

Supplementary Table S1. Representative example of Tn glycopeptide array data for one patient serum sample.

Chart ID	Detail	Sequence	Average RFU	S.D	%CV	# GalNAc residues in peptide sequence
52	Cp23 protein-200µg/ml	Recombinant protein	62158	606	1	
51	Cp17 protein-200µg/ml	Recombinant protein	60038	530	1	
35	Crypto peptide 01-50µM	H-ETS*EAAAT*VDLFAFT*LDGGK-NH2	32001	1049	3	3
36	Crypto peptide 02-50µM	H-ETSEAAAT*VDLFAFT*LDGGK-NH2	27962	8248	29	2
39	Crypto peptide 05-50µM	H-ETS*EAAAT*VDLFAFTLDGGK-NH2	25217	1729	7	2
40	Crypto peptide 06-50µM	H-ETSEAAAT*VDLFAFTLDGGK-NH2	18431	797	4	1
19	Tn3-linker-100µM	Ac-T*T*T*-CONH₂(CH₂)₃NH₂	9618	477	5	3 adjacent
13	α-DG-100µM	Ac-PPT*T*T*T*KKP-HN2	5211	259	5	4 adjacent
12	EA2 -1R-100µM	Ac-PTTDSTTPAPTTK-HH2	5027	1018	20	0
37	Crypto peptide 03-50µM	H-ETS*EAAATVDLFAFT*LDGGK-NH2	3764	241	6	2
11	EA2-100µM	Ac-PTTDSTT*PAPTTKNH2	3755	1696	45	1
38	Crypto peptide 04-50µM	H-ETSEAAATVDLFAFT*LDGGK-NH2	3165	494	16	1
18	PADRE-Tn3-100µM	DaKxVAAWTLKAAaT*T*T*G-NH2	2340	104	4	3 adjacent
1	a-100µM	Ac-PT*TTPLKNH2	2296	940	41	1
43	Crypto peptide 09-50µM	H-ETT*EAAAS*VDLFAFS*LDGGK-NH2	1844	162	9	3
49	Crypto peptide 15-50µM	H-DVPVEGSS*(23)TSTVAPANK-NH2	1682	283	17	23 adjacent
20	Tn-linker-100µM	Ac-T*-CONH₂(CH₂)₃NH₂	1532	73	5	1
45	Crypto peptide 11-50µM	H-DVPVEGSS*(7)TSTVAPANK-NH2	1435	565	39	7 adjacent
47	Crypto peptide 13-50µM	H-DVPVEGSS*(16)TSTVAPANK-NH2	1088	194	18	16 adjacent
31	Blood group A Tetra-AEAB-100µM		915	299	33	
2	b-100µM	Ac-PTT*TPLKNH2	862	261	30	1
32	Blood group A penta-AEAB-100µM		788	407	52	
7	g-100µM	Ac-PT*T*T*PLKNH2	729	353	48	3 adjacent
3	c-100µM	Ac-PTTT*PLKNH2	689	622	90	1
55	PBS		645	449	70	
10	II-100µM	H-GTTPSPVPT*TSTTSAP-OH	638	229	36	1
50	Crypto peptide 16-50µM	H-DVPVEGSS(23)TSTVAPANK-NH2	604	424	70	0
5	e-100µM	Ac-PT*TT*PLKNH2	555	472	85	2
4	d-100µM	Ac-PT*T*T*PLKNH2	497	504	101	2 adjacent
27	IgA-Pep01-100µM	KPVPST*PPT*PS*C	486	254	52	3
6	f-100µM	Ac-PTT*T*PLKNH2	485	358	74	2 adjacent
41	Crypto peptide 07-50µM	H-ETS*EAAATVDLFAFTLDGGK-NH2	473	32	7	1
9	αDG-R-100µM	Ac-PPTTTTKKPNH2	422	85	20	0
16	G-8-Pep-100µM	H-APGS*T*APP-NH2	375	241	64	2 adjacent
15	MUC1-1R-100µM	NH2-TSAPDTRPAP-NH2	360	150	42	0
42	Crypto peptide 08-50µM	H-ETSEAAATVDLFAFTLDGGK-NH2	360	159	44	0
22	Peptide-5-100µM	Ac-HN-KTTTG-CONH2	326	298	91	0
25	Thr1-100µM	H-Thr(a-D-GalNAc)-NH2	316	133	42	
33	LNT-100µM		308	78	25	
46	Crypto peptide 12-50µM	H-DVPVEGSS(7)TSTVAPANK-NH2	253	128	51	0
48	Crypto peptide 14-50µM	H-DVPVEGSS(16)TSTVAPANK-NH2	242	128	53	0
24	S2-100µM	H-Ser(a-D-GalNAc)-OH	238	217	91	

28	IgA-Pep02-100μM	KPVPSTPPTPSC	234	93	40	0
14	MUC1-1-100μM	NH2-TSAPDT*RDAP-NH2	219	214	98	1
21	Peptide-4-100μM	Ac-HN-KTTT-CONH2	178	185	104	
34	Man5-100μM		168	188	112	
30	T-GalNAc-100μM	T-GalNAc	165	188	114	
56	Biotin		159	321	202	
26	T1-100μM	H-Thr(a-D-GalNAc)-OH	158	98	62	
53	PBS		155	111	71	
44	Crypto peptide 10-50μM	H-ETTEAAASVDLFAFSLDGGK-NH2	125	46	37	0
54	PBS		124	233	188	
29	S-GalNAc-100μM	S-GalNAc	123	82	67	
17	MUC1-2R-100μM	H-APGSTAPP-NH2	114	77	68	0
23	Ser1-100μM	H-Ser(a-D-GalNAc)-NH2	114	77	68	
8	R-100μM	Ac-PTTTPLKNH2	104	105	101	0

Bold indicates glycosylation..

*indicates site of α-O-GalNAc modification, in 18, a = d - Ala, and x = cyclohexylalanine

RFU = relative fluorescence units; %CV, percent coefficient of variance.