

Figure S1: SSL4_t and SSL4_t-R182A Binding sLe^x

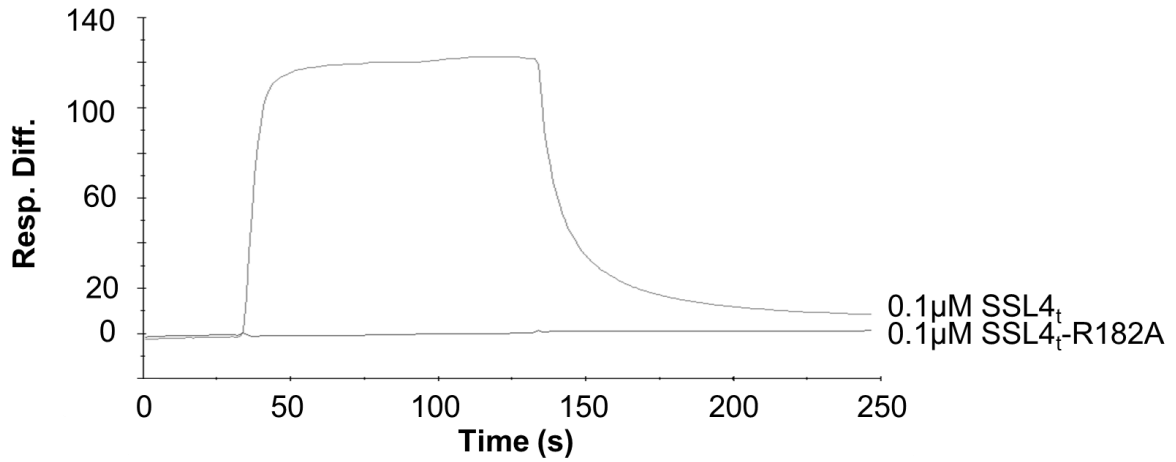


FIGURE S1: Sensorgram of 0.1 μM SSL4_t and SSL4_t-R182A binding sLe^x

TABLE S1: Quantitative measure of SSL4_t, SSL4_t-N181H, and SSL11 binding to sLe^x and sLacNac. A steady state affinity binding model was used to calculate an affinity constant at equilibrium.

	sLe ^x			sLacNac		
	K _D (nM)	Rmax	Chi ²	K _D (nM)	Rmax	Chi ²
SSL4 _t	86.96 ± 4.53	235.50 ± 0.14	6.95 ± 0.01	471.70 ± 18.67	374.00 ± 7.21	1.91 ± 1.22
SSL4 _t -N181H	90.76 ± 6.36	243.25 ± 3.18	6.28 ± 0.33	119.05 ± 10.25	414.25 ± 0.49	6.78 ± 3.41
SSL11	2320 ± 200	217.95 ± 0.64	2.67 ± 1.96	2430 ± 180	478.00 ± 44.42	8.58 ± 9.16

TABLE S2: SSL4_t binding to glycan array at 100 µg/mL

Glycan number	Glycan name	Avg w/o Max & Min	StDev w/o Max & Min	SEM w/o Max & Min	%CV
233	Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp8	10246	1636	818	16
229	Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp0	7555	449	224	6
231	Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp8	6916	2675	1338	39
235	Neu5Aca2-3Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	4871	967	483	20
227	Neu5Aca2-3Galβ1-4[6OSO3]GlcNAcβ-Sp8	4717	305	152	6
232	Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ-Sp8	4496	405	202	9
259	Neu5Gca2-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp0	4444	900	450	20
143	Neu5Aca2-3Galβ1-4GlcNAcβ1-2Manα1-3(Neu5Aca2-3Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp12	4253	297	148	7
237	Neu5Aca2-3Galβ1-4GlcNAcβ-Sp8	3774	215	108	6
293	Galβ1-3(Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ1-6)GalNAc-Sp14	3525	495	247	14
285	Neu5Aca2-3Galβ1-4GlcNAcβ1-3Galβ1-3GlcNAcβ-Sp0	3150	81	40	3
230	Neu5Aca2-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp0	3118	162	81	5
228	Neu5Aca2-3Galβ1-4(Fuca1-3)(6OSO3)GlcNAcβ-Sp8	3039	402	201	13
315	Neu5Aca2-3Galβ1-3(Neu5Aca2-3Galβ1-4GlcNAcβ1-6)GalNAc-Sp14	2946	303	152	10
208	Neu5Aca2-3(6-O-Su)Galβ1-4(Fuca1-3)GlcNAcβ-Sp8	2844	352	176	12
46	NeuAca2-3[6OSO3]Galβ1-4GlcNAcβ-Sp8	2745	300	150	11
277	Galβ1-3-(Neu5Aa2-3Galβ1-4GlcNAcβ1-6)GalNAc-Sp14	2736	797	398	29
222	Neu5Aca2-3Galβ-Sp8	2327	172	86	7
240	Neu5Aca2-3Galβ1-4Glcβ-Sp8	1627	167	84	10
238	Neu5Aca2-3Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	1565	72	36	5
212	NeuAca2-3(NeuAca2-3Galβ1-3GalNAcβ1-4)Galβ1-4Glcβ-Sp0	1491	142	71	10
249	Neu5Aca2-6Galβ1-4Glcβ-Sp0	1458	78	39	5
220	Neu5Aca2-3Galβ1-3[6OSO3]GalNAcα-Sp8	1352	102	51	8
225	Neu5Aca2-3Galβ1-3GlcNAcβ-Sp0	1300	76	38	6
214	Neu5Aca2-3GalNAcα-Sp8	1258	211	106	17
210	Neu5Aca2-3(GalNAcβ1-4)Galβ1-4GlcNAcβ-Sp8	1229	117	58	9
318	Neu5Aca2-3Galβ1-4GlcNAcβ1-2Manα1-3(Neu5Aca2-6Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp12	1222	81	40	7
199	Neu5Aca2-6Galβ1-4GlcNAcβ1-2Manα1-3(Neu5Aca2-3Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp12	1173	58	29	5
1	Neu5Aca2-8Neu5Aca-Sp8	1121	256	128	23
202	Neu5Aca2-3Galβ1-3GalNAcα-Sp8	1113	52	26	5
26	[3OSO3][6OSO3]Galβ1-4[6OSO3]GlcNAcβ-Sp0	1109	147	73	13
224	NeuAca2-3Galβ1-3GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	1098	221	111	20
236	Neu5Aca2-3Galβ1-4GlcNAcβ-Sp0	1090	136	68	13
287	[3OSO3][4OSO3]Galβ1-4GlcNAcβ-SpSp0	1079	180	90	17
53	Neu5Aca2-6Galβ1-4GlcNAcβ1-2Manα1-3(Neu5Aca2-6Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp13	1036	255	128	25
295	Galβ1-4GlcNAcβ1-2Manα1-3(Neu5Aca2-6Galβ1-	1018	169	84	17

	4GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12				
180	Glc β 1-4Glc β -Sp8	994	139	69	14
247	Neu5Aca2-6Gal β 1-4GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	985	99	50	10
219	Neu5Aca2-3Gal β 1-3(Neu5Aca2-3Gal β 1-4)GlcNAc β -Sp8	971	148	74	15
261	Neu5Gca2-3Gal β 1-4Glc β -Sp0	965	225	113	23
267	[3OSO3]Gal β 1-4[Fuca1-3][6OSO3]GlcNAc-Sp8	960	80	40	8
216	Neu5Aca2-3Gal β 1-3(6OSO3)GlcNAc-Sp8	954	45	23	5
60	Fuca1-2Gal β 1-3GalNAc β 1-4(Neu5Aca2-3)Gal β 1-4Glc β -Sp9	906	210	105	23
265	[3OSO3]Gal β 1-4(Fuca1-3)(6OSO3)Glc-Sp0	902	80	40	9
14	α -Neu5Ac-Sp8	885	55	28	6
253	Neu5Aca2-8Neu5Aca2-3Gal β 1-4Glc β -Sp0	864	84	42	10
188	KDN α 2-3Gal β 1-4GlcNAc β -Sp0	849	147	74	17
40	[4OSO3]Gal β 1-4GlcNAc β -Sp8	844	225	112	27
73	Fuca1-2Gal β 1-4Glc β -Sp0	843	626	313	74
218	NeuAca2-3Gal β 1-3(Fuca1-4)GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β Sp0	791	246	123	31
251	Neu5Aca2-6Gal β -Sp8	768	119	60	16
29	[3OSO3]Gal β 1-4(6OSO3)Glc β -Sp0	757	127	63	17
194	Man α 1-2Man α 1-2Man α 1-3(Man α 1-2Man α 1-3(Man α 1-2Man α 1-6)Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	756	261	131	35
263	Neu5Gca2-6Gal β 1-4GlcNAc β -Sp0	746	118	59	16
3	Neu5Aca2-8Neu5Aca2-8Neu5Ac β -Sp8	713	40	20	6
38	[3OSO3]Gal β -Sp8	709	147	74	21
18	β -D-Glc-Sp8	688	141	70	20
34	[3OSO3]Gal β 1-4(Fuca1-3)GlcNAc β -Sp8	677	230	115	34
257	Neu5Gca2-3Gal β 1-3(Fuca1-4)GlcNAc β -Sp0	676	208	104	31
311	Man α 1-6Man β -Sp10	663	159	80	24
319	Neu5Aca2-6Gal β 1-4GlcNAc β 1-2Man α 1-3(Gal β 1-4GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	655	362	181	55
70	Fuca1-2Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	655	68	34	10
303	GlcA β 1-3GlcNAc β -Sp8	649	63	32	10
317	Neu5Aca2-3Gal β 1-3GalNAc-Sp14	617	129	65	21
305	GlcNAc β 1-2Man α 1-3(GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	616	248	124	40
192	Man α 1-6(Man α 1-2Man α 1-3)Man α 1-6(Man α 2Man α 1-3)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	603	103	51	17
270	Fuca1-2Gal β 1-4[6OSO3]GlcNAc-Sp8	586	127	63	22
215	Neu5Aca2-3GalNAc β 1-4GlcNAc β -Sp0	584	193	96	33
260	Neu5Gca2-3Gal β 1-4GlcNAc β -Sp0	574	339	169	59
198	Man α 1-6(Man α 1-3)Man α 1-6(Man α 1-3)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	569	106	53	19
256	Gal β 1-4GlcNAc β 1-2Man α 1-3(Neu5Aca2-6Gal β 1-4GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp21	567	168	84	30
291	Gal α 1-3GalNAc α -Sp16	553	84	42	15
186	GlcA β 1-6Gal β -Sp8	545	225	113	41
48	9NAcNeu5Aca-Sp8	538	73	37	14
16	β -Neu5Ac-Sp8	527	107	53	20
139	Gal β 1-4[6OSO3]Glc β -Sp0	527	107	54	20
136	Gal β 1-4(Fuca1-3)GlcNAc β -Sp8	519	229	114	44
137	Gal β 1-4(Fuca1-3)GlcNAc β 1-4Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	519	64	32	12
239	Neu5Aca2-3Gal β 1-4Glc β -Sp0	517	97	48	19
168	GlcNAc β 1-4MDPLys	513	150	75	29
275	Gal β 1-3-(Gal β 1-4GlcNAc β 1-6)GalNAc-Sp14	510	89	45	17

289	6-H2PO3Glcβ-Sp10	504	163	81	32
170	GlcNAcβ1-4Galβ1-4GlcNAcβ-Sp8	496	228	114	46
273	Fuca1-2-Galβ1-4[6OSO3]Glc-Sp0	487	173	86	35
56	Fuca1-2Galβ1-3GalNAcβ1-3Galα1-4Galβ1-4Glcβ-Sp9	487	216	108	44
113	Galα1-6Glcβ-Sp8	482	51	26	11
47	[6OSO3]GlcNAcβ-Sp8	480	146	73	30
204	Neu5Aca2-8Neu5Aca2-8Neu5Aca2-3(GalNAcβ1-4)Galβ1-4Glcβ-Sp0	475	176	88	37
36	[3OSO3]Galβ1-4GlcNAcβ-Sp0	473	66	33	14
184	GlcAβ-Sp8	472	118	59	25
133	Galβ1-3GlcNAcβ-Sp0	471	77	39	16
245	Neu5Aca2-6Galβ1-4GlcNAcβ-Sp0	465	248	124	53
281	Galβ1-4[Fuca1-3][6OSO3]Glc-Sp0	460	90	45	20
243	Neu5Aca2-6GalNAcβ1-4GlcNAcβ-Sp0	453	145	72	32
97	Galα1-3(Fuca1-2)Galβ1-4GlcNAc-Sp0	441	184	92	42
309	HOOC(CH3)CH-3-O-GlcNAcβ1-4GlcNAcβ-Sp10	441	203	101	46
71	Fuca1-2Galβ1-4GlcNAcβ-Sp0	438	171	86	39
87	GalNAca1-4(Fuca1-2)Galβ1-4GlcNAcβ-Sp8	429	32	16	7
162	GlcNAcβ1-3Galβ-Sp8	418	118	59	28
115	Galβ1-3(Fuca1-4)GlcNAcβ1-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp0	418	108	54	26
299	Galβ1-4GlcNAcβ1-6Galβ1-4GlcNAcβ-Sp0	418	83	41	20
103	Galα1-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp8	417	105	52	25
84	GalNAca1-3(Fuca1-2)Galβ-Sp8	416	149	74	36
76	Fuca1-3GlcNAcβ-Sp8	411	218	109	53
248	Neu5Aca2-6Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	409	103	51	25
58	Fuca1-2Galβ1-3GalNAca-Sp8	407	118	59	29
123	Galβ1-3(Neu5Acβ2-6)GalNAca-Sp8	402	66	33	16
154	Galβ1-4Glcβ-Sp0	400	143	71	36
172	(GlcNAcβ1-4)5β-Sp8	399	152	76	38
201	Fuca1-3(Galβ1-4)GlcNAcβ1-2Mana1-3(Fuca1-3(Galβ1-4)GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	399	143	72	36
190	Mana1-2Mana1-3(Mana1-2Mana1-6)Mana-Sp9	394	84	42	21
35	[3OSO3]Galβ1-4[6OSO3]GlcNAcβ-Sp8	392	66	33	17
106	Galα1-3Galβ1-4Glcβ-Sp0	389	87	43	22
121	Galβ1-3(GlcNAcβ1-6)GalNAca-Sp8	387	61	30	16
12	α-L-Fuc-Sp9	382	203	101	53
31	[3OSO3]Galβ1-3(Fuca1-4)GlcNAcβ-Sp8	381	153	77	40
105	Galα1-3Galβ1-4GlcNAcβ-Sp8	377	179	89	48
52	Galβ1-4GlcNAcβ1-2Mana1-3(Galβ1-4GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp13	376	150	75	40
99	Galα1-3(Fuca1-2)Galβ-Sp8	374	65	33	17
109	Galα1-4Galβ1-4GlcNAcβ-Sp0	368	54	27	15
127	Galβ1-3GalNAcβ1-3Galα1-4Galβ1-4Glcβ-Sp0	367	125	63	34
78	Fucβ1-3GlcNAcβ-Sp8	367	81	41	22
108	Galα1-4(Fuca1-2)Galβ1-4GlcNAcβ-Sp8	359	115	57	32
64	Fuca1-2Galβ1-3GlcNAcβ-Sp8	356	71	36	20
5	Galβ1-3GlcNAcβ1-2Mana1-3(Galβ1-3GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp19	355	42	21	12
62	Fuca1-2Galβ1-3GlcNAcβ1-3Galβ1-4Glcβ-Sp8	352	104	52	30
153	Galβ1-4GlcNAcβ-Sp8	348	60	30	17
151	Galβ1-4GlcNAcβ1-6GalNAca-Sp8	348	69	34	20
21	β-GlcNAc-Sp0	346	110	55	32
111	Galα1-4Galβ1-4Glcβ-Sp0	344	90	45	26

50	Man α 1-3(Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp13	344	246	123	71
85	GalNAc α 1-3GalNAc β -Sp8	343	155	77	45
24	(Gal β 1-4GlcNAc β)2-3,6-GalNAc α -Sp8	343	95	48	28
283	Gal β 1-4GlcNAc β 1-3Gal β 1-3GlcNAc β -Sp0	341	83	42	24
37	[3OSO3]Gal β 1-4GlcNAc β -Sp8	338	29	14	9
91	GalNAc β 1-4(Fuca1-3)GlcNAc β -Sp0	335	112	56	33
81	GalNAc α 1-3(Fuca1-2)Gal β 1-4GlcNAc β -Sp0	333	131	66	39
66	Fuca1-2Gal β 1-4(Fuca1-3)GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	333	71	35	21
44	[6OSO3]Gal β 1-4GlcNAc β -Sp8	332	180	90	54
176	GlcNAc β 1-6Gal β 1-4GlcNAc β -Sp8	324	96	48	30
209	Neu5Ac α 2-3(GalNAc β 1-4)Gal β 1-4GlcNAc β -Sp0	324	39	19	12
20	β -GalNAc α -Sp8	324	184	92	57
163	GlcNAc β 1-3Gal β 1-3GalNAc α -Sp8	321	187	93	58
156	GlcNAc α 1-3Gal β 1-4GlcNAc β -Sp8	319	35	17	11
144	Gal β 1-4GlcNAc β 1-3GalNAc α -Sp8	317	28	14	9
17	β -D-Gal α -Sp8	315	101	51	32
174	GlcNAc β 1-6(Gal β 1-3)GalNAc α -Sp8	311	87	43	28
146	Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	310	93	46	30
266	[3OSO3]Gal β 1-4(Fuca1-3)Glc-Sp0	309	59	30	19
33	[3OSO3]Gal β 1-3GlcNAc β -Sp8	308	265	133	86
42	[6OSO3]Gal β 1-4Glc β -Sp0	308	61	31	20
164	GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	308	85	42	27
226	Neu5Ac α 2-3Gal β 1-3GlcNAc β -Sp8	307	87	43	28
242	Neu5Ac α 2-6GalNAc α -Sp8	305	35	18	11
140	Gal β 1-4[6OSO3]Glc β -Sp8	303	147	73	48
313	Man α 1-2Man α 1-2Man α 1-3(Man α 1-2Man α 1-6(Man α 1-3)Man α 1-6)Man α -Sp9	302	48	24	16
223	NeuAc α 2-3Gal β 1-3GalNAc β 1-3Gal α 1-4Gal β 1-4Glc β -Sp0	301	158	79	52
27	[3OSO3][6OSO3]Gal β 1-4GlcNAc β -Sp0	301	48	24	16
148	Gal β 1-4GlcNAc β 1-3Gal β 1-4Glc β -Sp0	297	37	18	12
107	Gal α 1-3Gal β -Sp8	297	117	59	39
254	Neu5Ac β 2-6GalNAc α -Sp8	297	73	37	25
2	Neu5Ac α 2-8Neu5Ac β -Sp17	296	115	57	39
297	Gal β 1-4GlcNAc β 1-3(GlcNAc β 1-6)Gal β 1-4GlcNAc-Sp0	296	111	55	37
89	GalNAc β 1-3(Fuca1-2)Gal β -Sp8	293	95	47	32
75	Fuca1-3GlcNAc β -Sp8	290	120	60	41
22	β -GlcNAc α -Sp8	289	136	68	47
94	Gal α 1-2Gal β -Sp8	287	187	93	65
25	GlcNAc β 1-3(GlcNAc β 1-4)(GlcNAc β 1-6)GlcNAc-Sp8	286	208	104	73
187	KDN α 2-3Gal β 1-3GlcNAc β -Sp0	284	46	23	16
290	Gal α 1-3(Fuca1-2)Gal β -Sp18	284	98	49	35
185	GlcA β 1-3Gal β -Sp8	281	123	62	44
102	Gal α 1-3GalNAc β -Sp8	281	137	68	49
193	Man α 1-2Man α 1-6(Man α 1-3)Man α 1-6(Man α 2Man α 2Man α 1-3)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	280	99	49	35
80	GalNAc α 1-3(Fuca1-2)Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	279	44	22	16
158	GlcNAc β 1-2Gal β 1-3GalNAc α -Sp8	279	85	43	31
181	Glc β 1-6Glc β -Sp8	277	93	47	34
301	GalNAc α 1-3(Fuca1-2)Gal β -Sp18	277	49	25	18
252	Neu5Ac α 2-8Neu5Ac α -Sp8	277	42	21	15
206	Neu5Ac α 2-8Neu5Ac α 2-3(GalNAc β 1-4)Gal β 1-4Glc β -Sp0	276	125	63	45

8	α -D-Glc-Sp8	272	115	57	42
271	Fuca1-2[6OSO3]Gal β 1-4[6OSO3]Glc-Sp0	272	105	53	39
83	GalNAc α 1-3(Fuca1-2)Gal β 1-4Glc β -Sp0	271	62	31	23
221	Neu5Ac α 2-3Gal β 1-3(Neu5Ac α 2-6)GalNAc α -Sp8	270	101	51	37
138	Gal β 1-4(Fuca1-3)GlcNAc β 1-4Gal β 1-4(Fuca1-3)GlcNAc β 1-4Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	270	68	34	25
112	Gal α 1-4GlcNAc β -Sp8	269	101	50	37
126	Gal β 1-3GalNAc β -Sp8	269	144	72	54
134	Gal β 1-3GlcNAc β -Sp8	267	92	46	34
269	Fuca1-2[6OSO3]Gal β 1-4GlcNAc-Sp0	267	72	36	27
90	GalNAc β 1-3Gal α 1-4Gal β 1-4GlcNAc β -Sp0	266	74	37	28
135	Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	265	123	62	47
6	Neu5Ac α 2-6Gal β 1-4GlcNAc β 1-2Man α 1-3(Neu5Ac α 2-6Gal β 1-4GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	262	32	16	12
74	Fuca1-2Gal β -Sp8	259	68	34	26
274	Gal β 1-3(Fuca1-4)GlcNAc β 1-3Gal β 1-3(Fuca1-4)GlcNAc β -Sp0	258	81	41	32
145	Gal β 1-4GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β 1-3Gal β 1-4(Fuca1-3)GlcNAc β -Sp0	258	56	28	22
178	Glc α 1-4Glc α -Sp8	255	82	41	32
159	GlcNAc β 1-3(GlcNAc β 1-6)GalNAc α -Sp8	255	65	32	25
175	GlcNAc β 1-6GalNAc α -Sp8	254	133	66	52
160	GlcNAc β 1-3(GlcNAc β 1-6)Gal β 1-4GlcNAc β -Sp8	253	124	62	49
203	NeuAc α 2-8NeuAc α 2-8NeuAc α 2-8NeuAc α 2-3(GalNAc β 1-4)Gal β 1-4Glc β -Sp0	252	61	31	24
262	Neu5Gc α 2-6GalNAc α -Sp0	252	21	11	8
117	Gal β 1-3(Fuca1-4)GlcNAc-Sp0	252	87	43	34
49	9NAcNeu5Ac α 2-6Gal β 1-4GlcNAc β -Sp8	250	62	31	25
63	Fuca1-2Gal β 1-3GlcNAc β -Sp0	248	73	37	30
39	[4OSO3][6OSO3]Gal β 1-4GlcNAc β -Sp0	247	108	54	44
9	α -D-Man-Sp8	247	106	53	43
182	G-ol-Sp8	247	112	56	46
197	Man α 1-6(Man α 1-3)Man α 1-6(Man α 2Man α 1-3)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	246	98	49	40
157	GlcNAc α 1-6Gal β 1-4GlcNAc β -Sp8	244	126	63	52
93	GalNAc β 1-4GlcNAc β -Sp8	244	59	30	24
296	Gal β 1-4GlcNAc β 1-3(Gal β 1-4GlcNAc β 1-6)Gal β 1-4GlcNAc-Sp0	242	184	92	76
155	Gal β 1-4Glc β -Sp8	242	120	60	50
244	Neu5Ac α 2-6Gal β 1-4[6OSO3]GlcNAc β -Sp8	241	165	83	69
51	GlcNAc β 1-2Man α 1-3(GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp13	240	63	32	26
288	[6OSO3]Gal β 1-4[6OSO3]GlcNAc β -Sp0	239	128	64	53
166	GlcNAc β 1-3Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	238	32	16	14
310	Man α 1-3(Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	238	94	47	39
258	Neu5Gc α 2-3Gal β 1-3GlcNAc β -Sp0	237	147	73	62
125	Gal β 1-3GalNAc α -Sp8	235	21	11	9
279	Gal β 1-3GlcNAc β 1-3Gal β 1-3GlcNAc β -Sp0	234	137	69	59
124	Gal β 1-3(Neu5Ac α 2-6)GlcNAc β 1-4Gal β 1-4Glc β -Sp10	234	105	53	45
147	Gal β 1-4GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	234	141	71	60
101	Gal α 1-3GalNAc α -Sp8	233	57	28	24
82	GalNAc α 1-3(Fuca1-2)Gal β 1-4GlcNAc β -Sp8	233	90	45	39
264	Neu5Gc α -Sp8	232	101	50	43
72	Fuca1-2Gal β 1-4GlcNAc β -Sp8	232	112	56	48

217	Neu5Ac α 2-3Gal β 1-3(Fuca α 1-4)GlcNAc β -Sp8	230	70	35	31
150	Gal β 1-4GlcNAc β 1-6(Gal β 1-3)GalNAc α -Sp8	230	52	26	22
152	Gal β 1-4GlcNAc β -Sp0	228	97	49	43
43	[6OSO3]Gal β 1-4Glc β -Sp8	227	32	16	14
302	GalNAc β 1-3Gal β -Sp8	227	94	47	41
142	Gal β 1-4GalNAc β 1-3(Fuca α 1-2)Gal β 1-4GlcNAc β -Sp8	225	85	42	38
54	Neu5Ac α 2-6Gal β 1-4GlcNAc β 1-2Man α 1-3(Neu5Ac α 2-6Gal β 1-4GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp8	225	81	41	36
68	Fuca α 1-2Gal β 1-4(Fuca α 1-3)GlcNAc β -Sp8	225	129	64	57
15	α -Neu5Ac-Sp11	224	97	49	43
110	Gal α 1-4Gal β 1-4GlcNAc β -Sp8	222	76	38	34
30	[3OSO3]Gal β 1-4(6OSO3)Glc β -Sp8	222	119	59	54
11	α -L-Fuc-Sp8	222	49	24	22
79	GalNAc α 1-3(Fuca α 1-2)Gal β 1-3GlcNAc β -Sp0	221	77	39	35
165	GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp8	220	122	61	56
161	GlcNAc β 1-3GalNAc α -Sp8	218	191	96	88
120	Gal β 1-3(Gal β 1-4GlcNAc β 1-6)GalNAc α -Sp8	218	99	50	45
61	Fuca α 1-2Gal β 1-3GlcNAc β 1-3Gal β 1-4Glc β -Sp10	218	23	11	11
67	Fuca α 1-2Gal β 1-4(Fuca α 1-3)GlcNAc β -Sp0	217	76	38	35
320	Neu5Ac α 2-6Gal β 1-4GlcNAc β 1-2Man α 1-3(GlcNAc β 1-2Man α 1-6)Man β 1-4GlcNAc β 1-4GlcNAc β -Sp12	216	111	55	51
96	Gal α 1-3(Fuca α 1-2)Gal β 1-4(Fuca α 1-3)GlcNAc β -Sp0	215	59	30	28
45	[6OSO3]Gal β 1-4[6OSO3]Glc β -Sp8	213	63	31	29
195	Man α 1-3(Man α 1-6)Man α -Sp9	212	69	35	33
292	Gal β 1-3GalNAc α -Sp16	211	58	29	28
57	Fuca α 1-2Gal β 1-3(Fuca α 1-4)GlcNAc β -Sp8	211	93	47	44
131	Gal β 1-3GlcNAc β 1-3Gal β 1-4GlcNAc β -Sp0	210	138	69	65
114	Gal β 1-2Gal β -Sp8	210	55	28	26
246	Neu5Ac α 2-6Gal β 1-4GlcNAc β -Sp8	210	46	23	22
280	Gal β 1-4[Fuca α 1-3][6OSO3]GlcNAc-Sp0	209	50	25	24
28	[3OSO3]Gal β 1-4Glc β -Sp8	208	118	59	57
173	GlcNAc β 1-4GlcNAc β 1-4GlcNAc β -Sp8	208	103	52	50
32	[3OSO3]Gal β 1-3GalNAc α -Sp8	207	63	32	31
196	Man α 1-3(Man α 1-2Man α 1-2Man α 1-6)Man α -Sp9	205	73	37	36
141	Gal β 1-4GalNAc α 1-3(Fuca α 1-2)Gal β 1-4GlcNAc β -Sp8	202	102	51	50
268	[3OSO3]Gal β 1-4[Fuca α 1-3]GlcNAc-Sp0	201	149	74	74
10	α -GalNAc-Sp8	200	98	49	49
100	Gal α 1-3(Gal α 1-4)Gal β 1-4GlcNAc β -Sp8	198	77	38	39
205	Neu5Ac α 2-8Neu5Ac α 2-8Neu5Ac α 2-3Gal β 1-4Glc β -Sp0	195	110	55	56
191	Man α 1-2Man α 1-3Man α -Sp9	194	44	22	23
122	Gal β 1-3(Neu5Ac α 2-6)GalNAc α -Sp8	194	87	43	45
167	GlcNAc β 1-3Gal β 1-4Glc β -Sp0	193	43	22	22
128	Gal β 1-3GalNAc β 1-4(Neu5Ac α 2-3)Gal β 1-4Glc β -Sp0	191	113	57	59
316	Neu5Ac α 2-3Gal β 1-3(Neu5Ac α 2-6)GalNAc-Sp14	190	32	16	17
286	[3OSO3]Gal β 1-4[6OSO3]GlcNAc β -Sp0	188	70	35	37
207	Neu5Ac α 2-8Neu5Ac α 2-8Neu5Ac α -Sp8	188	84	42	45
88	GalNAc β 1-3GalNAc α -Sp8	185	81	40	44
298	Gal β 1-4GlcNAc α 1-6Gal β 1-4GlcNAc β -Sp0	185	47	23	25
149	Gal β 1-4GlcNAc β 1-3Gal β 1-4Glc β -Sp8	184	74	37	40
306	GlcNAc β 1-3Man-Sp10	183	93	47	51
23	β -GlcN(Gc)-Sp8	182	62	31	34

272	Fuca1-2-(6OSO3)-Galβ1-4Glc-Sp0	181	103	52	57
86	GalNAcα1-3Galβ-Sp8	181	108	54	60
77	Fuca1-4GlcNAcβ-Sp8	181	185	92	102
211	Neu5Acα2-3(GalNAcβ1-4)Galβ1-4Glcβ-Sp0	179	112	56	63
284	Neu5Acα2-3Galβ1-3GlcNAcβ1-3Galβ1-3GlcNAcβ-Sp0	178	53	26	30
179	Glcα1-6Glcα1-6Glcβ-Sp8	176	54	27	31
4	Neu5Gcβ2-6Galβ1-4GlcNAc-Sp8	175	63	31	36
308	GlcNAcβ1-4GlcNAcβ-Sp12	175	83	41	47
169	GlcNAcβ1-4(GlcNAcβ1-6)GalNAcα-Sp8	174	138	69	79
95	Galα1-3(Fuca1-2)Galβ1-3GlcNAcβ-Sp0	173	75	38	44
55	Fuca1-2Galβ1-3GalNAcβ1-3Galα-Sp9	172	31	15	18
7	α-D-Gal-Sp8	172	86	43	50
307	GlcNAcβ1-4GlcNAcβ-Sp10	172	101	50	59
92	GalNAcβ1-4GlcNAcβ-Sp0	172	59	29	34
304	GlcNAcβ1-2Manα1-3(Neu5Acα2-6Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp12	170	82	41	48
65	Fuca1-2Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ1-4(Fuca1-3)GlcNAcβ-Sp0	166	39	20	24
177	Glcα1-4Glcβ-Sp8	165	64	32	39
98	Galα1-3(Fuca1-2)Galβ1-4Glcβ-Sp0	159	87	43	54
189	Manα1-2Manα1-2Manα1-3Manα-Sp9	158	84	42	54
276	Galβ1-3(GlcNAcβ1-6)GalNAc-Sp14	155	87	44	56
234	Neu5Acα2-3Galβ1-4GlcNAcβ1-3Galβ1-4(Fuca1-3)GlcNAc-Sp0	154	26	13	17
132	Galβ1-3GlcNAcβ1-3Galβ1-4Glcβ-Sp10	153	92	46	60
183	GlcAa-Sp8	153	106	53	70
129	Galβ1-3GalNAcβ1-4Galβ1-4Glcβ-Sp8	151	56	28	37
59	Fuca1-2Galβ1-3GalNAcβ1-4(Neu5Acα2-3)Galβ1-4Glcβ-Sp0	150	32	16	21
282	Galβ1-4(Fuca1-3)GlcNAcβ1-3Galβ1-3(Fuca1-4)GlcNAcβ-Sp0	150	108	54	72
69	Fuca1-2Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAc-Sp0	145	44	22	30
118	Galβ1-3(Fuca1-4)GlcNAc-Sp8	140	50	25	36
250	Neu5Acα2-6Galβ1-4Glcβ-Sp8	139	51	25	36
41	6-H2PO3Manα-Sp8	139	53	26	38
13	α-L-Rha-Sp8	136	34	17	25
130	Galβ1-3Galβ-Sp8	131	98	49	75
116	Galβ1-3(Fuca1-4)GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	130	107	54	82
312	Manα1-6(Manα1-3)Manα1-6(Manα1-3)Manβ-Sp10	128	78	39	61
255	Neu5Acβ2-6Galβ1-4GlcNAcβ-Sp8	128	46	23	36
200	Manβ1-4GlcNAcβ-Sp0	115	73	37	64
278	Galβ1-3GalNAc-Sp14	115	47	24	41
171	(GlcNAcβ1-4)6β-Sp8	114	24	12	21
314	Manα1-2Manα1-2Manα1-3(Manα1-2Manα1-6(Manα1-2Manα1-3)Manα1-6)Manα-Sp9	109	43	22	40
213	Neu5Acα2-3(Neu5Acα2-6)GalNAcα-Sp8	109	47	24	43
104	Galα1-3Galβ1-3GlcNAcβ-Sp0	103	38	19	37
119	Galβ1-3(Fuca1-4)GlcNAcβ-Sp8	103	36	18	35
294	Galβ1-3Galβ1-4GlcNAcβ-Sp8	98	29	14	30
241	Galβ1-4GlcNAcβ1-2Manα1-3(Fuca1-3(Galβ1-4)GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	97	38	19	39
300	GalNAcα-Sp15	96	24	12	25
19	β-D-Man-Sp8	83	19	10	23

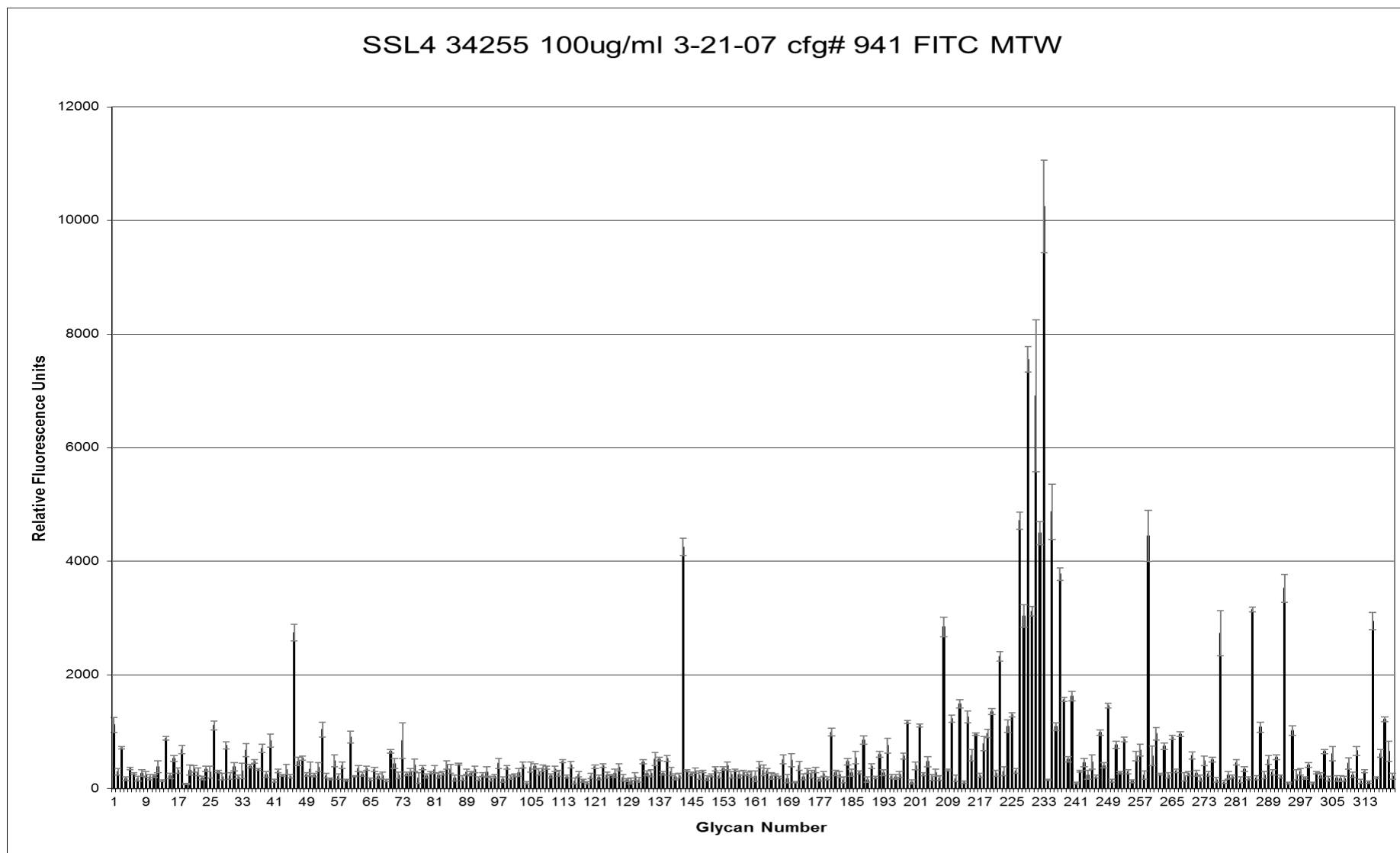


FIGURE S2: Graphical display of information presented in Table S1; SSL4_t binding to a glycan array at 100 µg/mL