

## SUPPLEMENTAL TABLE 1

## Primers for cDNA cloning by RT-PCR

Start atg codons and stop codons are underlined in external primers.

	<u>EXTERNAL PRIMERS</u>	<u>UTR PRIMERS</u>	<u>INTERNAL PRIMERS</u>
<b>Canine</b>	tca atc <u>atg</u> gct tgt ggt ctg gtc (sense)		sense: caa tca tgg ctt gtg gtc tg
<b>Galectin-1</b>	att tct aga <u>tta</u> gtc aaa ggc cag gca ctt (antisense)		antisense : ttc aaa gcg agg gtt gaa gt
<b>Canine</b>	gcc acc <u>atg</u> tcg ggg aaa ttt gag gtt (sense)		sense: gat tgc tgg tga tgc tga tg
<b>Galectin-2</b>	<u>tta</u> ttc tat ctt gaa gga gga gag (antisense)		antisense: cac atg tgc tta tcc cgt tg
<b>Canine</b>	ata ata ggt acc acc <u>atg</u> gca gac agt ttt tca ctt		sense: tcc act tta acc cac gct tc
<b>Galectin-3</b>	tta tta tct aga <u>tta</u> tat cat agc ata tga agc act (antisense)		antisense: ttc cca gtt tgc tga ttt cc
<b>Canine</b>	aat gaa ttc aac <u>atg</u> gcc tat gtc cct gca (sense)		sense: gct tcg tac cct tca caa gc
<b>Galectin-4</b>	aat gtc gac <u>tta</u> gac ttg gat ata gga (antisense)		antisense: gat caa aga att gcc cag ga
<b>Canine</b>	atc gga tcc acc <u>atg</u> gcg ggr tcr gtg gcc gac (sense)		sense: act cct tgg gct ctc cag tt
<b>Galectin-5</b>	<u>tca</u> gcc aag ctt agt gat ctg gag (antisense)		antisense: tga gta act gcc ggt ctg tg
<b>Canine</b>	cca gcc <u>atg</u> gca ggg agc tct (sense)	5' UTR sense : gcc tgc cct cgc agc cca gc	sense: gtg gtc ttc aac acc ctg ga
<b>Galectin-7</b>	aca tgc ggc cgc <u>tca</u> gaa gac gct cac gga ctc (antisense)	3' UTR antisense : gag gct tta ttt gcg ctg	antisense: agt ggt ggt act cgg agt cg
<b>Canine</b>	aga gtg <u>atg</u> ttg tcc tta aaa aac (sense)		sense: aat cca cgc ttc aag tgg tc
<b>Galectin-8</b>	<u>cta</u> cca gct cct tac ttc cag taa (antisense)		antisense: gcc ata aat gcc cag agt gt
<b>Canine</b>	gtg aag <u>atg</u> gcc ttc agc agc ttc cag (sense)	5' UTR sense : tgg cca cag agg tgg tgt ga	sense: gta ccc ctc caa gag cat c
<b>Galectin-9</b>	<u>cta</u> tgt ctg cac gtg ggt cag ttg (antisense)	3' UTR antisense : gtg tca tcc cca ggg ccg cg	antisense: aca cat gat cca cac cga ga
<b>Canine</b>	gcc acc <u>atg</u> tca cct gga gaa aaa ctg (sense)	5' UTR sense : gtt gga ggc act cca ctc cca tg	sense: aat ggt ccc tga aga tgc ac
<b>Galectin-12</b>	<u>tca</u> gta gtg gac aca gta gac ctg (antisense)	3' UTR antisense : cgg agt ccc tgg ctc act tg	antisense: cct tca ttt cct cgt ttc ca

**Supplemental Table 2**  
**Concentration Dependent Ranking Analysis of Canine Galectin 1**

Order	No.	Glycan Structure	Galectin Concentration						AVG RANK
			200 µg/ml		10 µg/ml		1 µg/ml		
			RFU <sub>Max</sub>	19493	27843	6663	RFU	Rank	
1	384	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-6)Mana1-6)Manb1-4GlcNacb1-4GlcN	19494	100	26979	97	5777	87	95
2	358	Gala1-3Galb1-4GlcNacb1-2Mana1-3(Gala1-3Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp20	13696	70	24582	88	6663	100	86
3	364	Galb1-4GlcNacb1-2(Galb1-4GlcNacb1-4)Mana1-3(Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp21	7286	37	27844	100	5336	80	72
4	283	[3OSO3]Galb1-4[6OSO3]GlcNacb-Sp0	13585	70	26516	95	3433	52	72
5	33	[3OSO3]Galb1-4[6OSO3]GlcNacb-Sp8	8572	44	24982	90	3401	51	62
6	51	Galb1-4GlcNacb1-2Mana1-3(Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp13	16769	86	4987	18	4962	74	59
7	142	Neu5Aca2-3Galb1-4GlcNacb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp12	13773	71	19265	69	1339	20	53
8	383	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4(Fuca1-3)GlcNacb1-6)Galb1-4Glc-Sp21	16337	84	14133	51	1039	16	50
9	31	[3OSO3]Galb1-3GlcNacb-Sp8	11827	61	13244	48	2776	42	50
10	295	Galb1-4GlcNAca1-6Galb1-4GlcNacb-Sp0	12870	66	14508	52	1665	25	48
11	379	Galb1-3GlcNacb1-3(Galb1-3GlcNacb1-3Galb1-4GlcNacb1-6)Galb1-4Glc-Sp0	12201	63	17510	63	687	10	45
12	34	[3OSO3]Galb1-4GlcNacb-Sp0	9714	50	14533	52	1312	20	41
13	234	Neu5Aca2-3Galb1-4GlcNacb1-3Galb1-4GlcNacb1-3Galb1-4GlcNacb-Sp0	14340	74	9805	35	442	7	38
14	35	[3OSO3]Galb1-4GlcNacb-Sp8	7023	36	13685	49	1986	30	38
15	22	Galb1-4GlcNacb1-3(Galb1-4GlcNacb1-6)GalNAca-Sp8	12044	62	8393	30	835	13	35
16	145	Galb1-4GlcNacb1-3Galb1-4GlcNacb1-3Galb1-4GlcNacb-Sp0	12823	66	8535	31	412	6	34
17	343	Galb1-4GlcNacb1-2Mana1-3Manb1-4GlcNacb1-4GlcNacb-Sp12	10517	54	10468	38	395	6	32
18	293	Galb1-4GlcNacb1-3(Galb1-4GlcNacb1-6)Galb1-4GlcNacb-Sp0	13761	71	2706	10	1142	17	32
19	223	Neu5Aca2-3Galb1-3GlcNacb1-3Galb1-4GlcNacb-Sp0	11729	60	6888	25	623	9	31
20	347	Galb1-4GlcNacb1-2Mana1-3(Galb1-4GlcNacb1-2Mana1-6)Manb1-4GlcNacb1-4(Fuca1-6)GlcNacb-Sp22	9682	50	11290	41	173	3	31
21	28	[3OSO3]Galb1-4[6OSO3]Glc-Sp8	13300	68	1609	6	1237	19	31
22	27	[3OSO3]Galb1-4[6OSO3]Glc-Sp0	6314	32	9350	34	1532	23	30
23	345	Galb1-4GlcNacb1-2Mana1-3(Mana1-6)Manb1-4GlcNacb1-4GlcNacb-Sp12	11045	57	7566	27	213	3	29
24	294	Galb1-4GlcNacb1-3(GlcNacb1-6)Galb1-4GlcNacb-Sp0	13068	67	3916	14	181	3	28
25	281	Neu5Aca2-3Galb1-3GlcNacb1-3Galb1-3GlcNacb-Sp0	12946	66	2712	10	309	5	27

26	394	Galb1-4GlcNAcb1-2Mana1-3(GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	13427	69	1492	5	409	6	27
27	146	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	10195	52	4095	15	431	6	24
28	4	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp19	11388	58	1276	5	155	2	22
29	356	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	10215	52	2640	9	193	3	22
30	50	Galb1-4GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	11524	59	425	2	93	1	21
31	147	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	8556	44	1820	7	92	1	17
32	255	Neu5Gca2-3Galb1-3GlcNAcb-Sp0	8369	43	1814	7	105	2	17
33	344	Galb1-4GlcNAcb1-2Mana1-6Manb1-4GlcNAcb1-4GlcNAc-Sp12	8582	44	1055	4	68	1	16
34	148	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp8	7194	37	2201	8	156	2	16
35	381	Fuca1-2Galb1-3(Fuca1-4)GlcNAcb1-3(Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp21	8552	44	65	0	62	1	15
36	395	GlcNAcb1-2Mana1-3(Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp12	8246	42	474	2	42	1	15
37	144	Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	5335	27	3634	13	146	2	14
38	282	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	6993	36	1089	4	100	2	14
39	70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	7103	36	899	3	87	1	14
40	131	Galb1-3GlcNAcb1-3Galb1-4Glc-Sp10	7036	36	892	3	86	1	14
41	104	Gala1-3Galb1-4GlcNAcb-Sp8	7028	36	792	3	100	2	13
42	237	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	4613	24	3107	11	356	5	13
43	315	Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	5005	26	3102	11	153	2	13
44	26	[3OSO3]Galb1-4Glc-Sp8	5854	30	1579	6	94	1	12
45	115	Galb1-3(Fuca1-4)GlcNAcb1-3Galb1-4GlcNAcb-Sp0	6305	32	967	3	40	1	12
46	276	Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	6432	33	257	1	65	1	12
47	186	KDNa2-3Galb1-3GlcNAcb-Sp0	5839	30	958	3	73	1	11
48	348	Galb1-3GlcNAcb1-2Mana1-3(Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp22	6273	32	367	1	56	1	11
49	396	Neu5Aca2-3Galb1-3GlcNAcb1-3GalNaca-Sp14	6184	32	214	1	46	1	11
50	61	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glc-Sp10	6220	32	76	0	29	0	11
51	323	Neu5Ac(9Ac)a2-3Galb1-3GlcNAcb-Sp0	5561	29	765	3	77	1	11
52	393	Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAc-Sp19	6220	32	23	0	22	0	11
53	280	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	5873	30	83	0	60	1	10
54	291	Galb1-3Galb1-4GlcNAcb-Sp8	5454	28	195	1	176	3	10
55	198	Neu5Aca2-6Galb1-4GlcNAcb1-2Mana1-3(Neu5Aca2-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp12	5593	29	450	2	55	1	10

56	130	Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	4408	23	1823	7	122	2	10
57	403	Galb1-3GlcNAcb1-6Galb1-4GlcNAcb-Sp0	5407	28	275	1	98	1	10
58	257	Neu5Gca2-3Galb1-4GlcNAcb-Sp0	5262	27	332	1	82	1	10
59	404	Galb1-3GlcNAca1-6Galb1-4GlcNAcb-Sp0	4983	26	370	1	168	3	10
60	225	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	4694	24	572	2	162	2	10

**Supplemental Table 3  
Concentration Dependent Ranking Analysis of Canine Galectin 2**

Order	No.	Glycan Structure	Galectin Concentration		50 µg/ml		5 µg/ml		*AVG RANK
			RFU <sub>Max</sub>		11487		2615		
			RFU	Rank	RFU	Rank			
1	367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	11487	100	2615	100	100	100	
2	424	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4(Fuca1-6)GlcNAcb-Sp20	6457	56	1318	50	53		
3	299	GlcAb1-3GlcNAcb-Sp8	561	5	160	6	5		
4	37	[4OSO3]Galb1-4GlcNAcb-Sp8	6	0	5	0	0		
5	357	Fuca1-2Galb1-4GlcNAcb1-2Mana1-3(Fuca1-2Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	124	1	41	2	1		
6	374	Neu5Aca2-3Galb1-4(Fuca1-3)GlcNAcb1-3GalNAca-Sp14	34	0	22	1	1		
7	337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	79	1	9	0	1		
8	131	Galb1-3GalNAca-Sp8	11	0	7	0	0		

\*Average Rank based on 2 concentrations due to low RFU values at 0.5 µg/ml

**Supplemental Table 4  
Concentration Dependent Ranking Analysis of Canine Galectin 3**

Order	No.	Glycan Structure	Galectin Concentration						AVG RANK
			10 µg/ml		1 µg/ml		0.1 µg/ml		
			RFU <sub>Max</sub>	RFU	Rank	RFU	Rank	RFU	
1	366	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	32174	98	23605	100	3378	100	99
2	365	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	32273	99	22288	94	3271	97	97
3	330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32709	100	19839	84	2542	75	86
4	326	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29963	92	16252	69	1193	35	65
5	145	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	23866	73	19984	85	1007	30	62
6	332	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	23323	71	15367	65	1345	40	59
7	329	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	20301	62	12792	54	1517	45	54
8	140	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	26954	82	8720	37	243	7	42
9	324	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	26679	82	7327	31	216	6	40
10	70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	26024	80	5676	24	384	11	38
11	246	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	27267	83	6577	28	71	2	38
12	146	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	21850	67	8681	37	225	7	37
13	376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp14	24413	75	6790	29	180	5	36
14	96	Gala1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	23898	73	6969	30	178	5	36
15	80	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	23783	73	5839	25	155	5	34
16	358	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	22899	70	4470	19	34	1	30
17	69	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	19583	60	3803	16	60	2	26
18	337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	18011	55	3687	16	167	5	25
19	81	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	16814	51	4340	18	122	4	24
20	280	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	18541	57	3099	13	42	1	24
21	234	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	16523	51	3810	16	75	2	23
22	369	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	14859	45	2361	10	21	1	19
23	223	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-4GlcNAcb-Sp0	14096	43	1586	7	35	1	17
24	148	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp8	13659	42	1979	8	12	0	17
25	94	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	12980	40	1330	6	70	2	16
26	165	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	12756	39	1564	7	41	1	16
27	281	Neu5Aca2-3Galb1-3GlcNAcb1-3Galb1-3GlcNAcb-Sp0	10619	32	1451	6	33	1	13
28	33	[3OSO3]Galb1-4[6OSO3]GlcNAcb-Sp8	10146	31	1519	6	54	2	13
29	237	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	7659	23	728	3	28	1	9

**Supplemental Table 5**  
**Concentration Dependent Ranking Analysis of Canine Galectin 4**

Order	No.	Glycan Structure	Galectin Concentration		50 µg/ml		5 µg/ml		0.5 µg/ml		AVG RANK
			RFU <sub>Max</sub>		27558		27260		19799		
			RFU	Rank	RFU	Rank	RFU	Rank			
1	376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	27558	100	27260	100	14847	75	92		
2	101	Gala1-3(Fuca1-2)Galb1-4Glc-Sp0	8614	31	19118	70	19799	100	67		
3	330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	26021	94	18963	70	5501	28	64		
4	84	GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	9900	36	15614	57	10062	51	48		
5	366	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp0	18797	68	8936	33	916	5	35		
6	83	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	12613	46	13889	51	1036	5	34		
7	148	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	11344	41	7334	27	3743	19	29		
8	367	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	17293	63	4843	18	202	1	27		
9	377	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	11401	41	6725	25	1414	7	24		
10	98	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	16077	58	2492	9	464	2	23		
11	100	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	9768	35	2669	10	1184	6	17		
12	25	[3OSO3]Galb1-4[6OSO3]Glc-Sp8	5363	19	4066	15	74	0	12		
13	370	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	6216	23	1416	5	240	1	10		
14	82	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	3201	12	3946	14	514	3	10		

**Supplemental Table 6  
Concentration Dependent Ranking Analysis of Canine Galectin 7**

Order	No.	Glycan Structure	Galectin Concentration						AVG RANK
			10 µg/ml		1 µg/ml		0.1 µg/ml		
			RFU <sub>Max</sub>	Rank	RFU	Rank	RFU	Rank	
1	69	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	44660	100	34633	100	32917	89	96
2	70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	38512	86	28389	82	36907	100	89
3	66	Fuca1-2Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb1-3Galb1-4(Fuca1-3)GlcNAcb-Sp0	34903	78	30469	88	28061	76	81
4	145	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	31534	71	18661	54	2586	7	44
5	329	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	29988	67	13593	39	3044	8	38
6	324	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	28557	64	12418	36	2112	6	35
7	326	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	31032	69	9704	28	1257	3	34
8	330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	30456	68	8711	25	599	2	32
9	332	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	30318	68	6232	18	728	2	29
10	365	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp0	27016	60	6878	20	264	1	27
11	280	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	22709	51	6693	19	418	1	24
12	146	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	24505	55	4412	13	302	1	23
13	148	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp8	20483	46	4666	13	226	1	20
14	327	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	22399	50	755	2	173	0	18
15	246	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	16896	38	3737	11	200	1	16
16	147	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	19614	44	1430	4	334	1	16
17	337	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	19590	44	469	1	213	1	15
18	366	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp0	18378	41	1374	4	114	0	15
19	328	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	12560	28	3668	11	131	0	13
20	379	Galb1-3GlcNAcb1-3(Galb1-3GlcNAcb1-3Galb1-4GlcNAcb1-6)Galb1-4Glc-Sp0	10213	23	249	1	133	0	8



**Supplemental Table 7**  
**Concentration Dependent Ranking Analysis of Canine Galectin 8**

Order	No.	Glycan Structure	Galectin Concentration			AVG RANK			
			RFU <sub>Max</sub>		RFU		RFU		AVG RANK
			10 µg/ml	1 µg/ml	0.1 µg/ml	10 µg/ml	1 µg/ml	0.1 µg/ml	AVG RANK
			42783	32403	7384				
			RFU	Rank	RFU	Rank	RFU	Rank	AVG RANK
1	234	Neu5Aca2-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	40978	96	32403	100	7384	100	99
2	365	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp0	41043	96	31109	96	2953	40	77
3	330	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	36698	86	32173	99	1058	14	66
4	165	GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32179	75	24717	76	2745	37	63
5	332	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	33626	79	24590	76	2152	29	61
6	145	Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	35458	83	25624	79	924	13	58
7	369	Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	31612	74	24700	76	685	9	53
8	78	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	34458	81	21532	66	636	9	52
9	81	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	42783	100	15677	48	472	6	52
10	329	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	30739	72	22388	69	619	8	50
11	375	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp14	28882	68	21945	68	398	5	47
12	366	Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-3(Gala1-3(Fuca1-2)Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp2	29904	70	19706	61	175	2	44
13	368	GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-3(GalNAca1-3(Fuca1-2)Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp0	32446	76	17635	54	187	3	44
14	376	Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAc-Sp14	27371	64	20091	62	159	2	43
15	80	GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	31371	73	9755	30	156	2	35
16	97	Gala1-3(Fuca1-2)Galb1-4Glc-Sp0	20909	49	15108	47	740	10	35
17	147	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	25690	60	9280	29	1224	17	35
18	70	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	32258	75	3794	12	372	5	31
19	148	Galb1-4GlcNAcb1-3Galb1-4Glc-Sp8	23983	56	9553	29	339	5	30
20	94	Gala1-3(Fuca1-2)Galb1-3GlcNAcb-Sp0	26432	62	8037	25	135	2	29
21	82	GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	22925	54	9424	29	159	2	28
22	335	GlcNAca1-4Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	25181	59	6844	21	239	3	28
23	28	[3OSO3]Galb1-4[6OSO3]Glc-Sp8	16479	39	10141	31	637	9	26
24	96	Gala1-3(Fuca1-2)Galb1-4GlcNAc-Sp0	24947	58	3926	12	135	2	24
25	327	Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	22150	52	3264	10	113	2	21

26	140	Galb1-4GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp8	24123	56	1764	5	62	1	21
27	251	Neu5Aca2-8Neu5Aca2-3Galb1-4Glc-Sp0	18269	43	4846	15	325	4	21
28	387	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	23187	54	964	3	289	4	20
29	390	GalNAca1-3(Fuca1-2)Galb1-3GalNAca1-3(Fuca1-2)Galb1-4GlcNAcb-Sp0	22578	53	1331	4	142	2	20
30	280	Galb1-4GlcNAcb1-3Galb1-3GlcNAcb-Sp0	21803	51	1814	6	132	2	19
31	27	[3OSO3]Galb1-4[6OSO3]Glc-Sp0	15897	37	5770	18	242	3	19
32	211	Neu5Aca2-3(Neu5Aca2-3Galb1-3GalNAcb1-4)Galb1-4Glc-Sp0	16241	38	4634	14	115	2	18
33	399	GalNAca1-3GalNAcb1-3Gala1-4Galb1-4GlcNAcb-Sp0	21637	51	75	0	194	3	18
34	326	Neu5Aca2-6Galb1-4GlcNAcb1-3Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	20528	48	1389	4	67	1	18
35	386	Fuca1-2Galb1-3GalNAca1-3(Fuca1-2)Galb1-4Glc-Sp0	20468	48	78	0	93	1	16
36	61	Fuca1-2Galb1-3GlcNAcb1-3Galb1-4Glc-Sp10	18146	42	100	0	171	2	15
37	69	Fuca1-2Galb1-4GlcNAcb1-3Galb1-4GlcNAcb-Sp0	17559	41	578	2	160	2	15
38	328	GalNAcb1-3Gala1-4Galb1-4GlcNAcb1-3Galb1-4Glc-Sp0	13028	30	2320	7	106	1	13
39	358	Gala1-3Galb1-4GlcNAcb1-2Mana1-3(Gala1-3Galb1-4GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	15845	37	26	0	110	1	13
40	355	Fuca1-2Galb1-3GlcNAcb1-2Mana1-3(Fuca1-2Galb1-3GlcNAcb1-2Mana1-6)Manb1-4GlcNAcb1-4GlcNAcb-Sp20	9477	22	123	0	543	7	10
41	225	Neu5Aca2-3Galb1-3GlcNAcb-Sp8	9939	23	1452	4	150	2	10

**Supplemental Table 8**  
**Concentration Dependent Ranking Analysis of Canine Galectin 9N**

Order	No.	Glycan Structure	Galectin Concentration						AVG RANK
			5 µg/ml		1 µg/ml		0.1 µg/ml		
			RFU <sub>Max</sub>	Rank	RFU	Rank	RFU	Rank	
1	369	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-3(GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	25949	100	5533	59	1244	100	86
2	28	[3OSO3]Galβ1-3GalNAcα-Sp8	18156	70	3477	37	775	62	56
3	26	[3OSO3]Galβ1-4[6OSO3]Glcβ-Sp8	14663	57	3149	33	838	67	52
4	333	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	19450	75	5337	57	202	16	49
5	379	Galβ1-3GalNAcα1-3(Fuca1-2)Galβ1-4Glc-Sp0	12617	49	3754	40	147	12	33
6	400	GalNAcα1-3GalNAcβ1-3Galα1-4Galβ1-4GlcNAcβ-Sp0	11292	44	3149	33	44	4	27
7	334	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	11428	44	2288	24	114	9	26
8	87	GalNAcα1-3(Fuca1-2)Galβ1-4Glcβ-Sp0	10716	41	2639	28	90	7	25
9	414	GalNAcα1-3GalNAcβ1-3Galα1-4Galβ1-4Glcβ-Sp0	9236	36	2694	29	31	2	22
10	25	[3OSO3]Galβ1-4[6OSO3]Glcβ-Sp0	5766	22	1553	16	284	23	20
11	456	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-6(GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-3)Manβ1-4GlcNAcβ1-4(Fuca1-6)GlcNAcβ-Sp20	8475	33	1233	13	24	2	16
12	370	Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-3(Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Manα1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	6161	24	1524	16	12	1	14
13	380	Galβ1-3GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAc-Sp0	6249	24	1177	12	16	1	13
14	34	[3OSO3]Galβ1-4[6OSO3]GlcNAcβ-Sp8	4534	17	1196	13	82	7	12
15	85	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ-Sp0	5049	19	1149	12	15	1	11
16	86	GalNAcα1-3(Fuca1-2)Galβ1-4GlcNAcβ-Sp8	4223	16	1171	12	7	1	10

**Supplemental Table 9**  
**Concentration Dependent Ranking Analysis of Canine Galectin 9C**

Order	No.	Glycan Structure	Galectin Concentration						AVG RANK
			5 µg/ml		1 µg/ml		0.1 µg/ml		
			RFU <sub>Max</sub>	Rank	RFU	Rank	RFU	Rank	
1	29	[3OSO3]Galβ1-3GlcNAcβ-Sp0	20597	97	9436	100	3244	83	93
2	33	[3OSO3]Galβ1-4[6OSO3]GlcNAcβ-Sp0	18021	85	9146	97	3357	86	89
3	34	[3OSO3]Galβ1-4[6OSO3]GlcNAcβ-Sp8	20275	95	5527	59	3909	100	85
4	30	[3OSO3]Galβ1-3GlcNAcβ-Sp8	21247	100	5601	59	3014	77	79
5	35	[3OSO3]Galβ1-4GlcNAcβ-Sp0	15734	74	6103	65	2017	52	63
6	370	Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Mana1-3(Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	15868	75	6298	67	902	23	55
7	36	[3OSO3]Galβ1-4GlcNAcβ-Sp8	14201	67	4521	48	1817	46	54
8	292	Neu5Aca2-3Galβ1-3GlcNAcβ1-3Galβ1-3GlcNAcβ-Sp0	10794	51	5300	56	1685	43	50
9	26	[3OSO3]Galβ1-4[6OSO3]Glcβ-Sp8	11425	54	5007	53	1266	32	46
10	25	[3OSO3]Galβ1-4[6OSO3]Glcβ-Sp0	10512	49	4827	51	928	24	41
11	245	Neu5Aca2-3Galβ1-3GlcNAcβ1-3Galβ1-4GlcNAcβ-Sp0	10961	52	4565	48	315	8	36
12	217	[3OSO3]Galβ1-4(Fuca1-3)[6OSO3]GlcNAc-Sp8	6536	31	3415	36	480	12	26
13	287	Galβ1-3GlcNAcβ1-3Galβ1-3GlcNAcβ-Sp0	7018	33	3115	33	316	8	25
14	24	[3OSO3]Galβ1-4Glcβ-Sp8	6604	31	3580	38	9	0	23
15	328	Neu5Aca2-6Galβ1-4GlcNAcβ1-3Galβ1-3GlcNAcβ-Sp0	6006	28	3169	34	7	0	21
16	373	Galα1-3(Fuca1-2)Galβ1-3GlcNAcβ1-2Mana1-3(Galα1-3(Fuca1-2)Galβ1-3GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp20	6186	29	2265	24	129	3	19
17	426	Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Mana1-3(Galα1-3(Fuca1-2)Galβ1-4GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4(Fuca1-6)GlcNAcβ-Sp12	3706	17	1329	14	106	3	11
18	323	Neu5Aca2-3Galβ1-4GlcNAcβ1-2Mana1-3(Neu5Aca2-3Galβ1-4GlcNAcβ1-2Mana1-6)Manβ1-4GlcNAcβ1-4GlcNAcβ-Sp12	3593	17	1343	14	51	1	11
19	452	Galα1-3Fuca1-2Galβ1-4GlcNAcβ1-3(Galα1-3Fuca1-2Galβ1-4GlcNAcβ1-6)GalNAc-Sp14	3145	15	1188	13	66	2	10