



Figure 1: Bundled GIN plot with associations with survival based on the training data (diamonds) and by cross-validation (crosses) using C-MYC as the reference gene. Note, the large selection bias for all bundles of genes.

	Gene Label	$\hat{\beta}_j$	\hat{p}_{j0}
1	MHC Class II=DR beta Clone=470953	-0.53	0.84
2	MHC Class II=DR alpha Clone=1241226	-0.53	0.83
3	MHC Class II=DR alpha Clone=117411	-0.49	0.8
4	MHC Class II=DR beta Clone=491166	-0.44	0.82
5	MHC Class II=DQ beta Clone=756030	-0.47	0.78
6	MHC Class II=DQ alpha Clone=756092	-0.52	0.73
7	MHC Class II=DP beta Clone=1317024	-0.46	0.73
8	MHC Class II=DP alpha Clone=207715	-0.53	0.73
9	MHC Class II=DQ alpha Clone=221619	-0.54	0.72
10	MHC Class II=DQ alpha Clone=593221	-0.56	0.71
11	MHC Class II=DQ beta Clone=753209	-0.42	0.75
12	MHC Class II=DR alpha Clone=1350713	-0.4	0.78
13	MHC Class II=DR alpha Clone=726209	-0.4	0.75
14	MHC Class II=DM alpha Clone=183337	-0.4	0.72
15	MHC Class II=DP alpha Clone=205283	-0.54	0.62
16	MHC Class II=DP beta Clone=741088	-0.3	0.72
17	MHC Class II=DM alpha Clone=162174	-0.31	0.68
18	MHC Class II=DM alpha Clone=259241	-0.3	0.68
19	MHC Class II=DM beta Clone=1670937	-0.31	0.62
20	MHC Class II=DP alpha Clone=703738	-0.43	0.42
21	invariant chain=Ia-associated invariant gamma-chain Clone=1240638	-0.47	0.67
22	invariant chain=Ia-associated invariant gamma-chain Clone=840681	-0.39	0.68
23	invariant chain=Ia-associated invariant gamma-chain Clone=685995	-0.37	0.68
24	MHC Class II=DM beta Clone=148231	-0.25	0.63
25	MHC Class II=DN alpha Clone=683914	-0.24	0.65
26	invariant chain=Ia-associated invariant gamma-chain Clone=725751	-0.37	0.64
27	IL-2/IL-4/IL-7/IL-9/IL-15 receptor common gamma chain Clone=17	-0.37	0.51
28	MHC Class I=HLA-A2 Clone=1242055	-0.32	0.55
29	Glucocorticoid receptor Clone=668127	-0.44	0.38
30	MHC Class I protein HLA-G Clone=1117041	-0.27	0.58
31	T cell receptor alpha chain Clone=67	-0.32	0.35
32	CD45=protein tyrosine phosphatase, receptor type, C Clone=1967959	-0.29	0.41
33	BRI=type II integral membrane protein Clone=214789	-0.31	0.36
34	CD9 Clone=306170	-0.29	0.39
35	CIITA-8=MHC Class II transactivator Clone=1241172	-0.23	0.51
36	MHC Class I=HLA-A2 Clone=81466	-0.23	0.5
37	Unknown UG Hs.120243 gamma-parvin Clone=712107	-0.27	0.4
38	MHC Class II=DR beta Clone=704162	-0.17	0.41
39	Alpha-Actinin 1 Clone=324077	-0.45	0.18
40	CIITA-8=MHC Class II transactivator Clone=1319866	-0.36	0.25

Table 1: Top ranked genes by GIN with weights $(\nu_o, \nu_e, \nu_c) = (.6, .2, .2)$ using MHC Class II DR clone as the reference gene.

	Gene Label	$\hat{\beta}_i$	\hat{p}_{j0}
1	Unknown UG Hs.172108 nucleoporin 88kD sc _i d9752 Clone=1290142	0.51	0.36
2	Unknown UG Hs.136645 ESTs Clone=2174896)	0.46	0.47
3	40S ribosomal protein S21 Clone=683210	0.43	0.59
4	Eukaryotic translation initiation factor 2 subunit 2 Clone=1675973	0.44	0.52
5	40S ribosomal protein S21 Clone=784012	0.43	0.47
6	ribosomal protein L5 pseudogene Clone=1283900	0.43	0.47
7	Unknown UG Hs.300912 ESTs Clone=1272595	0.4	0.54
8	Unknown Clone=1289995	0.4	0.55
9	Ribosomal protein S12 Clone=1269579	0.4	0.52
10	40S ribosomal protein S21 Clone=345676	0.39	0.58
11	Unknown UG Hs.77039 ribosomal protein S3A Clone=1982129	0.37	0.63
12	Unknown UG Hs.22635 ESTs sc _i d883 Clone=685413	0.38	0.54
13	Unknown UG Hs.228738 EST Clone=1371988	0.39	0.46
14	Unknown Clone=1982363	0.41	0.33
15	Ribosomal protein L37a Clone=1335421	0.39	0.44
16	Unknown UG Hs.61485 hypothetical protein sc _i d10749 Clone=1670765	0.41	0.29
17	Unknown UG Hs.120727 EST Clone=1284249	0.43	0.21
18	EF-1 alpha=Elongation factor 1-alpha Clone=725067	0.36	0.5
19	BAP37=hBAPB=B cell receptor associated protein Clone=683863	0.38	0.4
20	EF-1 alpha=Elongation factor 1-alpha Clone=824079	0.37	0.44
21	Unknown Clone=1337231	0.36	0.48
22	ribosomal protein L5 pseudogene Clone=700564	0.36	0.5
23	Mouse Hoxb2 Clone=7646)	0.36	0.51
24	Unknown UG Hs.147927 EST Clone=2000977	0.42	0.2
25	nm23-H2=NDP kinase B=Nucleoside diphosphate kinase B Clone=346948	0.34	0.59
26	CTP synthetase Clone=323644	0.38	0.38
27	Ribosomal protein S9 Clone=1087015	0.36	0.49
28	Phosphoribosyl pyrophosphate amidotransferase Clone=147056	0.32	0.78
29	Alanyl-tRNA synthetase Clone=2212574	0.39	0.27
30	Unknown Clone=2044088)	0.33	0.63
31	Bag-1=Bcl-2 interacting anti-apoptotic protein Clone=1322301	0.37	0.32
32	Unknown UG Hs.283106 hemoglobin, gamma A Clone=1968443	0.33	0.53
33	Ribosomal protein L27 Clone=272185	0.35	0.41
34	Unknown UG Hs.276938 EST, similar to 60S RIB L13 Clone=2075204	0.34	0.47
35	FEZ1-T=homologue of C. elegans unc-76 gene Clone=267078	0.32	0.6
36	Unknown UG Hs.15787 Homo sapiens mRNA Clone=485778	0.39	0.19
37	Unknown Clone=2138)	0.34	0.45
38	HINT=Histidine triad nucleotide-binding = kinase C inhibitor-I Clone=75415	0.37	0.26
39	FRAG1=FGF receptor activating protein FRAG1 Clone=703433	0.34	0.43
40	Ribosomal protein L32 Clone=1368302	0.34	0.41

Table 2: Top ranked genes $(\nu_o, \nu_e, \nu_c) = (.75, .25, .2)$ using C-MYC as the reference gene.