

**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
		Ave RFU	Rank	Ave RFU	Rank		
162	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp8	36724	72	881	100	86	0.0003091
86	GalNAca1-3(Fuca1-2)Galb1-4Glc-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]Glc-Sp8	20864	41	683	78	59	0.0360847
333	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-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)Galb1-4GlcNAcb-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)Galb1-4GlcNAcb-Sp0	33722	66	248	28	47	0.0011231
161	Galb1-4GlcNAcb1-3Galb1-4Glc-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)Galb1-4Glc-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)Galb1-4Glc-Sp0	42650	84	29	3	44	4.12E-05
338	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glc-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]Glc-Sp0	23080	45	284	32	39	0.023741
331	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-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)GalNAcb-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)GalNAcb-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	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-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	Neu5Aca2-8Neu5Aca2-3Galb1-4Glc-Sp0	15786	31	19	2	17	0.1118386

72	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	15725	31	8	1	16	0.1132316
260	Neu5Aca2-3Galb1-4Glc-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	Galb1-3GlcNAca1-3Galb1-4GlcNAcb-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	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glc-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	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4Glc-Sp0	10590	21	6	1	11	0.2452476
100	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	3781	7	112	13	10	0.4956103
65	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glc-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)Galb1-4Glc-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	Neu5Aca2-3Galb1-4Glc-Sp8	6945	14	-1	0	7	0.3745432
436	Gala1-3Galb1-4Glc-Sp10	6128	12	13	1	7	0.4057235
115	Gala1-3Galb1-4Glc-Sp0	5934	12	14	2	7	0.4133161
401	Gala1-3Galb1-4GlcNAcb1-3GalNAc-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)2-3Galb1-3GlcNAcb-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	Galb1-3GlcNAcb1-3Galb1-4Glc-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]Galb1-4Glc-Sp8	3291	6	11	1	4	0.519469
231	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glc-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	Neu5Gca2-3Galb1-4Glc-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	Galb1-3GalNAcb1-4Galb1-4Glc-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)Galb1-4Glc-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)Manb1-4GlcNAcb1-4GlcNAcb-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	Neu5Aca2-6Galb1-4Glc-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)Galb1-4Glc-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	Neu5Aca2-3Galb1-3GalNAcb1-3Gala1-4Galb1-4Glc-Sp0	1037	2	5	1	1	0.6093725
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	GalNAcb1-4Galb1-4Glc-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)Manb1-4GlcNAcb1-4GlcNAcb-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)Galb1-4Glc-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	Fuca1-2Galb1-4Glc-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]Galb1-4Glc-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	Neu5Aca2-6Galb1-4Glc-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	Gala1-6Glc-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	GlcNAcb1-3Galb1-4Glc-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	Gica1-4Gica-Sp8	39	0	14	2	1	0.6471749
409	Neu5Aca2-3Galb1-3GalNAcb1-4(Neu5Aca2-8Neu5Aca2-3)Galb1-4Glc-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	Glc-Sp8	43	0	13	2	1	0.6470621
135	Galb1-3(Neu5Aca2-6)GlcNAcb1-4Galb1-4Glc-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)Galb1-4Glc-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	Glc1-6Glc1-6Glc1-6Glc-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)Galb1-4Glc-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	Gica-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	Gica1-4Glc-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	Gica1-6Gica1-6Glc-Sp8	27	0	11	1	1	0.6477388
44	[6OSO3]Galb1-4[6OSO3]Glc-Sp8	64	0	10	1	1	0.6463849
169	Galb1-4Glc-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	Glc1-4Glc-Sp8	56	0	10	1	1	0.6466859
88	GalNAca1-3(Fuca1-2)Galb-Sp8	111	0	9	1	1	0.6446523
404	GalNAcb1-3Gala1-6Galb1-4Glc-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)Galb1-4Glc-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]Glc-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	Galb1-3GalNAcb1-3Gala1-4Galb1-4Glc-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]Galb1-4Glc-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	GlcA1-4GlcA1-4GlcA1-4Glc-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)GalNAc-Sp14	67	0	8	1	1	0.6463473
224	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3Galb1-4Glc-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	Galb1-3GlcNAcb1-3GalNAc-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	Galb1-3GlcNAcb1-6GalNAc-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	Neu5Gca2-6GalNAc-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)GalNAc-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	Fuca1-2Galb1-3GalNAcb1-3Gala1-4Galb1-4Glc-Sp9	12	0	8	1	0	0.648415
80	Fucb1-3GlcNAcb-Sp8	30	0	8	1	0	0.6477388
189	GlcNAcb1-6GalNAc-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	GlcNAcb1-3GalNAc-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	Galb1-3GalNAc-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	GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb1-4GlcNAcb-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]Glc-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)Galb1-4Glc-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	Gala1-4Galb1-4Glc-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)Glc-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)Galb1-4Glc-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	Glc1-6Glc-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)Galb1-4Glc-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	Galb1-4Glc-b-Sp0	49	0	1	0	0	0.6472877
295	6-H2PO3Glc-b-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)Galb1-4Glc-b-Sp0	-70	0	-86	-10	-5	0.6550021
443	Fuca1-2Galb1-4GlcNAcb1-2(Fuca1-2Galb1-4GlcNAcb1-4)Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)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 <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>
Sp8	CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>
Sp9	CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>
Sp10	NHCOCH <sub>2</sub> NH
Sp11	OCH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> -p-NHCOCH <sub>2</sub> NH
Sp12	Asparagine
Sp13	Glycine
Sp14	Threonine
Sp15	Serine
Sp16	PNP (OC <sub>6</sub> H <sub>4</sub> NH <sub>2</sub> )
Sp17	OCH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> NH <sub>2</sub>
Sp18	O(CH <sub>2</sub> ) <sub>3</sub> NHCO(CH <sub>2</sub> ) <sub>3</sub> NH <sub>2</sub>
Sp19	EN or NK
Sp20	GENR
Sp21	N(CH <sub>3</sub> )-O-(CH <sub>2</sub> ) <sub>2</sub> -NH <sub>2</sub>
Sp22	NST
MDPLys	Mur-L-Ala-D-iGlnb-(CH <sub>2</sub> ) <sub>4</sub> NH <sub>2</sub>