	26	10	1	14	0.1656656
502	Galb1-3GlcNAca1-3Galb1-4GlcNAc-Sp8	12940	25	4	0	13	0.1769113
358	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	11545	23	15	2	12	0.2156107
244	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	11335	22	16	2	12	0.2218539
64	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp8	11868	23	6	1	12	0.206425
335	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	9923	19	31	4	12	0.2661383
420	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-3GalNAc-Sp14	11039	22	4	0	11	0.2312399
426	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	10102	20	17	2	11	0.2606844
412	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	10590	21	6	1	11	0.2452476
100	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	3781	7	112	13	10	0.4956103
65	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	9465	19	9	1	10	0.2823258
199	GlcAb-Sp8	196	0	168	19	10	0.6354125
66	Fuca1-2Galb1-3GlcNAcb-Sp0	8769	17	11	1	9	0.3065354
114	Gala1-3Galb1-4GlcNAcb-Sp8	8684	17	8	1	9	0.3096696
433	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	874	2	137	16	9	0.6105412
113	Gala1-3Galb1-3GlcNAcb-Sp0	7986	16	12	1	9	0.3348585
212	Mana1-6(Mana1-3)Mana1-6(Mana1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	484	1	137	16	8	0.6255947
461	Gala1-3(Fuca1-2)Galb1-3GalNAcb-Sp8	6655	13	25	3	8	0.384715
371	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	4374	9	65	7	8	0.4735803
278	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	6980	14	19	2	8	0.3724348
456	Neu5Aca2-6Galb1-4GlcNAcb1-6(Fuca1-2Galb1-3GlcNAcb1-3)Galb-4Glc-Sp21	7146	14	13	2	8	0.3663231
384	Galb1-4GlcNacb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	6840	13	14	2	8	0.3780015
255	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	7161	14	5	1	7	0.3660564
379	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glcb-Sp0	9555	19	-40	-4	7	0.2809249
365	Fuca1-2Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	6010	12	19	2	7	0.4101254
268	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	6514	13	7	1	7	0.3908803
261	Neu5Aca2-3Galb1-4Glcb-Sp8	6945	14	-1	0	7	0.3745432
436	Gala1-3Galb1-4Glc-Sp10	6128	12	13	1	7	0.4057235
115	Gala1-3Galb1-4Glcb-Sp0	5934	12	14	2	7	0.4133161
401	Gala1-3Galb1-4GlcNacb1-3GalNaca-Sp14	6663	13	0	0	7	0.3853729
239	Neu5Aca2-3Galb1-3[6OSO3]GalNAca-Sp8	5696	11	14	2	6	0.4227234
460	Gala1-3(Fuca1-2)Galb1-3GalNAca-Sp8	4554	9	29	3	6	0.4677808
67	Fuca1-2Galb1-3GlcNAcb-Sp8	5796	11	3	0	6	0.4192001
357	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	4498	9	24	3	6	0.4702368
246	Neu5Aca2-3Galb1-3GlcNAcb-Sp0	1744	3	69	8	6	0.5790824
415	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	675	1	86	10	6	0.6202115
389	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb1-3GalNAca-Sp14	555	1	82	9	5	0.6249807
202	KDNa2-3Galb1-3GlcNAcb-Sp0	2968	6	39	4	5	0.5313575
395	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNAca-Sp14	2248	4	50	6	5	0.559796
326	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	4786	9	6	1	5	0.4593761
372	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	358	1	82	9	5	0.6325181
235	Neu5Aca2-3Galb1-3[6OSO3]GlcNAc-Sp8	1704	3	55	6	5	0.5812189
145	Galb1-3GlcNAcb1-3Galb1-4Glcb-Sp10	4180	8	6	1	4	0.4837824
413	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	1335	3	54	6	4	0.5957906
339	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	512	1	65	7	4	0.6272815

30	[3OSO3]Galb1-3GlcNAcb-Sp8	3198	6	15	2	4	0.523058
425	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2(Galb1-3GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	3802	7	4	0	4	0.4991236
24	[3OSO3]Galb1-4Glcb-Sp8	3291	6	11	1	4	0.519469
231	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glcb-Sp0	3340	7	10	1	4	0.5175327
28	[3OSO3]Galb1-3GalNAca-Sp8	2222	4	28	3	4	0.5617119
348	Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	397	1	60	7	4	0.6318696
281	Neu5Gca2-3Galb1-4Glcb-Sp0	2397	5	18	2	3	0.5551203
297	Galb1-3Galb1-4GlcNAcb-Sp8	2874	6	7	1	3	0.5364274
447	Galb1-4(Fuca1-3)GlcNAcb1-6GalNAc-Sp14	489	1	48	5	3	0.6288129
209	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-3(Mana1-2Mana1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	100	0	54	6	3	0.6433697
503	Galb1-3[6OSO3]GlcNAcb-Sp8	1315	3	33	4	3	0.5973976
29	[3OSO3]Galb1-3GlcNAcb-Sp0	2200	4	17	2	3	0.5630282
220	Neu5Aca2-3Galb1-3GalNAca-Sp8	2096	4	10	1	3	0.5674506
128	Galb1-3(Fuca1-4)GlcNAc-Sp8	340	1	39	4	3	0.6348418
478	Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6(Galb1-4GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-6AA	761	1	31	3	2	0.6190163
349	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	673	1	32	4	2	0.6223677
142	Galb1-3GalNAcb1-4Galb1-4Glcb-Sp8	212	0	38	4	2	0.6397396
102	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	840	2	27	3	2	0.6161201
10	Neu5Aca-Sp11	45	0	41	5	2	0.6459332
392	Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Gala1-3Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	672	1	30	3	2	0.6224831
494	[6OSO3](Fuca1-2)Galb1-3[6OSO3]GlcNAcb-Sp0	270	1	35	4	2	0.6376542
126	Galb1-3(Fuca1-4)GlcNAcb-Sp0	1292	3	18	2	2	0.5988855
483	Galb1-3(Fuca1-4)GlcNAcb1-6GalNaca-Sp14	265	1	35	4	2	0.6378439
223	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	82	0	36	4	2	0.6447277
170	GlcNAca1-3Galb1-4GlcNAcb-Sp8	1874	4	5	1	2	0.5764679
359	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAb-Sp20	188	0	34	4	2	0.6407997
471	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana-Sp0	493	1	28	3	2	0.6294249
241	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp14	1157	2	16	2	2	0.6042377
269	Neu5Aca2-6Galb1-4Glcb-Sp0	1370	3	13	1	2	0.5960259
369	Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Gala1-3Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	592	1	26	3	2	0.6257098
499	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-6GalNAca-Sp14	1250	2	14	2	2	0.6006847
147	Galb1-3GlcNAcb-Sp8	90	0	32	4	2	0.6445769
334	Neu5Aca2-3-Galb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAc-Sp14	977	2	17	2	2	0.611201
484	Neu5Aca2-3Galb1-3GlcNAcb1-6GalNAca-Sp14	194	0	30	3	2	0.640724
400	Gala1-4Galb1-4GlcNacb1-2Mana1-3(Gala1-4Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-LVaNKT	464	1	25	3	2	0.6306479
498	(Fuca1-2)Galb1-3GlcNAcb1-6(Fuca1-2Galb1-3GlcNAcb1-3)GalNAca-Sp14	503	1	24	3	2	0.6291955
254	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4GlcNAcb-Sp8	255	1	28	3	2	0.6384888
488	Gala1-3Galb1-4GlcNAcb1-6GalNAca-Sp14	1156	2	11	1	2	0.6044716
397	Galb1-4(Fuca1-3)GlcNacb1-3GalNaca-Sp14	453	1	23	3	2	0.6311444
374	Neu5Aca2-6Galb1-4GlcNAcb1-3GalNAc-Sp14	954	2	14	2	2	0.6122096
444	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	481	1	22	3	2	0.630113
465	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-6AA	203	0	26	3	2	0.6405348
133	Galb1-3(Neu5Aca2-6)GalNAca-Sp14	45	0	29	3	2	0.6463849
250	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	130	0	27	3	2	0.6432565
247	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	336	1	23	3	2	0.6356026
362	Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3(Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	309	1	23	3	2	0.6366289
429	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	42	0	28	3	2	0.6465354
82	GalNAca1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp0	221	0	24	3	2	0.639929
23	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	411	1	20	2	2	0.6328612

356	KDNa2-3Galb1-3GalNAca-Sp14	448	1	20	2	2	0.6314498
54	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-N(LT)AVL	163	0	24	3	2	0.6421233
288	Galb1-4(Fuca1-3)[6OSO3]Glc-Sp0	597	1	16	2	2	0.6259016
59	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb-Sp8	272	1	22	2	1	0.6380716
383	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	435	1	19	2	1	0.6319841
91	GalNAca1-3Galb-Sp8	793	2	12	1	1	0.6185148
222	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	232	0	22	2	1	0.6395881
325	Neu5Ac(9Ac)a2-3Galb1-4GlcNAcb-Sp0	121	0	23	3	1	0.6437471
446	Galb1-4GlcNAcb1-6GalNAc-Sp14	693	1	13	2	1	0.6223292
422	Gala1-3Galb1-3GlcNAcb1-3GalNAc-Sp14	507	1	16	2	1	0.6293484
259	Fuca1-2Galb1-4[6OSO3]Glc-Sp0	189	0	21	2	1	0.6412537
144	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	1383	3	1	0	1	0.5959867
108	Gala1-3(Gala1-4)Galb1-4GlcNAcb-Sp8	132	0	22	3	1	0.6433697
318	Neu5Aca2-8Neu5Acb-Sp17	72	0	23	3	1	0.6455943
216	[3OSO3]Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	440	1	16	2	1	0.6319077
243	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	1037	2	5	1	1	0.6093372
296	Galb1-3(Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-6)GalNAca-Sp14	678	1	12	1	1	0.6229445
163	Galb1-4GlcNAcb1-6(Galb1-3)GalNAca-Sp8	111	0	21	2	1	0.6441998
125	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	338	1	17	2	1	0.6357547
98	GalNAcb1-4GlcNAcb-Sp8	200	0	19	2	1	0.6409132
448	Galb1-4GlcNAcb1-2Mana-Sp0	265	1	18	2	1	0.6384888
110	Gala1-3GalNAca-Sp16	79	0	21	2	1	0.645406
453	GalNAcb1-4Galb1-4Glcb-Sp0	43	0	21	2	1	0.6467612
399	Gala1-4Galb1-3GlcNacb1-2Mana1-3(Gala1-4Galb1-3GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp19	469	1	14	2	1	0.6308771
321	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	612	1	11	1	1	0.6255179
391	Gala1-3Galb1-3GlcNAcb1-2Mana1-3(Gala1-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	239	0	17	2	1	0.6395123
437	Galb1-4Galb-Sp10	53	0	20	2	1	0.6464226
94	GalNAcb1-3(Fuca1-2)Galb-Sp8	179	0	18	2	1	0.6417453
33	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	588	1	11	1	1	0.6264384
468	GlcNAcb1-6(GlcNAcb1-2)Mana1-6(GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-6AA	95	0	19	2	1	0.6448785
179	GlcNAcb1-3Galb1-4GlcNAcb-Sp8	334	1	15	2	1	0.6359828
265	Neu5Aca2-6Galb1-4GlcNAcb-Sp0	77	0	19	2	1	0.6455566
469	Galb1-3GlcNAcb1-2Mana1-6(GlcNAcb1-4)(Galb1-3GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp21	407	1	13	2	1	0.6332805
287	Galb1-4(Fuca1-3)[6OSO3]GlcNAc-Sp0	274	1	15	2	1	0.6382613
173	GlcNAcb1-3(GlcNAcb1-6)GalNAca-Sp8	39	0	19	2	1	0.6469869
292	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	162	0	17	2	1	0.6424256
345	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	155	0	17	2	1	0.64269
49	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	88	0	18	2	1	0.6451799
482	Gala1-3Galb1-3GlcNAcb1-6GalNAca-Sp14	663	1	8	1	1	0.6236749
256	Neu5Aca2-3Galb1-4GlcNAcb-Sp0	55	0	18	2	1	0.6464226
289	Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	74	0	18	2	1	0.6457073
225	Neu5Aca2-8Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	74	0	18	2	1	0.6457073
466	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-6(Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp19	227	0	15	2	1	0.6400426
97	GalNAcb1-4GlcNAcb-Sp0	172	0	16	2	1	0.6420855
459	Galb1-4GlcNAcb-(OCH2CH2)6NH2	50	0	18	2	1	0.6466107
76	Fuca1-2Galb1-4Glcb-Sp0	143	0	16	2	1	0.643181
323	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	7	0	19	2	1	0.6481897
354	KDNa2-6Galb1-4GlcNAc-Sp0	52	0	18	2	1	0.6465354
42	[6OSO3]Galb1-4Glcb-Sp8	79	0	17	2	1	0.6455566

347	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	31	0	18	2	1	0.6473253
5	GalNAca-Sp15	356	1	12	1	1	0.6352603
414	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb1-3GalNAc-Sp14	217	0	14	2	1	0.6404591
299	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4GlcNAc-Sp0	156	0	15	2	1	0.6427278
248	Neu5Aca2-3Galb1-4[6OSO3]GlcNAcb-Sp8	292	1	13	1	1	0.6376542
31	[3OSO3]Galb1-4(Fuca1-3)GlcNAc-Sp0	64	0	17	2	1	0.6461215
485	[3OSO3]Galb1-3(Fuca1-4) GlcNAca-Sp0	179	0	15	2	1	0.6418587
90	GalNAca1-3GalNAcb-Sp8	130	0	15	2	1	0.6437094
346	Galb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	186	0	14	2	1	0.6416319
353	KDNa2-3Galb1-4(Fuca1-3)GlcNAc-Sp0	296	1	12	1	1	0.6375403
127	Galb1-3(Fuca1-4)GlcNAcb-Sp8	111	0	15	2	1	0.6444261
417	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	177	0	14	2	1	0.6419721
172	GlcNAcb1-2Galb1-3GalNAca-Sp8	20	0	17	2	1	0.6477764
118	Gala1-4Galb1-4GlcNAcb-Sp0	69	0	16	2	1	0.6459709
486	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GlcNAcb1-3(Fuca1-3(Galb1-4)GlcNAcb1-6)Galb1-4Glc-Sp21	811	2	3	0	1	0.6181675
4	GalNAca-Sp8	126	0	15	2	1	0.6438603
472	Neu5Aca2-3Galb1-4GlcNAcb1-6GalNAca-Sp14	292	1	12	1	1	0.6376921
270	Neu5Aca2-6Galb1-4Glcb-Sp8	30	0	16	2	1	0.6474381
204	Mana1-2Mana1-2Mana1-3Mana-Sp9	19	0	17	2	1	0.6478139
308	GlcNAcb1-4GlcNAcb-Sp12	49	0	16	2	1	0.6467236
122	Gala1-6Glcb-Sp8	55	0	16	2	1	0.6464978
69	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	108	0	15	2	1	0.6445392
350	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	666	1	5	1	1	0.6236749
393	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	67	0	15	2	1	0.6460838
495	Neu5Aca2-6GalNAcb1-4[6OSO3]GlcNAcb-Sp8	21	0	16	2	1	0.6477764
96	GalNAcb1-4(Fuca1-3)GlcNAcb-Sp0	152	0	14	2	1	0.6429167
21	[3OSO3][6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	41	0	16	2	1	0.6470245
34	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	237	0	12	1	1	0.6397775
14	Manb-Sp8	54	0	15	2	1	0.6465731
302	Galb1-4GlcNAcb1-6Galb1-4GlcNAcb-Sp0	77	0	15	2	1	0.6457073
215	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAc-Sp0	603	1	6	1	1	0.626055
146	Galb1-3GlcNAcb-Sp0	84	0	14	2	1	0.6454813
276	Neu5Acb2-6Galb1-4GlcNAcb-Sp8	73	0	14	2	1	0.6458956
40	6-H2PO3Mana-Sp8	87	0	14	2	1	0.6453683
324	Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-3(Fuca1-3(Galb1-4)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	173	0	13	1	1	0.6421611
435	Galb1-4GlcNAcb1-4(Galb1-4GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4-GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	135	0	13	2	1	0.6435962
320	Neu5Gcb2-6Galb1-4GlcNAc-Sp8	105	0	14	2	1	0.64469
271	Neu5Aca2-6Galb-Sp8	5	0	15	2	1	0.648415
157	Galb1-4GlcNAcb1-3GalNAca-Sp14	51	0	15	2	1	0.6466859
112	Gala1-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	118	0	13	2	1	0.6442375
75	Fuca1-2Galb1-4GlcNAcb-Sp8	818	2	1	0	1	0.6179745
87	GlcNAcb1-3Galb1-3GalNAca-Sp8	120	0	13	2	1	0.6441621
181	GlcNAcb1-3Galb1-4Glcb-Sp0	226	0	11	1	1	0.6402319
416	Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-3(Galb1-4(Fuca1-3)GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	200	0	12	1	1	0.6411781
337	GlcNAca1-4Galb1-3GlcNAcb-Sp0	115	0	13	1	1	0.6443507
205	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	59	0	14	2	1	0.6464226
36	[3OSO3]Galb1-4GlcNAcb-Sp8	53	0	14	2	1	0.6466483
193	Glca1-4Glca-Sp8	39	0	14	2	1	0.6471749
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	71	0	13	2	1	0.6460085

1	Gala-Sp8	106	0	13	1	1	0.64469
15	GalNAcb-Sp8	103	0	13	1	1	0.6448031
245	Fuca1-2[6OSO3]Galb1-4Glc-Sp0	17	0	14	2	1	0.6480018
511	[6PO3]Galb1-4GlcNAcb-Sp0	56	0	14	2	1	0.6465354
203	KDNa2-3Galb1-4GlcNAcb-Sp0	141	0	12	1	1	0.6434075
217	Fuca1-2[6OSO3]Galb1-4GlcNAc-Sp0	175	0	11	1	1	0.6421611
228	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp0	185	0	11	1	1	0.6417831
13	Glcb-Sp8	43	0	13	2	1	0.6470621
135	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glcb-Sp10	82	0	13	1	1	0.6455943
130	Galb1-3(GlcNAcb1-6)GalNAca-Sp8	50	0	13	2	1	0.6467988
442	[6OSO3]Galb1-3[6OSO3]GlcNAc-Sp0	105	0	12	1	1	0.6447654
394	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	129	0	12	1	1	0.6438603
221	Neu5Aca2-3Galb1-3GalNAca-Sp14	260	1	9	1	1	0.6390197
9	Neu5Aca-Sp8	38	0	13	1	1	0.6472501
403	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	103	0	12	1	1	0.6448408
62	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	55	0	13	1	1	0.6466107
93	GalNAcb1-3GalNAca-Sp8	202	0	10	1	1	0.6411781
190	GlcNAcb1-6GalNAca-Sp14	22	0	13	1	1	0.6478515
150	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	43	0	13	1	1	0.6470621
50	Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	67	0	12	1	1	0.6461967
405	GlcNAcb1-6(GlcNAcb1-3)GalNAca-Sp14	19	0	13	1	1	0.6479643
322	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	168	0	10	1	1	0.6424634
487	Fuca1-2Galb1-4GlcNAcb1-6GalNAca-Sp14	233	0	9	1	1	0.6400426
106	Gala1-3(Fuca1-2)Galb-Sp8	22	0	13	1	1	0.6478515
155	Galb1-4GalNAcb1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	256	1	9	1	1	0.6391713
462	Glca1-6Glca1-6Glca1-6Glcb-Sp10	102	0	11	1	1	0.6449161
251	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	110	0	11	1	1	0.6446146
124	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	44	0	12	1	1	0.6470621
505	[6OSO3]GalNAcb1-4GlcNAc-Sp8	138	0	10	1	1	0.6435962
132	Galb1-3(Neu5Aca2-6)GalNAca-Sp8	30	0	12	1	1	0.6475885
139	Galb1-3GalNAcb-Sp8	146	0	10	1	1	0.6432942
151	Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb1-4Galb1-4(Fuca1-3)GlcNAcb-Sp0	234	0	9	1	1	0.6400047
489	Galb1-4(Fuca1-3)GlcNAcb1-2Mana-Sp0	26	0	12	1	1	0.6477388
70	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp0	97	0	11	1	1	0.6451046
229	Neu5Aca2-3(GalNAcb1-4)Galb1-4GlcNAcb-Sp8	172	0	10	1	1	0.6423123
166	Galb1-4GlcNAcb-Sp0	35	0	12	1	1	0.6474005
83	[3OSO3]Galb1-4(Fuca1-3)Glc-Sp0	57	0	12	1	1	0.6465731
164	Galb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	155	0	10	1	1	0.6429544
497	[3OSO3]GalNAcb1-4(Fuca1-3)GlcNAcb-Sp8	64	0	11	1	1	0.6463473
315	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	5	0	12	1	1	0.6485277
167	Galb1-4GlcNAcb-Sp8	207	0	9	1	1	0.6410267
342	Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	53	0	12	1	1	0.6467236
230	Neu5Aca2-3(GalNAcb1-4)Galb1-4Glcb-Sp0	40	0	12	1	1	0.6472125
12	Galb-Sp8	49	0	12	1	1	0.646874
441	[6OSO3]Galb1-3GlcNAcb-Sp0	42	0	12	1	1	0.6471373
48	[9NAc]Neu5Aca2-6Galb1-4GlcNAcb-Sp8	15	0	12	1	1	0.6481521
311	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb-Sp10	30	0	12	1	1	0.6475885
317	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	22	0	12	1	1	0.6478891
274	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	182	0	9	1	1	0.6419721

77	Fuca1-2Galb-Sp8	22	0	12	1	1	0.6478891
445	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	235	0	8	1	1	0.6400047
473	Neu5Aca2-6Galb1-4GlcNAcb1-6GalNAca-Sp14	150	0	9	1	1	0.643181
284	Neu5Gca-Sp8	84	0	10	1	1	0.645632
183	GlcNAcb1-4(GlcNAcb1-6)GalNAca-Sp8	113	0	10	1	1	0.6445392
303	GalNAcb1-3Galb-Sp8	353	1	6	1	1	0.6356026
423	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	308	1	6	1	1	0.6373125
2	Glca-Sp8	61	0	11	1	1	0.6464602
480	Neu5Aca2-6Galb1-4GlcNAcb1-6(Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3)Galb1-4Glc-Sp21	180	0	9	1	1	0.6420477
501	Galb1-4GlcNAcb1-2(Gal b1-4GlcNAcb1-4)Mana1-3(GlcNAcb1-4)[Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-6)Mana1-6]Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAc-Sp21	321	1	6	1	1	0.6368188
477	Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp19	145	0	9	1	1	0.6433697
506	[3OSO3]GalNAcb1-4[3OSO3]GlcNAc-Sp8	20	0	11	1	1	0.6480018
111	Gala1-3GalNAcb-Sp8	55	0	11	1	1	0.6466859
71	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb-Sp8	76	0	10	1	1	0.6459332
192	Glca1-4Glcb-Sp8	176	0	8	1	1	0.6422367
219	Fuca1-2[6OSO3]Galb1-4[6OSO3]Glc-Sp0	156	0	9	1	1	0.6429544
56	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	27	0	11	1	1	0.6477388
138	Galb1-3GalNAca-Sp16	72	0	10	1	1	0.6460838
381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	70	0	10	1	1	0.6461591
267	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	118	0	9	1	1	0.6443884
194	Glca1-6Glca1-6Glcb-Sp8	27	0	11	1	1	0.6477388
44	[6OSO3]Galb1-4[6OSO3]Glcb-Sp8	64	0	10	1	1	0.6463849
169	Galb1-4Glcb-Sp8	39	0	10	1	1	0.6473253
458	Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6(Galb1-4GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	360	1	5	1	1	0.6353744
307	GlcNAcb1-4GlcNAcb-Sp10	12	0	11	1	1	0.6483023
242	Neu5Aca2-3Galb-Sp8	24	0	11	1	1	0.6478515
195	Glcb1-4Glcb-Sp8	56	0	10	1	1	0.6466859
88	GalNAca1-3(Fuca1-2)Galb-Sp8	111	0	9	1	1	0.6446523
404	GalNAcb1-3Gala1-6Galb1-4Glcb-Sp8	112	0	9	1	1	0.6446146
508	[3OSO3]GalNAcb1-4GlcNAc-Sp8	33	0	10	1	1	0.6475509
3	Mana-Sp8	21	0	10	1	1	0.6480018
341	GlcNAca1-4Galb1-3GalNAc-Sp14	160	0	8	1	1	0.6428411
474	Neu5Aca2-6Galb1-4 GlcNAcb1-6(Neu5Aca2-6Galb1-4GlcNAcb1-3)GalNAca-Sp14	134	0	8	1	1	0.6438226
78	Fuca1-3GlcNAcb-Sp8	40	0	10	1	1	0.6472877
470	Neu5Aca2-6Galb1-4GlcNAcb1-6(Galb1-3GlcNAcb1-3)Galb1-4Glcb-Sp21	199	0	7	1	1	0.641405
27	[3OSO3]Galb1-3(Fuca1-4)GlcNAcb-Sp8	39	0	10	1	1	0.6473253
7	Fuca-Sp9	74	0	9	1	1	0.6460462
152	Galb1-4[6OSO3]Glcb-Sp0	345	1	5	1	1	0.6359448
197	G-ol-Sp8	72	0	9	1	1	0.6461215
99	Gala1-2Galb-Sp8	95	0	9	1	1	0.6452553
92	GalNAca1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	79	0	9	1	1	0.6458579
492	Fuca1-2Galb1-4GlcNAcb1-2Mana-Sp0	24	0	10	1	1	0.6478891
140	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp0	158	0	8	1	1	0.6429167
293	[3OSO3][4OSO3]Galb1-4GlcNAcb-Sp0	112	0	8	1	1	0.6446523
178	GlcNAcb1-3Galb1-4GlcNAcb-Sp0	210	0	7	1	1	0.6409889
8	Rhaa-Sp8	66	0	9	1	1	0.6463473
174	GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAcb-Sp8	42	0	10	1	1	0.6472125
123	Galb1-2Galb-Sp8	27	0	10	1	1	0.6477764
107	Gala1-3(Fuca1-2)Galb-Sp18	66	0	9	1	1	0.6463473

41	[6OSO3]Galb1-4Glcb-Sp0	88	0	9	1	1	0.645519
380	Galb1-3GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	93	0	9	1	1	0.6453306
38	[4OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	105	0	8	1	1	0.6449161
373	Neu5Aca2-3Galb1-4GlcNAcb1-3GalNAc-Sp14	52	0	9	1	1	0.646874
95	GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	209	0	6	1	1	0.6410646
463	Glca1-4Glca1-4Glca1-4Glcb-Sp10	57	0	9	1	1	0.6466859
496	GalNAcb1-4[6OSO3](Fuca1-3)GlcNAcb-Sp8	105	0	8	1	1	0.6449161
20	GlcNAcb1-3(GlcNAcb1-4)(GlcNAcb1-6)GlcNAc-Sp8	93	0	8	1	1	0.6453683
439	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb-Sp8	71	0	8	1	1	0.6461967
35	[3OSO3]Galb1-4GlcNAcb-Sp0	72	0	8	1	1	0.6461591
218	Fuca1-2Galb1-4[6OSO3]GlcNAc-Sp8	373	1	3	0	1	0.634956
464	Neu5Aca2-3Galb1-4GlcNAcb1-6(Neu5Aca2-3Galb1-4GlcNAcb1-3)GalNAca-Sp14	67	0	8	1	1	0.6463473
224	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glcb-Sp0	81	0	8	1	1	0.6458203
89	GalNAca1-3(Fuca1-2)Galb-Sp18	90	0	8	1	1	0.6454813
238	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4)GlcNAcb-Sp8	68	0	8	1	1	0.6463097
388	Galb1-3GlcNAcb1-3GalNAca-Sp14	104	0	8	1	1	0.6449538
55	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	113	0	7	1	1	0.6446523
510	Galb1-4[6PO3]GlcNAcb-Sp0	82	0	8	1	1	0.6457826
481	Galb1-3GlcNAcb1-6GalNAca-Sp14	147	0	7	1	1	0.6433697
158	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	197	0	6	1	1	0.6415184
282	Neu5Gca2-6GalNAca-Sp0	29	0	9	1	1	0.6477388
121	Gala1-4GlcNAcb-Sp8	54	0	8	1	1	0.6468364
283	Neu5Gca2-6Galb1-4GlcNAcb-Sp0	83	0	8	1	1	0.645745
171	GlcNAca1-6Galb1-4GlcNAcb-Sp8	9	0	9	1	1	0.6484901
51	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	15	0	9	1	1	0.6482648
272	Neu5Aca2-8Neu5Aca-Sp8	7	0	9	1	1	0.6485652
207	Mana1-6(Mana1-2Mana1-3)Mana1-6(Mana1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	18	0	9	1	1	0.6481521
68	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	49	0	8	1	0	0.6470245
18	GlcN(Gc)b-Sp8	18	0	8	1	0	0.6481897
361	Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	77	0	7	1	0	0.6460085
19	Galb1-4GlcNAcb1-3(Galb1-4GlcNAcb1-6)GalNAca-Sp8	56	0	8	1	0	0.6467612
47	[9NAc]Neu5Aca-Sp8	187	0	6	1	0	0.6418965
17	GlcNAcb-Sp8	140	0	6	1	0	0.6436716
116	Gala1-3Galb-Sp8	110	0	7	1	0	0.6447654
200	GlcAb1-3Galb-Sp8	14	0	8	1	0	0.6483399
211	Mana1-3(Mana1-2Mana1-2Mana1-6)Mana-Sp9	33	0	8	1	0	0.647626
58	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glcb-Sp9	12	0	8	1	0	0.648415
80	Fucb1-3GlcNAcb-Sp8	30	0	8	1	0	0.6477388
189	GlcNAcb1-6GalNAca-Sp8	242	0	4	0	0	0.6398911
131	Galb1-3(GlcNAcb1-6)GalNAc-Sp14	66	0	7	1	0	0.6464226
182	GlcNAcb1-4-MDPLys	30	0	8	1	0	0.6477388
336	GlcNAca1-4Galb1-4GlcNAcb-Sp0	99	0	7	1	0	0.6451799
175	GlcNAcb1-3GalNAca-Sp8	136	0	6	1	0	0.6438226
79	Fuca1-4GlcNAcb-Sp8	55	0	7	1	0	0.6468364
509	[4OSO3]GalNacb-Sp10	36	0	8	1	0	0.6475133
300	Galb1-4GlcNAcb1-3(GlcNAcb1-6)Galb1-4GlcNAc-Sp0	14	0	8	1	0	0.6483399
449	Fuca1-2Galb1-4GlcNAcb1-3(Fuca1-2Galb1-4GlcNAcb1-6)GalNAc-Sp14	204	0	5	1	0	0.6412915
257	Neu5Aca2-3Galb1-4GlcNAcb-Sp8	65	0	7	1	0	0.6464602
136	Galb1-3GalNAca-Sp8	267	1	3	0	0	0.6389817

298	Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	57	0	7	1	0	0.6467612
402	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	83	0	6	1	0	0.6458203
186	GlcNAcb2-4GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	26	0	7	1	0	0.6479267
233	Neu5Aca2-3GalNAca-Sp8	8	0	8	1	0	0.6485652
312	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-3)Mana1-6)Mana-Sp9	78	0	6	1	0	0.6460085
262	Neu5Aca2-6GalNAca-Sp8	75	0	6	1	0	0.6461215
153	Galb1-4[6OSO3]Glcb-Sp8	106	0	6	1	0	0.6449538
176	GlcNAcb1-3GalNAca-Sp14	51	0	7	1	0	0.6469869
507	GalNAcb1-4[6OSO3]GlcNAc-Sp8	44	0	7	1	0	0.6472501
11	Neu5Acb-Sp8	35	0	7	1	0	0.6475885
240	Neu5Aca2-3Galb1-3(Neu5Aca2-6)GalNAca-Sp8	7	0	7	1	0	0.6486403
294	[6OSO3]Galb1-4[6OSO3]GlcNAcb-Sp0	65	0	6	1	0	0.6464978
60	Fuca1-2Galb1-3GalNAca-Sp8	147	0	5	1	0	0.6434452
141	Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp0	193	0	4	0	0	0.6417453
129	Galb1-4GlcNAcb1-6GalNAca-Sp8	37	0	7	1	0	0.6475133
258	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	69	0	6	1	0	0.6463473
366	Galb1-4GlcNAcb1-2(Galb1-4GlcNAcb1-4)Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	139	0	5	1	0	0.6437471
305	GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	21	0	7	1	0	0.6481145
143	Galb1-3Galb-Sp8	139	0	5	1	0	0.6437471
432	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-2)Manb1-4GlcNAcb1-4GlcNAc-Sp21	197	0	4	0	0	0.6415941
185	GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4b-Sp8	36	0	6	1	0	0.6475885
37	[3OSO3]Galb-Sp8	56	0	6	1	0	0.6468364
214	Manb1-4GlcNAcb-Sp0	8	0	7	1	0	0.6486028
285	Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	77	0	6	1	0	0.6460462
277	Neu5Gca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	31	0	6	1	0	0.6477764
310	Mana1-6Manb-Sp10	16	0	6	1	0	0.6483399
117	Gala1-4(Fuca1-2)Galb1-4GlcNAcb-Sp8	55	0	5	1	0	0.6469116
120	Gala1-4Galb1-4Glcb-Sp0	35	0	6	1	0	0.647626
363	Neu5Aca2-6GlcNAcb1-4GlcNAc-Sp21	122	0	4	0	0	0.6444261
396	Fuca1-2Galb1-4GlcNacb1-3GalNaca-Sp14	26	0	6	1	0	0.6479643
280	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	125	0	4	0	0	0.6443129
314	Neu5Aca2-3Galb1-3(Neu5Aca2-3Galb1-4GlcNAcb1-6)GalNAca-Sp14	221	0	2	0	0	0.6407619
406	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)Glcb-Sp21	37	0	6	1	0	0.6475509
149	Galb1-4(Fuca1-3)GlcNAcb-Sp8	154	0	3	0	0	0.6432565
344	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	17	0	6	1	0	0.6483023
187	GlcNAcb1-4GlcNAcb1-4GlcNAcb-Sp8	36	0	5	1	0	0.647626
201	GlcAb1-6Galb-Sp8	17	0	6	1	0	0.6483023
306	GlcNAcb1-3Man-Sp10	99	0	4	0	0	0.645293
237	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	99	0	4	0	0	0.645293
213	Mana1-6(Mana1-3)Mana1-6(Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	116	0	4	0	0	0.6446523
32	[3OSO3]Galb1-4(Fuca1-3)GlcNAcb-Sp8	46	0	5	1	0	0.6472501
438	Galb1-6Galb-Sp10	69	0	5	1	0	0.6463849
328	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-3(Fuca1-4)GlcNAcb-Sp0	83	0	4	0	0	0.6458956
16	GlcNAcb-Sp0	49	0	5	1	0	0.6471373
210	Mana1-3(Mana1-6)Mana-Sp9	42	0	5	1	0	0.6474005
103	Gala1-3(Fuca1-2)Galb1-4(Fuca1-3)GlcNAcb-Sp8	38	0	5	1	0	0.6475509
253	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb-Sp8	14	0	5	1	0	0.6484526
490	[6OSO3](Fuca1-2) Galb1-3GlcNAcb-Sp0	9	0	5	1	0	0.6486403
208	Mana1-2Mana1-6(Mana1-3)Mana1-6(Mana1-2Mana1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	49	0	4	1	0	0.6471749

188	GlcNAcb1-6(Galb1-3)GalNAca-Sp8	9	0	5	1	0	0.6486403
382	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4(Fuca1-3)GlcNAcb1-6)Galb1-4Glc-Sp21	86	0	4	0	0	0.6457826
407	Neu5Aca2-6Galb1-3GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	200	0	1	0	0	0.6415941
177	GlcNAcb1-3Galb-Sp8	114	0	3	0	0	0.6447654
249	Neu5Aca2-3Galb1-4(Fuca1-3)[6OSO3]GlcNAcb-Sp8	111	0	3	0	0	0.6448785
156	Galb1-4GlcNAcb1-3GalNAca-Sp8	67	0	4	0	0	0.6464978
22	[3OSO3][6OSO3]Galb1-4GlcNAcb-Sp0	5	0	5	1	0	0.6487905
301	Galb1-4GlcNAca1-6Galb1-4GlcNAcb-Sp0	87	0	3	0	0	0.6457826
491	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-6GalNAca-Sp14	19	0	4	0	0	0.6483023
198	GlcAa-Sp8	38	0	4	0	0	0.6475885
252	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp8	25	0	4	0	0	0.648077
165	Galb1-3(Galb1-4GlcNAcb1-6)GalNAc-Sp14	98	0	3	0	0	0.6453683
419	Fuca1-2Galb1-3GlcNAcb1-3GalNAc-Sp14	80	0	3	0	0	0.6460462
134	Galb1-3(Neu5Acb2-6)GalNAca-Sp8	16	0	4	0	0	0.648415
43	[6OSO3]Galb1-4GlcNAcb-Sp8	32	0	4	0	0	0.6478139
45	Neu5Aca2-3[6OSO3]Galb1-4GlcNAcb-Sp8	5	0	4	0	0	0.648828
500	GlcNAcb1-2(GlcNAcb1-4)Mana1-3(GlcNAcb1-4)[GlcNAcb1-2(GlcNAcb1-6)Mana1-6]Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAc-Sp21	4	0	4	0	0	0.6488656
236	Neu5Aca2-3Galb1-3(Fuca1-4)GlcNAcb-Sp8	94	0	2	0	0	0.6455566
227	Neu5Aca2-3(6-O-Su)Galb1-4(Fuca1-3)GlcNAcb-Sp8	44	0	3	0	0	0.6474005
119	Gala1-4Galb1-4GlcNAcb-Sp8	149	0	1	0	0	0.6435207
57	Fuca1-2Galb1-3GalNAcb1-3Gala-Sp9	72	0	3	0	0	0.6463473
63	Fuca1-2Galb1-3GalNAcb1-4(Neu5Aca2-3)Galb1-4Glcb-Sp9	42	0	3	0	0	0.6474757
109	Gala1-3GalNAca-Sp8	27	0	3	0	0	0.6480394
6	Fuca-Sp8	27	0	3	0	0	0.6480394
196	Glcb1-6Glcb-Sp8	60	0	2	0	0	0.6468364
418	GlcNAcb1-2Mana1-3(GlcNAcb1-2(GlcNAcb1-6)Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	51	0	2	0	0	0.6471749
53	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	36	0	3	0	0	0.6477012
316	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	125	0	1	0	0	0.6444261
427	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3GlcNAcb1-6)Galb1-4Glc-Sp21	31	0	3	0	0	0.6478891
385	GlcNacb1-2(GlcNacb1-4)Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNac-Sp21	21	0	3	0	0	0.6482648
266	Neu5Aca2-6Galb1-4GlcNAcb-Sp8	45	0	2	0	0	0.6474005
46	[6OSO3]GlcNAcb-Sp8	21	0	3	0	0	0.6482648
408	Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	148	0	0	0	0	0.6435962
504	[4OSO3][6OSO3]GalNAcb1-4GlcNAc-Sp8	74	0	1	0	0	0.6463473
137	Galb1-3GalNAca-Sp14	52	0	2	0	0	0.6471373
74	Fuca1-2Galb1-4GlcNAcb-Sp0	61	0	2	0	0	0.6467988
275	Neu5Acb2-6GalNAca-Sp8	51	0	2	0	0	0.6471749
434	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-4)(Galb1-4GlcNAcb1-6(Galb1-4GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	132	0	0	0	0	0.6441998
232	Neu5Aca2-3(Neu5Aca2-6)GalNAca-Sp8	28	0	2	0	0	0.6480394
279	Neu5Gca2-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	255	1	-2	0	0	0.639626
364	Neu5Aca2-6GlcNAcb1-4GlcNAcb1-4GlcNAc-Sp21	25	0	2	0	0	0.6481521
39	[4OSO3]Galb1-4GlcNAcb-Sp8	35	0	2	0	0	0.6477764
430	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	30	0	2	0	0	0.6479643
264	Neu5Aca2-6Galb1-4[6OSO3]GlcNAcb-Sp8	72	0	1	0	0	0.6464226
309	HOOC(CH3)CH-3-O-GlcNAcb1-4GlcNAcb-Sp10	29	0	2	0	0	0.6480018
52	GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp13	19	0	2	0	0	0.6483775
263	Neu5Aca2-6GalNAcb1-4GlcNAcb-Sp0	19	0	2	0	0	0.6483775
184	GlcNAcb1-4Galb1-4GlcNAcb-Sp8	22	0	2	0	0	0.6482648
226	Neu5Aca2-8Neu5Aca2-8Neu5Aca-Sp8	59	0	1	0	0	0.6469116

168	Galb1-4Glcb-Sp0	49	0	1	0	0	0.6472877
295	6-H2PO3Glcb-Sp10	-7	0	2	0	0	0.6493535
191	GlcNAcb1-6Galb1-4GlcNAcb-Sp8	73	0	0	0	0	0.6464226
148	Galb1-4(Fuca1-3)GlcNAcb-Sp0	29	0	1	0	0	0.6480394
313	Mana1-2Mana1-2Mana1-3(Mana1-2Mana1-6(Mana1-2Mana1-3)Mana1-6)Mana-Sp9	31	0	1	0	0	0.6479643
234	Neu5Aca2-3GalNAcb1-4GlcNAcb-Sp0	17	0	1	0	0	0.6484901
431	GlcNAcb1-4(GlcNAcb1-2)Mana1-3(GlcNAcb1-4)(GlcNAcb1-6(GlcNAcb1-2)Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp21	2	0	1	0	0	0.6490533
61	Fuca1-2Galb1-3GalNAca-Sp14	83	0	-1	0	0	0.6460838
304	GlcAb1-3GlcNAcb-Sp8	39	0	-1	0	0	0.6477388
206	Mana1-2Mana1-3Mana-Sp9	16	0	-1	0	0	0.6486028
440	GalNAcb1-6GalNAcb-Sp8	3	0	-1	0	0	0.6490908
428	GlcNAcb1-2Mana1-3(GlcNAcb1-4)(GlcNAcb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNAc-Sp21	37	0	-2	0	0	0.6478515
319	Neu5Aca2-8Neu5Aca2-8Neu5Acb-Sp8	-6	0	-4	0	0	0.649541
376	(GalNAcb1-4GlcNAcb1-2Mana1-6)GalNAcb1-4GlcNAcb1-2Mana1-3Manb1-4GlcNAcb1-4GlcNAc-Sp12	34	0	-36	-4	-2	0.6492409
352	[6OSO3]GlcNAcb1-3Galb1-4GlcNAc-b-Sp0	-97	0	-41	-5	-2	0.6543305
343	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	-62	0	-43	-5	-2	0.653098
351	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	790	2	-63	-7	-3	0.6215211
355	KDNa2-3Galb1-4Glc-Sp0	2115	4	-87	-10	-3	0.5705533
375	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	1574	3	-94	-11	-4	0.5922183
452	Neu5Aca2-8Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glcb-Sp0	-70	0	-86	-10	-5	0.6550021
443	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4 GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	-677	-1	-150	-17	-9	0.6796725
476	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-6AA	-54	0	-295	-34	-17	0.6621717
475	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-6AA	-319	-1	-320	-36	-19	0.6728342
479	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6(GlcNAcb1-4)(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAc-Sp21	-625	-1	-715	-81	-41	0.6980193
467	Neu5Aca2-3Galb1-3GlcNAcb1-6(Neu5Aca2-3Galb1-4GlcNAcb1-2)Mana1-6(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	-2187	-4	-1819	-207	-105	0.7848215

Spacer Abbreviation	Chemical Structure
Sp0	$CH_2CH_2NH_2$
Sp8	$CH_2CH_2CH_2NH_2$
Sp9	$CH_2CH_2CH_2CH_2CH_2NH_2$
Sp10	$NHCOCH_2NH$
Sp11	$OCH_2C_6H_4$-p-$NHCOCH_2NH$
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP ($OC_6H_4NH_2$)
Sp17	$OCH_2C_6H_4NH_2$
Sp18	$O(CH_2)_3NHCO(CH_2)_5NH_2$
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH3)-O-(CH2)2-NH2
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH2)4NH2