

WGCNA module annotation

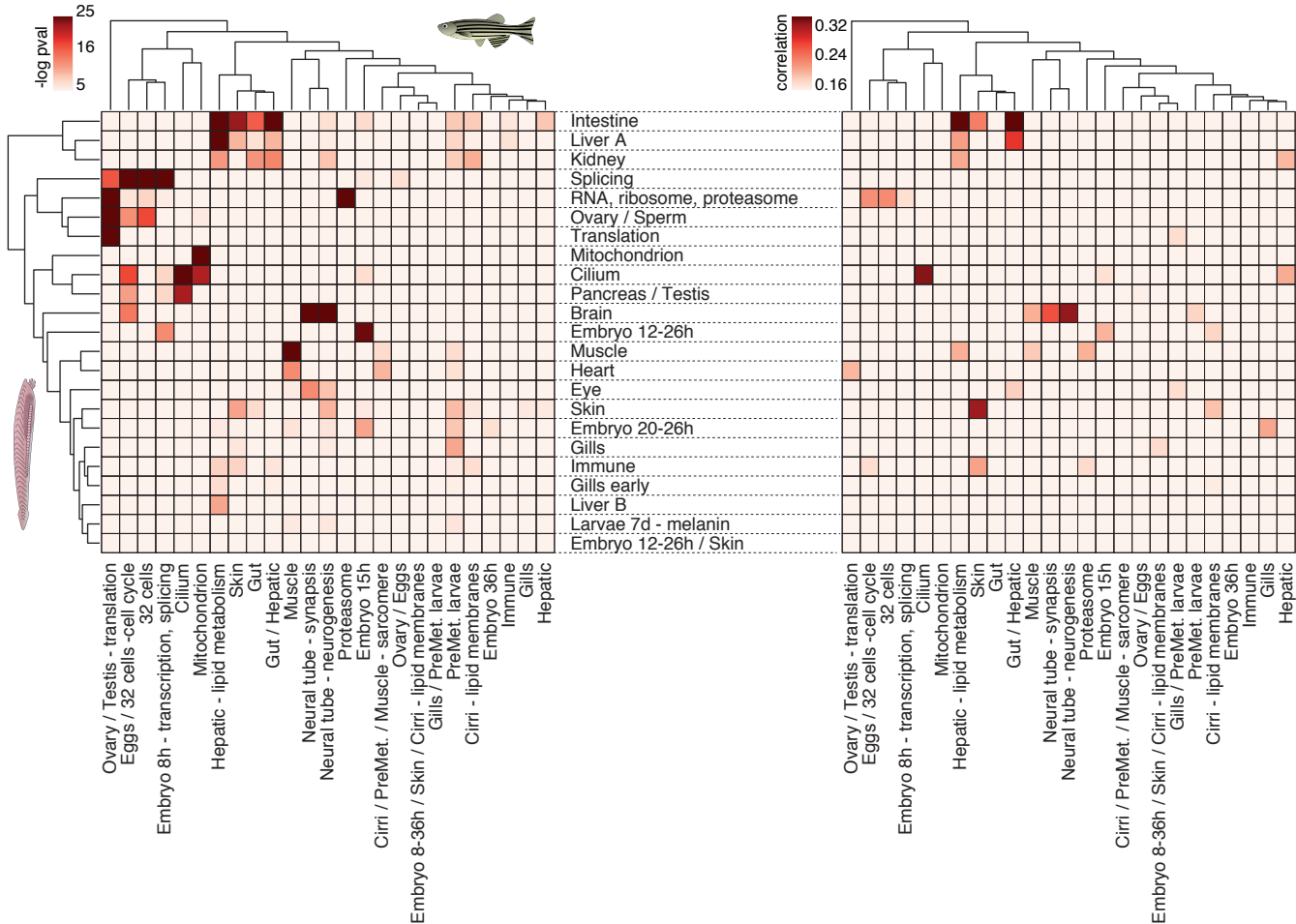
1. Amphioxus and zebrafish module annotation & comparisons.....page 2
 - a. Module color & annotated names
 - b. Amphioxus & zebrafish module comparisons (genes and TF-motifs, as in Fig.4)
2. Clustered heatmap of TF-motifs vs amphioxus & zebrafish modules.....page 3
 - a. WGCNA modules from the two species are plotted against all motif clusters. The values visualized are the z-scores of each motif in each module. Modules and motifs are clustered based on the correlation of the visualized z-scores
 - b. TF motif clusters and their corresponding associated gene symbols. Clusters are sorted first by number of associated genes and then by their ID number
3. Amphioxus module RNA-seq expression and GO terms.....page 4
4. Zebrafish module RNA-seq expression and GO terms.....page 29

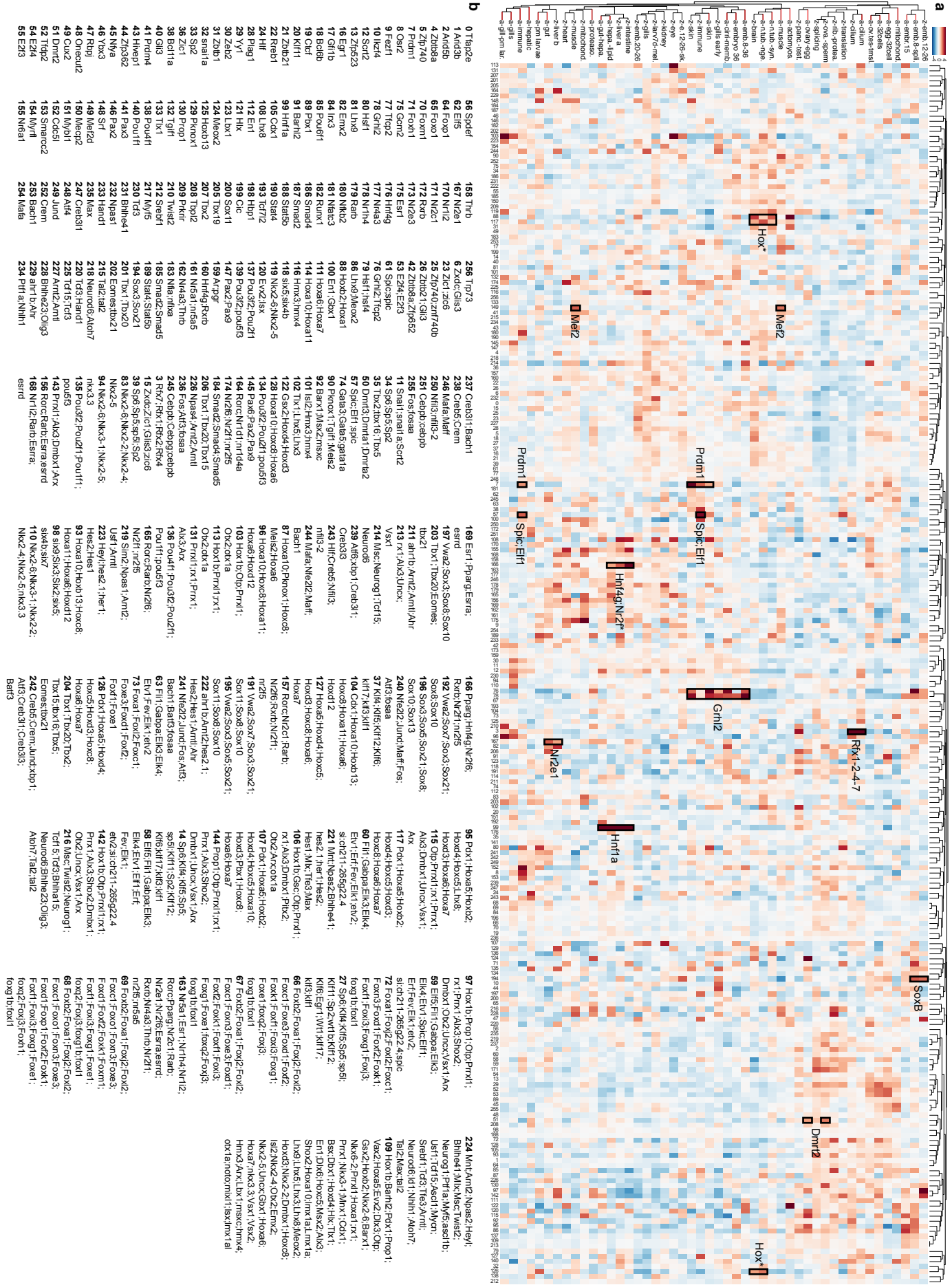
a***B. lanceolatum* WGCNA modules annotation**

Module Color	Module annotated name
black	32 cells
blue	Neural tube - synopsis
brown	Gills
cyan	Neural tube - neurogenesis
darkmagenta	Ovary / Testis - translation
darkorange	Cilium
darkred	Muscle
darkseagreen4	Embryo 8-36h / Skin / Cirri - lipid membranes
darkslateblue	Embryo 8h - transcription, splicing
darkturquoise	Embryo 36h
green	Eggs / 32 cells -cell cycle
greenyellow	Hepatic - lipid metabolism
lavanderblush3	Cirri / PreMet. / Muscle - actomyosin
lightpink4	Embryo 15h
magenta	Skin
navajowhite2	Immune
palevioletred3	Ovary / Eggs
pink	Gut
plum1	Gut / Hepatic
plum2	Proteasome
red	PreMet. larvae
salmon	Cirri - lipid membranes
sienna3	Hepatic
thistle2	Gills / PreMet. larvae
turquoise	Mitochondrion

***D. rerio* WGCNA modules annotation**

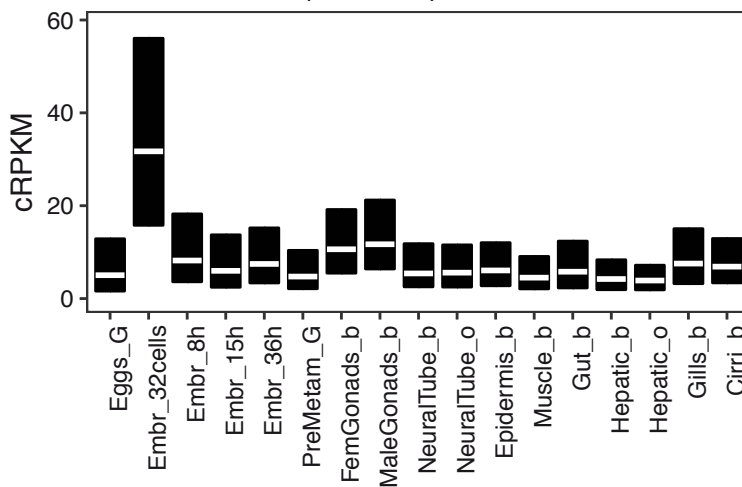
Module Color	Module annotated name
bisque4	Larvae 7d - melanin
black	Ovary / Sperm
blue	Brain
brown	Cilium
brown4	Liver B
coral2	Mitochondrion
darkgreen	Intestine
darkgrey	RNA, ribosome, proteasome
darkmagenta	Translation
darkorange	Muscle
darkred	Liver A
darkseagreen4	Embryo 12-26h / Skin
darkslateblue	Immune
green	Splicing
honeydew1	Embryo 12-26h
ivory	Eye
lightcyan	Heart
lightgreen	Pancreas / Testis
magenta	Gills
pink	Skin
salmon	Embryo 20-26h
yellow4	Kidney
yellowgreen	Gills early

b

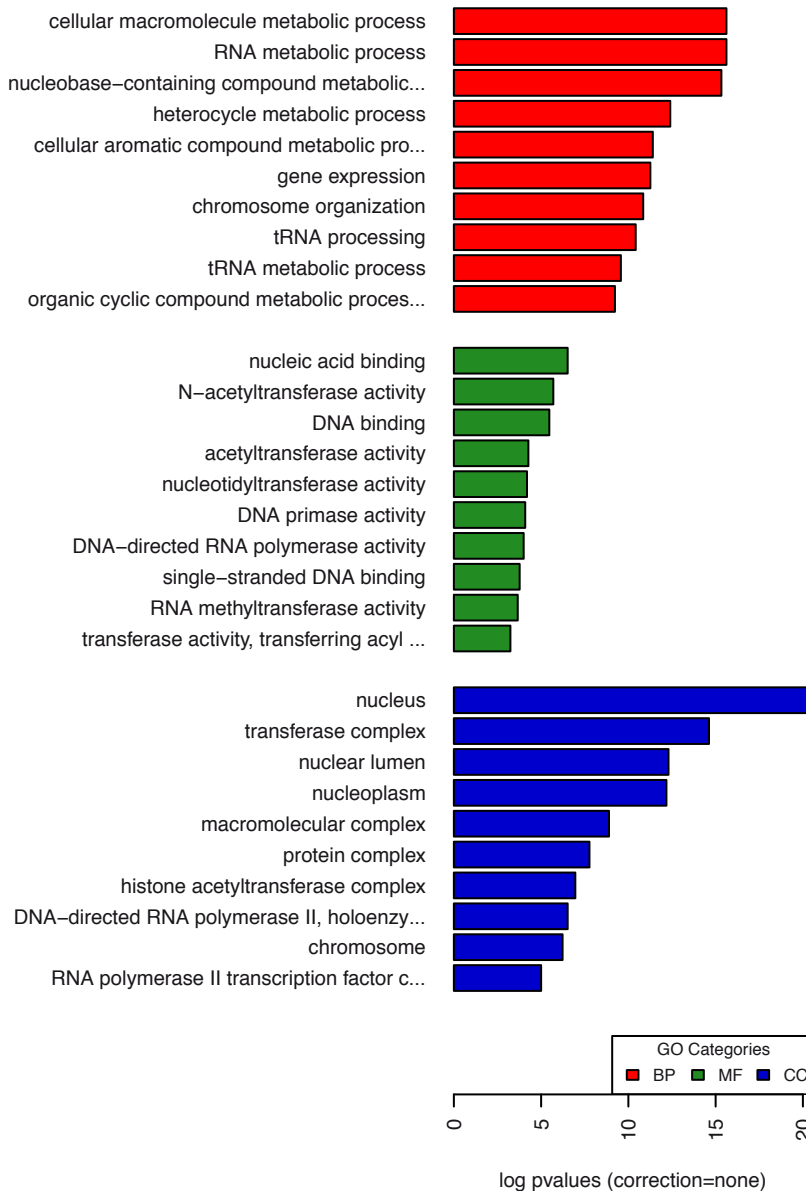


***B. lanceolatum* modules**

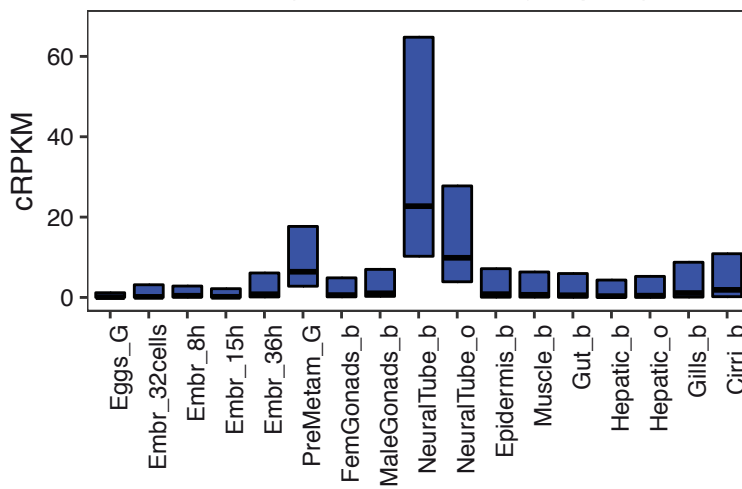
Module:black (32 cells)



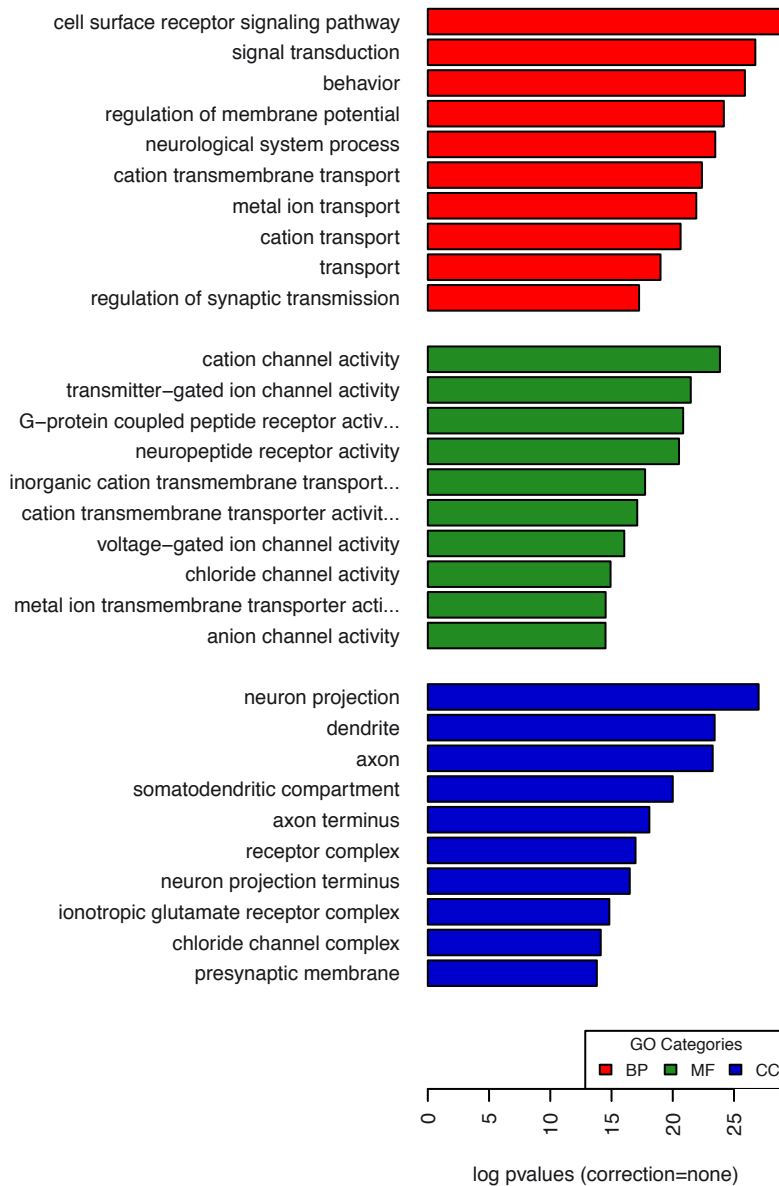
TopGO results



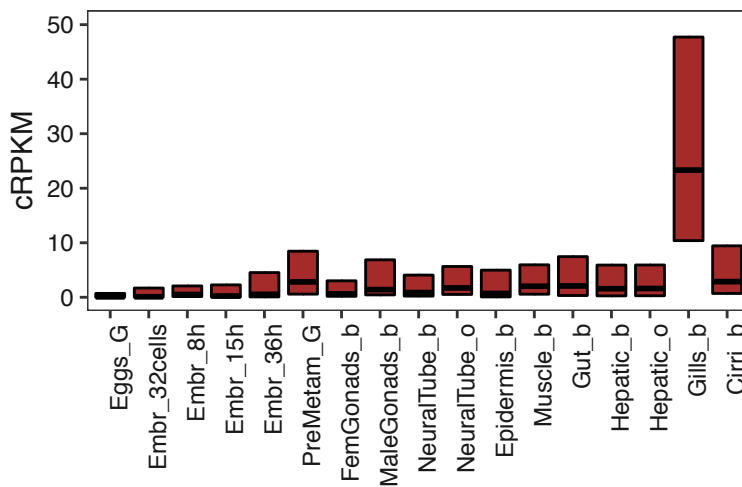
Module:blue (Neural tube - synopsis)



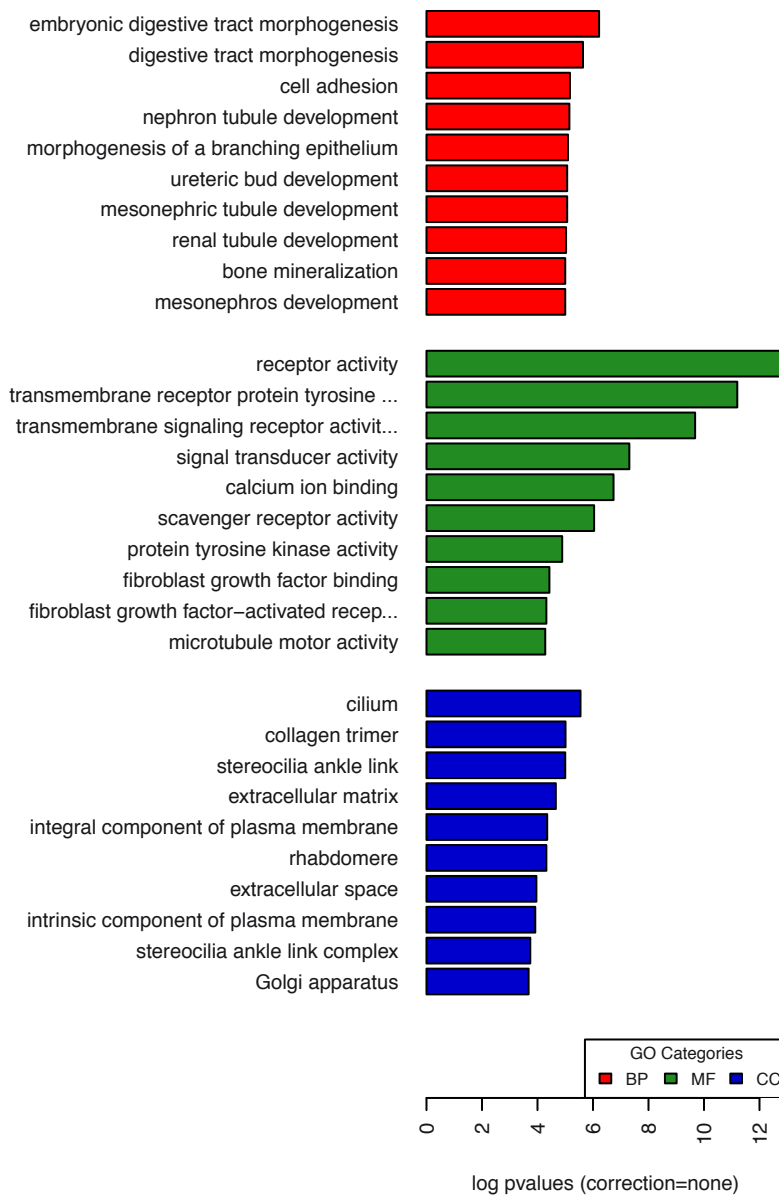
TopGO results



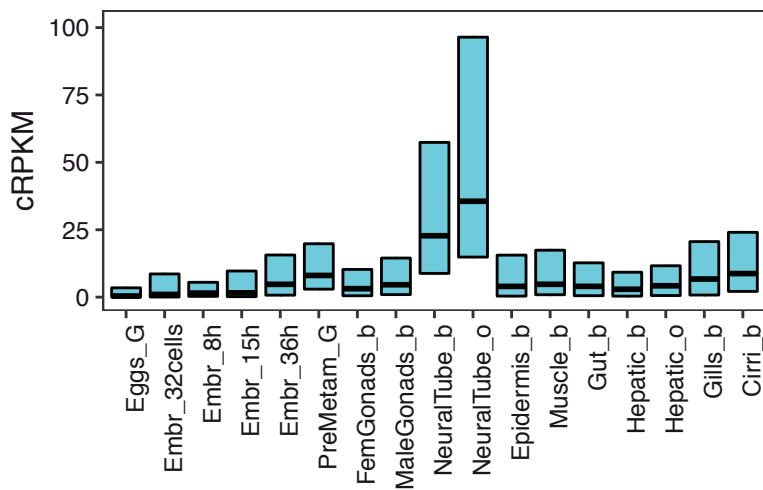
Module:brown (Gills)



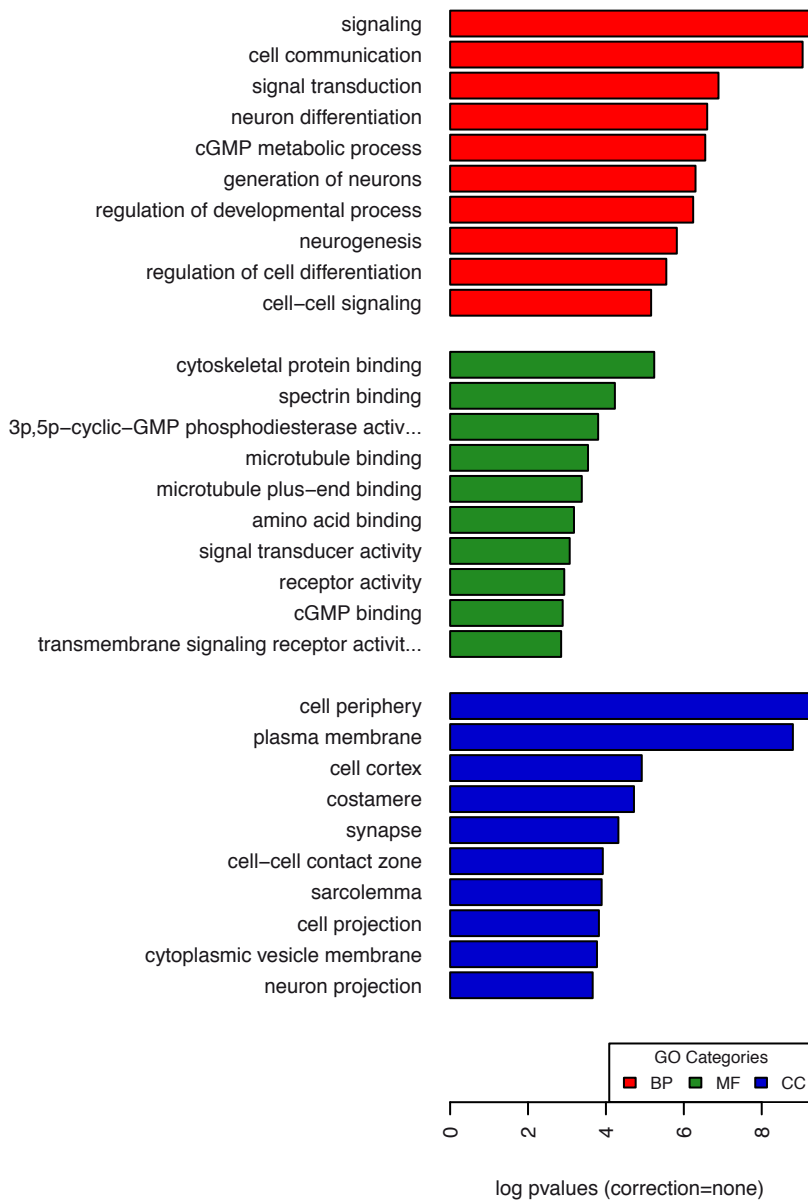
TopGO results



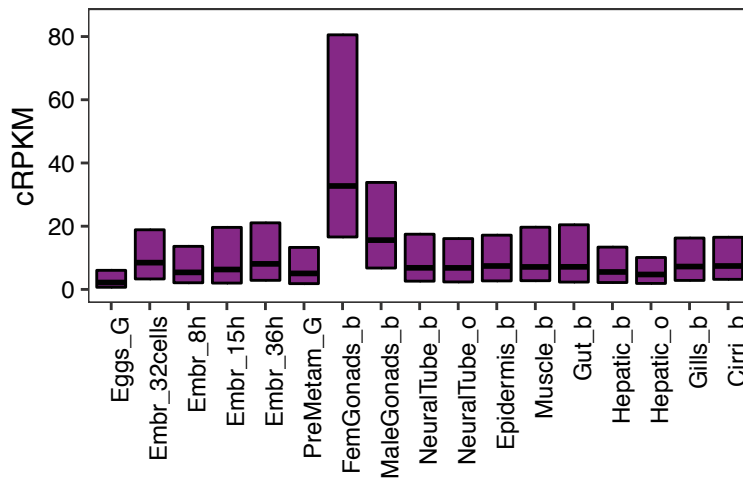
Module:cyan (Neural tube - neurogenesis)



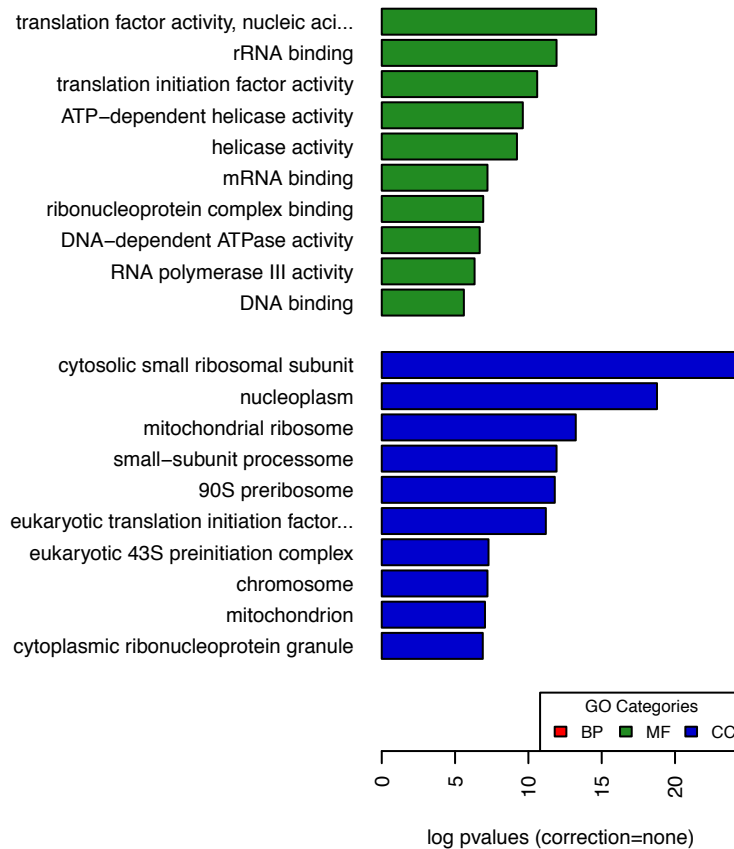
TopGO results



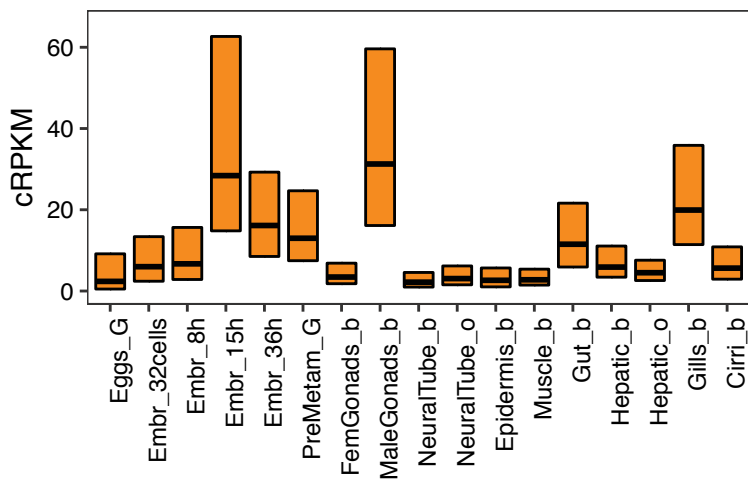
Module:darkmagenta (Ovary / Testis - translation)



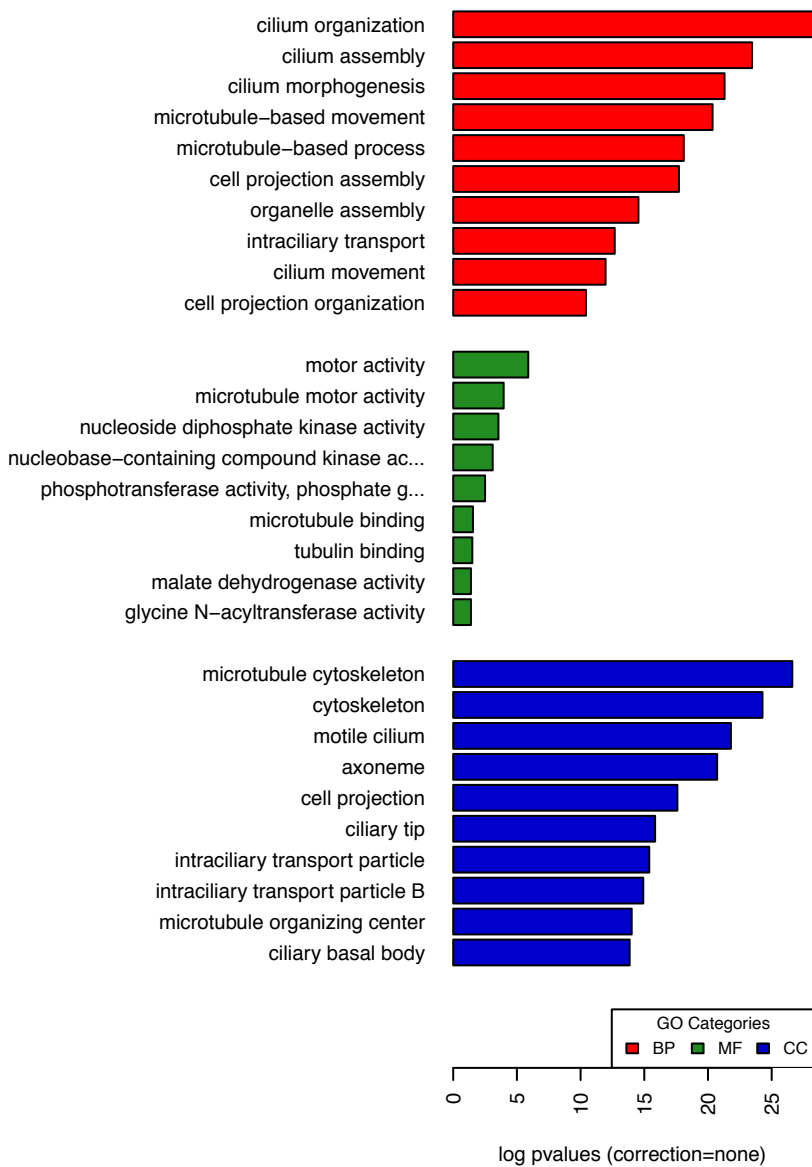
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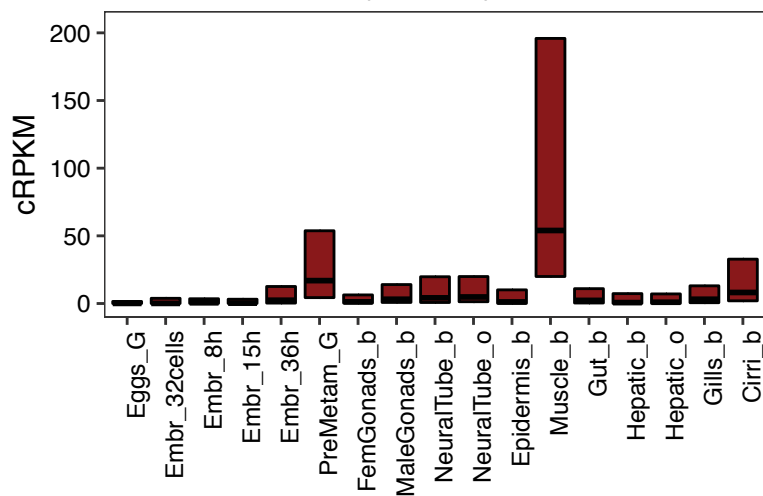
Module:darkorange (Cilium)



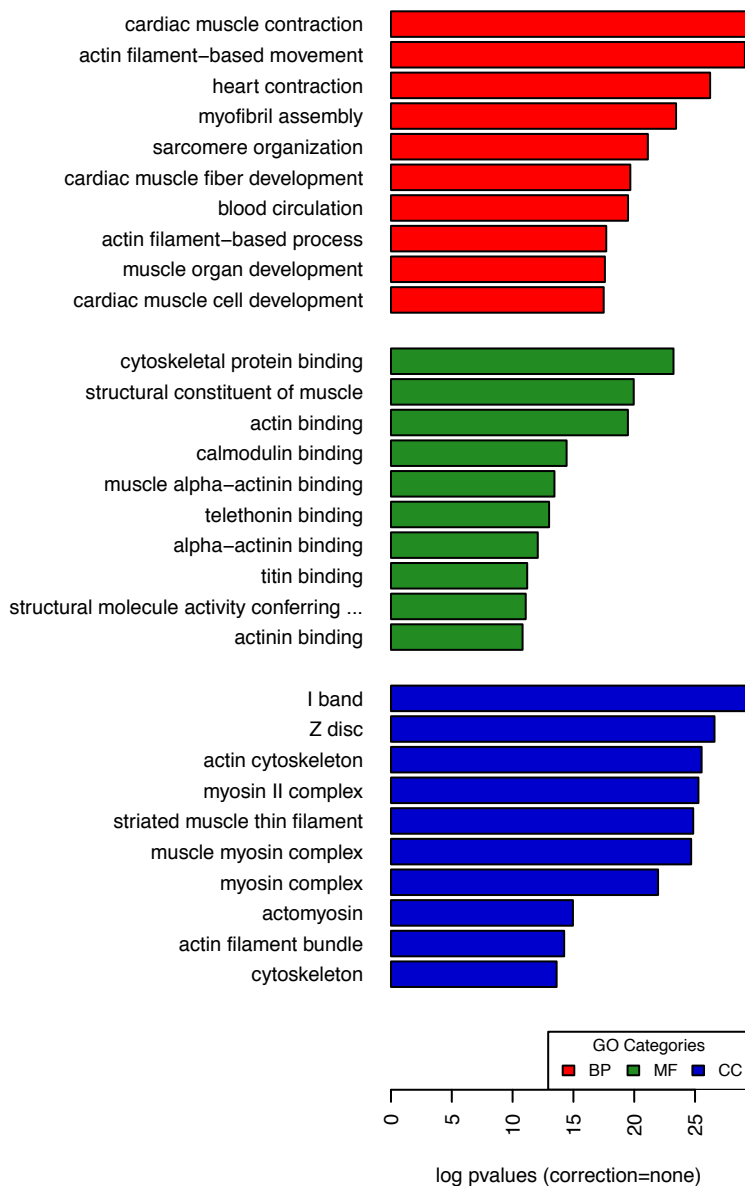
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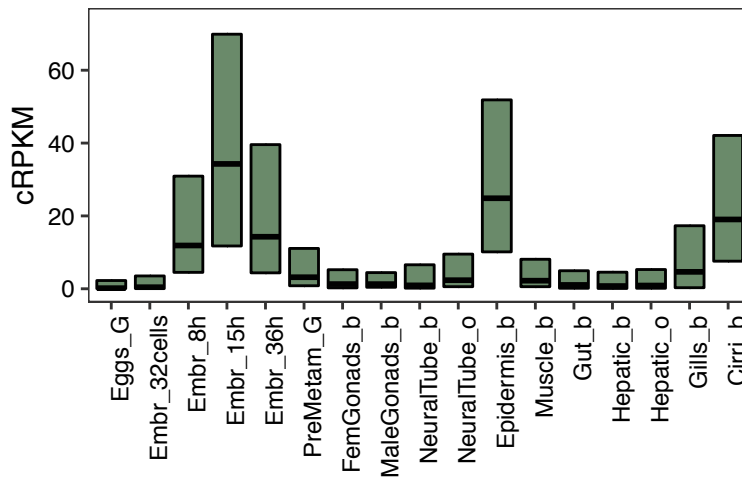
Module:darkred (Muscle)



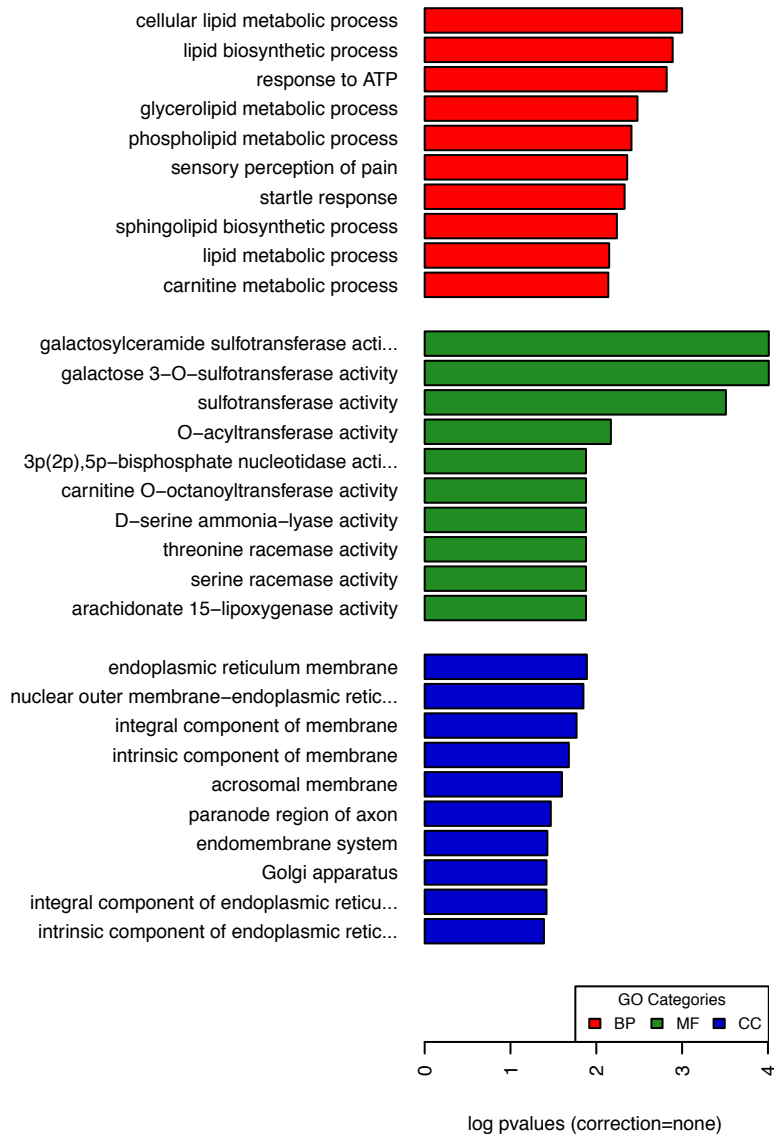
TopGO results



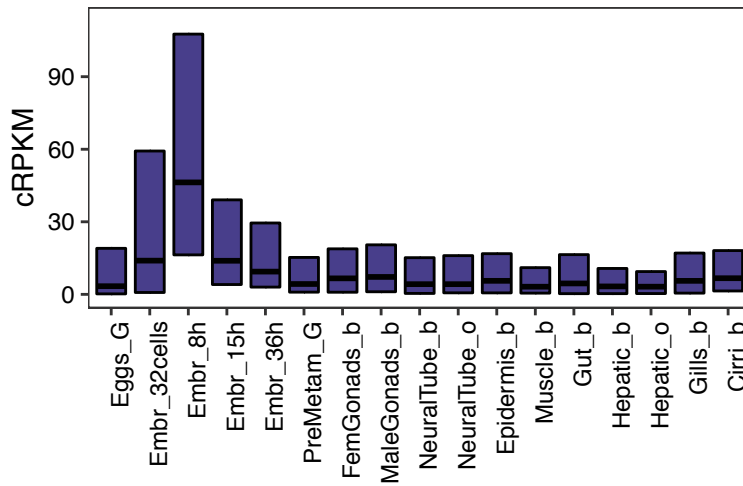
Module:darkseagreen4 (Embryo 8-36h/Skin/Cirri - lipid membranes)



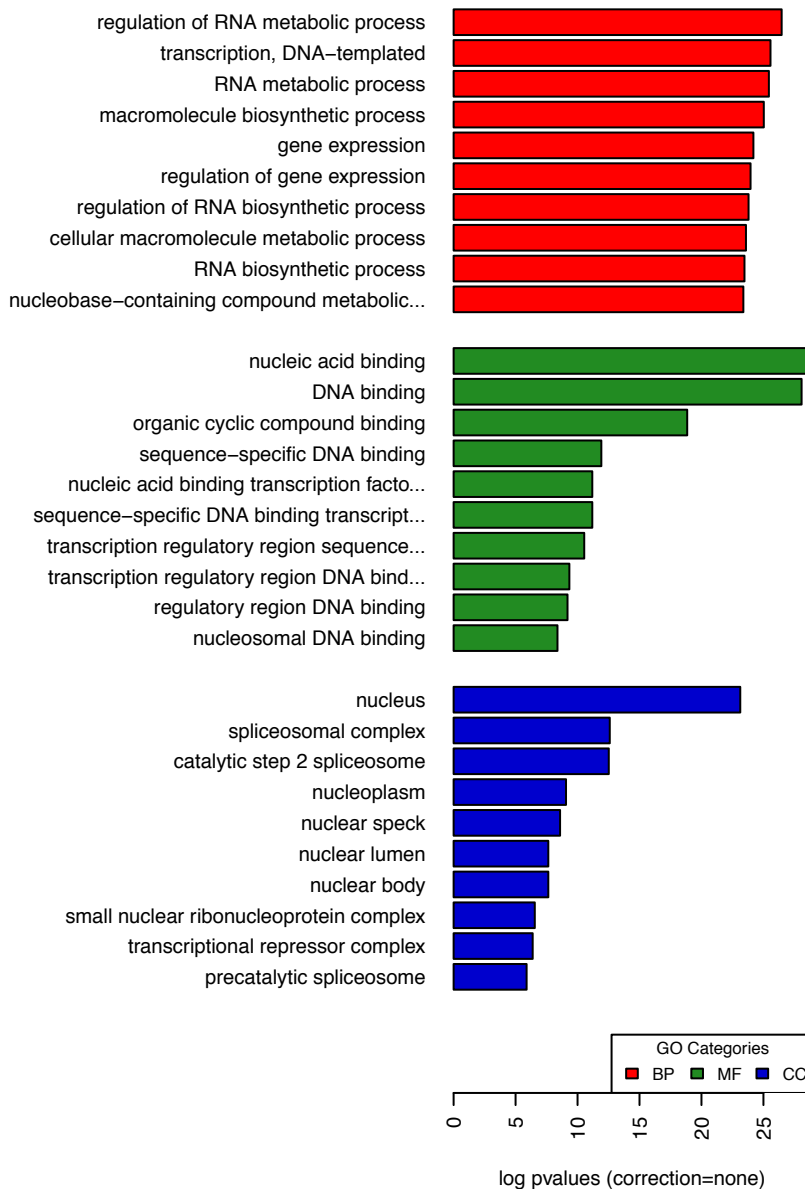
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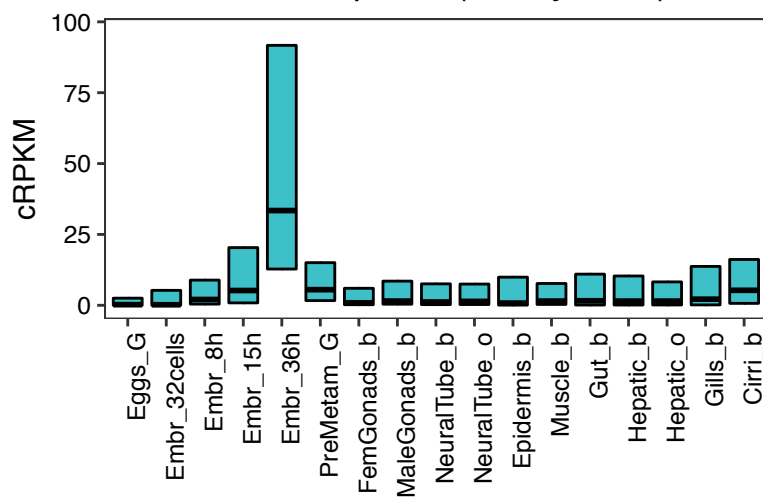
Module:darkslateblue (Embryo 8h - transcription, splicing)



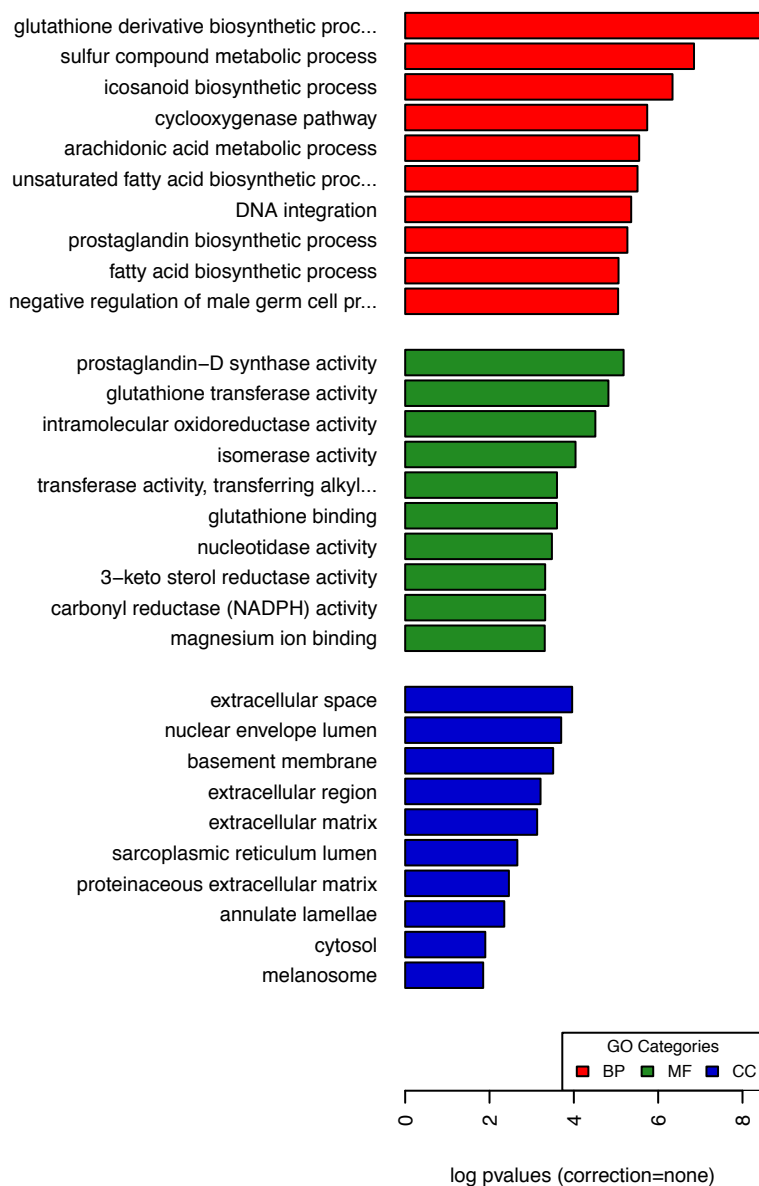
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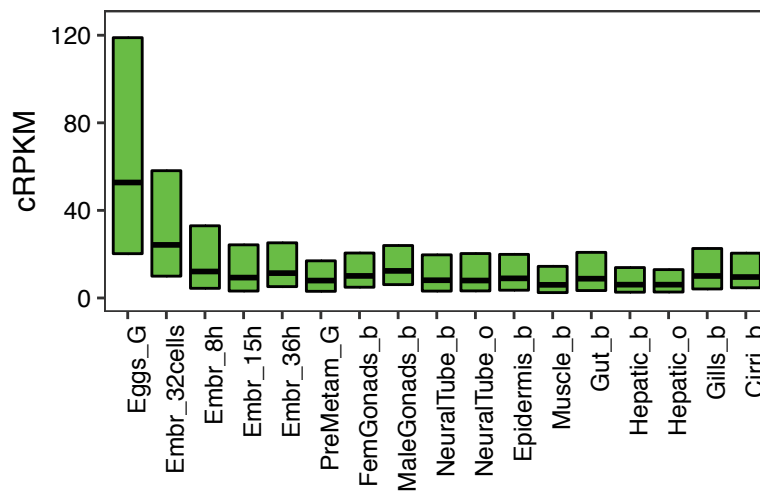
Module:darkturquoise (Embryo 36h)



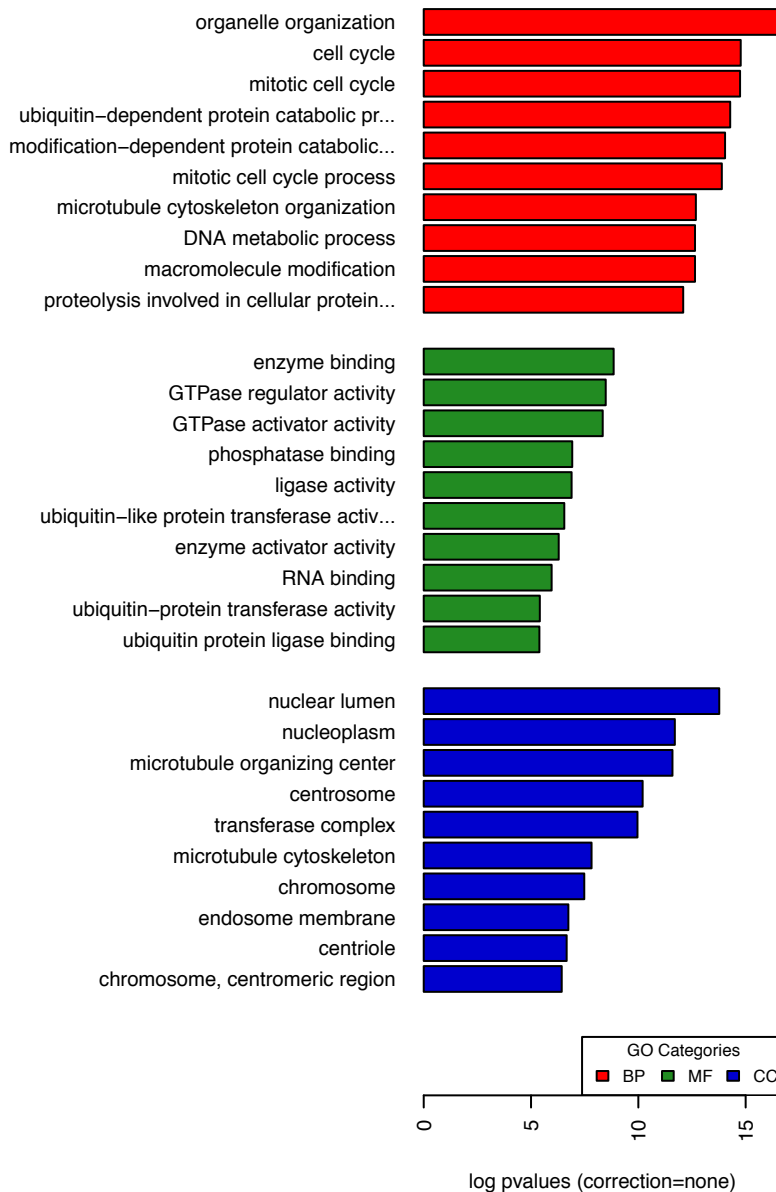
TopGO results



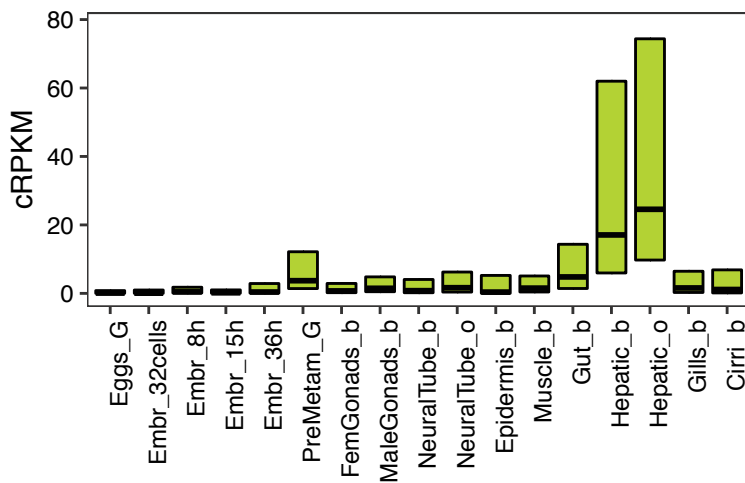
Module:green (Eggs / 32 cells - cell cycle)



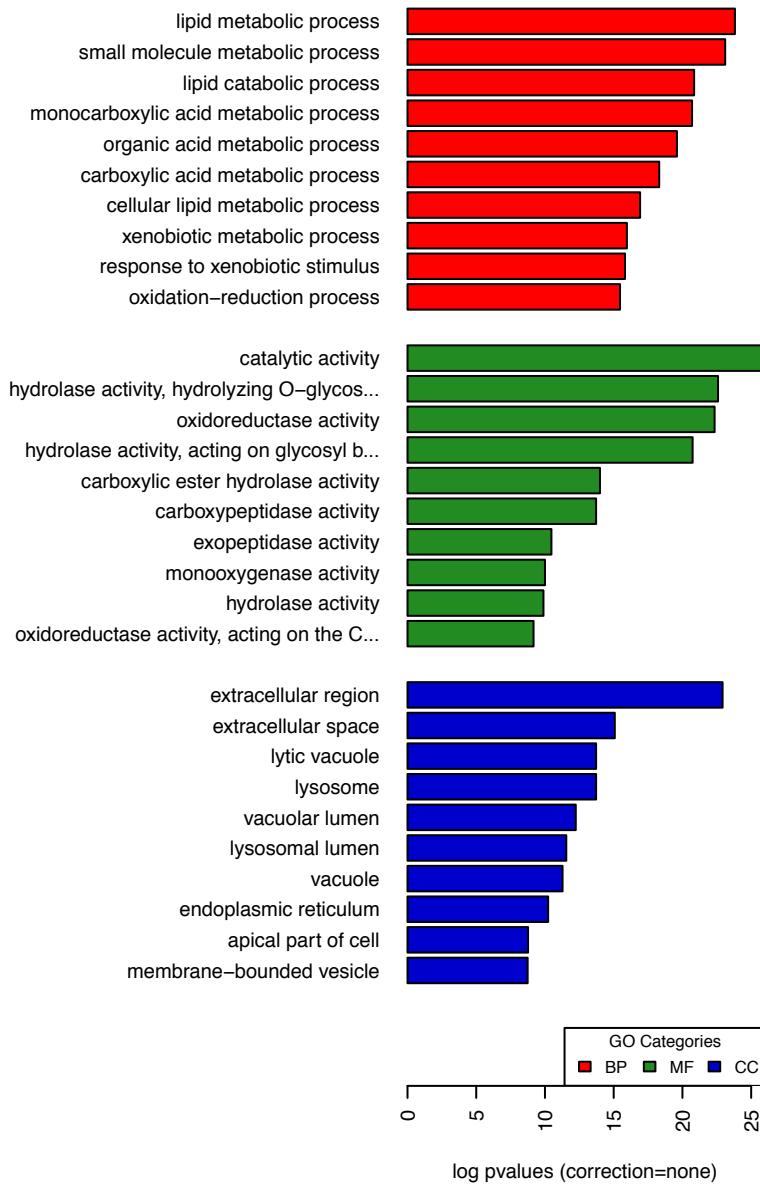
TopGO results



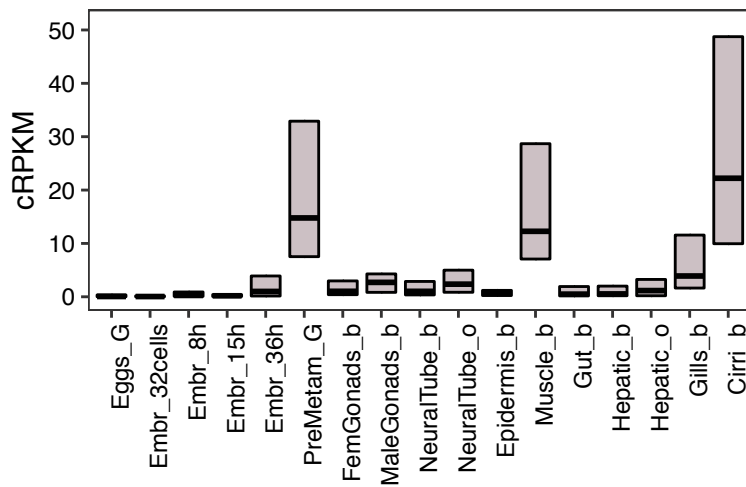
Module:greenyellow (Hepatic - lipid metabolism)



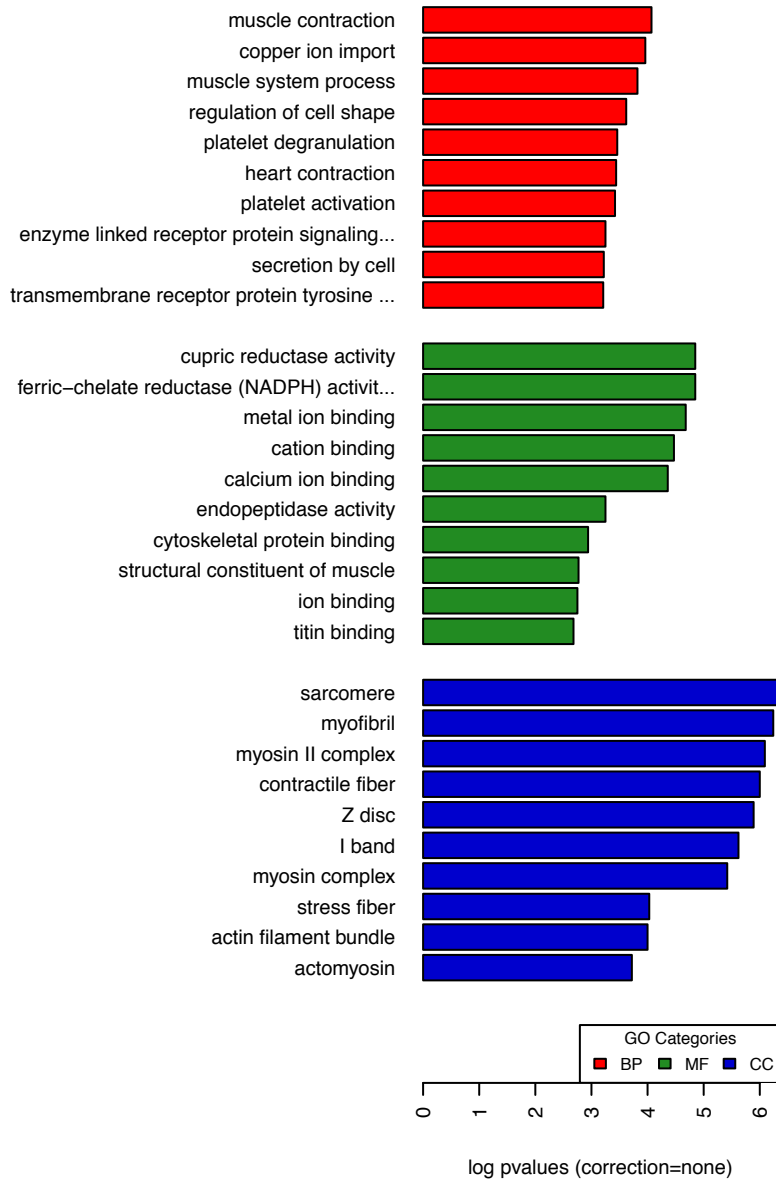
TopGO results



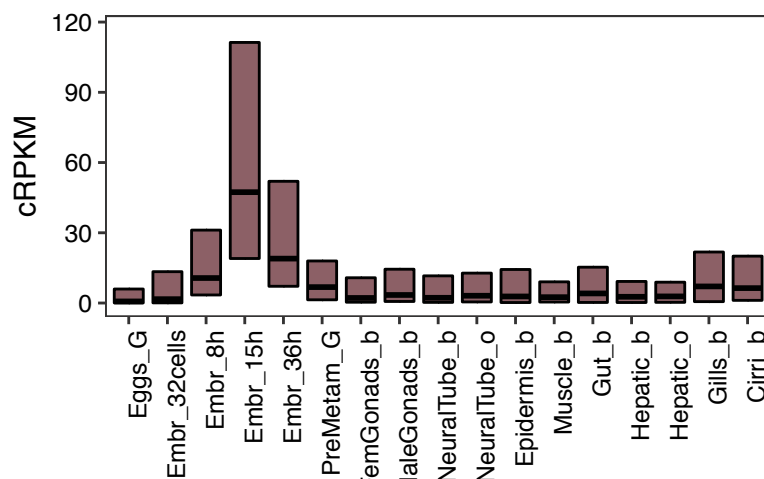
Module:lavenderblush3 (Cirri / PreMet. / Muscle - actomyosin)



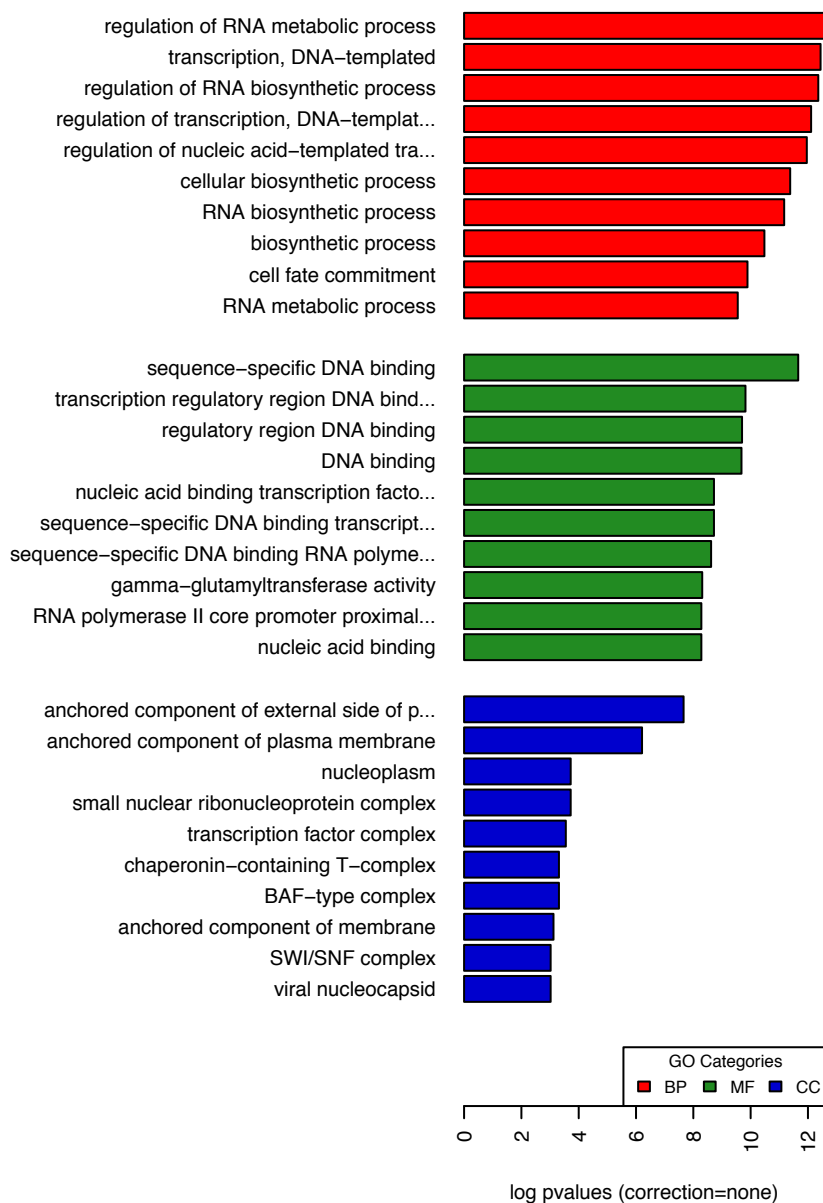
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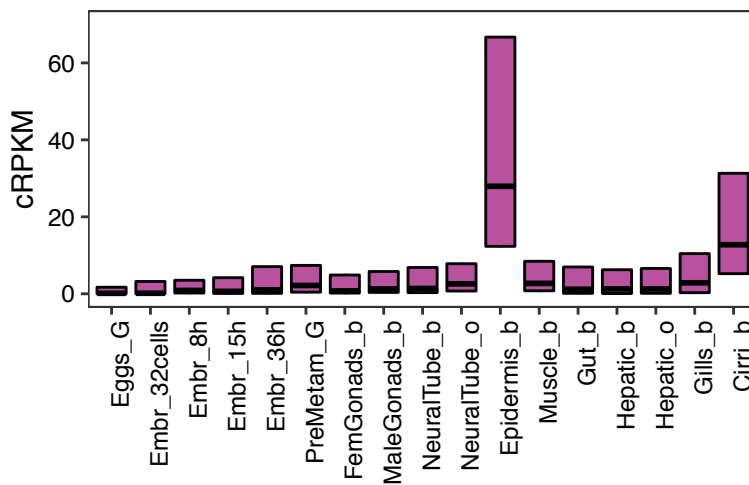
Module:lightpink4 (Embryo 15h)



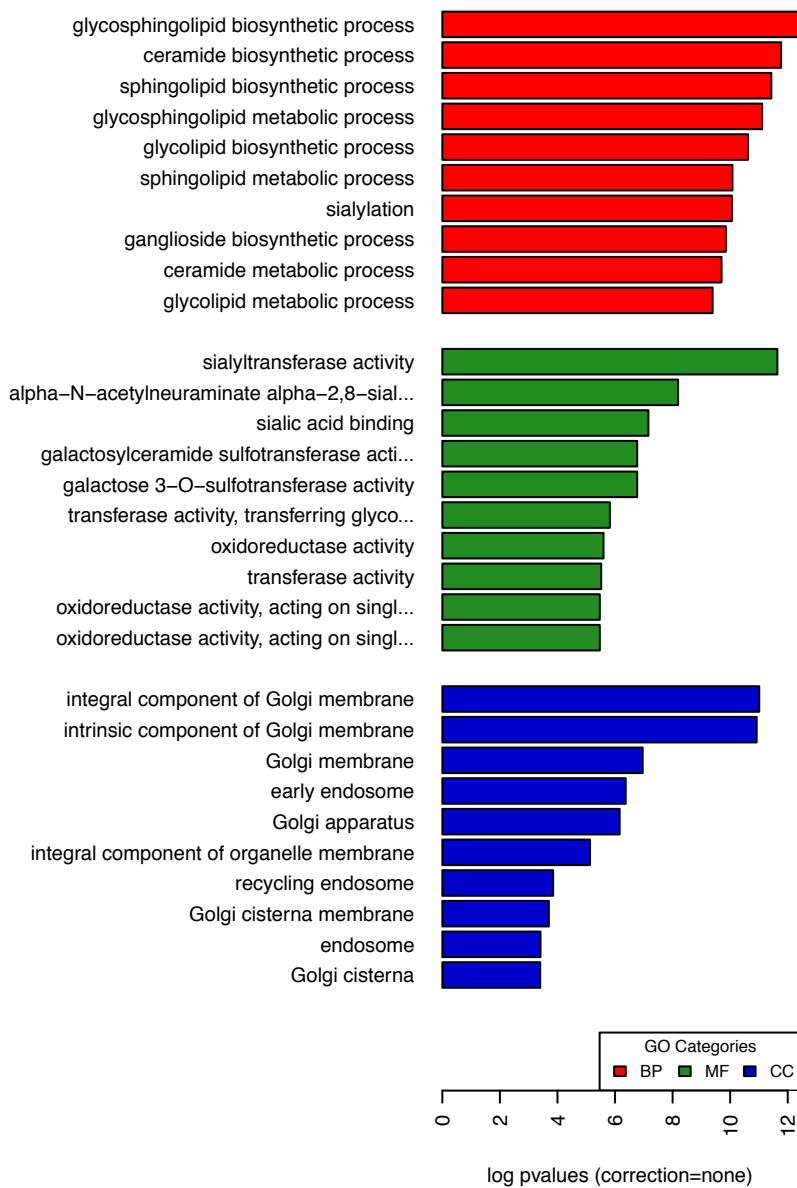
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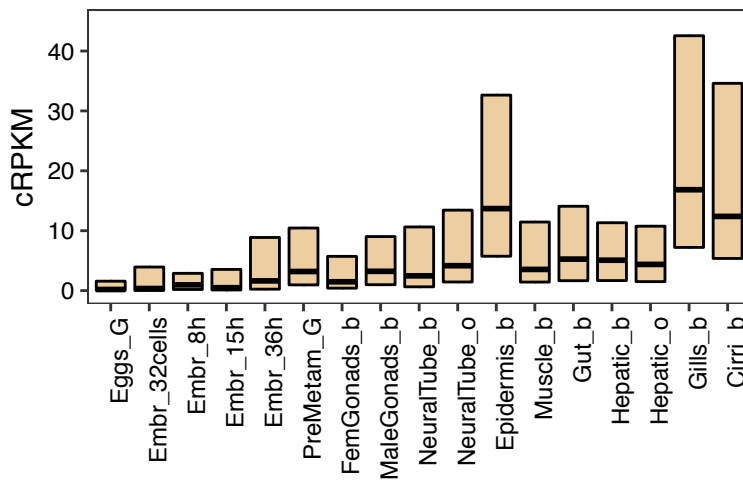
Module:magenta (Skin)



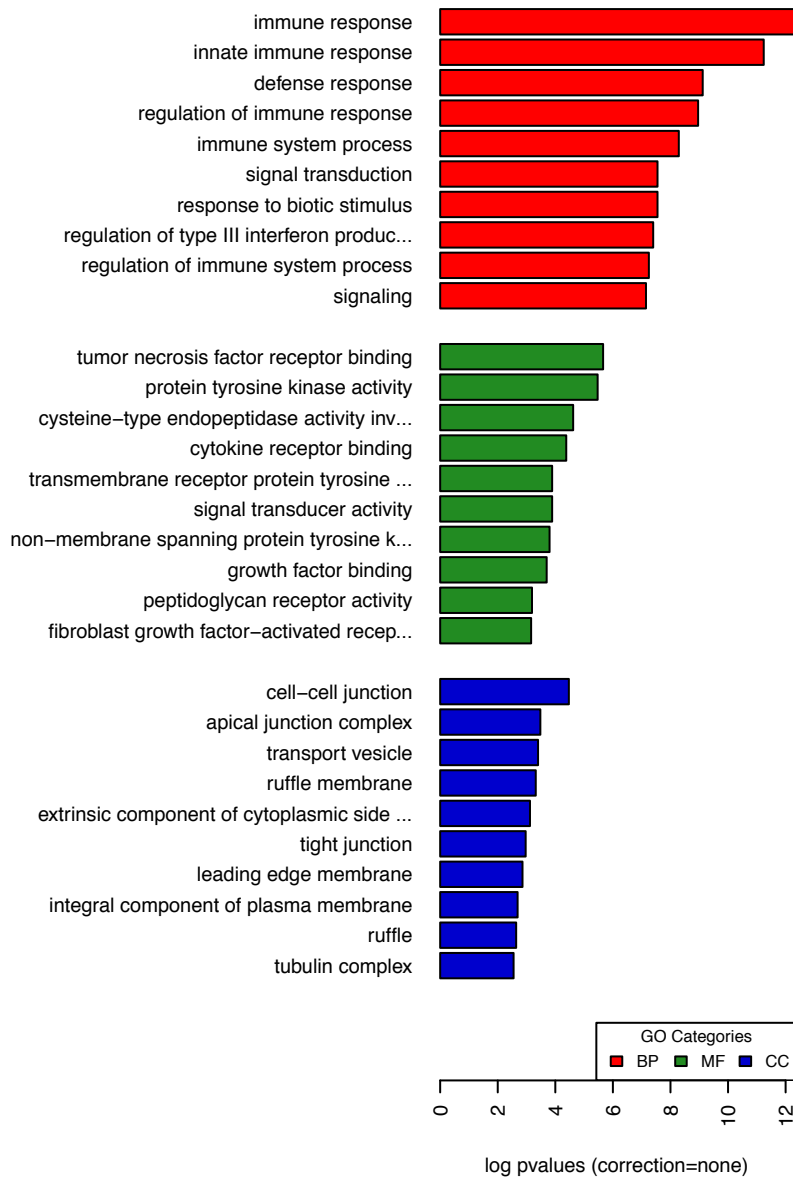
TopGO results



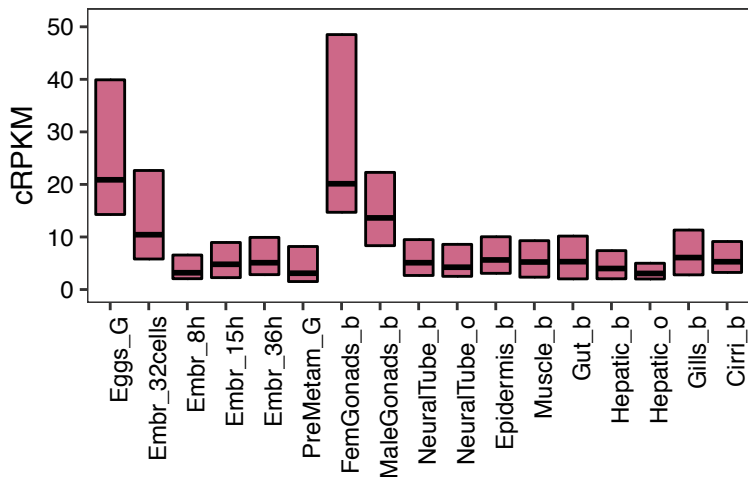
Module:navajowhite2 (Immune)



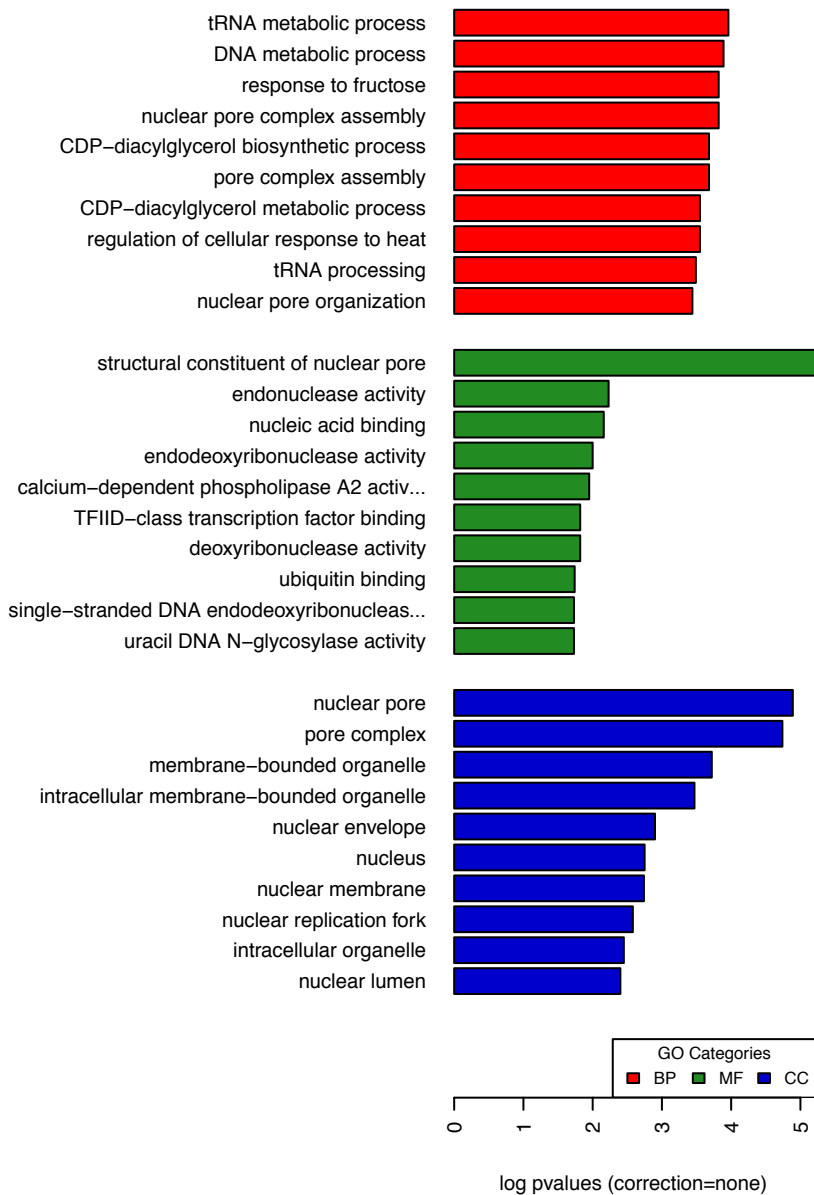
TopGO results



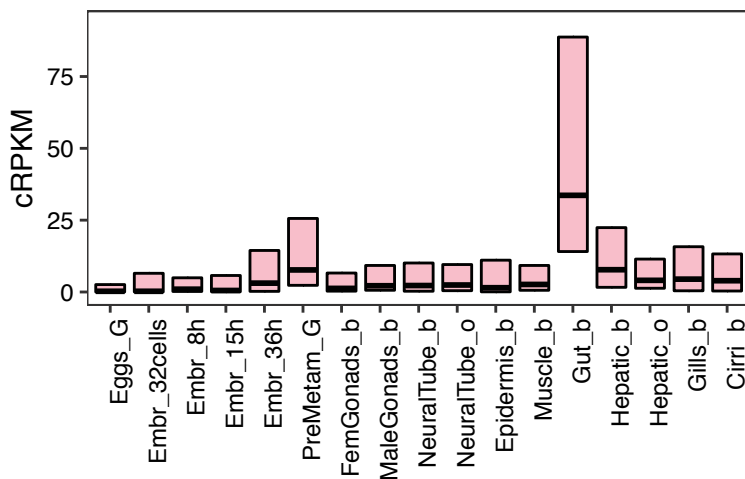
Module:palevioletred3 (Ovary / Eggs)



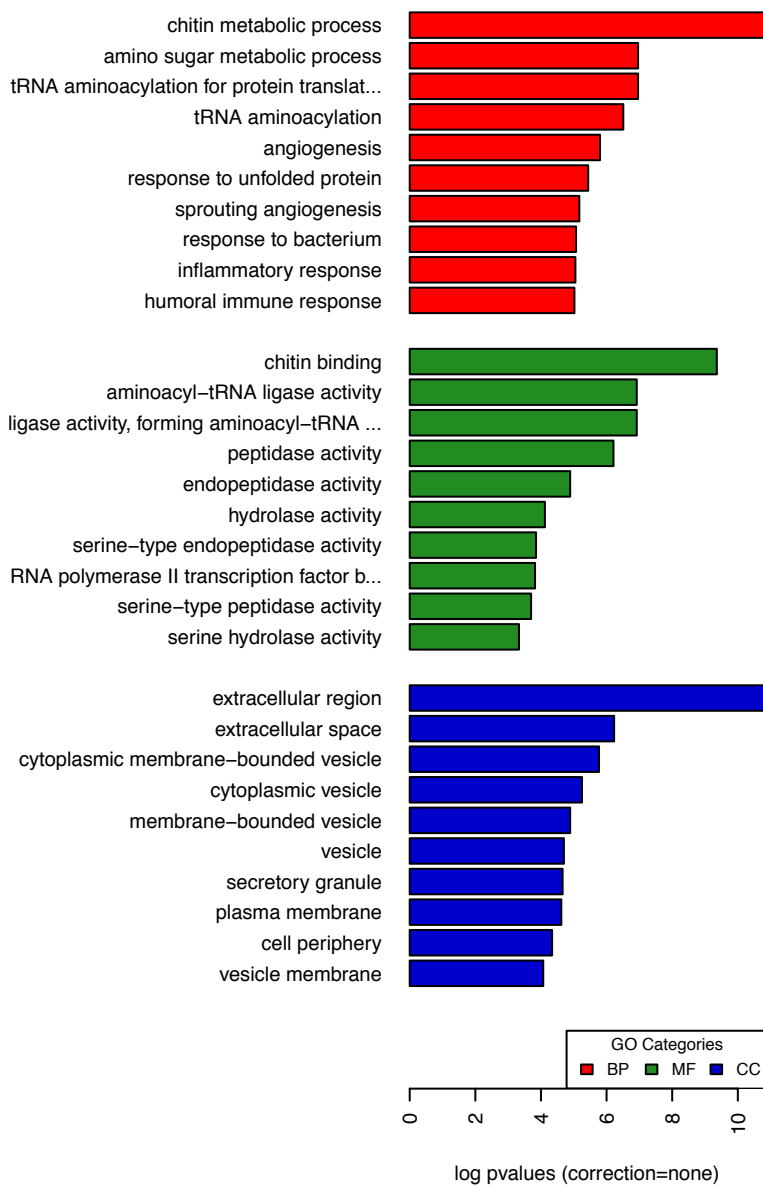
TopGO results



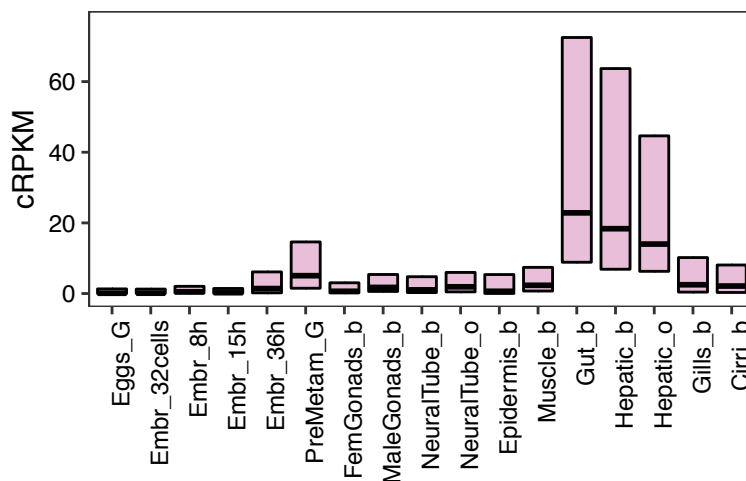
Module: pink (Gut)



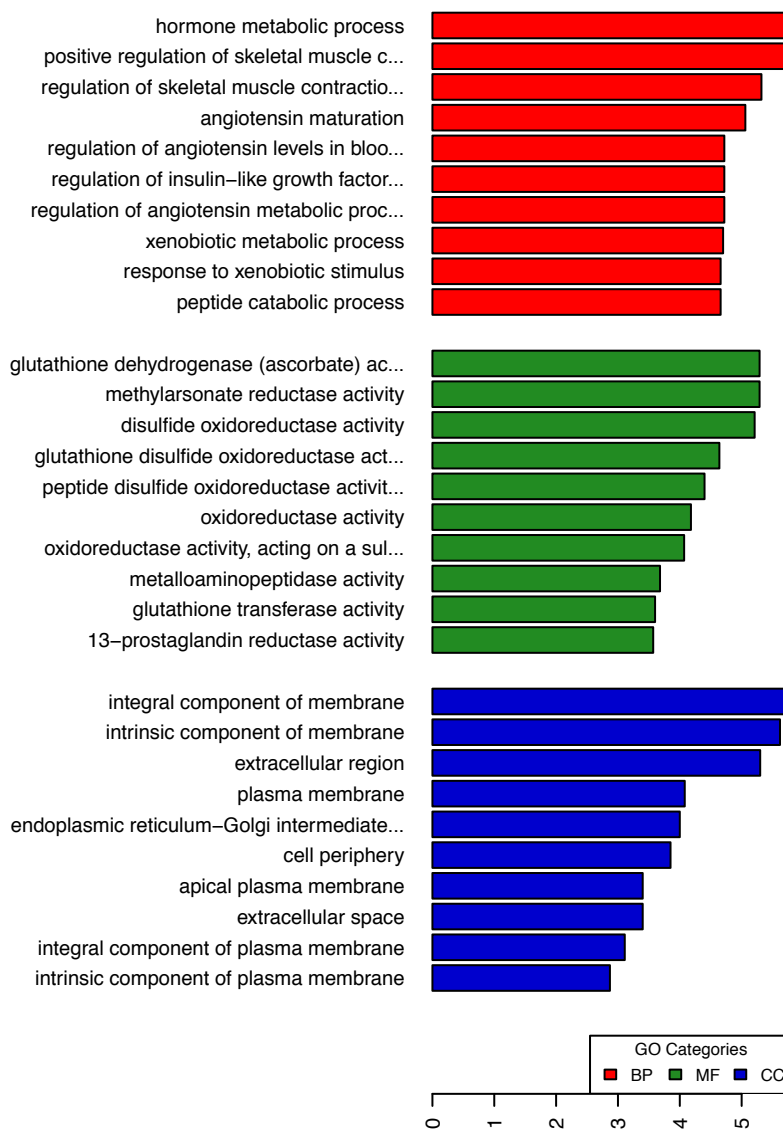
TopGO results



Module:plum1 (Gut / Hepatic)

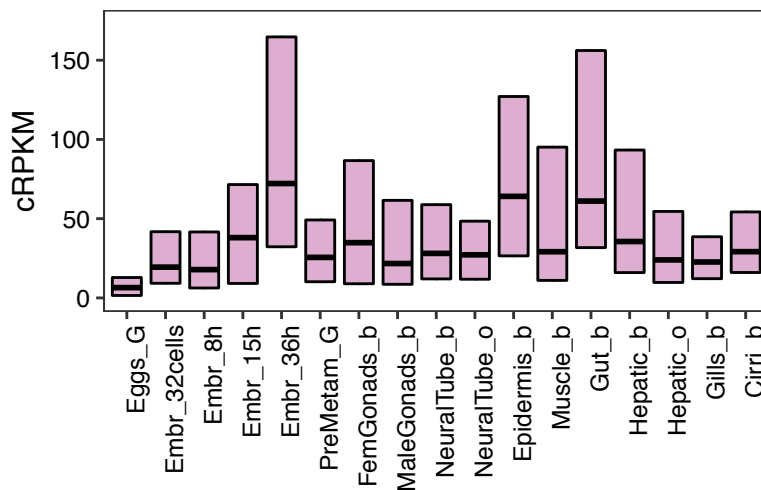


TopGO results

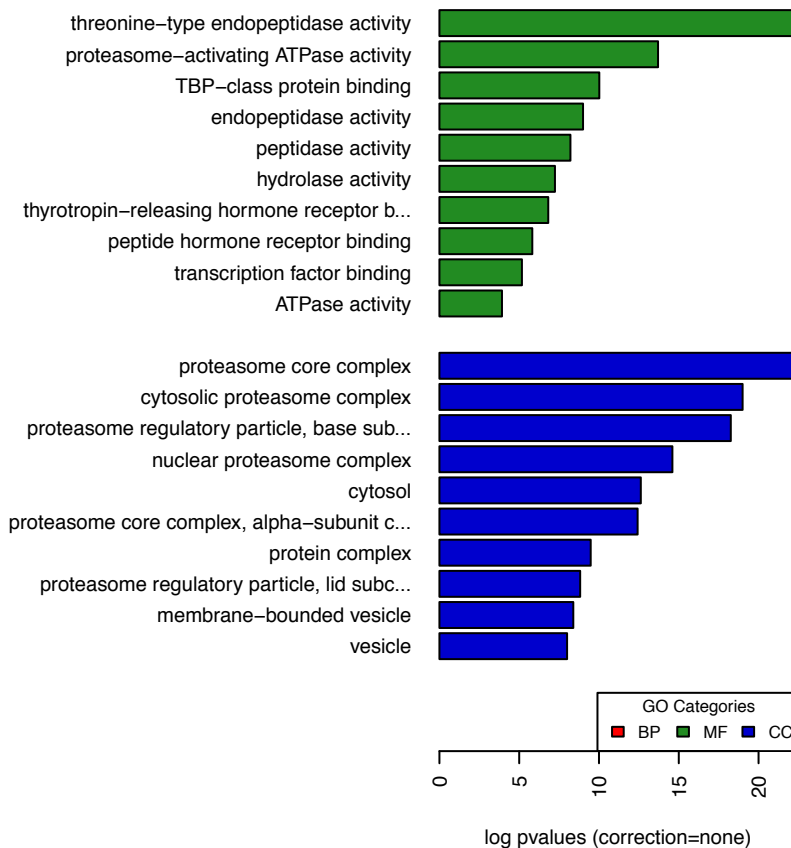


log p-values (correction=none)

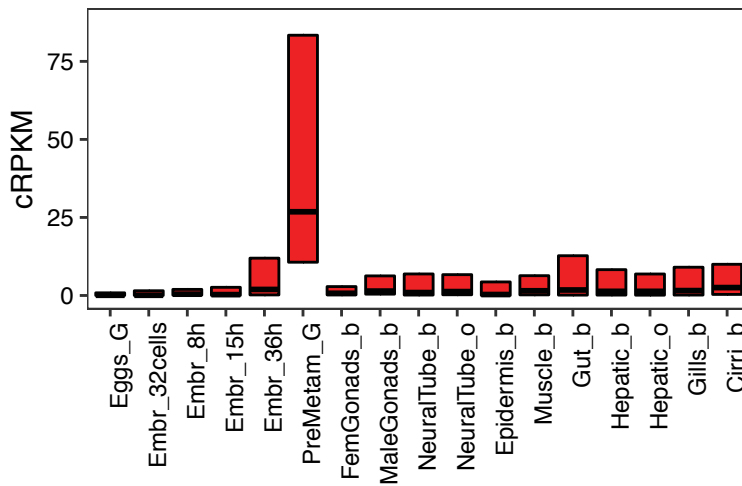
Module:plum2 (Proteasome)



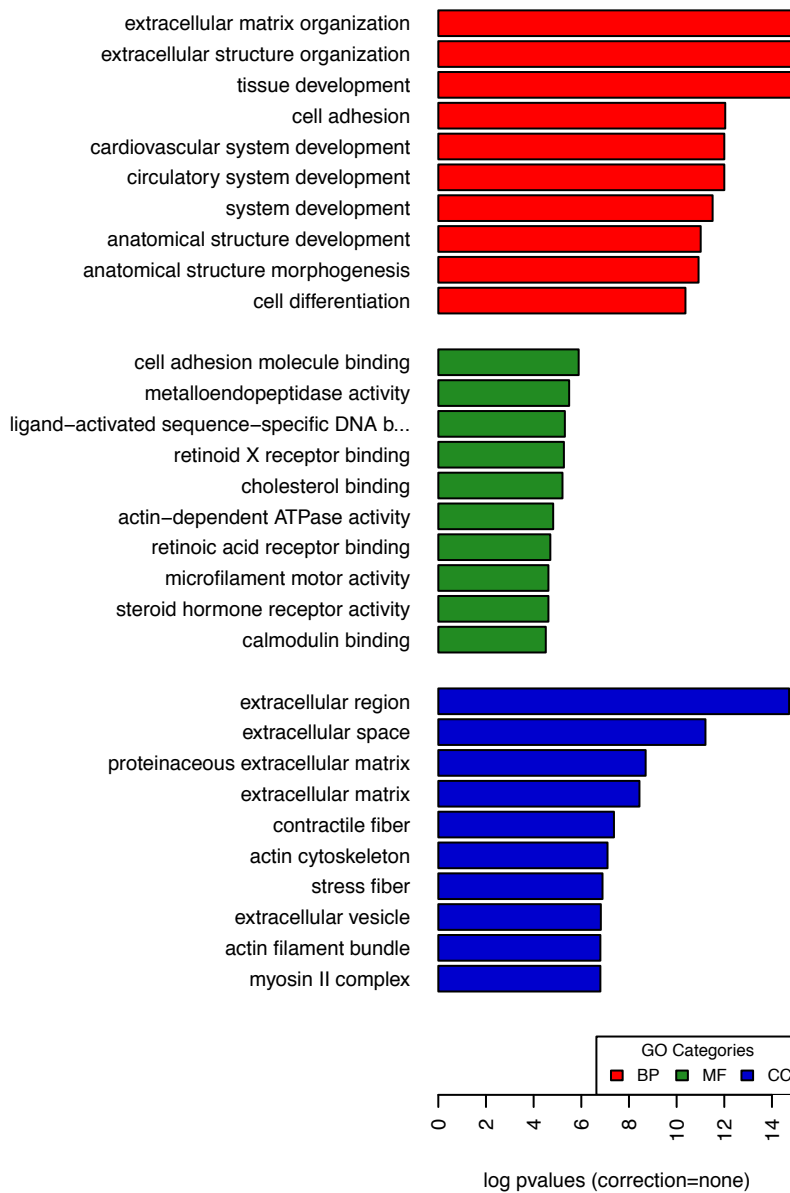
TopGO results



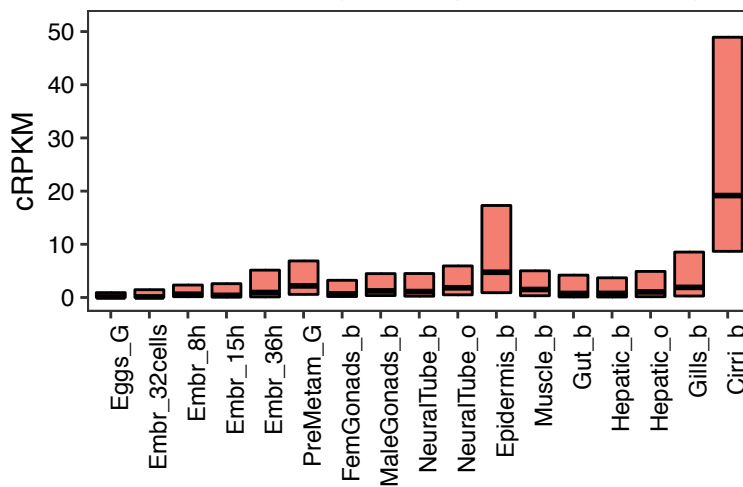
Module:red (PreMet. larvae)



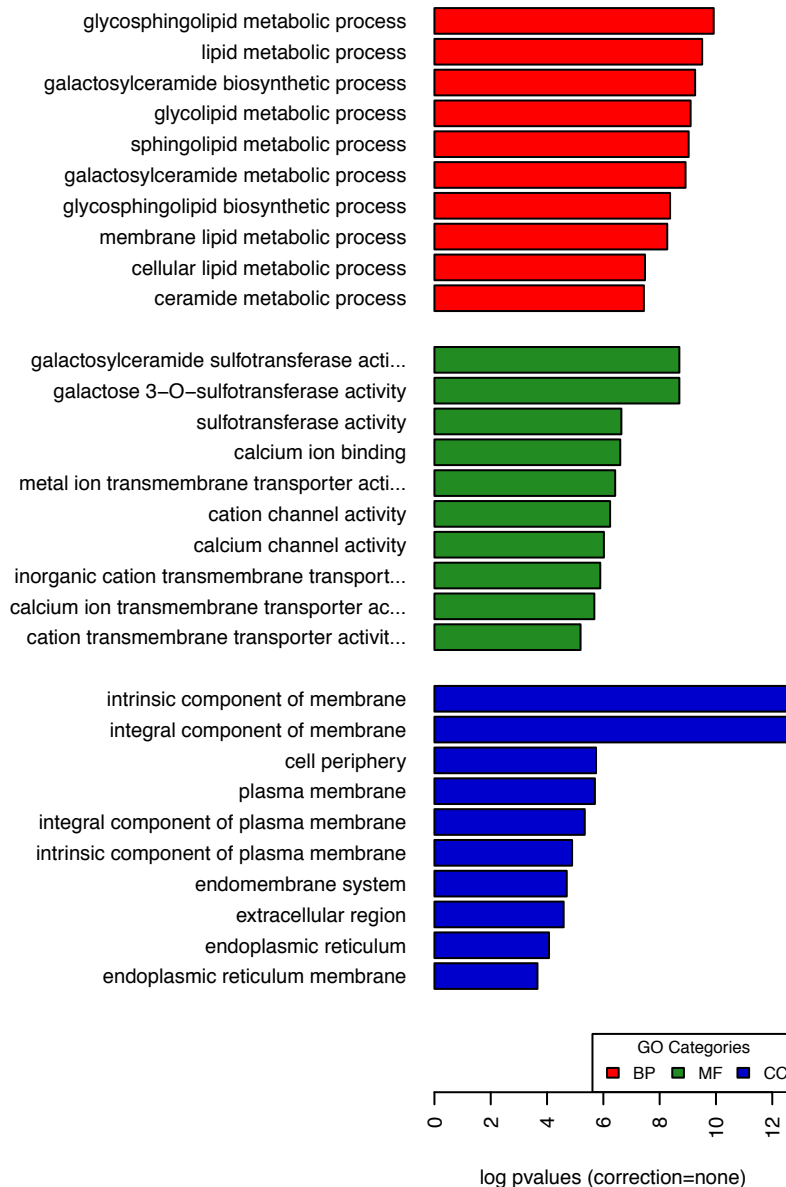
TopGO results



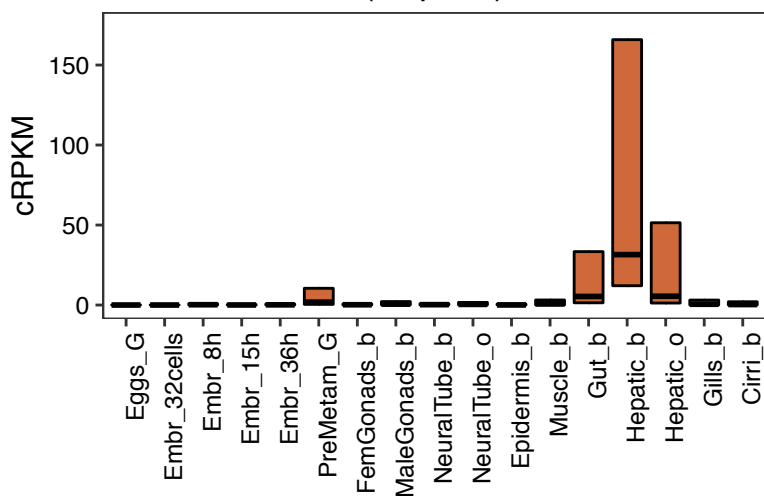
Module:salmon (Cirri - lipid membranes)



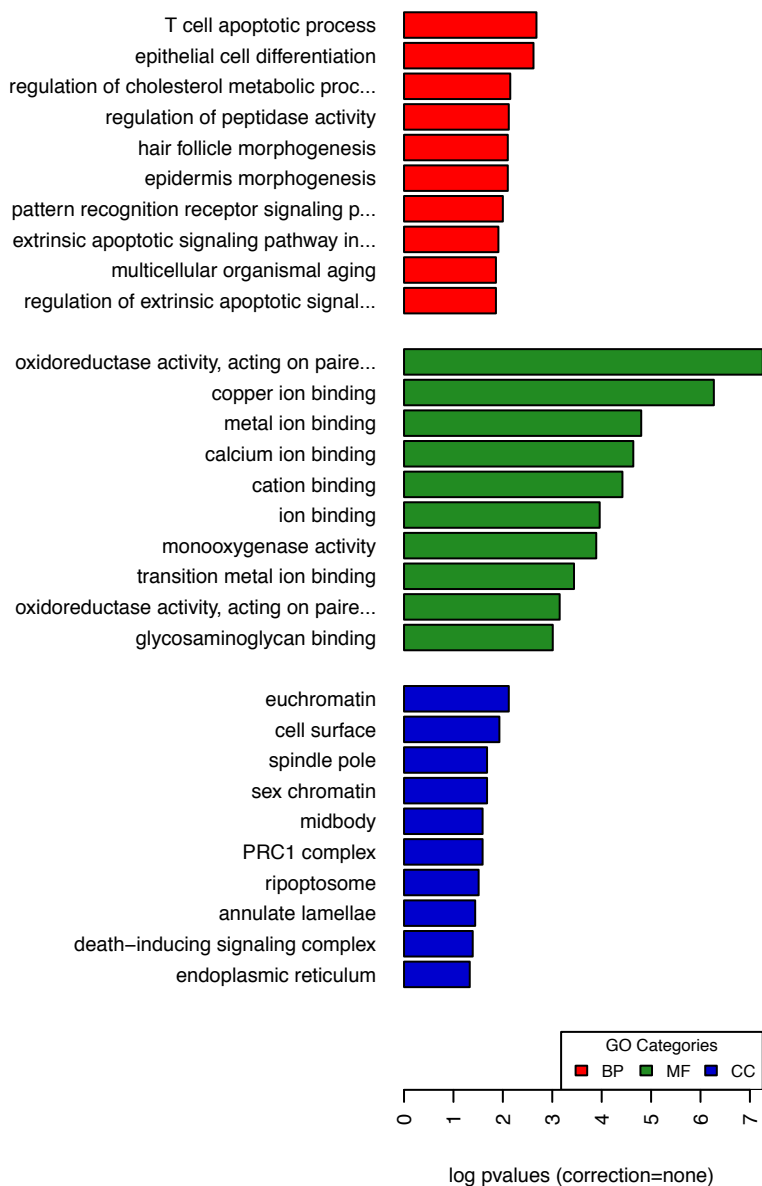
TopGO results



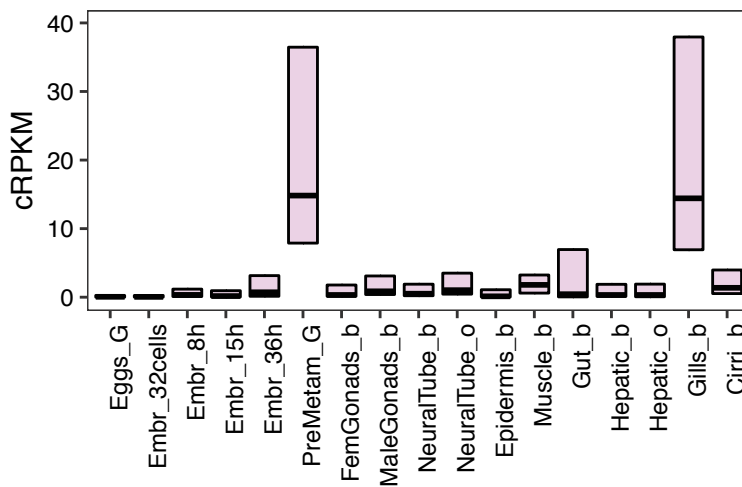
Module:sienna3 (Hepatic)



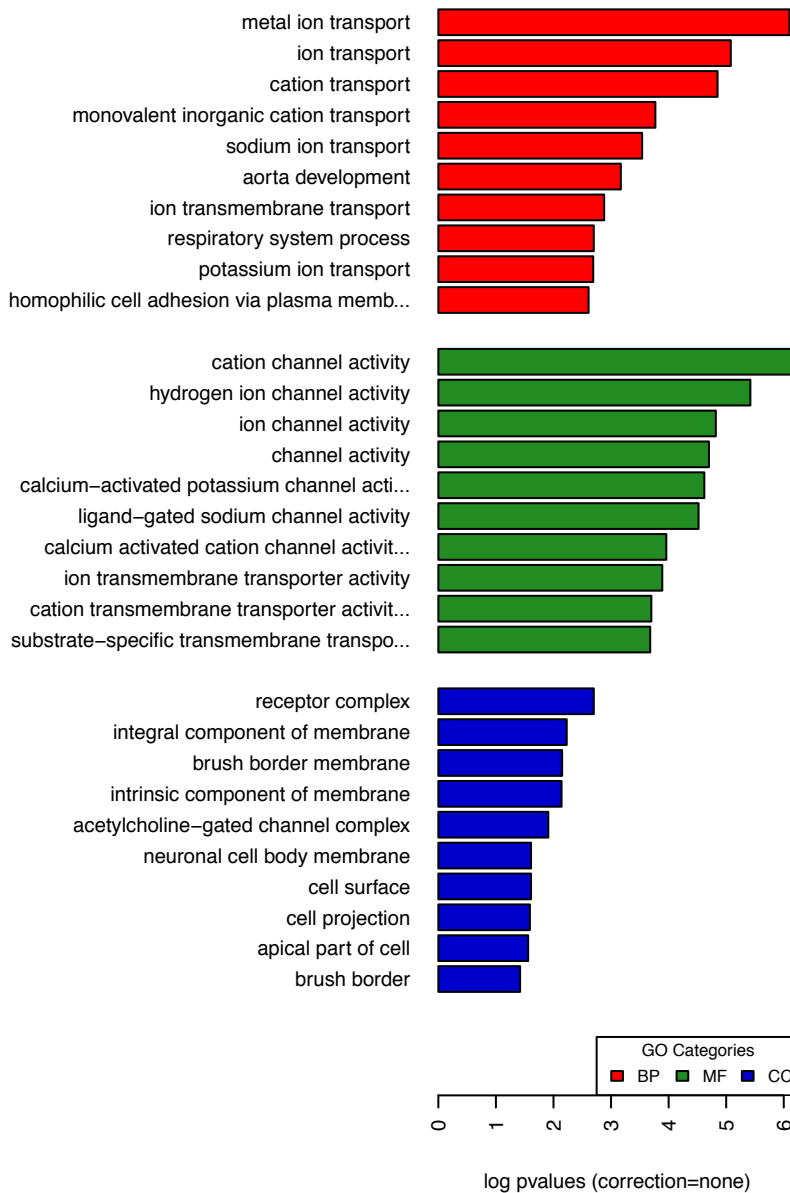
TopGO results



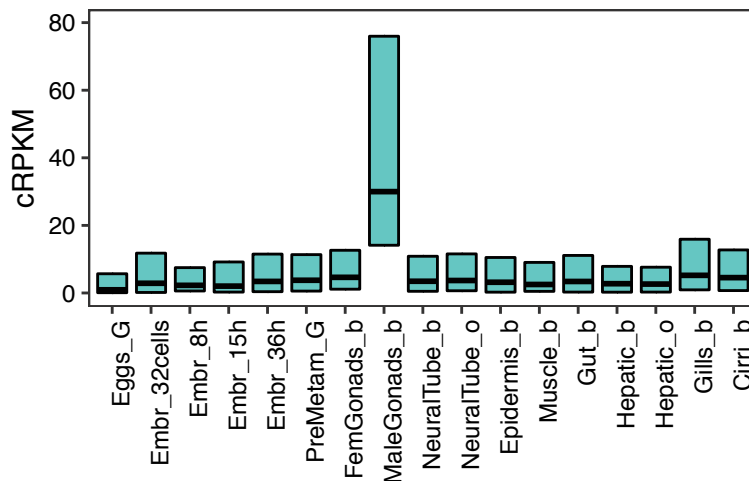
Module:thistle2 (Gills / PreMet. larvae)



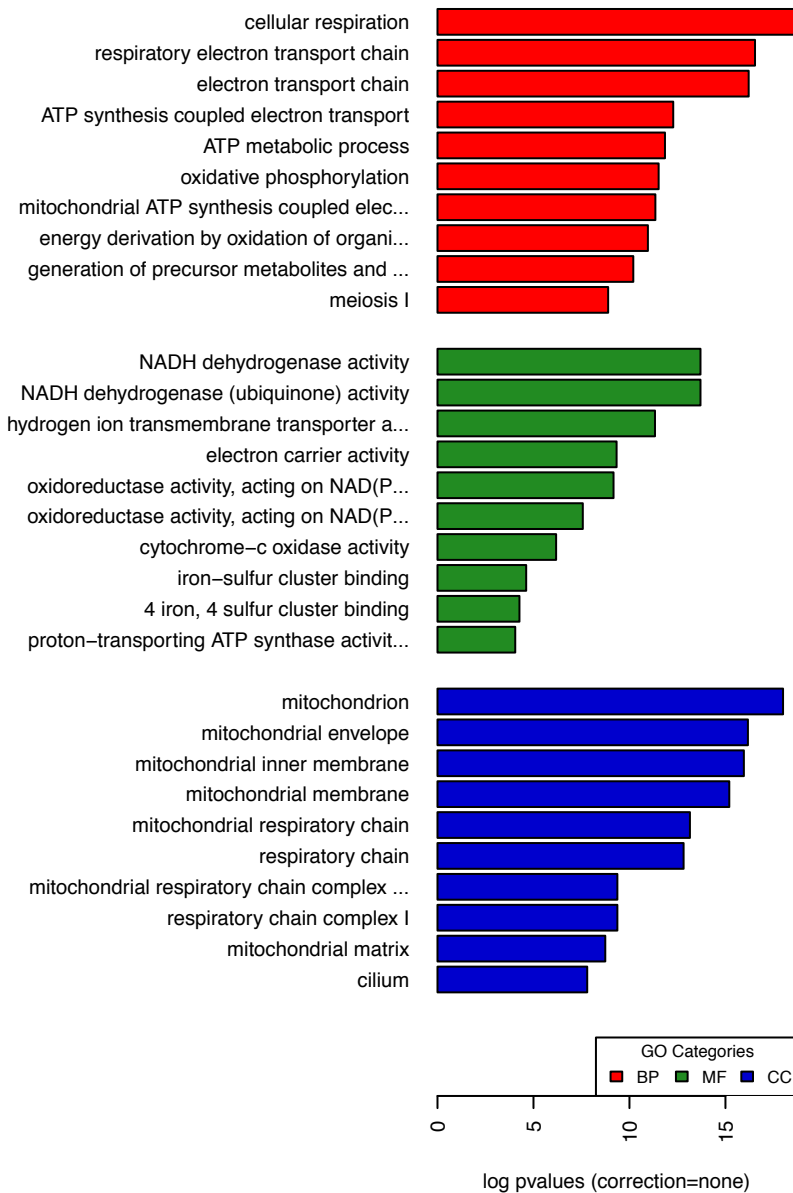
TopGO results



Module:turquoise (Mitochondrion)

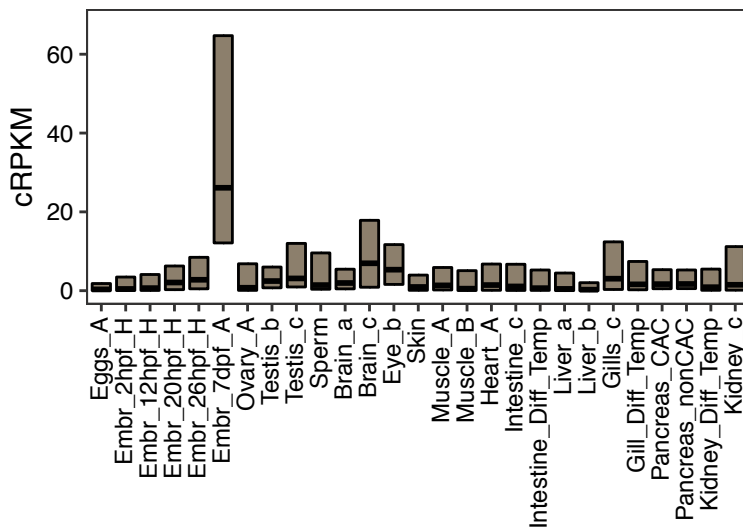


TopGO results

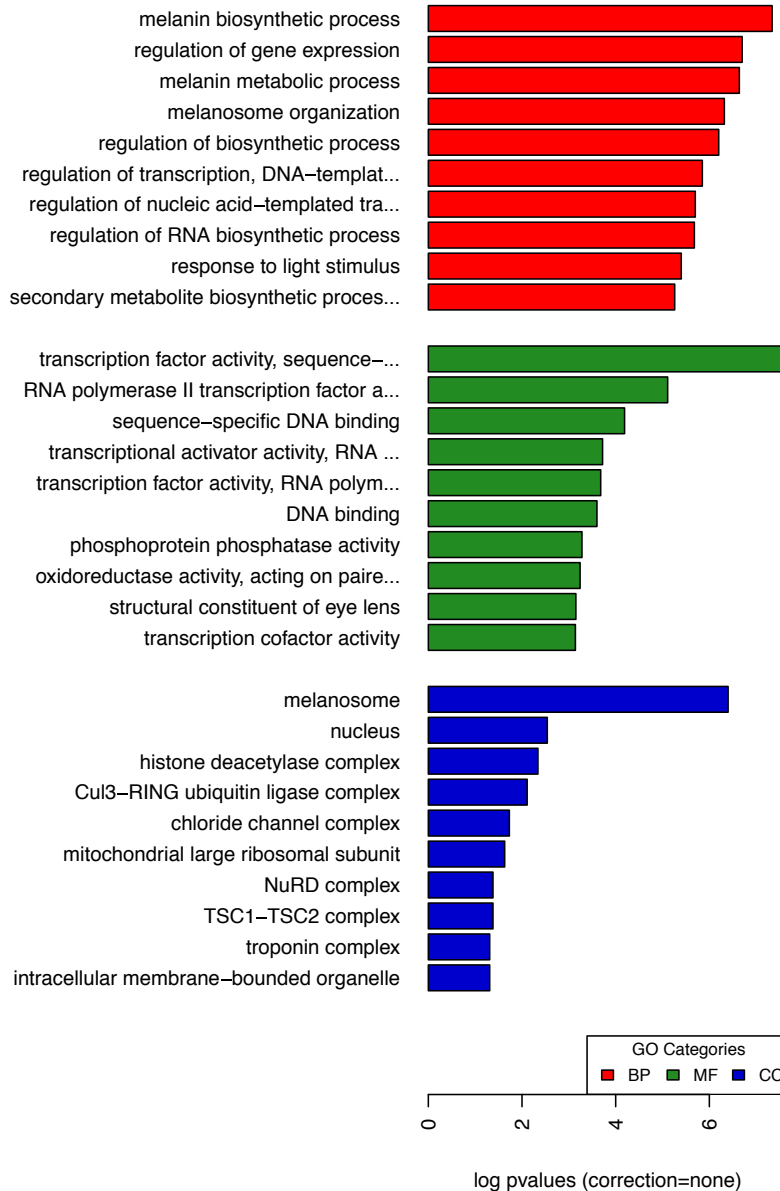


***D. rerio* modules**

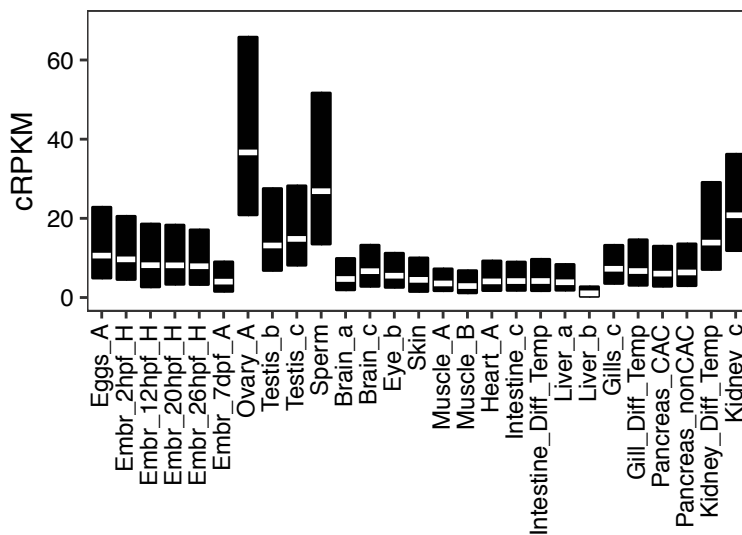
Module:bisque4 (Larvae 7d - melanin)



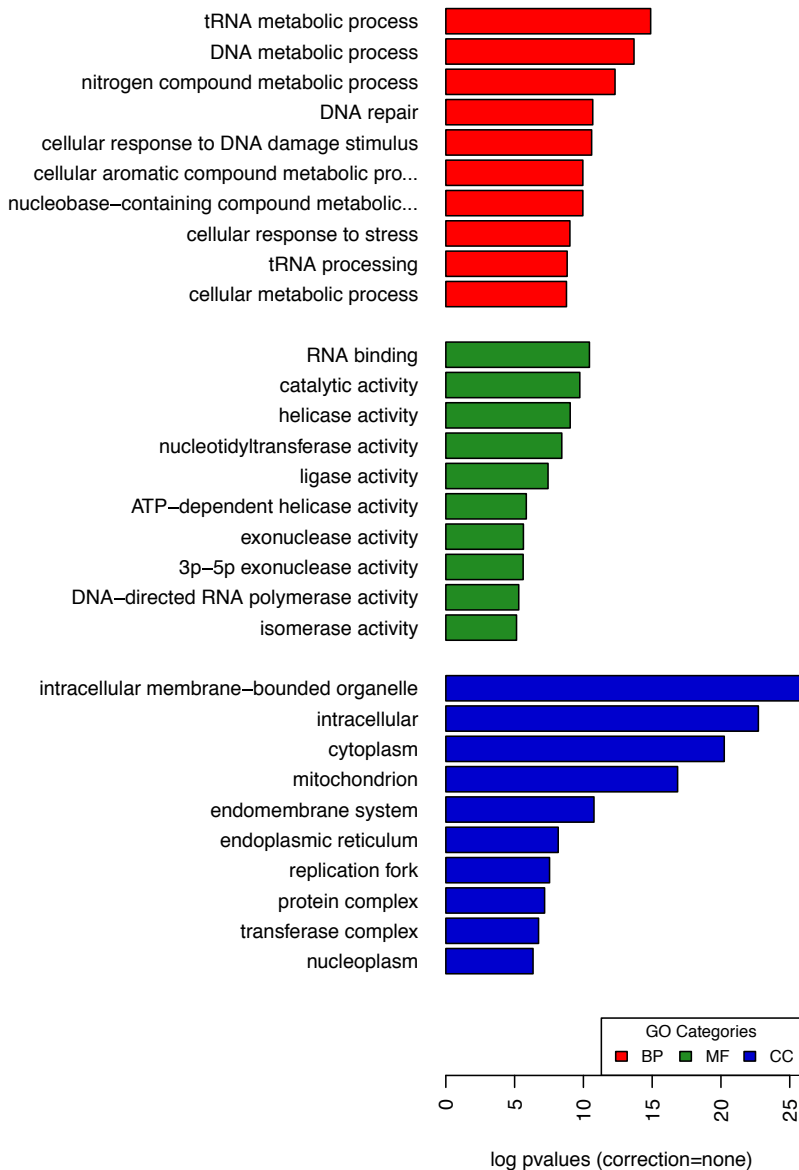
TopGO results



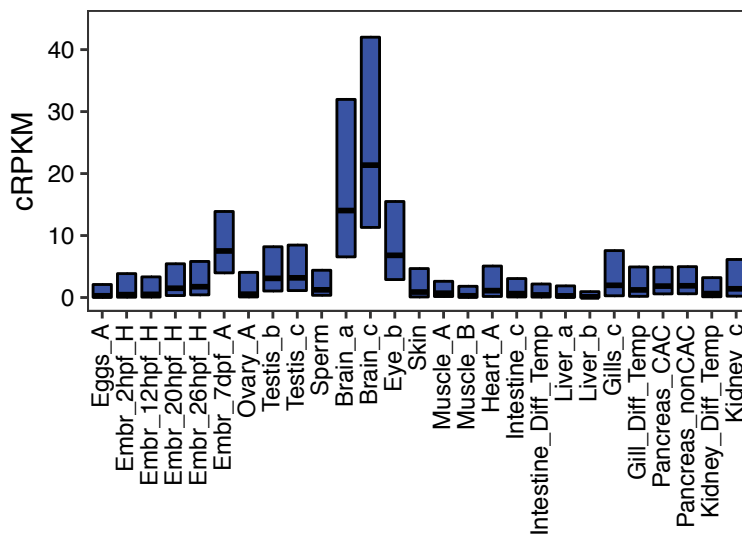
Module:black (Ovary / Sperm)



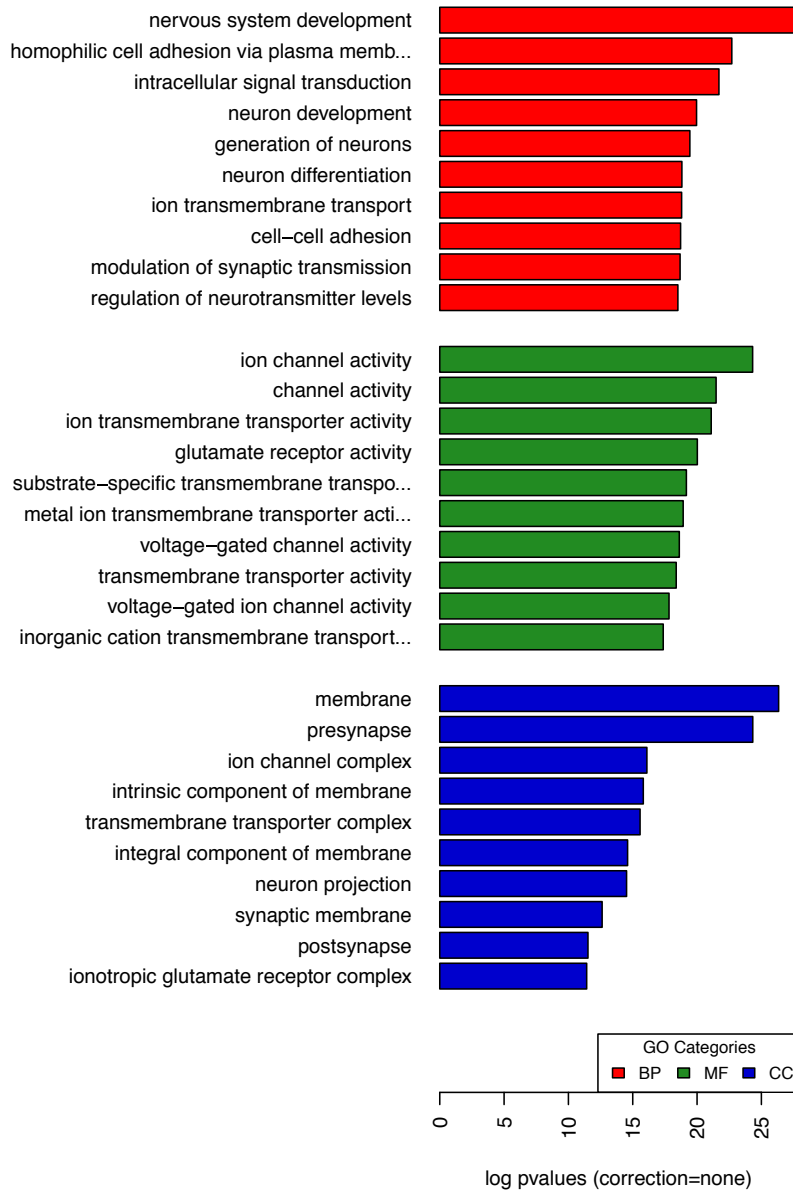
TopGO results



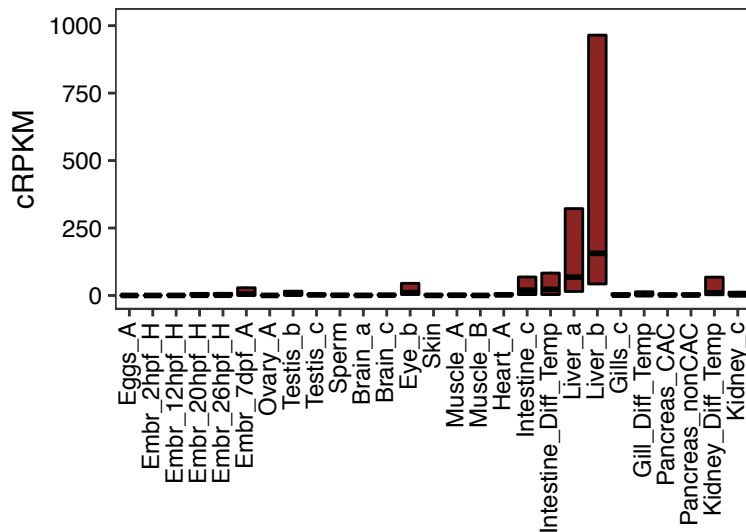
Module:blue (Brain)



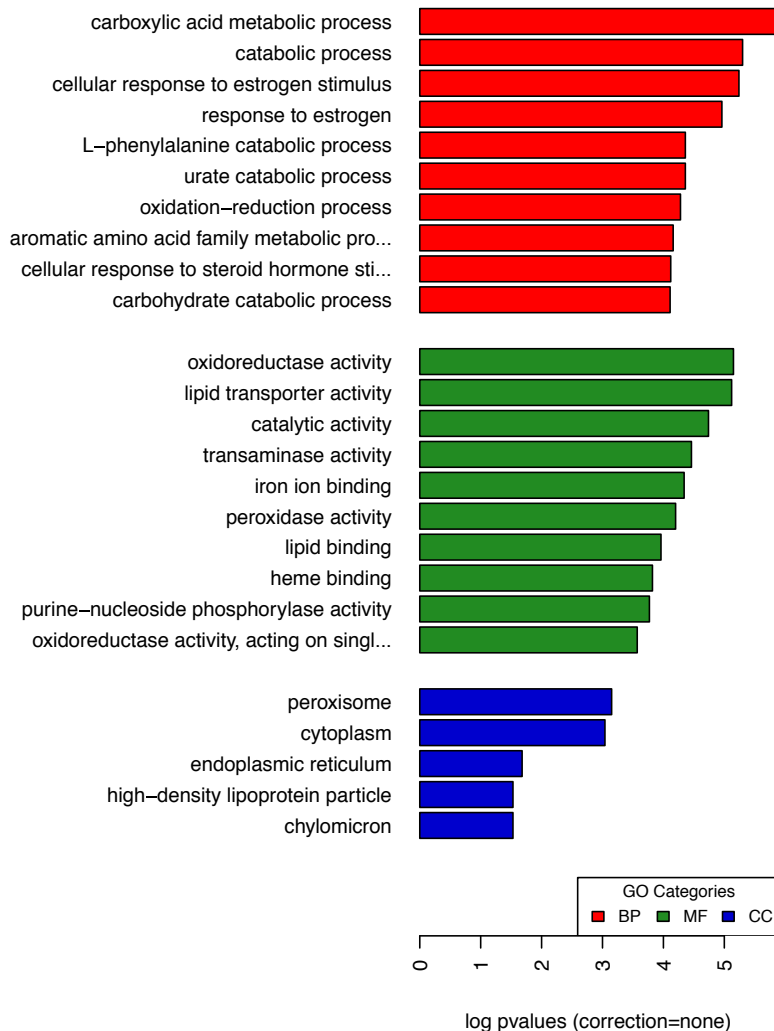
TopGO results



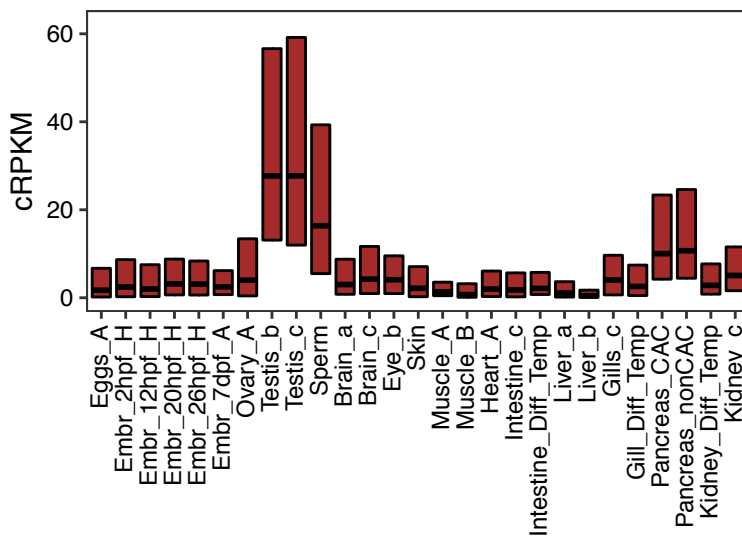
Module:brown4 (Liver B)



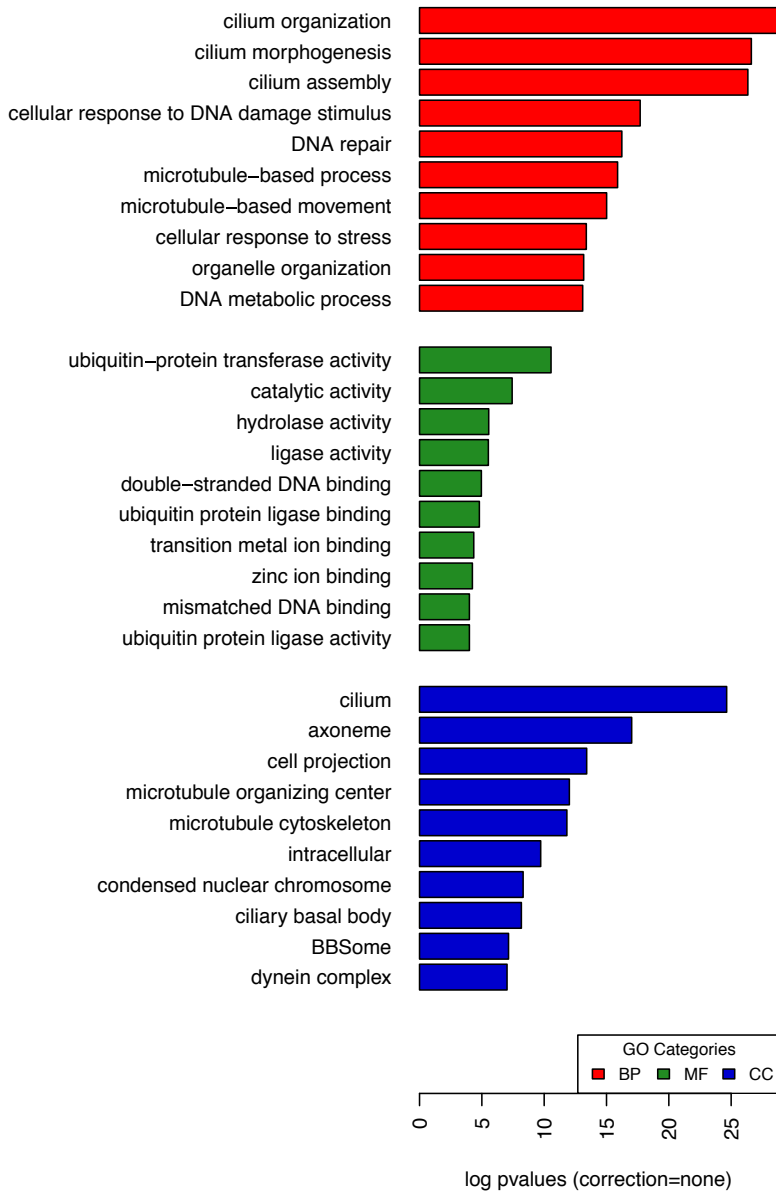
TopGO results



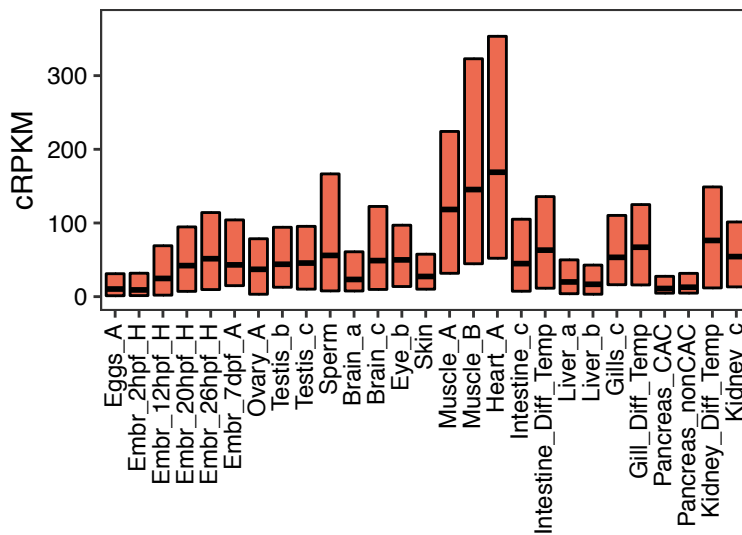
Module:brown (Cilium)



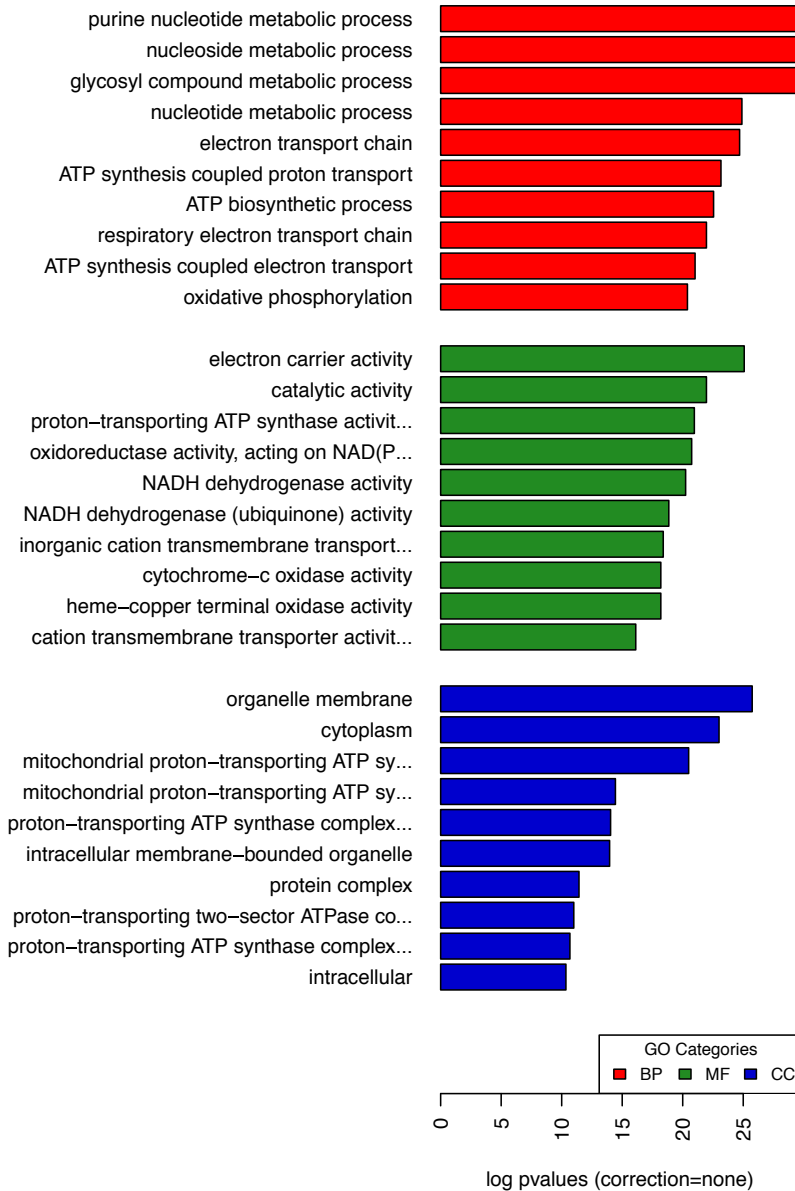
TopGO results



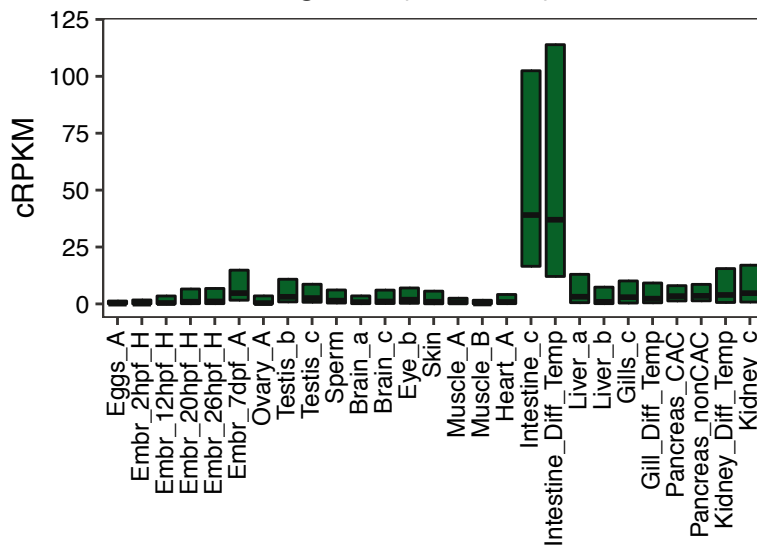
Module:coral2 (Mitochondrion)



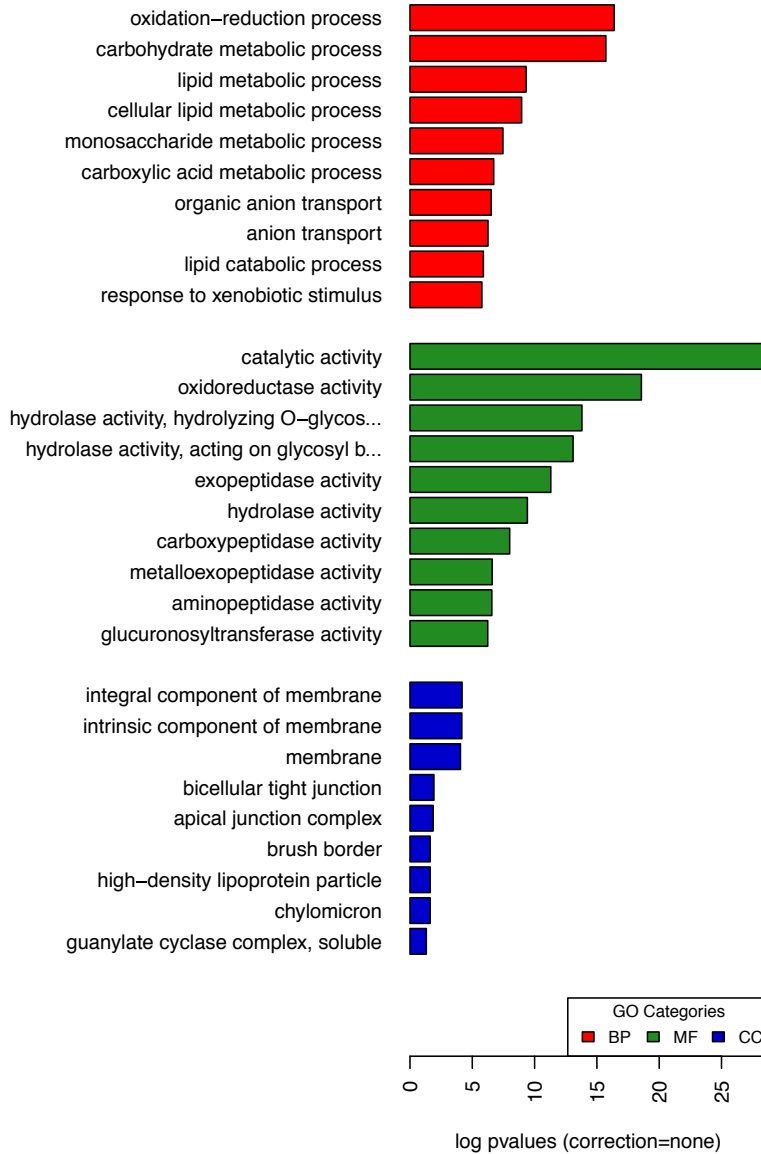
TopGO results



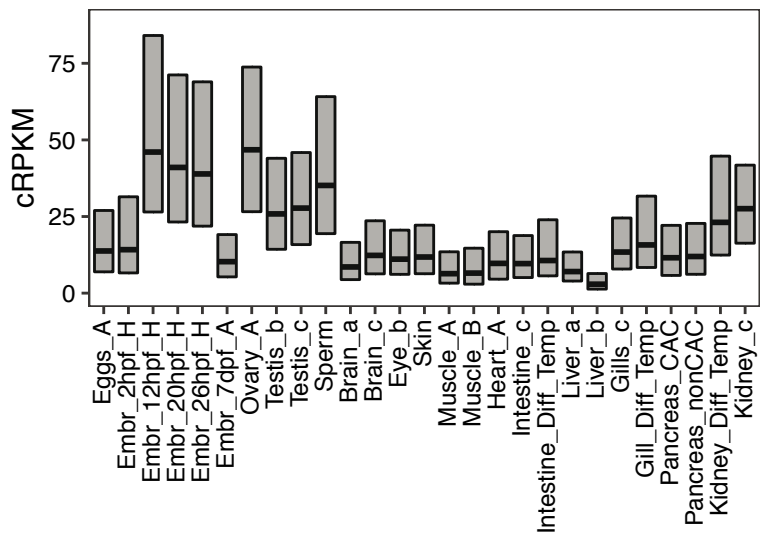
Module:darkgreen (Intestine)



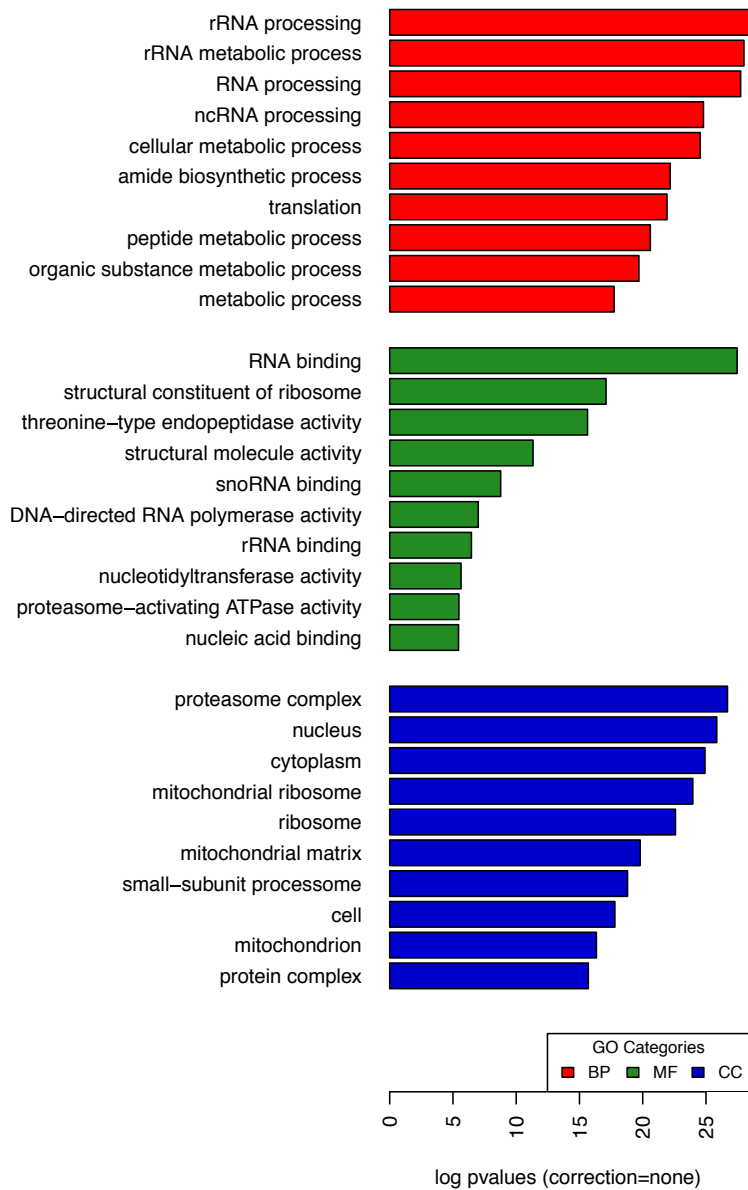
TopGO results



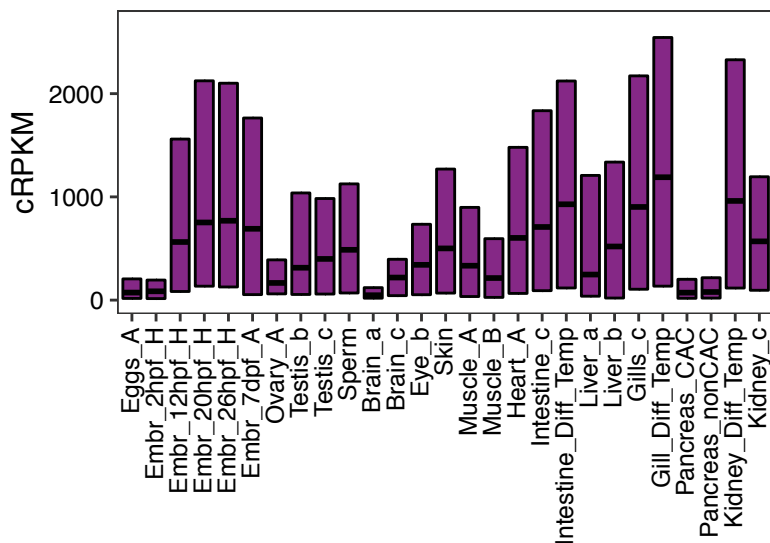
Module:darkgrey (RNA, ribosome, proteasome)



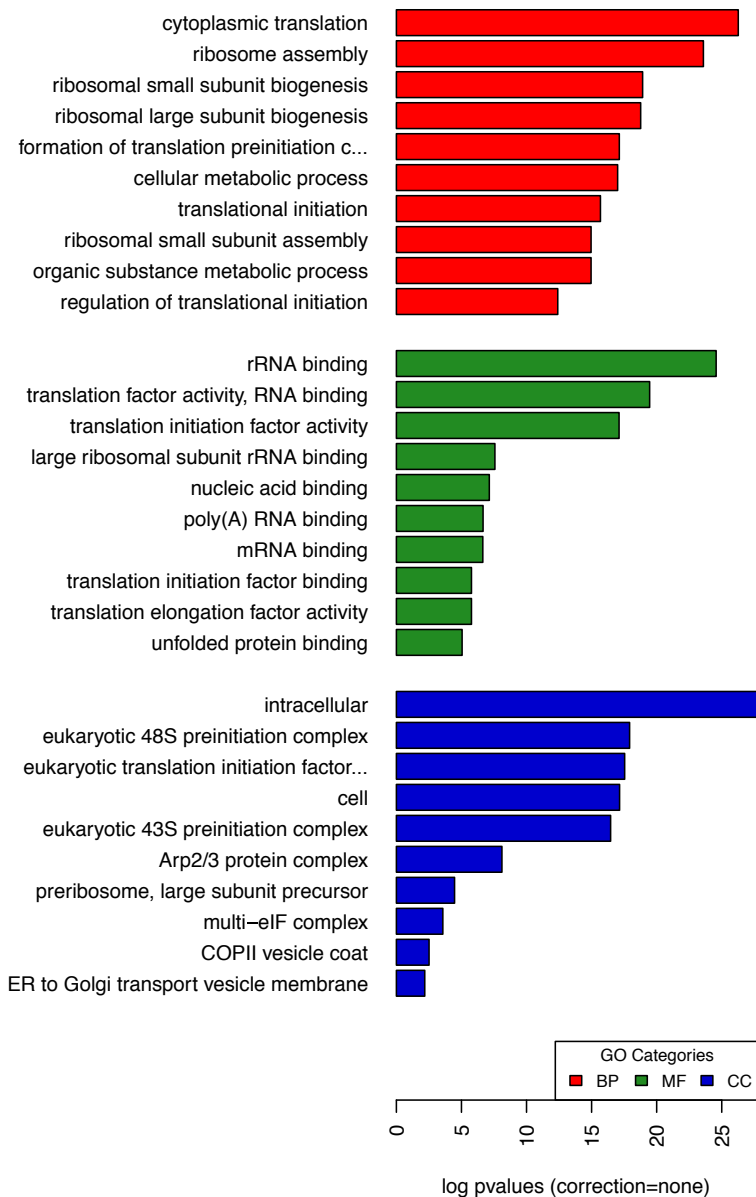
TopGO results



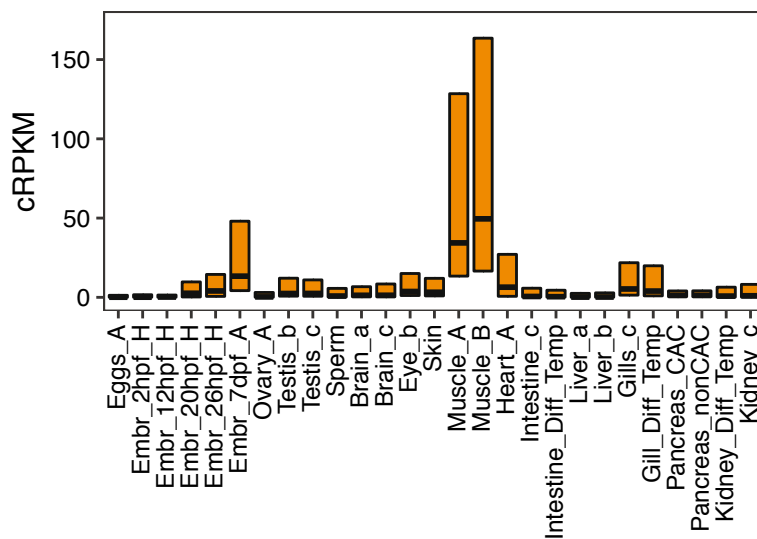
Module:darkmagenta (Translation)



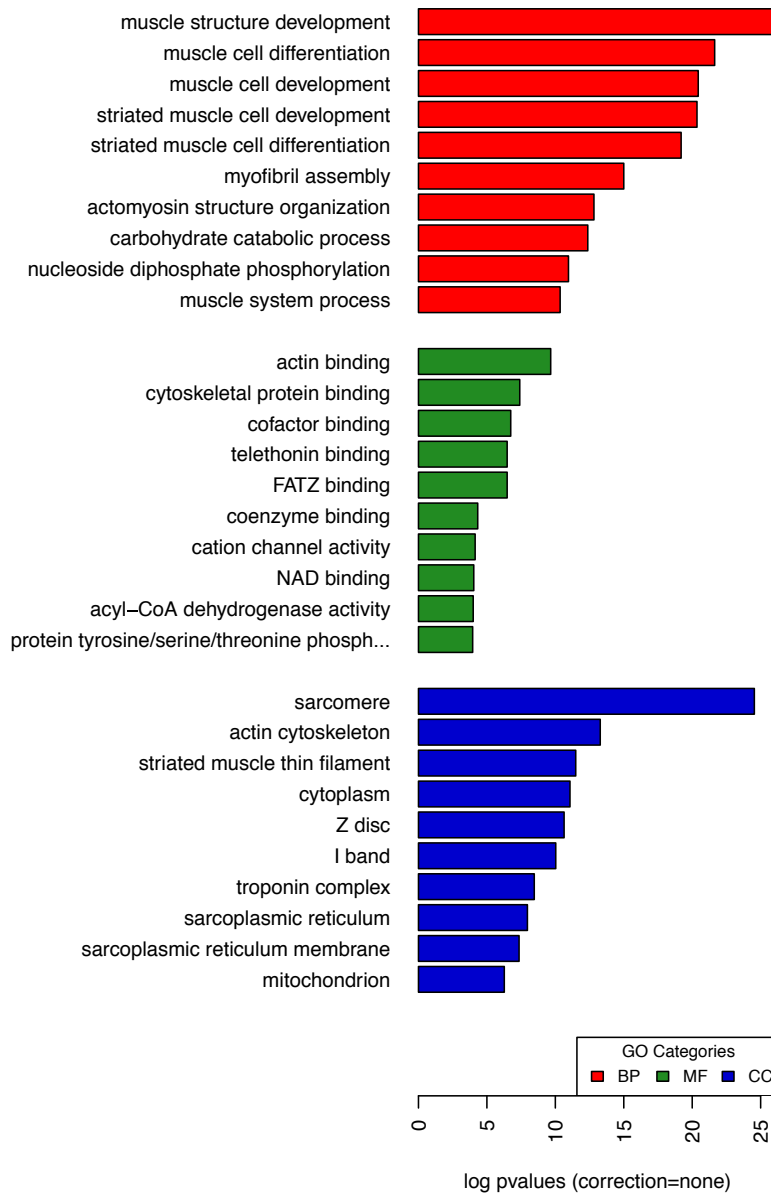
TopGO results



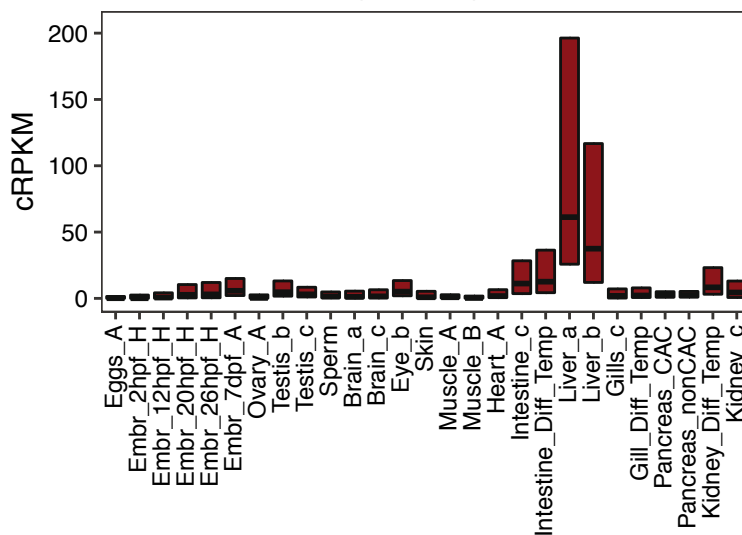
Module:darkorange (Muscle)



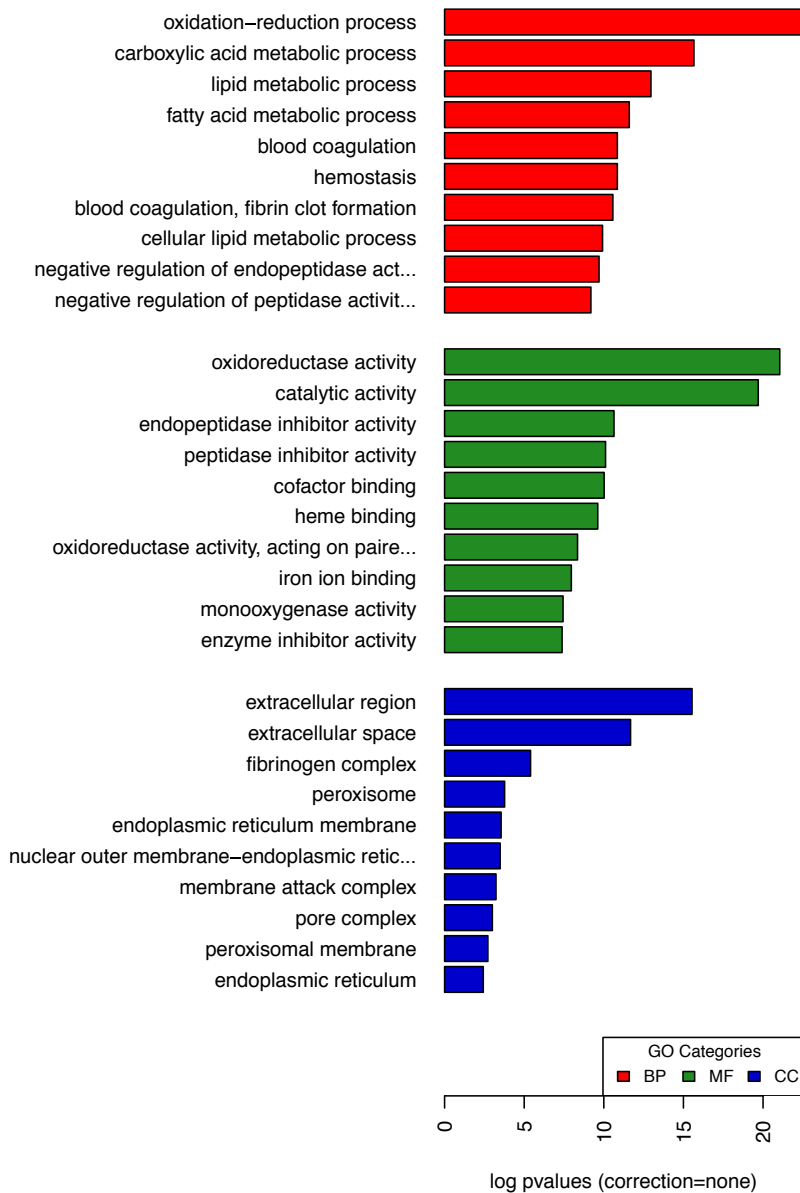
TopGO results



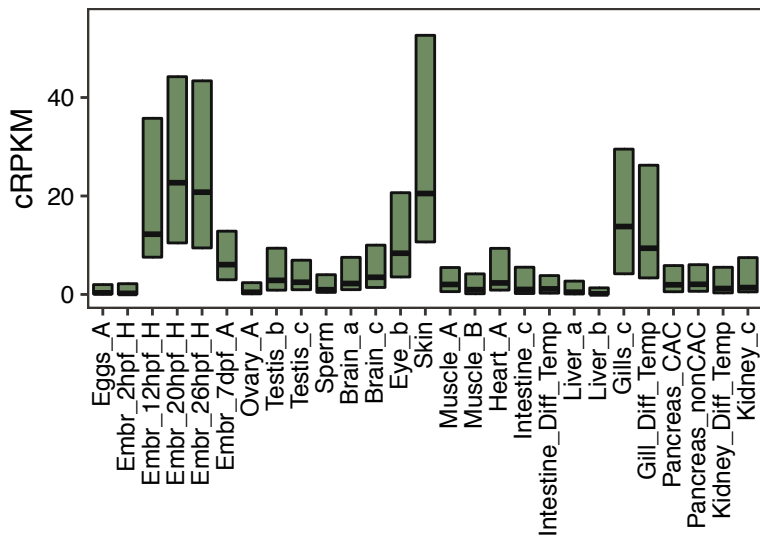
Module:darkred (Liver A)



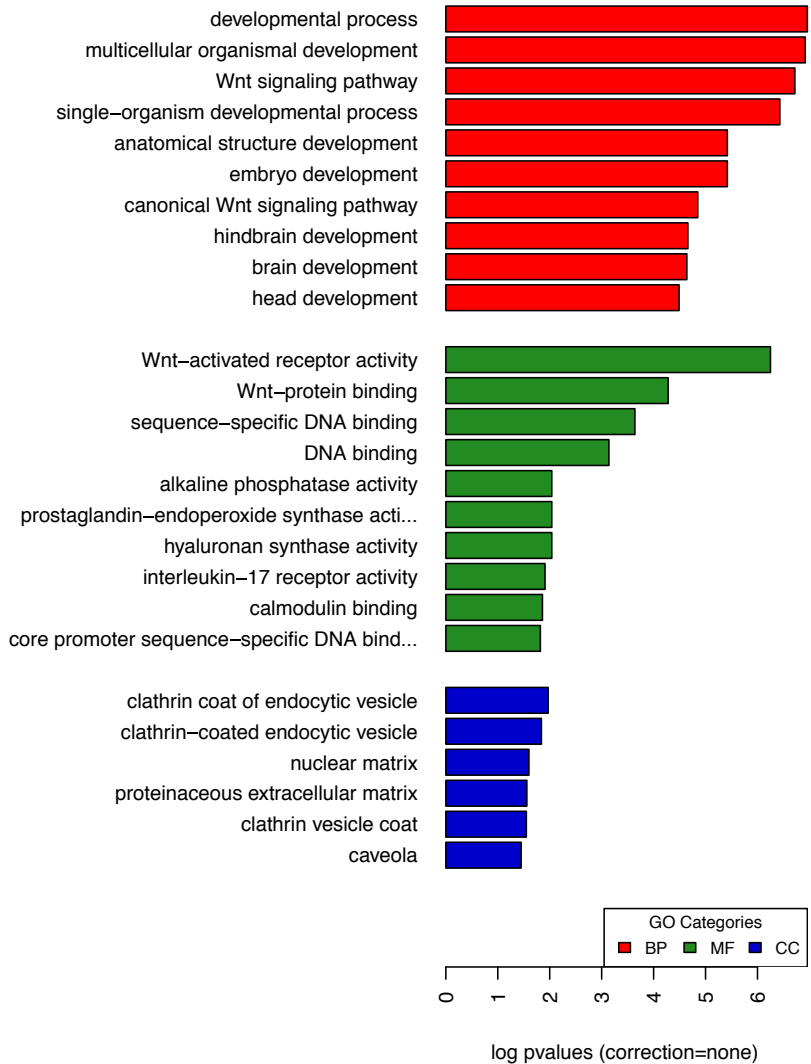
TopGO results



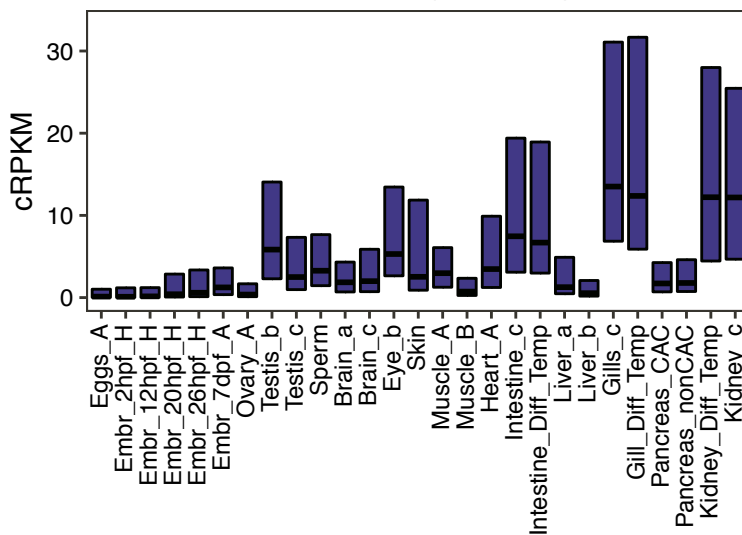
Module:darkseagreen4 (Embryo 12-26h / Skin)



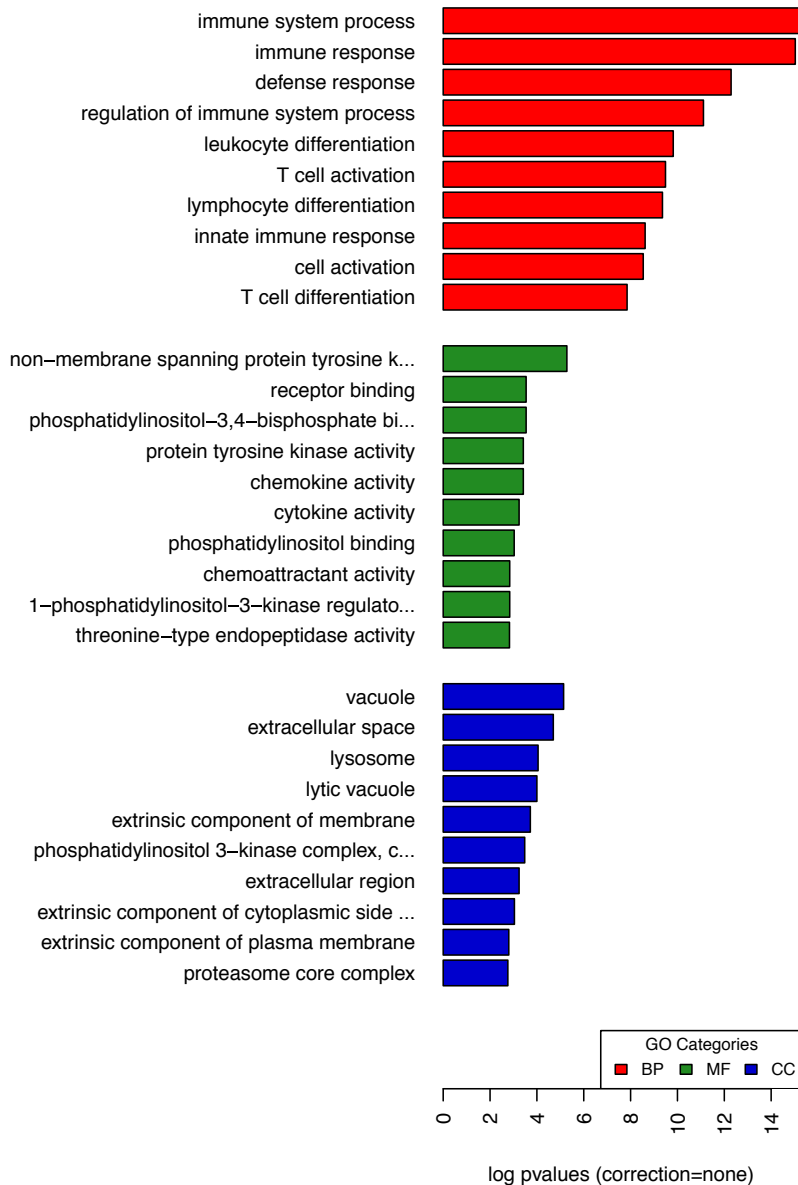
TopGO results



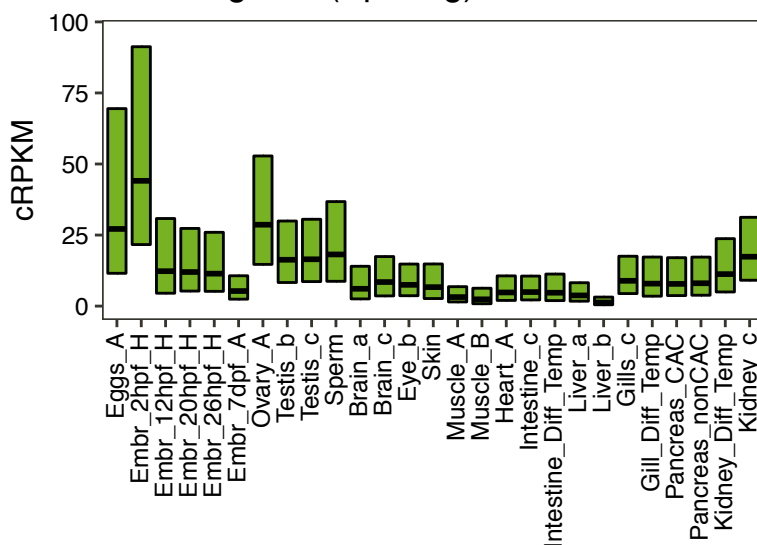
Module:darkslateblue (Immune)



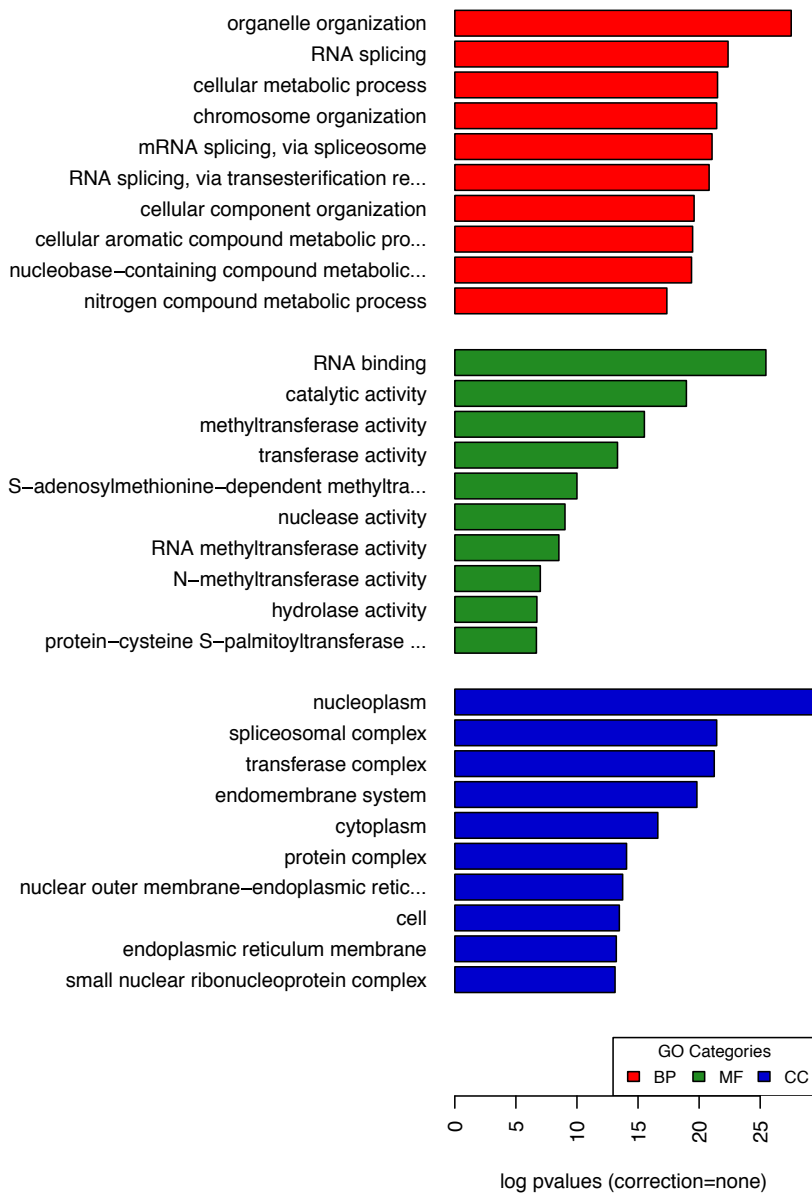
TopGO results



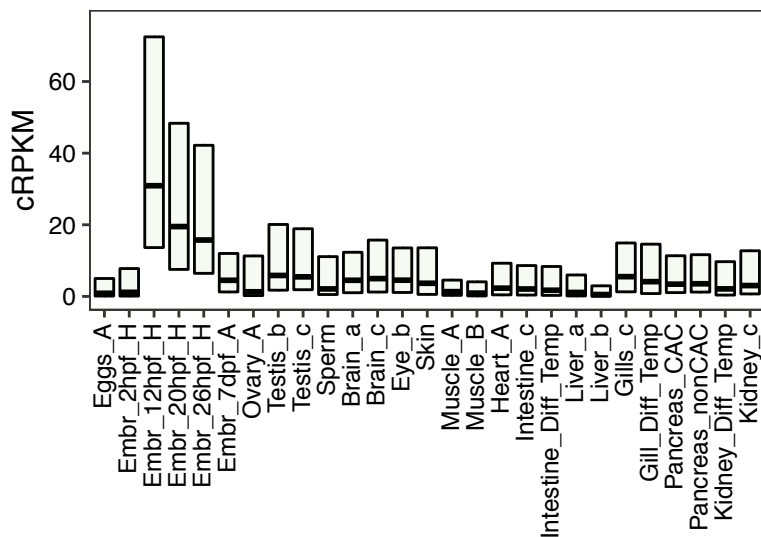
Module:green (Splicing)



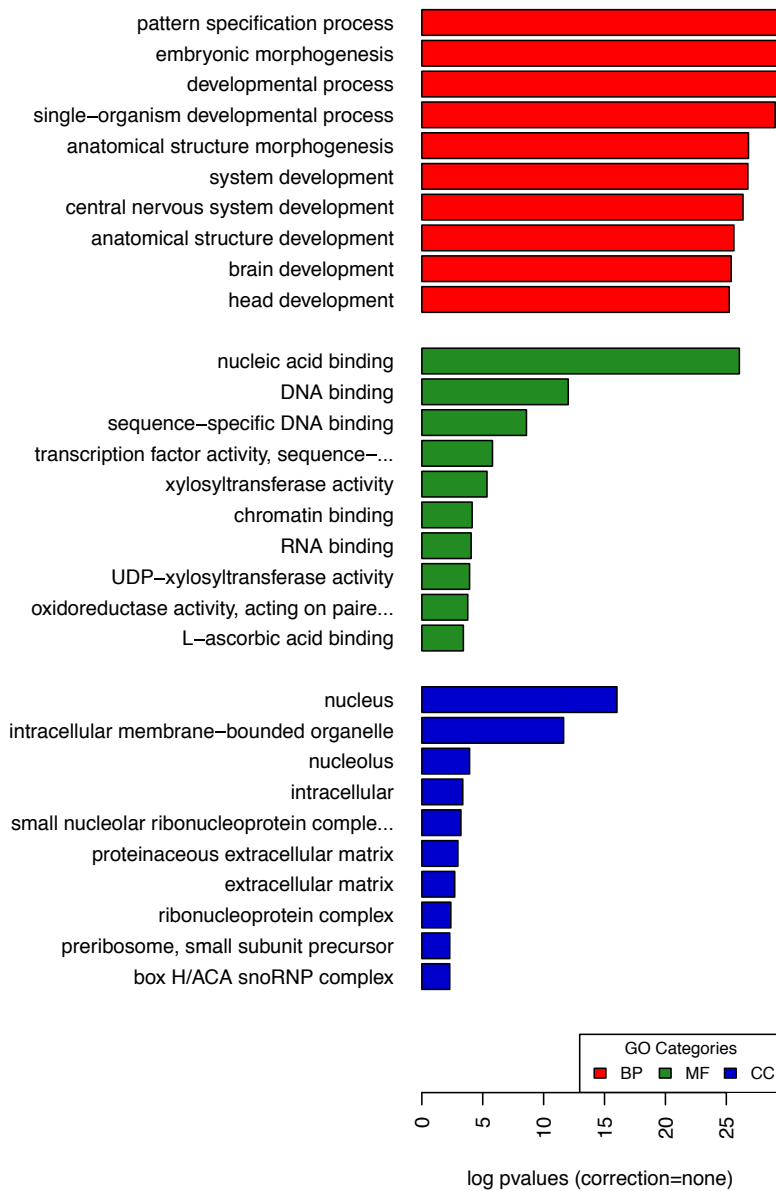
TopGO results



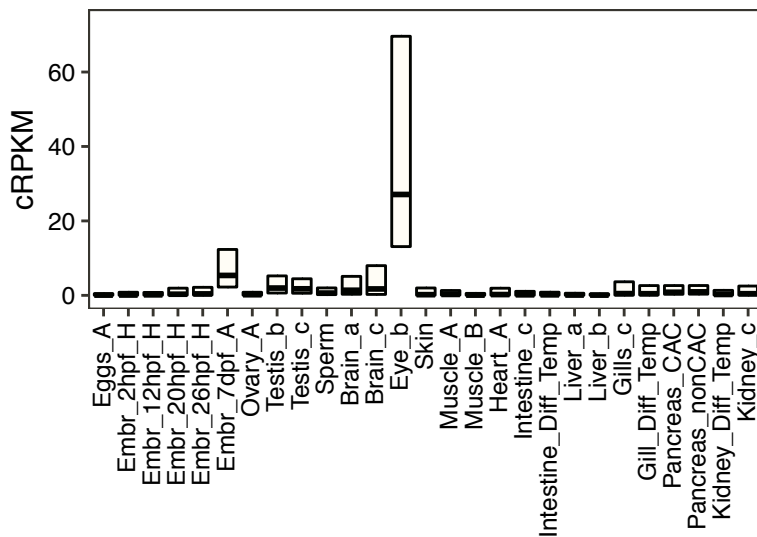
Module:honeydew1(Embryo 12-26h)



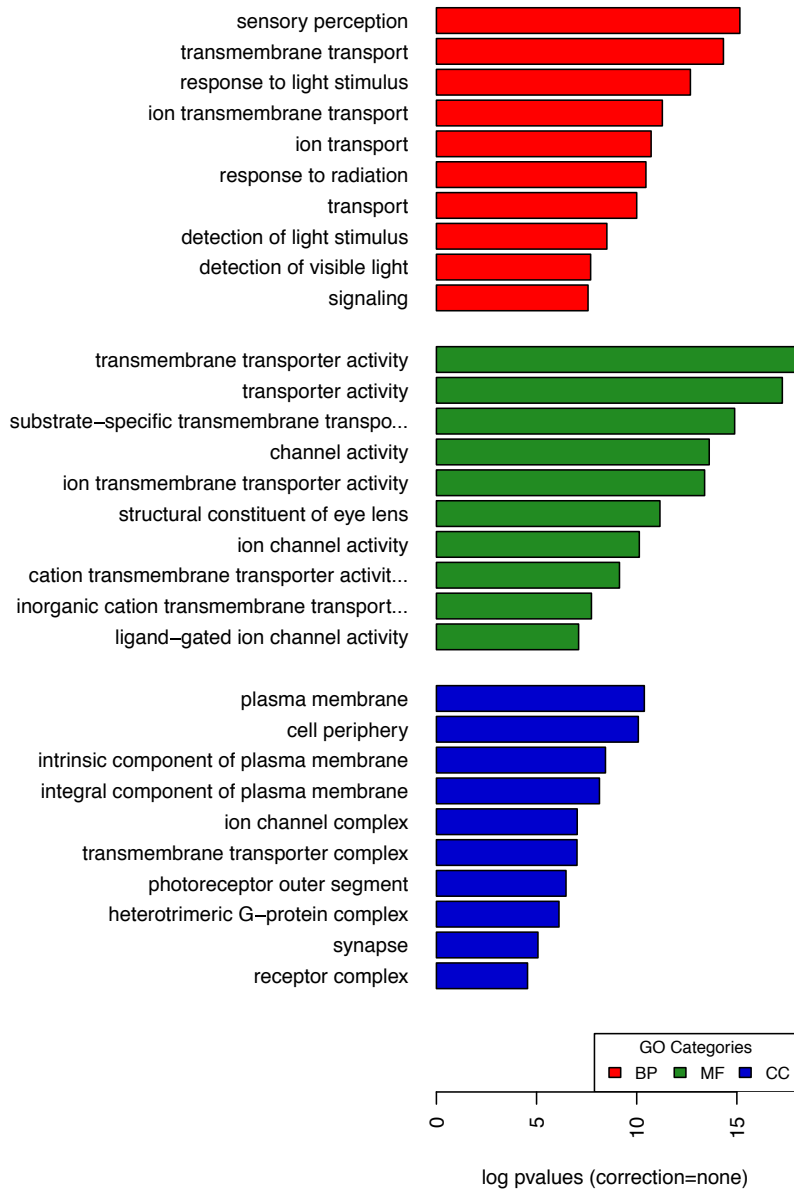
TopGO results



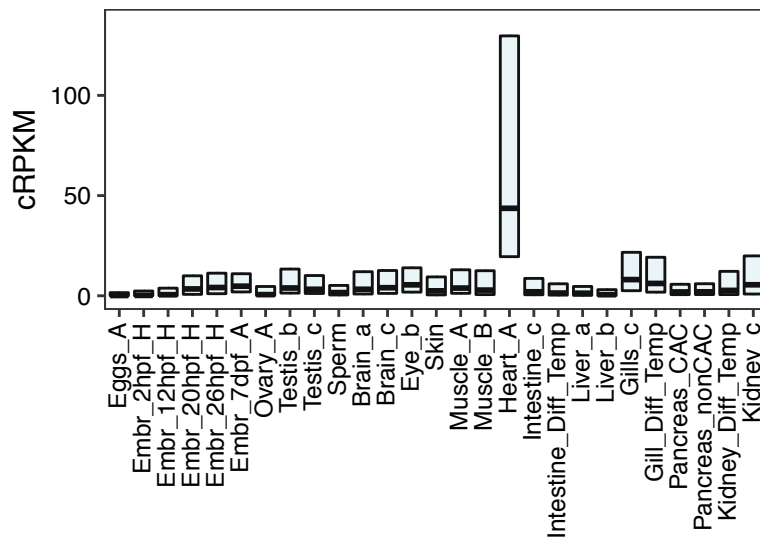
Module:ivory (Eye)



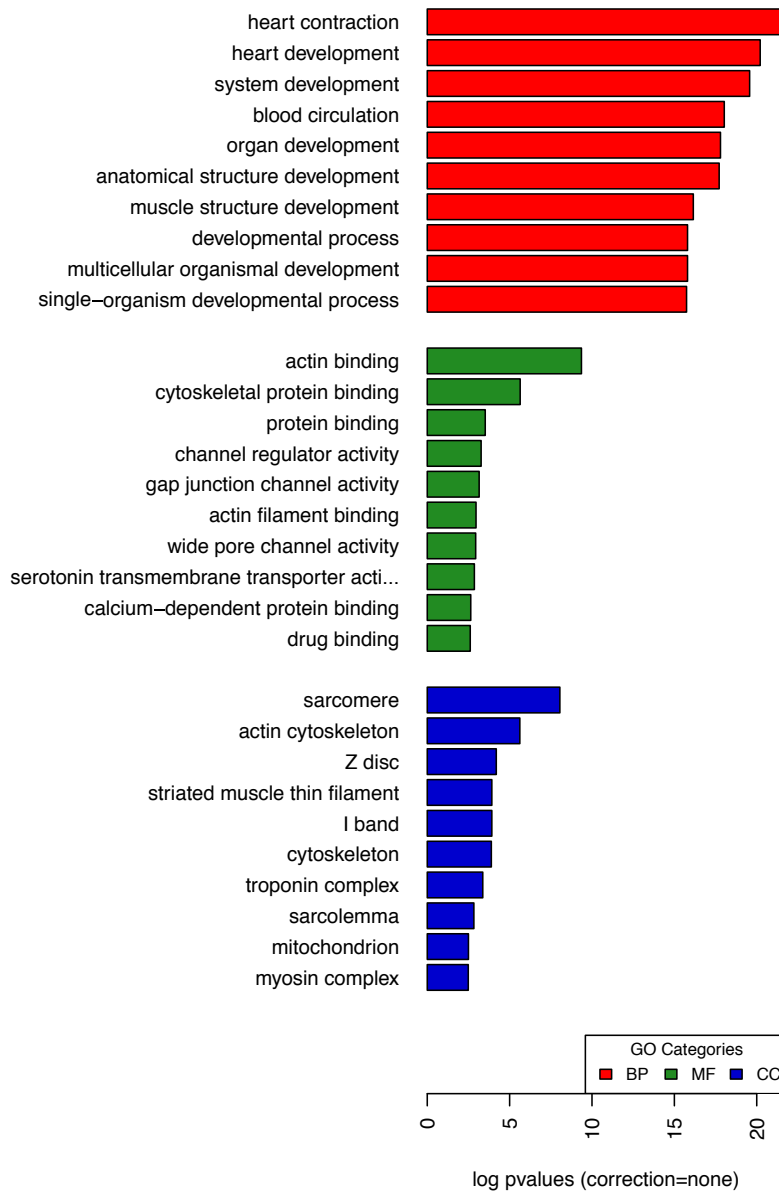
TopGO results



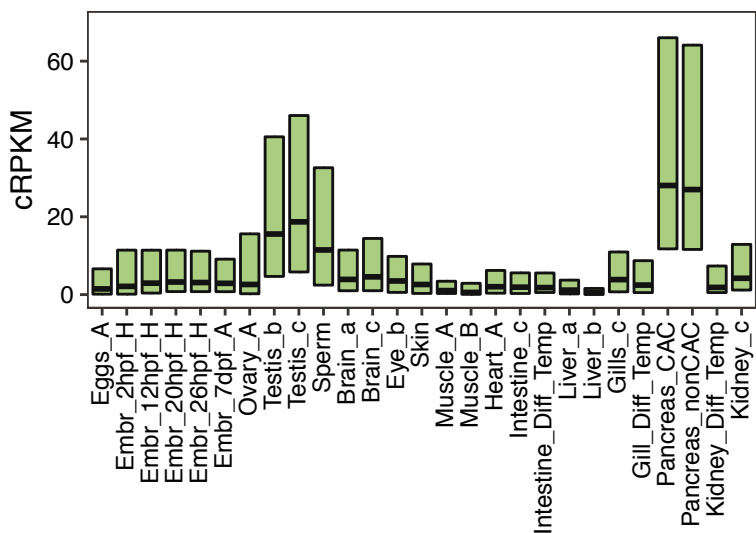
Module:lightcyan (Heart)



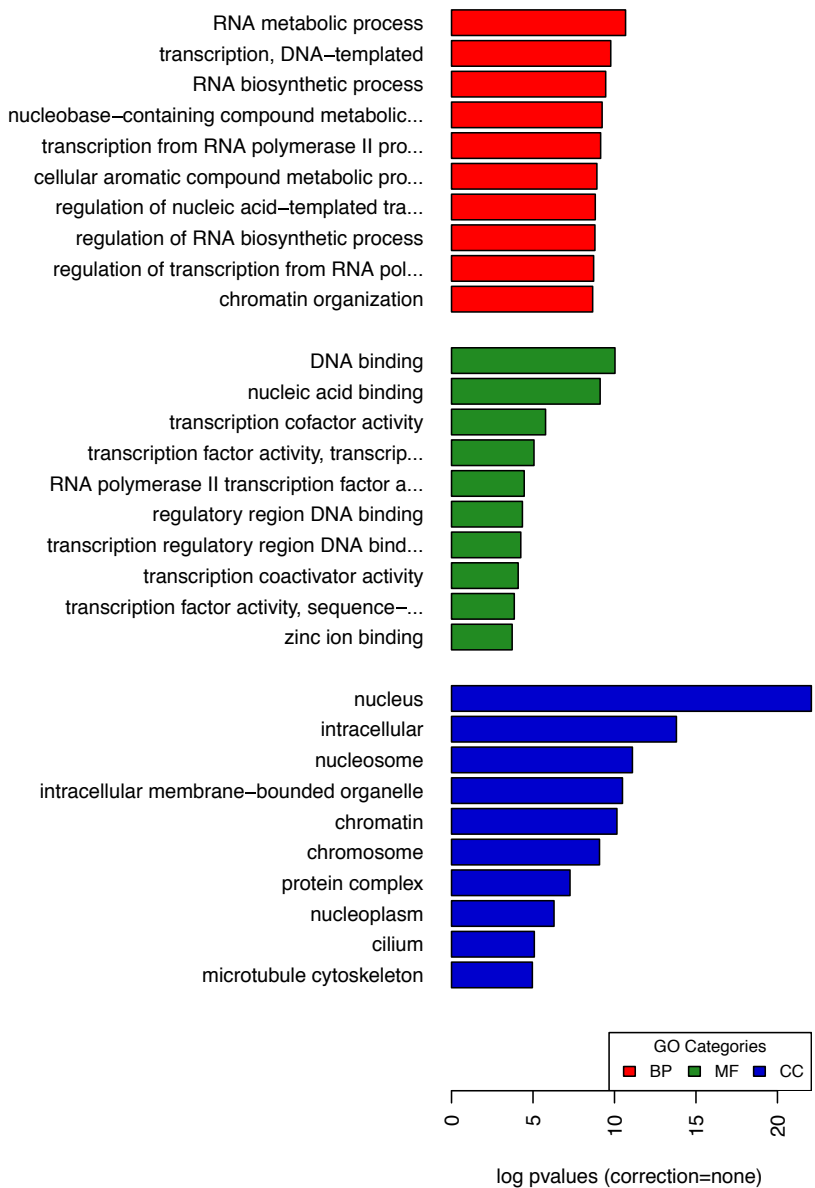
TopGO results



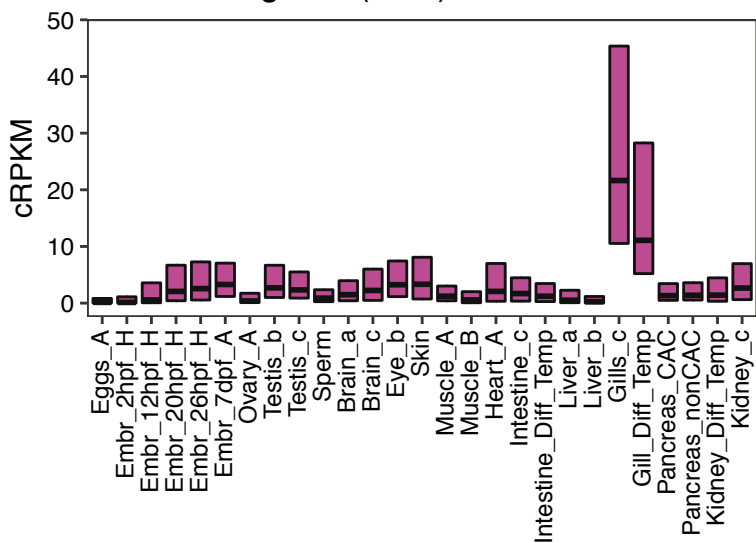
Module:lightgreen (Pancreas / Testis)



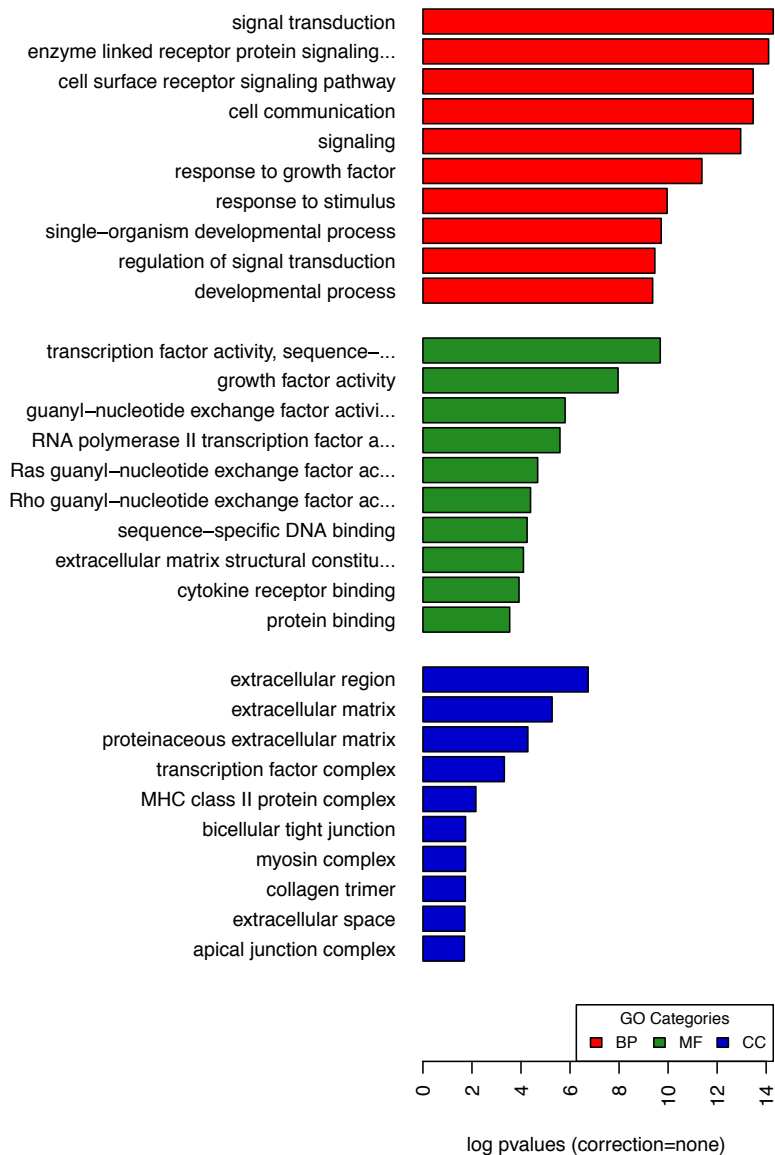
TopGO results



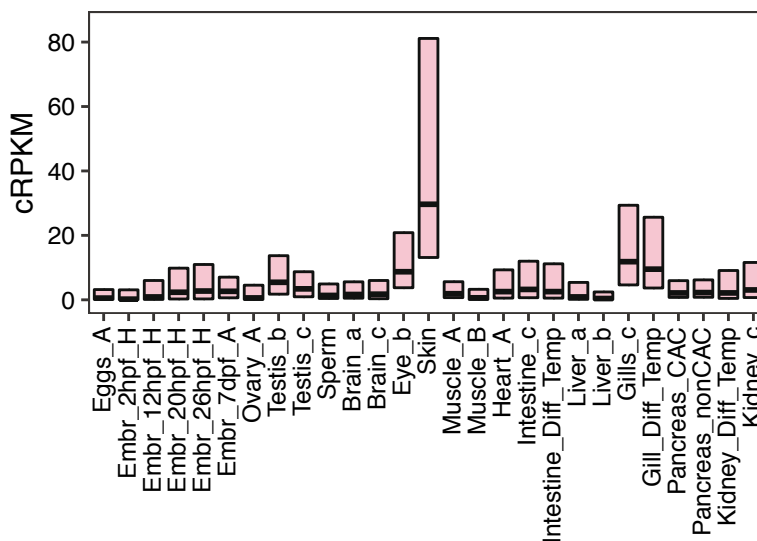
Module:magenta (Gills)



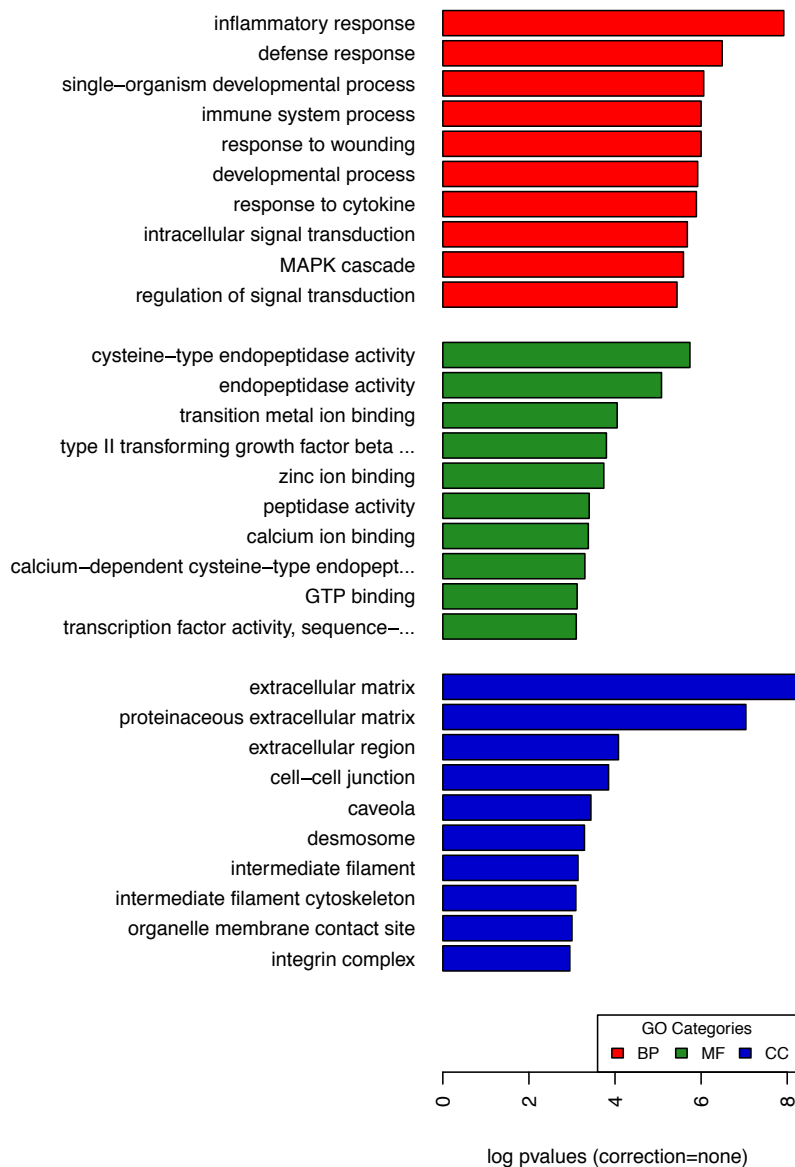
TopGO results



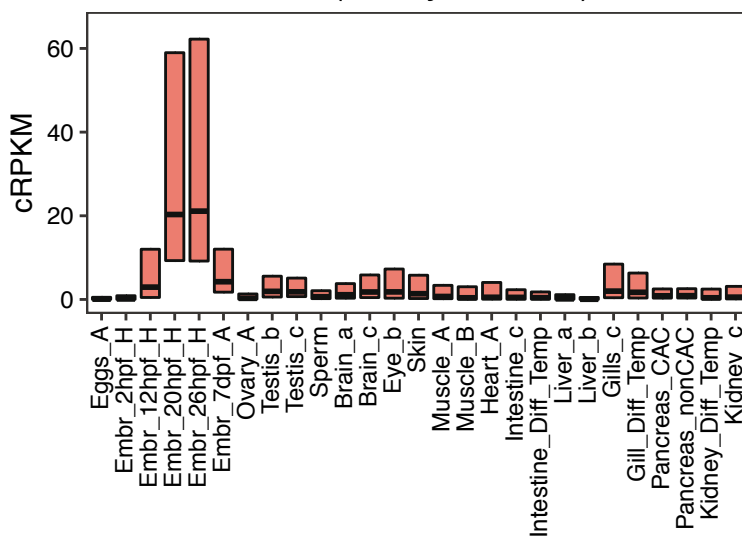
Module: pink (Skin)



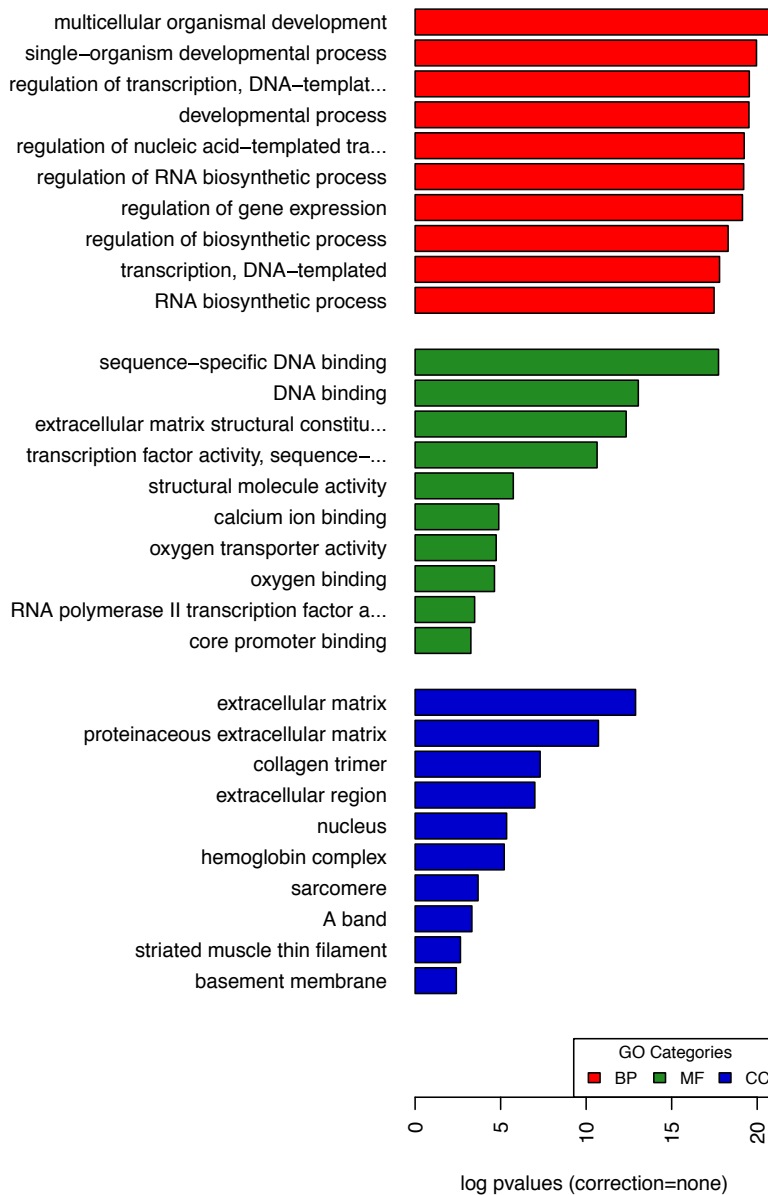
TopGO results



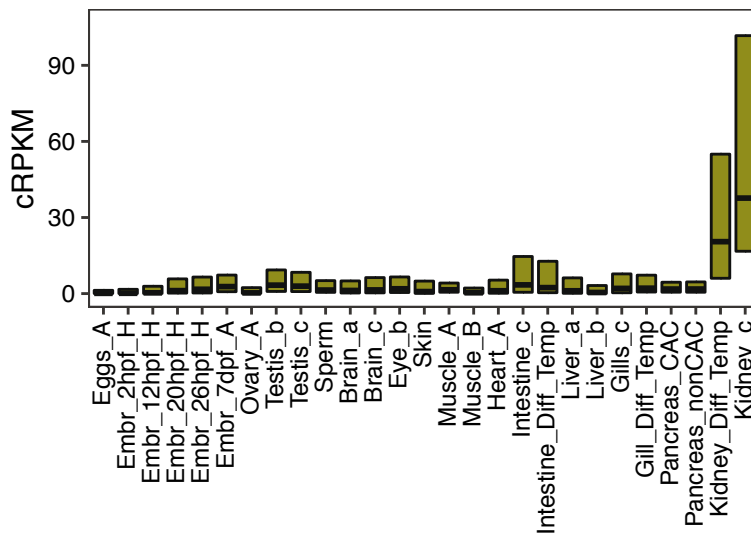
Module:salmon (Embryo 20-26h)



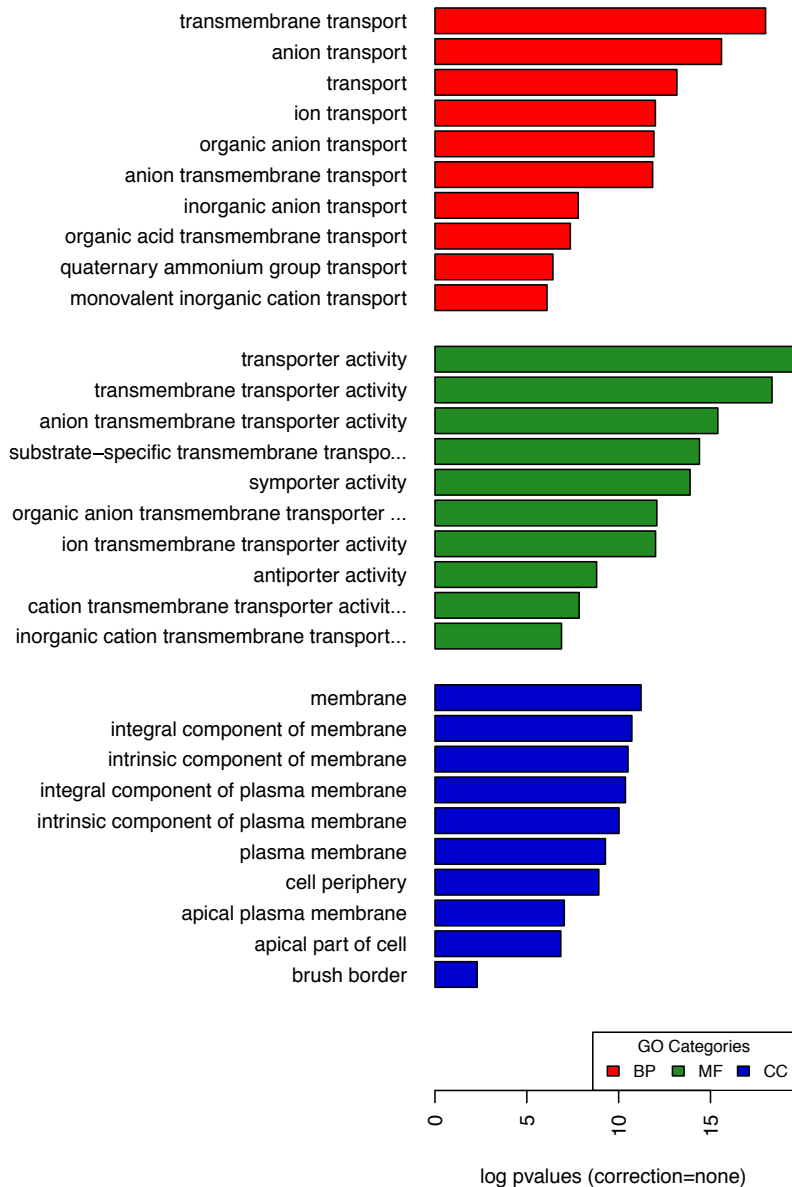
TopGO results



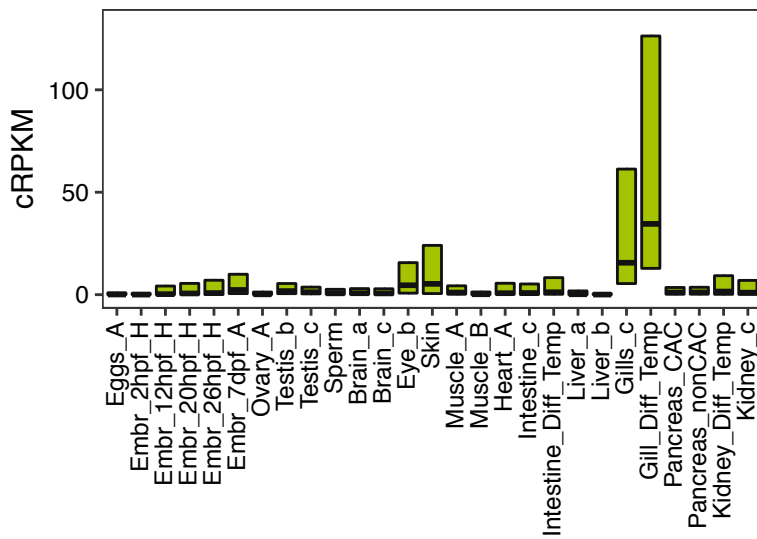
Module:yellow4 (Kidney)



TopGO results



Module:yellowgreen (Gills early)



TopGO results

