Supplementary Figures 1-13

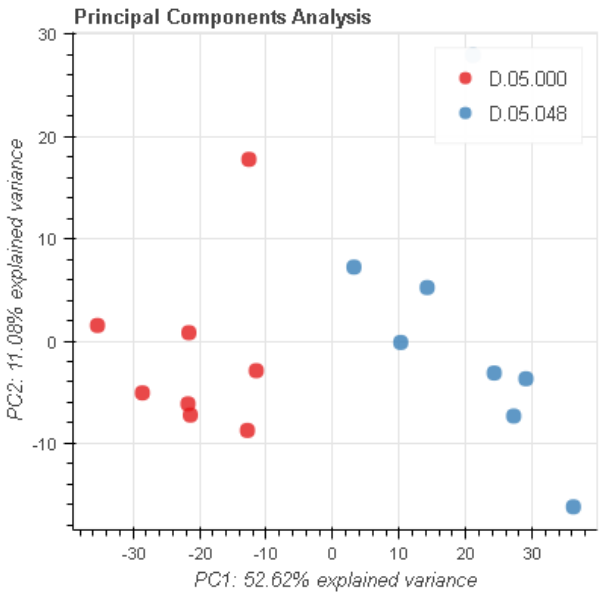
Blood immune transcriptome analysis of artificially fed dairy calves and naturally suckled beef calves from birth to 7 days of age

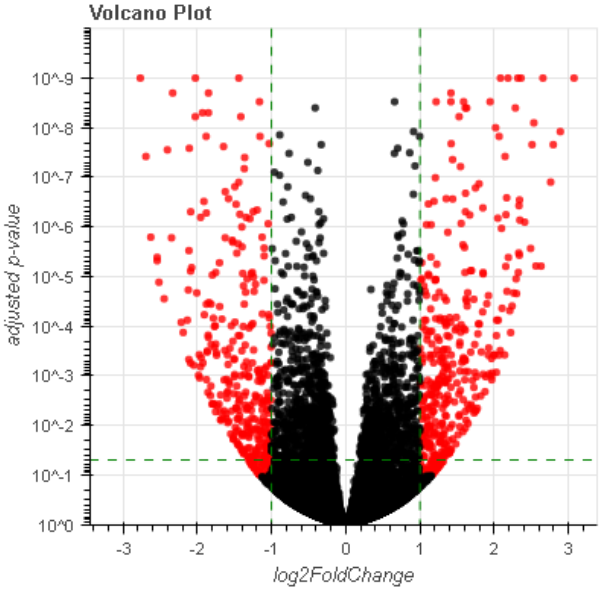
C. Surlis[1*], B. Earley[1], M. McGee[1], K. Keogh[1], P. Cormican[1], G. Blackshields[1], K. Tiernan[1], A. Dunn[2], S. Morrison[2], A.Arguello[1], S. M. Waters[1]

Supplementary Figure 1

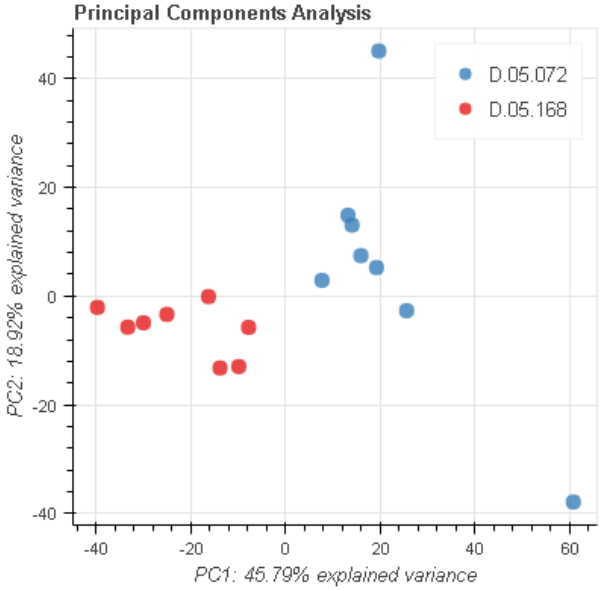
Comparing Dairy 5% over time

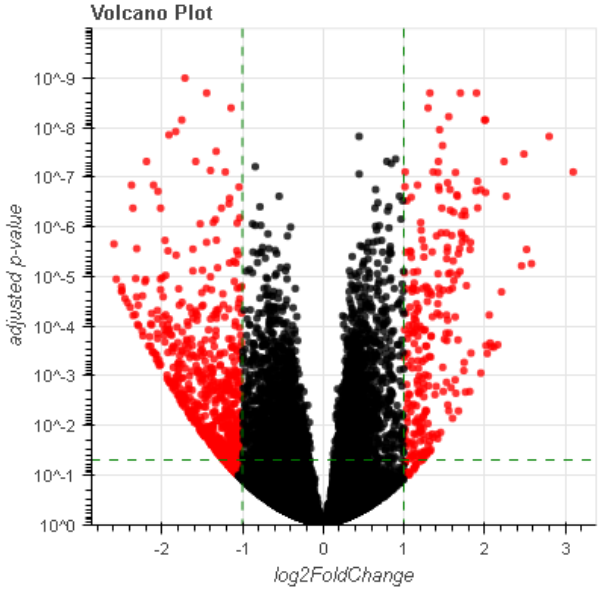
D.05.048 V D.05.000





D.05.168 V D.05.072



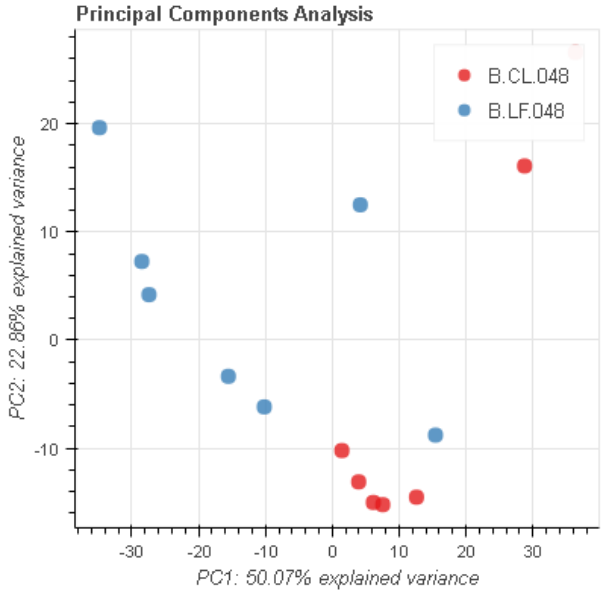


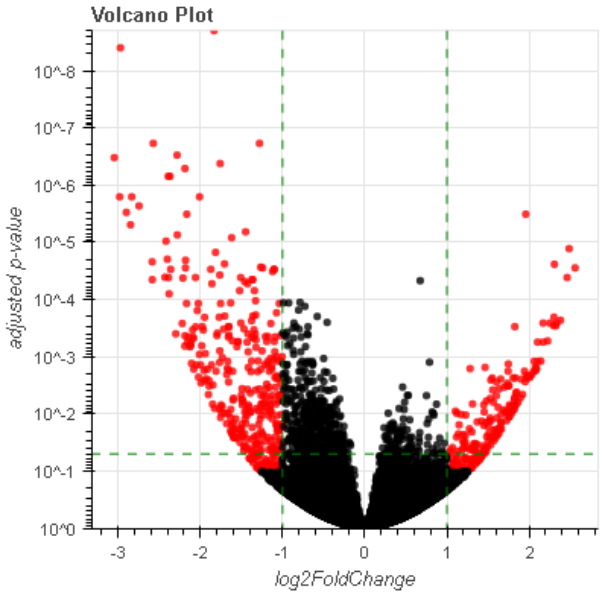
Supplementary Figure 2

Comparing Beef Breeds

Beef LF V Beef CL across timepoints

B.CL.048 V B.LF.048

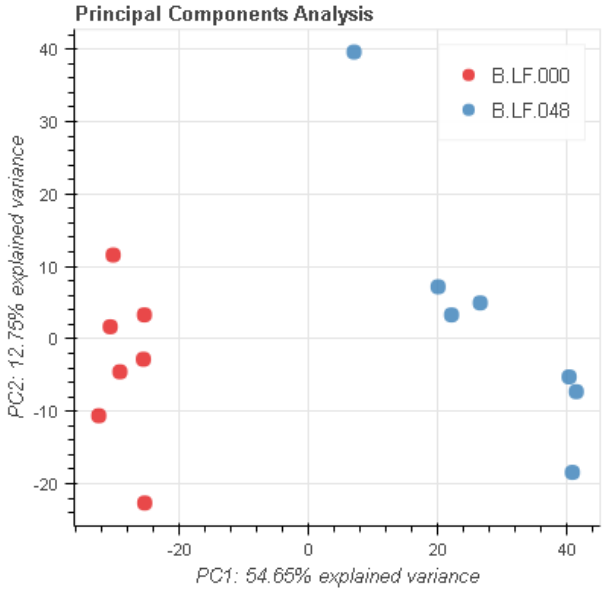


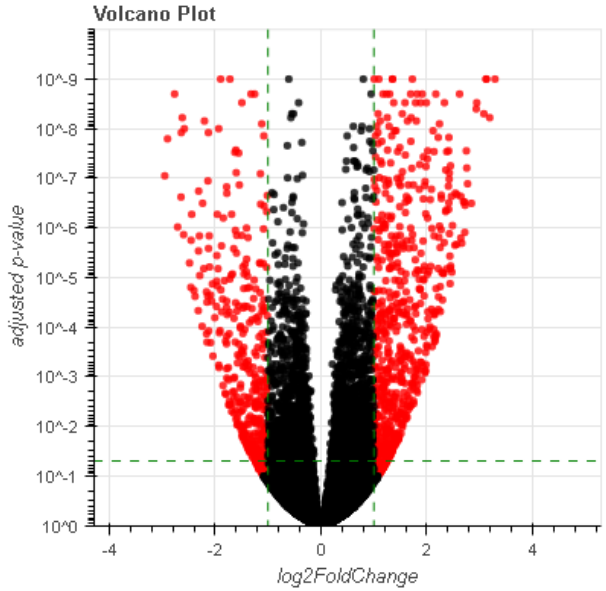


Supplementary Figure 3

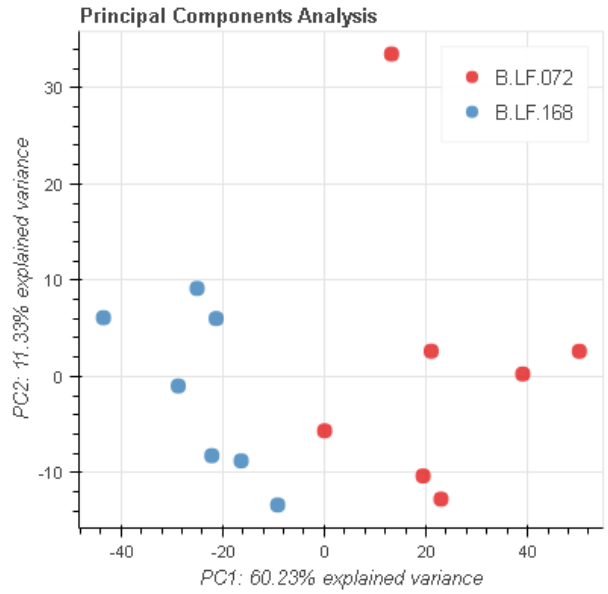
Beef LF across time

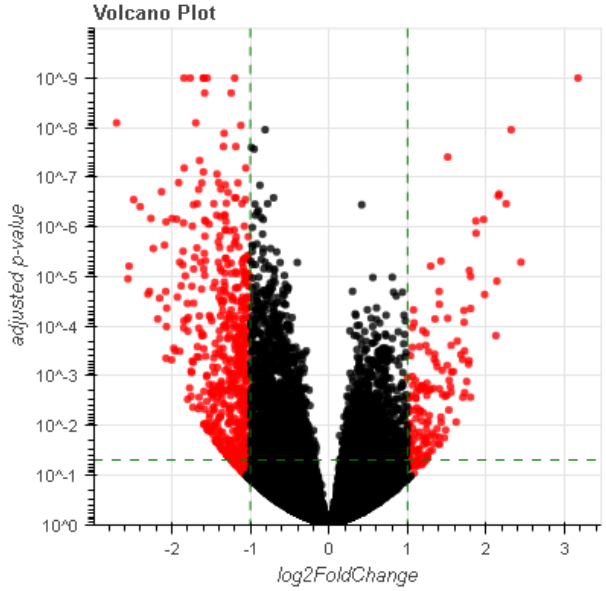
B.LF.048 V B.LF.000





B.LF.168 V B.LF.072

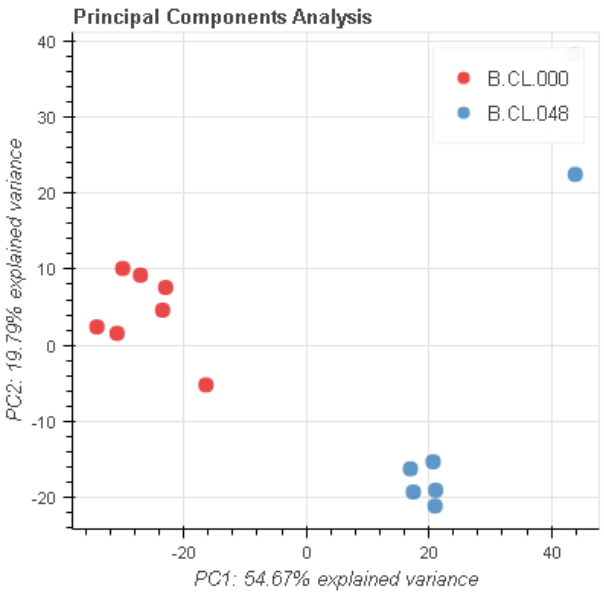


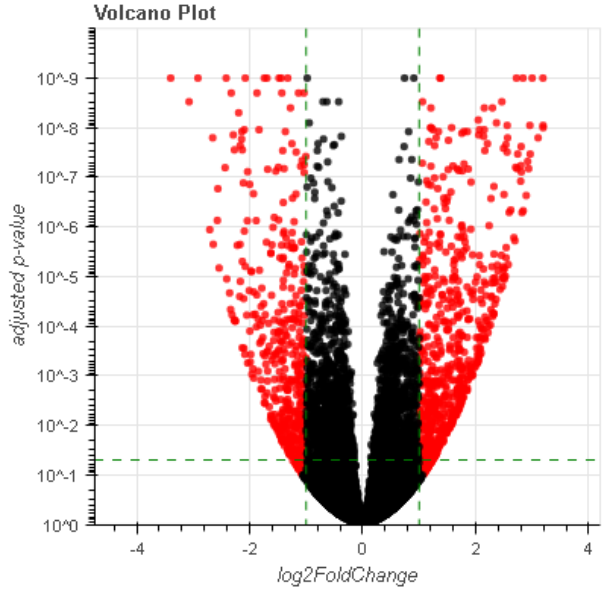


Supplementary Figure 4

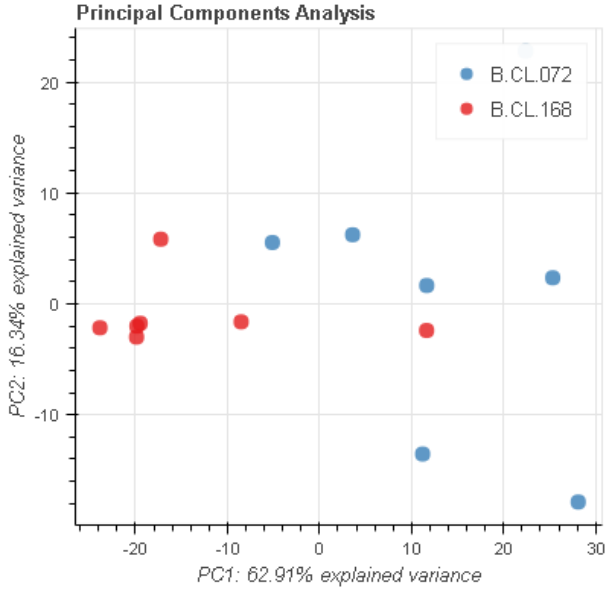
Beef CL across time

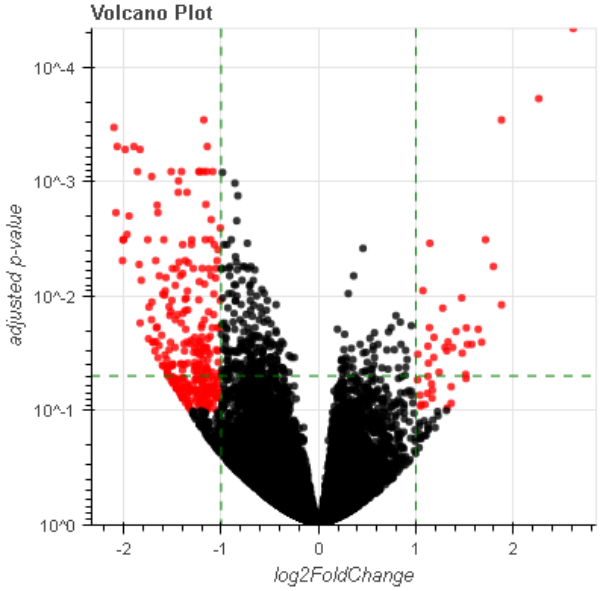
B.CL.048 V B.CL.000



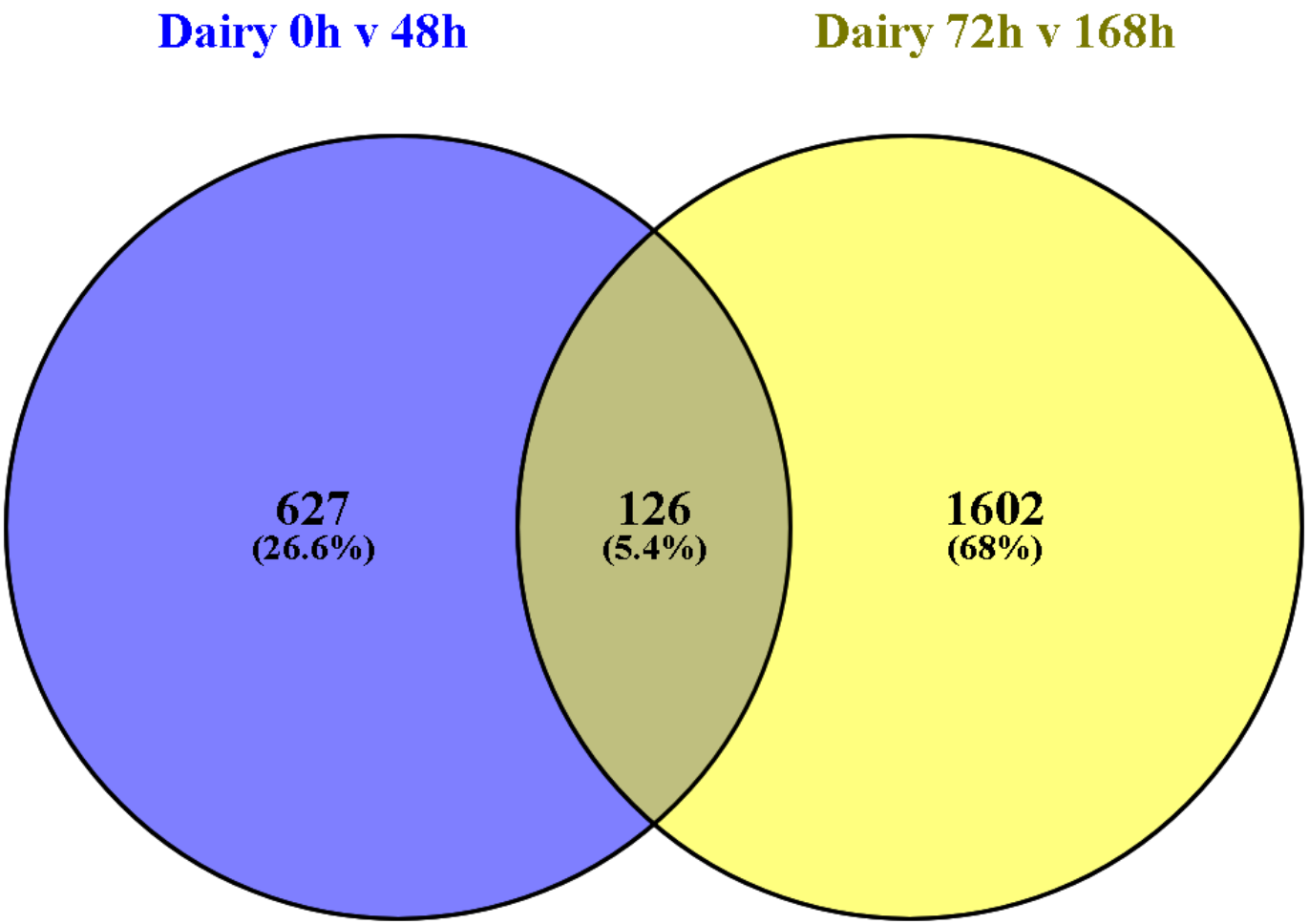


B.CL.168 V B.CL.072

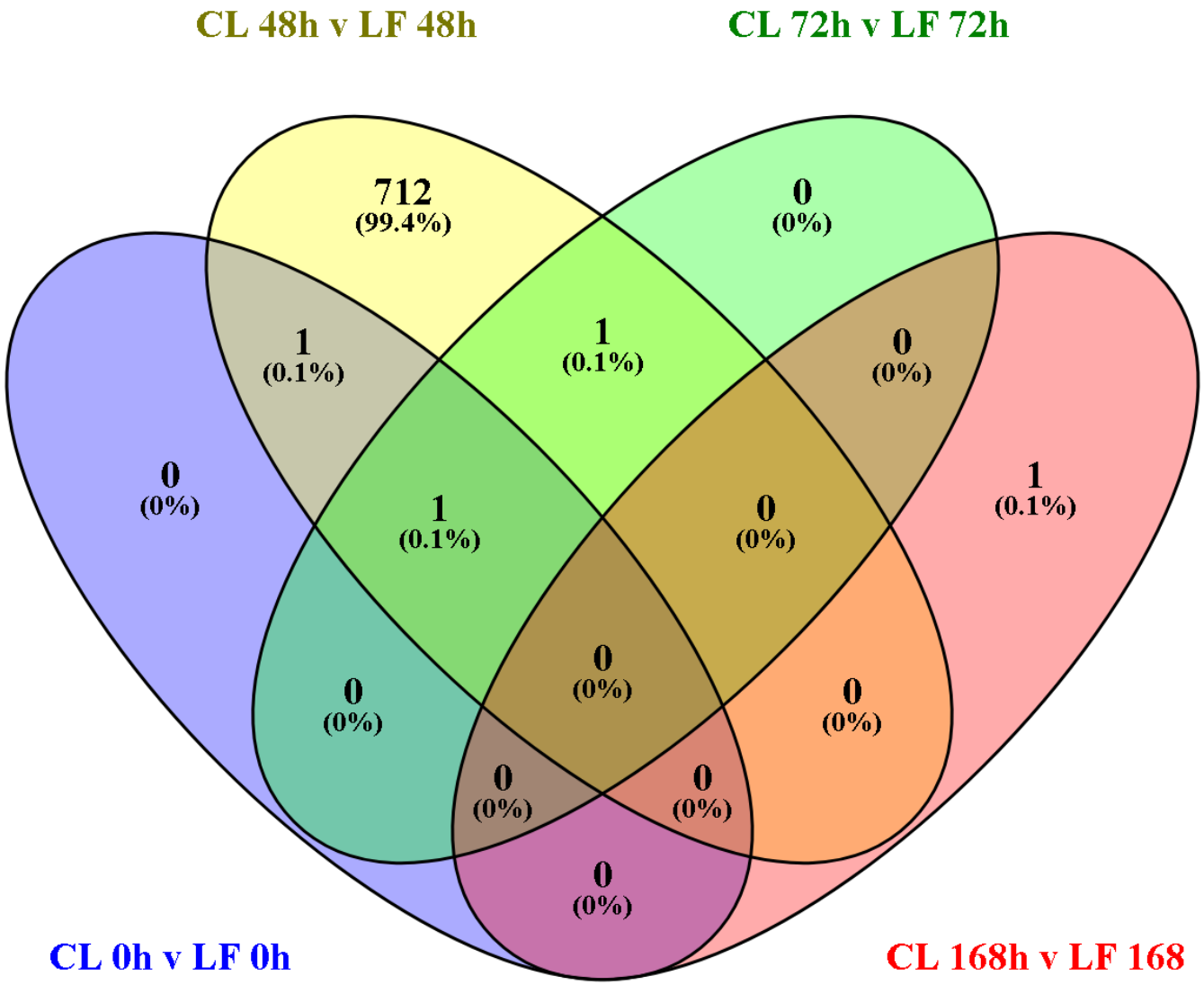




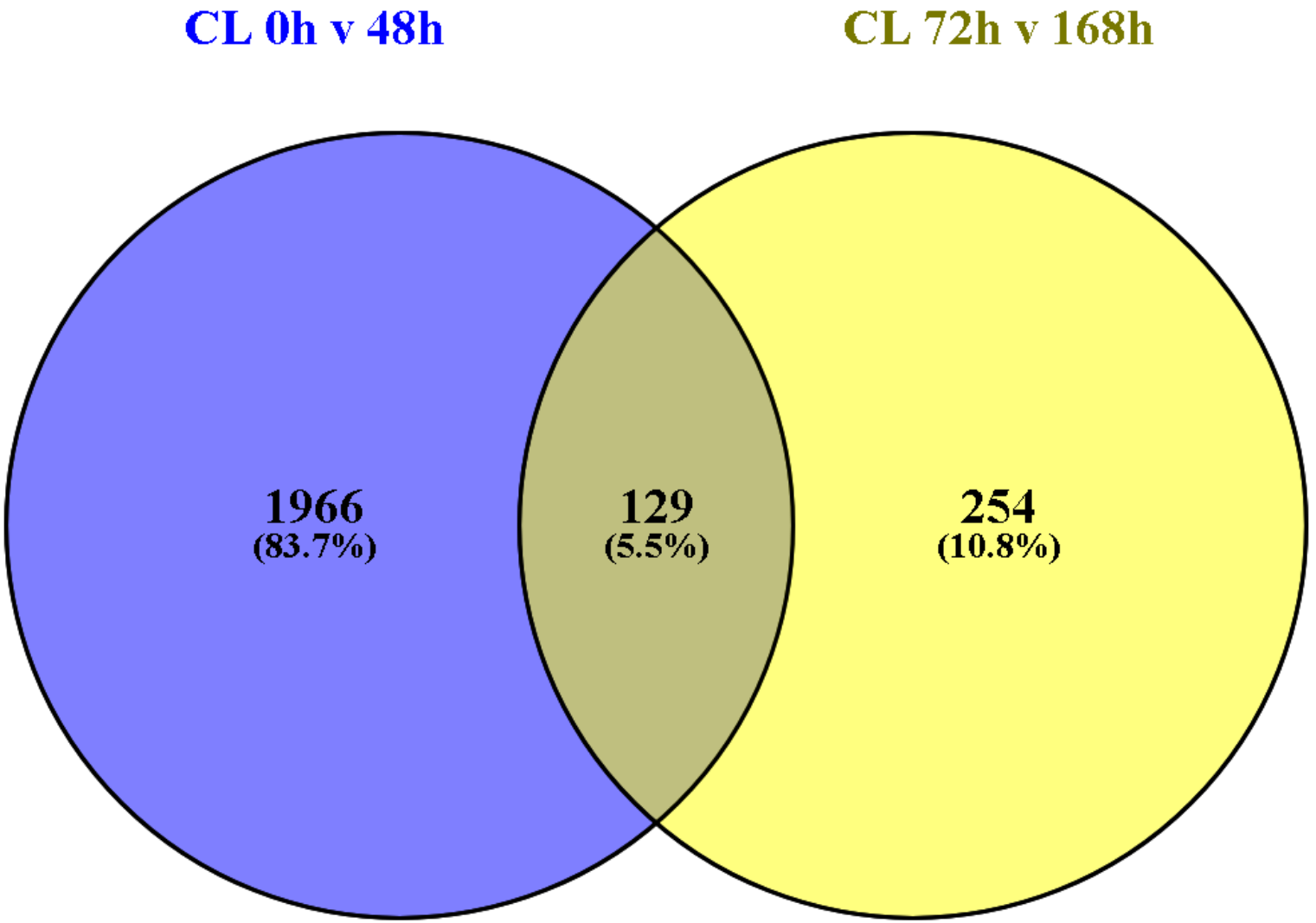
Supplementary Figure 5



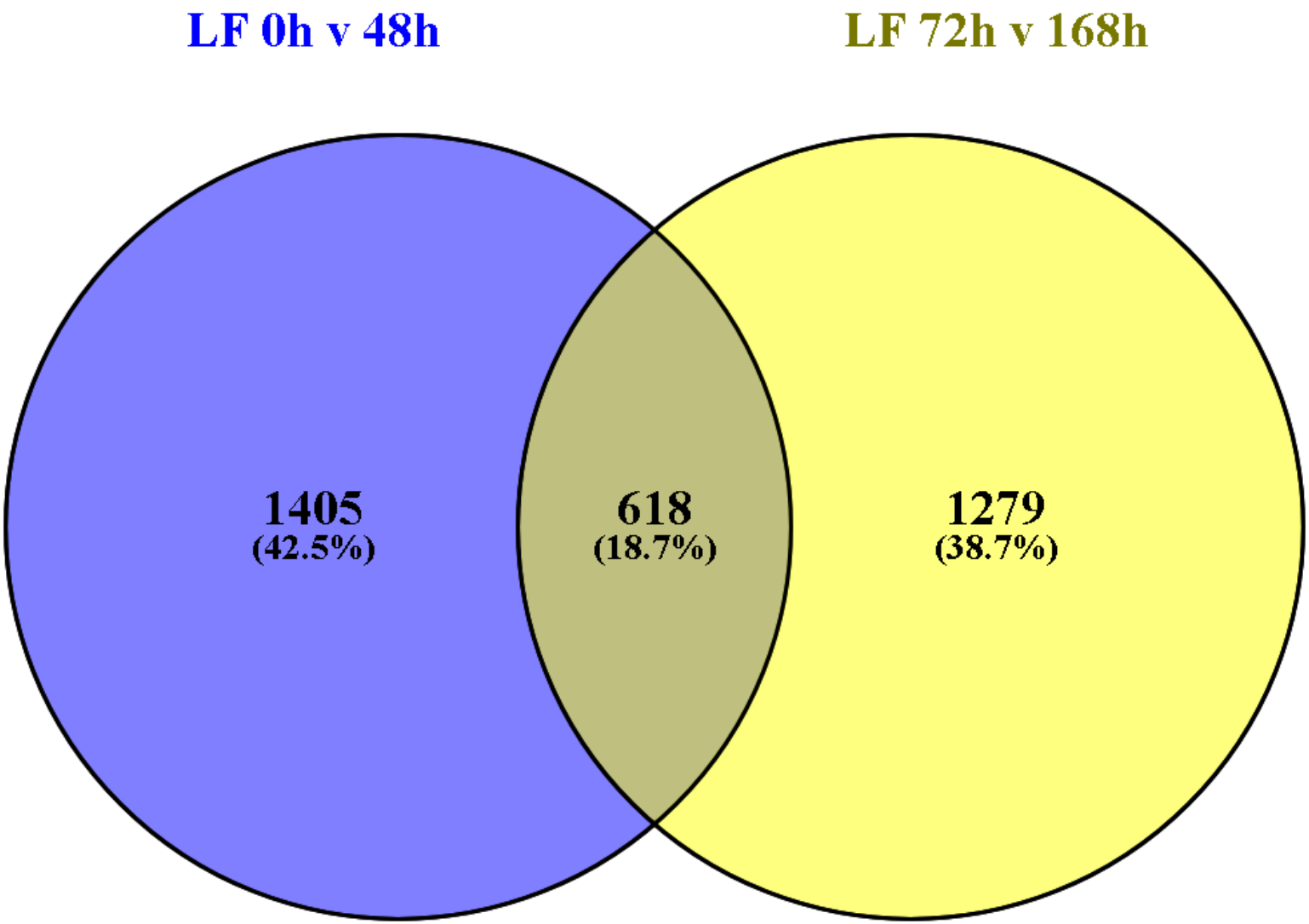
Supplementary Figure 6



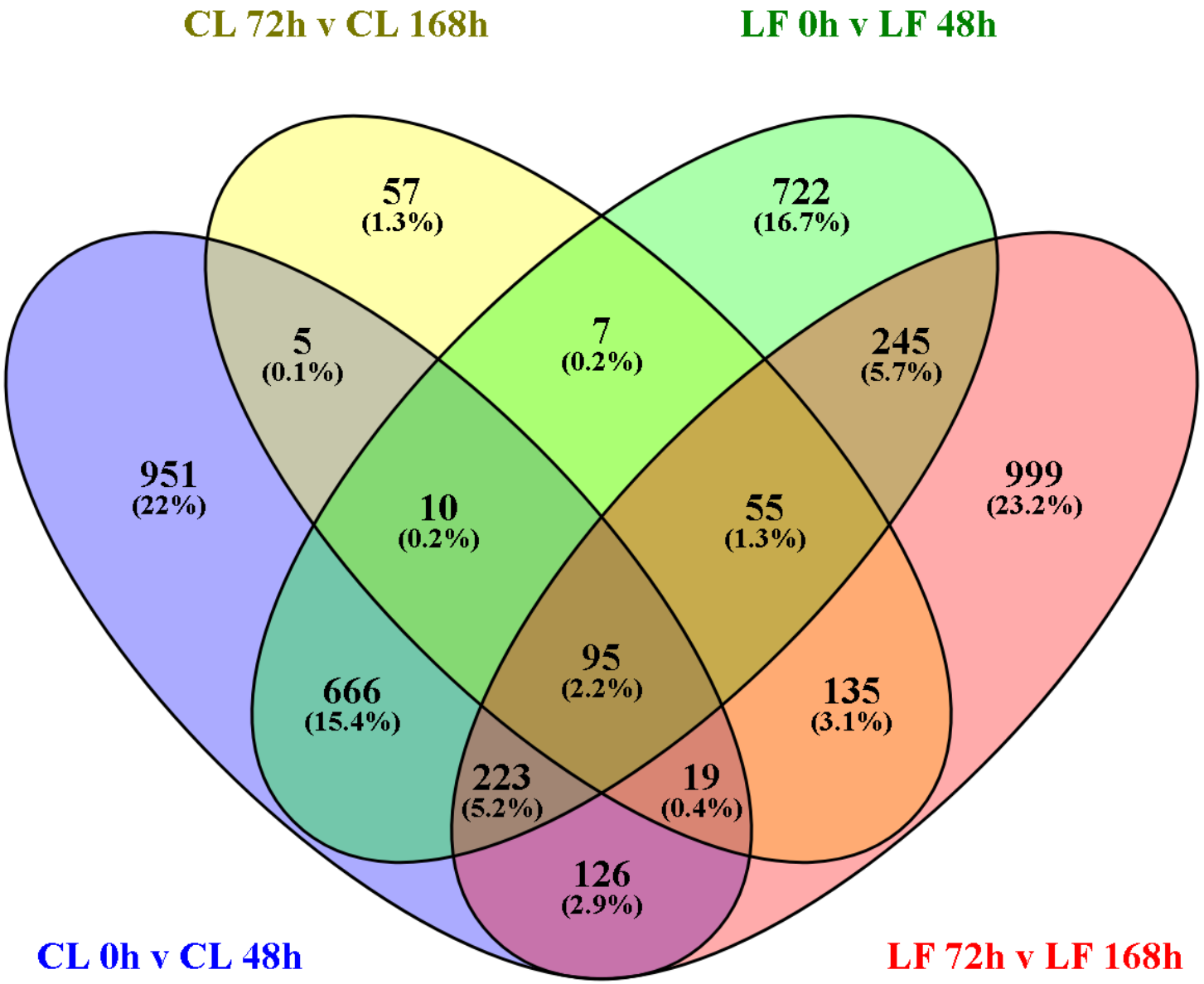
Supplementary Figure 7



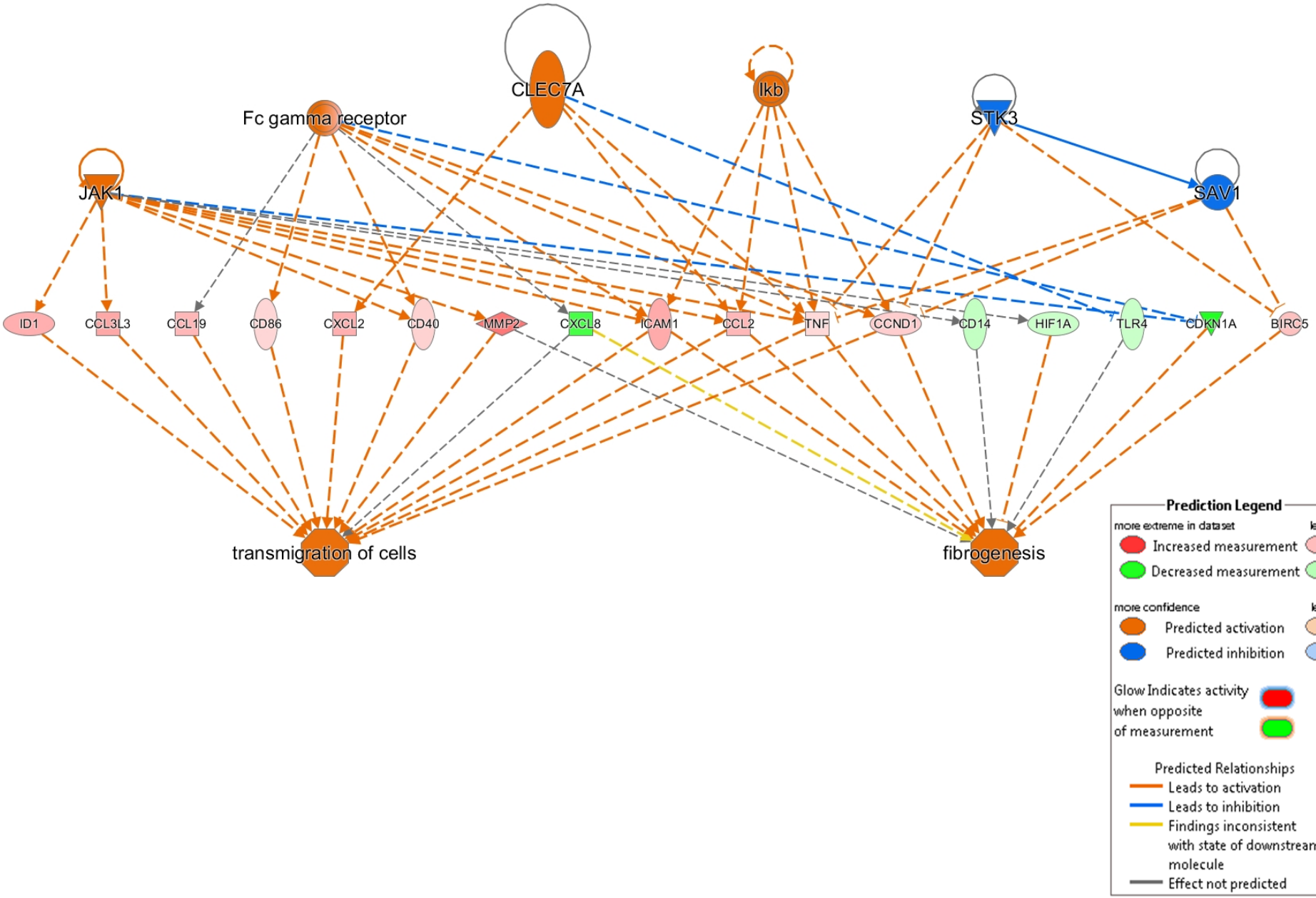
Supplementary Figure 8



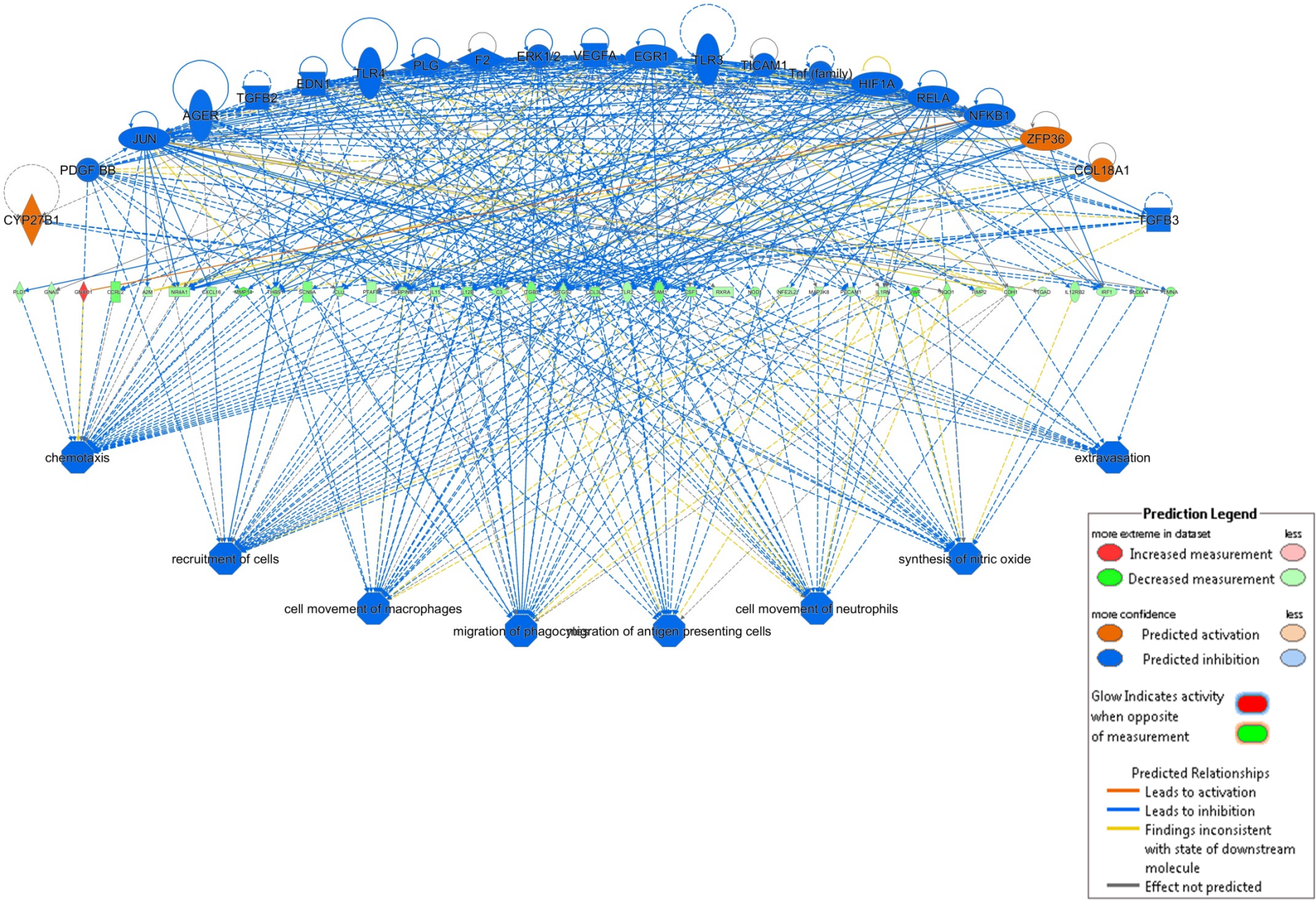
Supplementary Figure 9



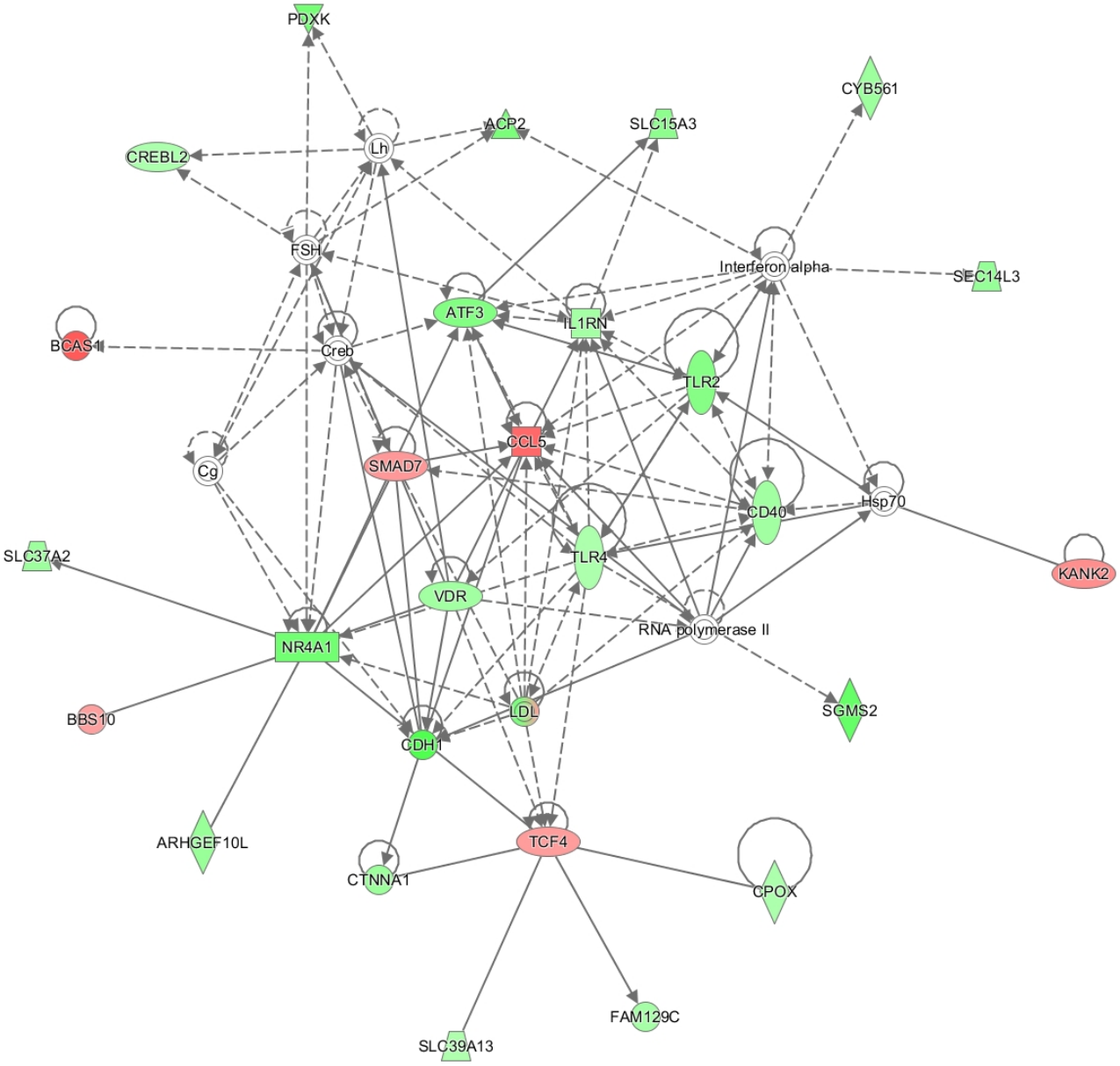
Supplementary Figure 10
Beef CL 48h v CL 0h
Fibrogenesis and transmigration of cells network regulators upregulated in 48hour



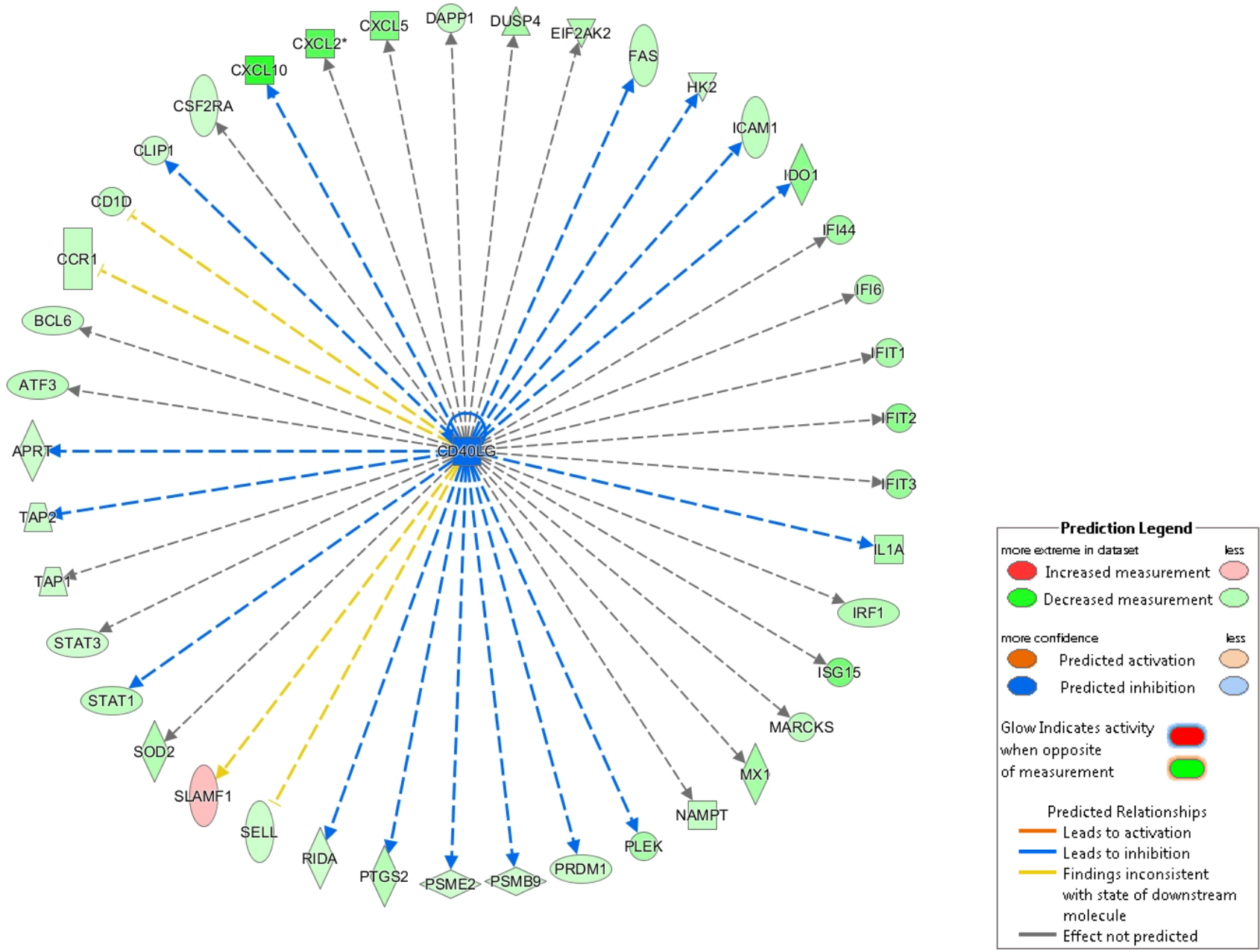
Supplementary Figure 11
Beef CL168h v CL 72h
Immune system overall responses inhibited at 168 hours



Supplementary Figure 12
Beef LF 168h v Beef LF 72h
Hematological System Development and Function, Immune Cell Trafficking, Inflammatory Response
Network 14



Supplementary Figure 13
Beef CL 48 v LF 48
Inhibition of CD40l in CL48- The cytokine that binds to CD40



Supplementary Table 1
Calf milk replacer and concentrate composition
DM (dry matter); CP (Crude protein)

Chemical composition	**Calf diet**		
	Milk replacer	Concentrate	Straw
Oven DM[1] (g/kg fresh)	972	916	882
Composition of DM (g/kg)			
Nitrogen	36.6	29.6	5.7
NDF[2]	-	347.5	869.3
ADF[3]	-	175.9	530.5
Ash	75.1	75.4	47.3
Ether extract	201.9	42.4	13.9
CP[2] (%)	22.8	18.5	3.6