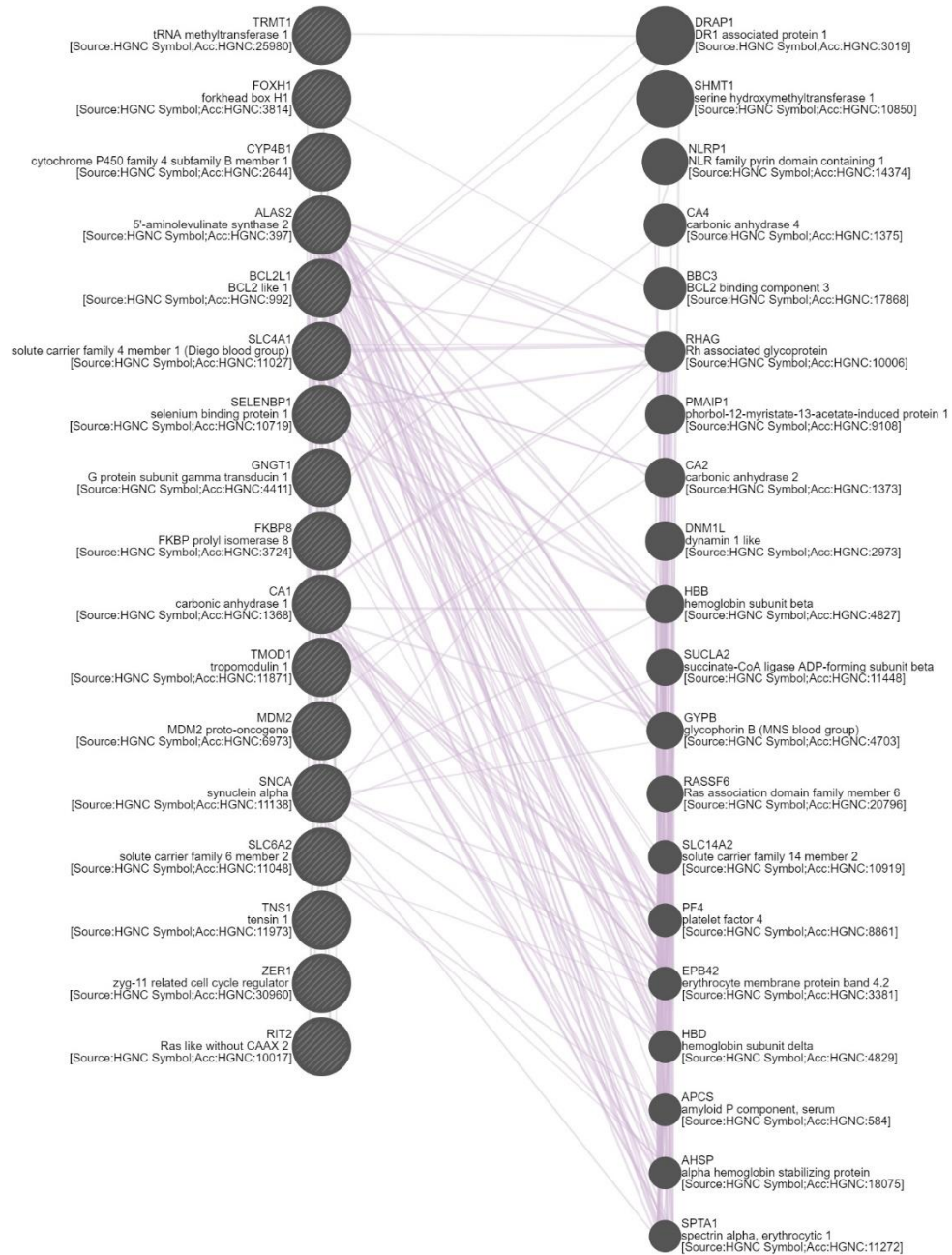
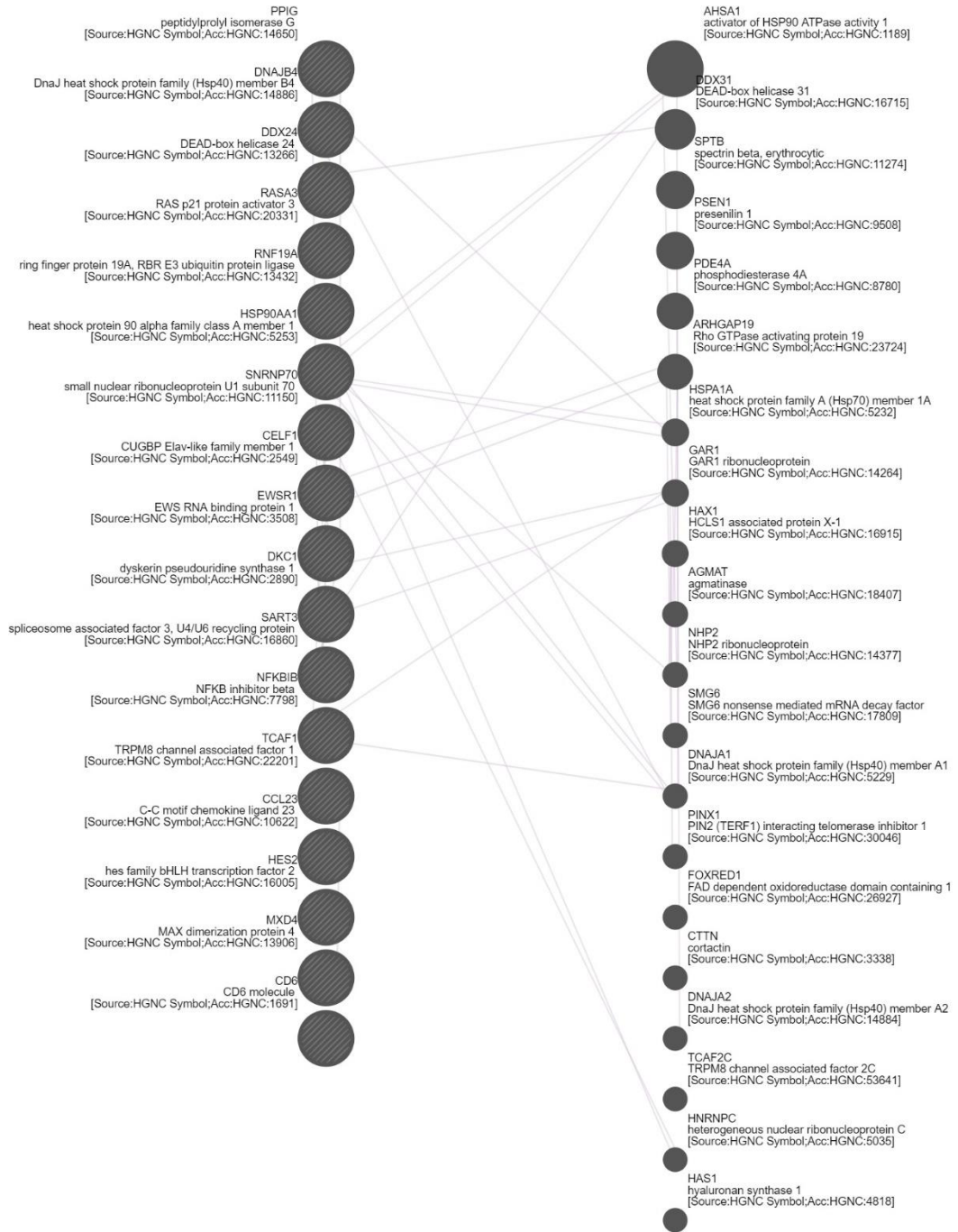


# Supplementary files



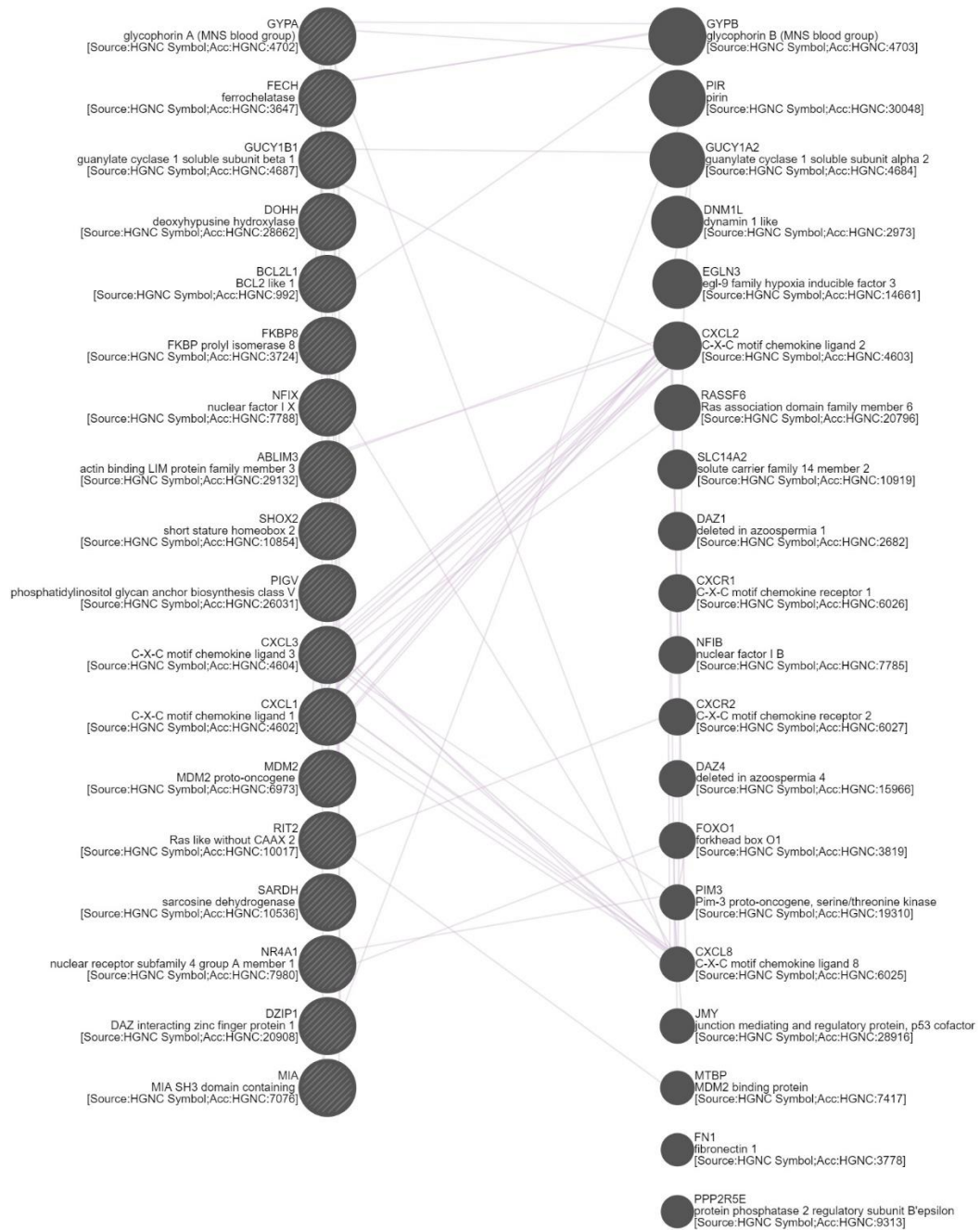
**Supplementary 1:** Co-expression of upregulated genes in UC by Genemania.

A larger dot size represents a stronger relationship, while a smaller dot size suggests a weaker relationship.



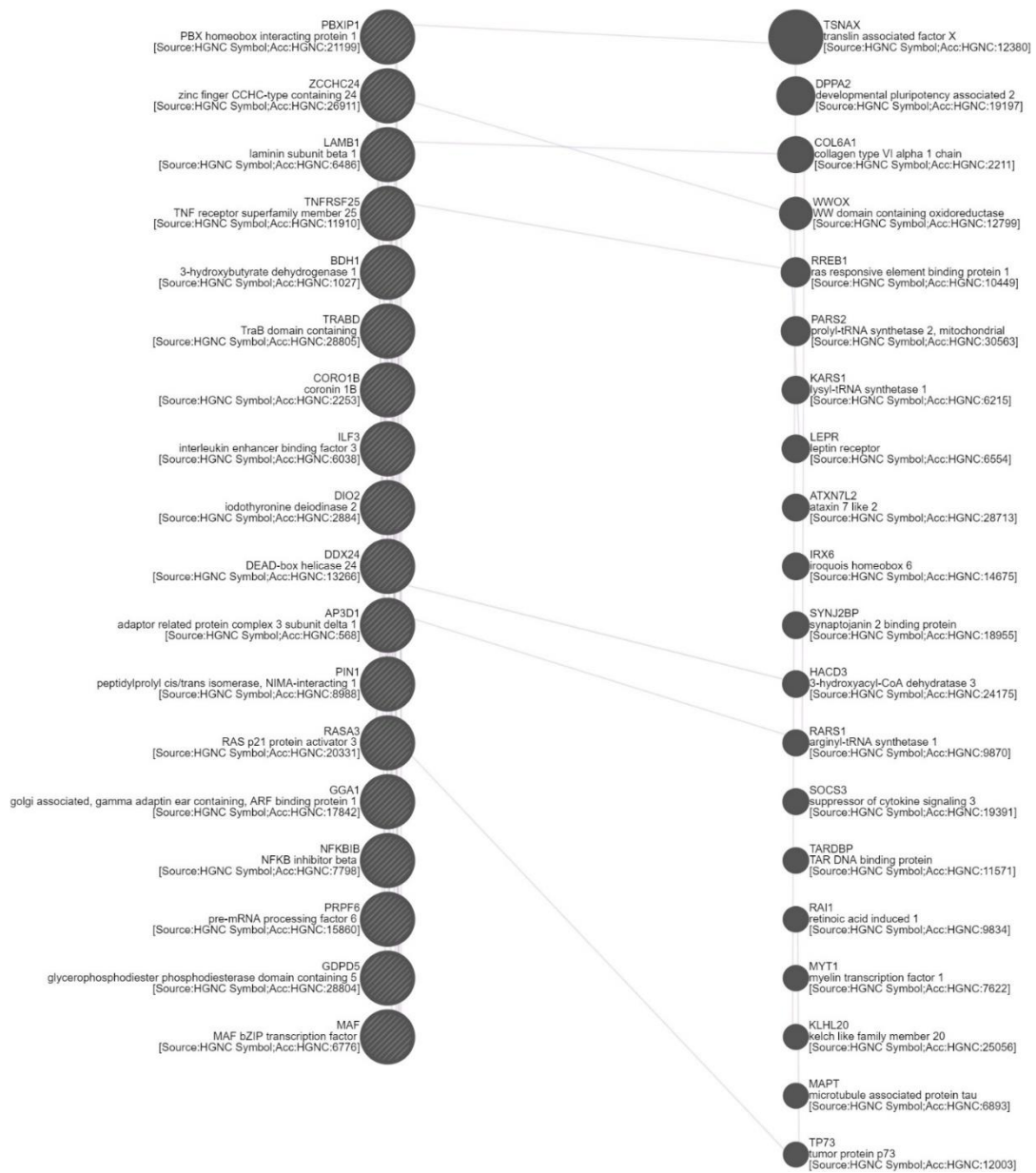
## Supplementary 2: Co-expression of downregulated genes in UC by Genemania.

A larger dot size represents a stronger relationship, while a smaller dot size suggests a weaker relationship.



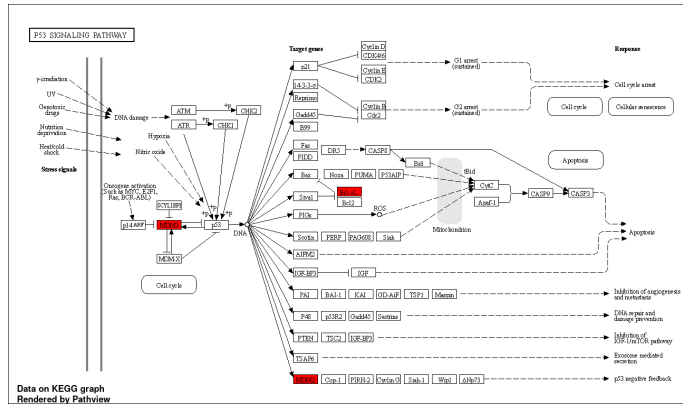
### Supplementary 3: Co-expression of upregulated genes in CD by Genemania.

A larger dot size represents a stronger relationship, while a smaller dot size suggests a weaker relationship.

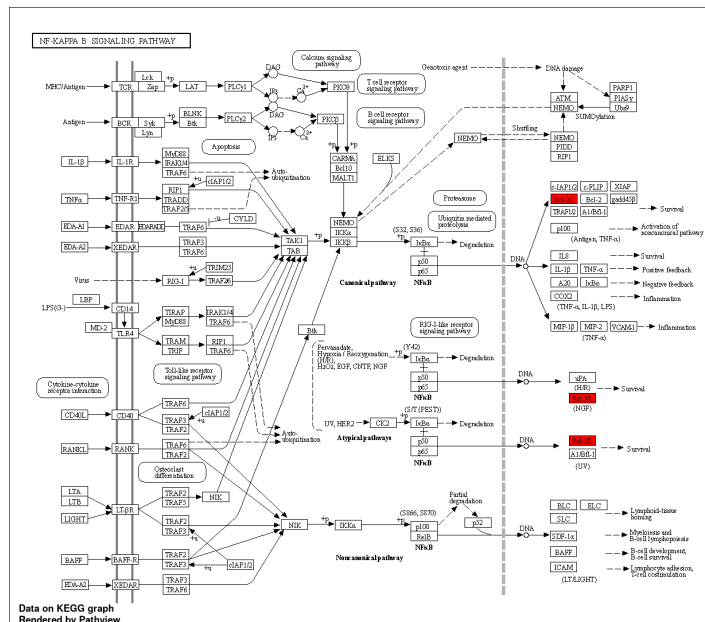


#### Supplementary 4: Co-expression of downregulated genes in CD by *Genemanina*.

A larger dot size represents a stronger relationship, while a smaller dot size suggests a weaker relationship.



Supplementary 5: BCL2L1 and MDM2 in p53 signaling pathway.



Supplementary 6: BCL2L1 and MDM2 in NF-κB signaling pathway.