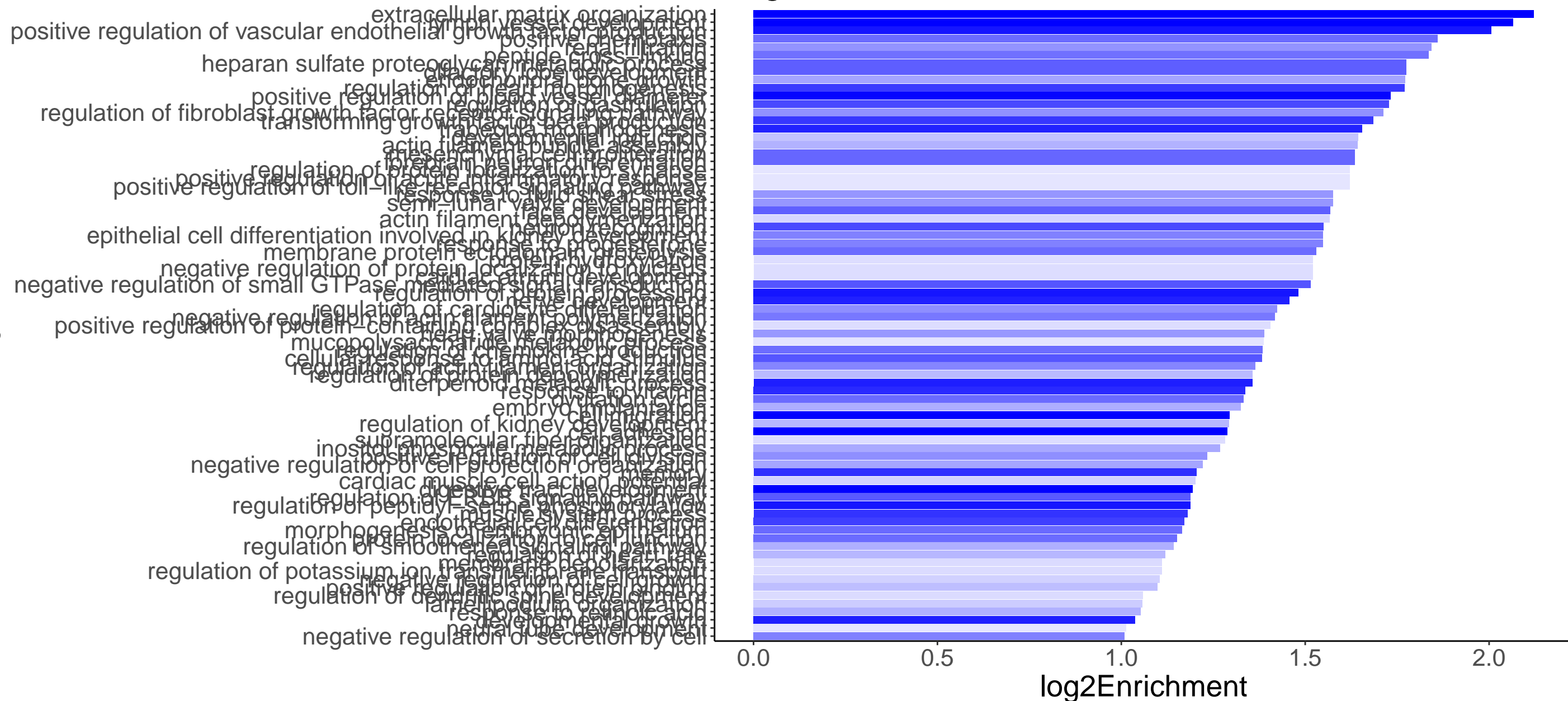


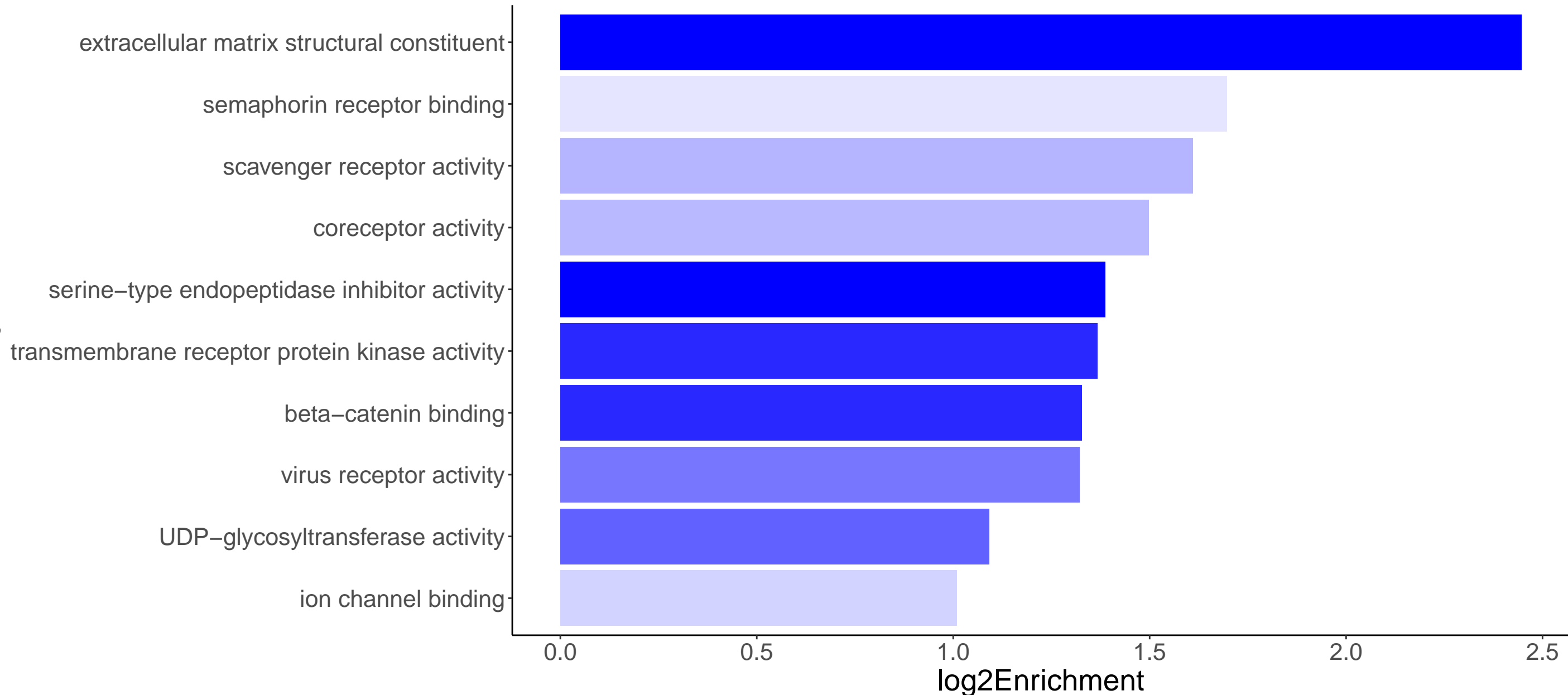
# Original module 5 BP enrichment

Term



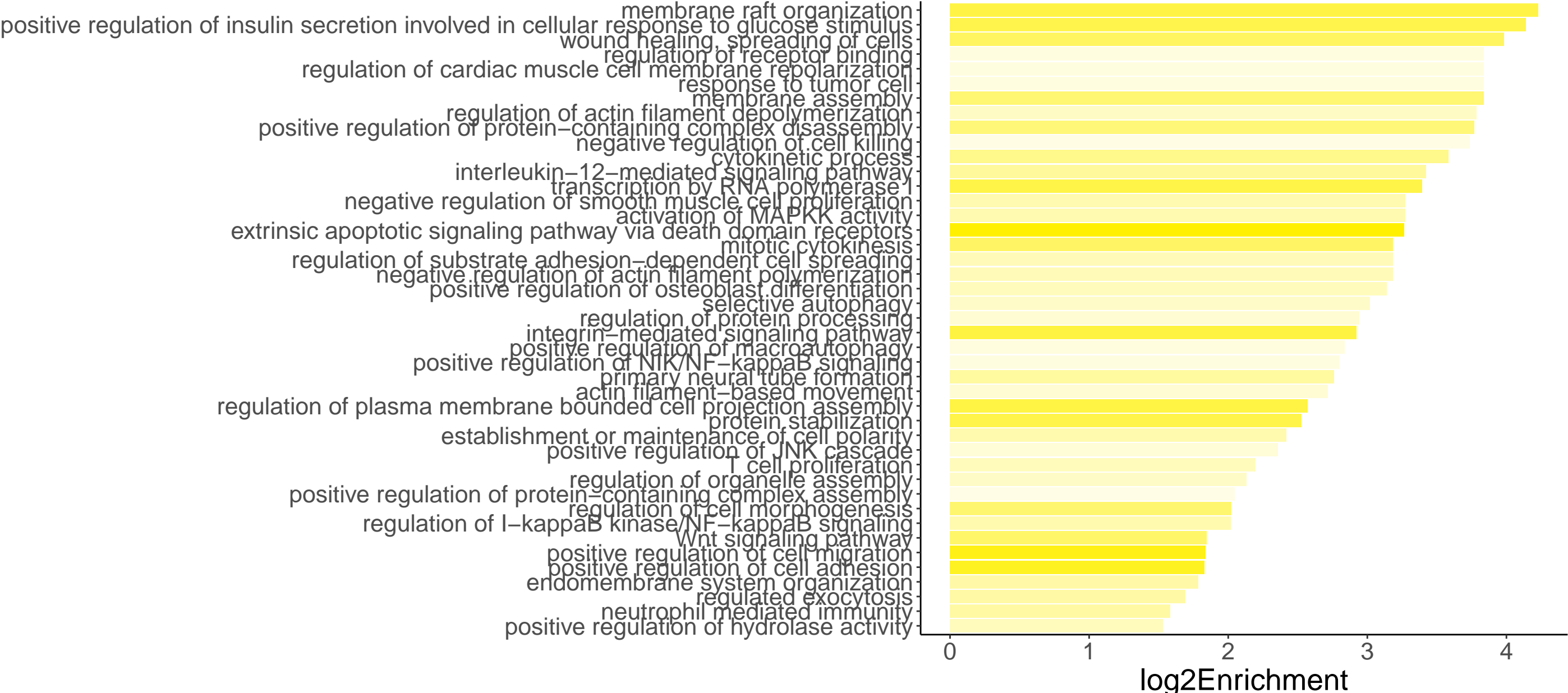
# Original module 5 MF enrichment

Term



# Re-clustered module 5.1 BP enrichment

Term



# Re-clustered module 5.1 MF enrichment

Term

phosphatidylinositol biphosphate binding

protein phosphatase binding

protease binding

actin binding

calcium ion binding

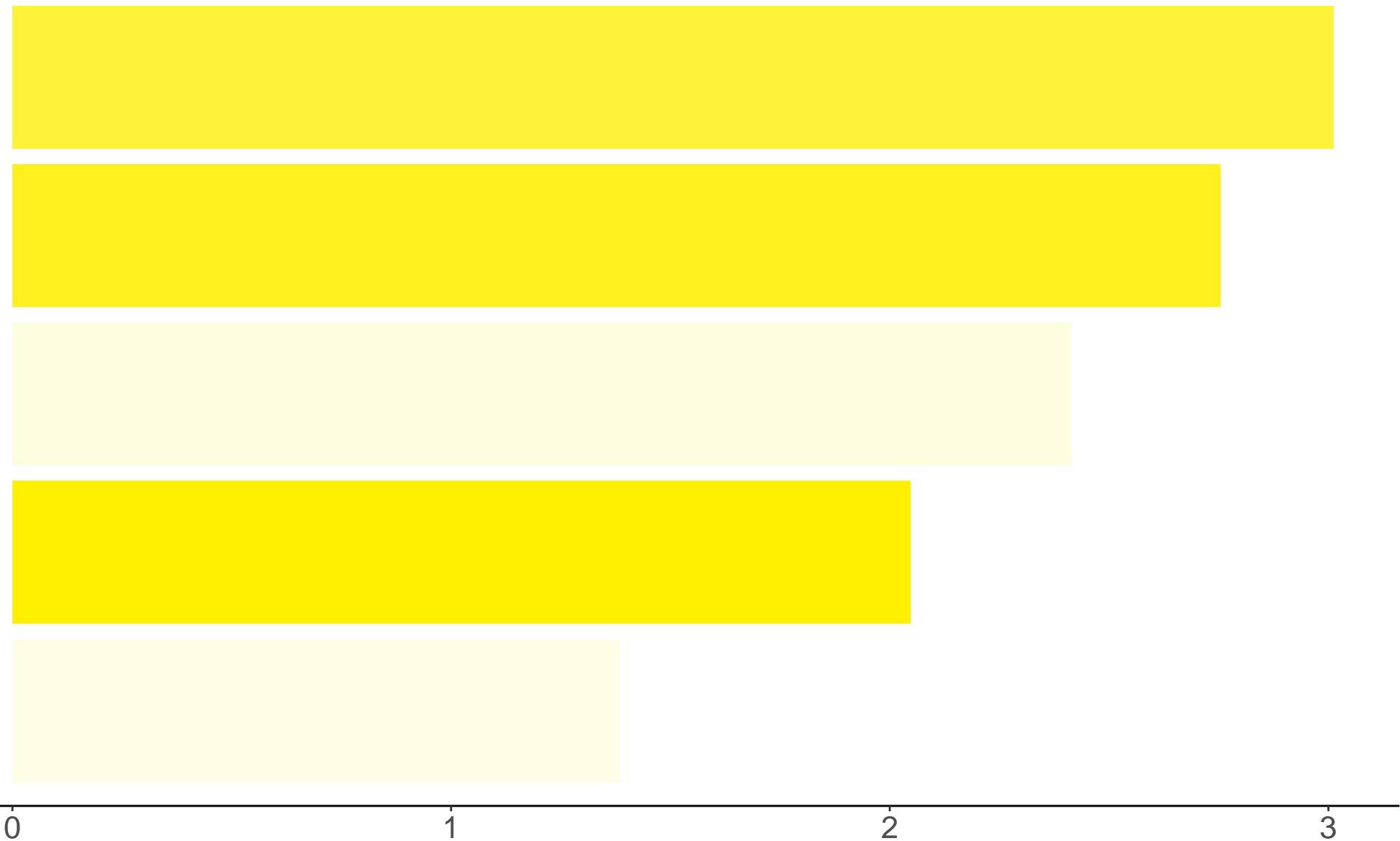
0

1

2

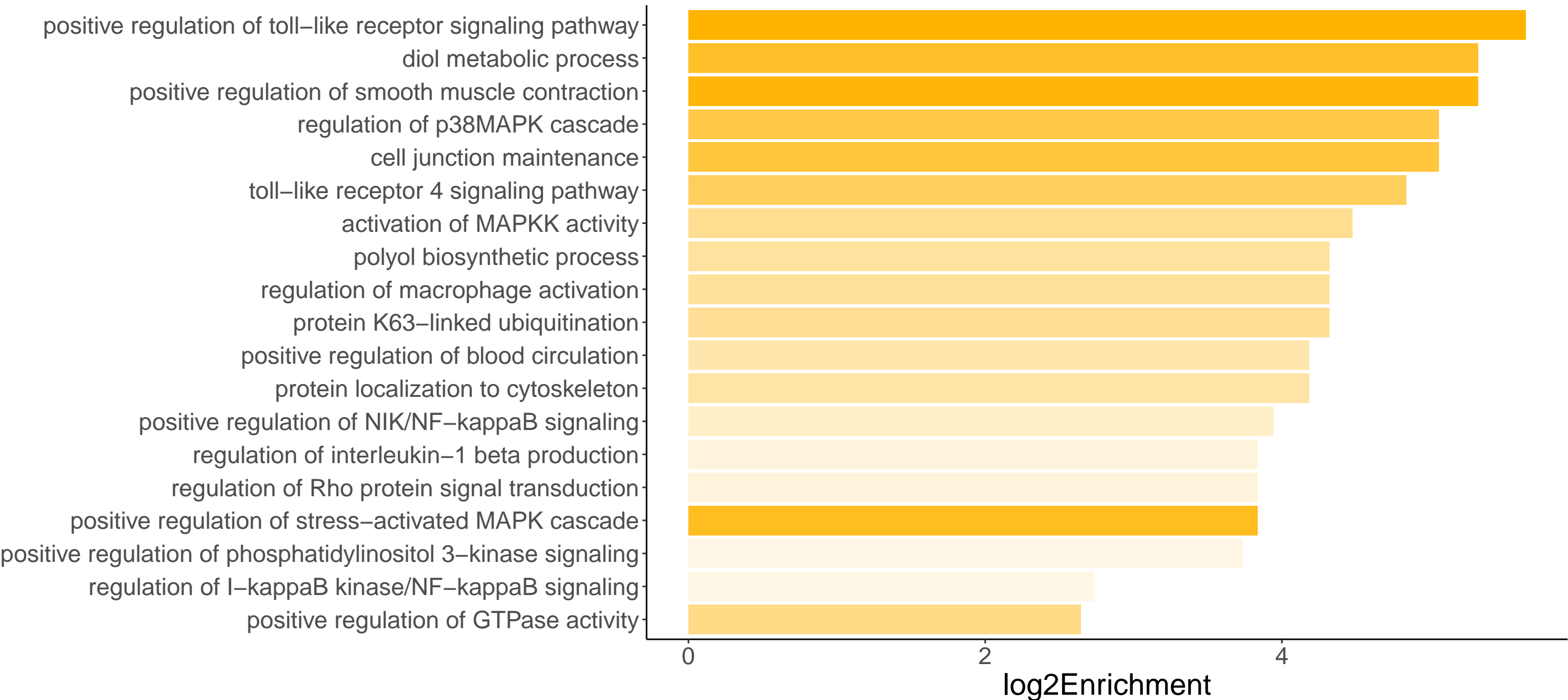
3

log2Enrichment



# Re-clustered module 5.10 BP enrichment

Term



# Re-clustered module 5.10 MF enrichment

Term

G-protein alpha-subunit binding

protein phosphatase 2A binding

tumor necrosis factor receptor superfamily binding

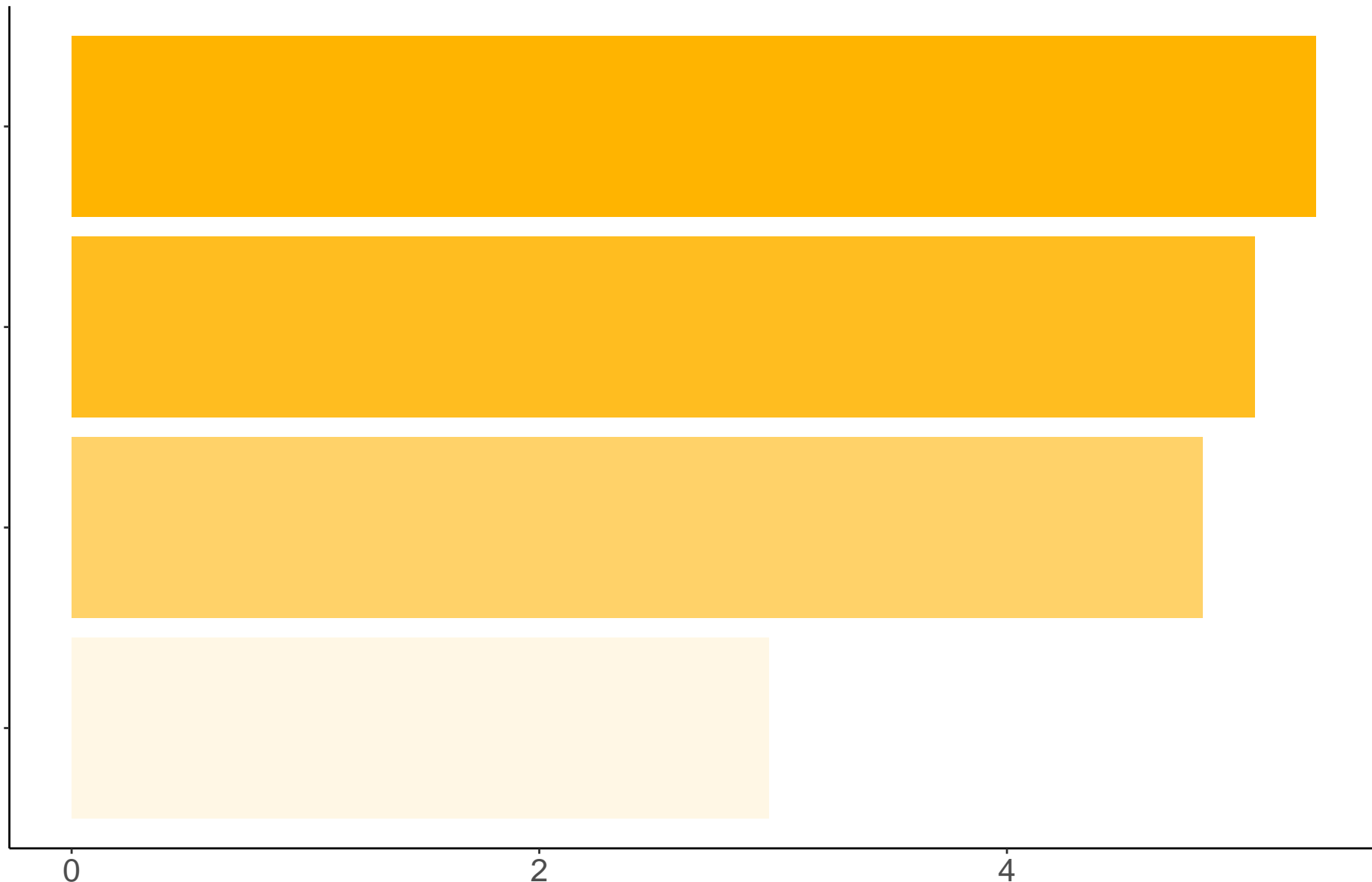
guanyl-nucleotide exchange factor activity

0

2

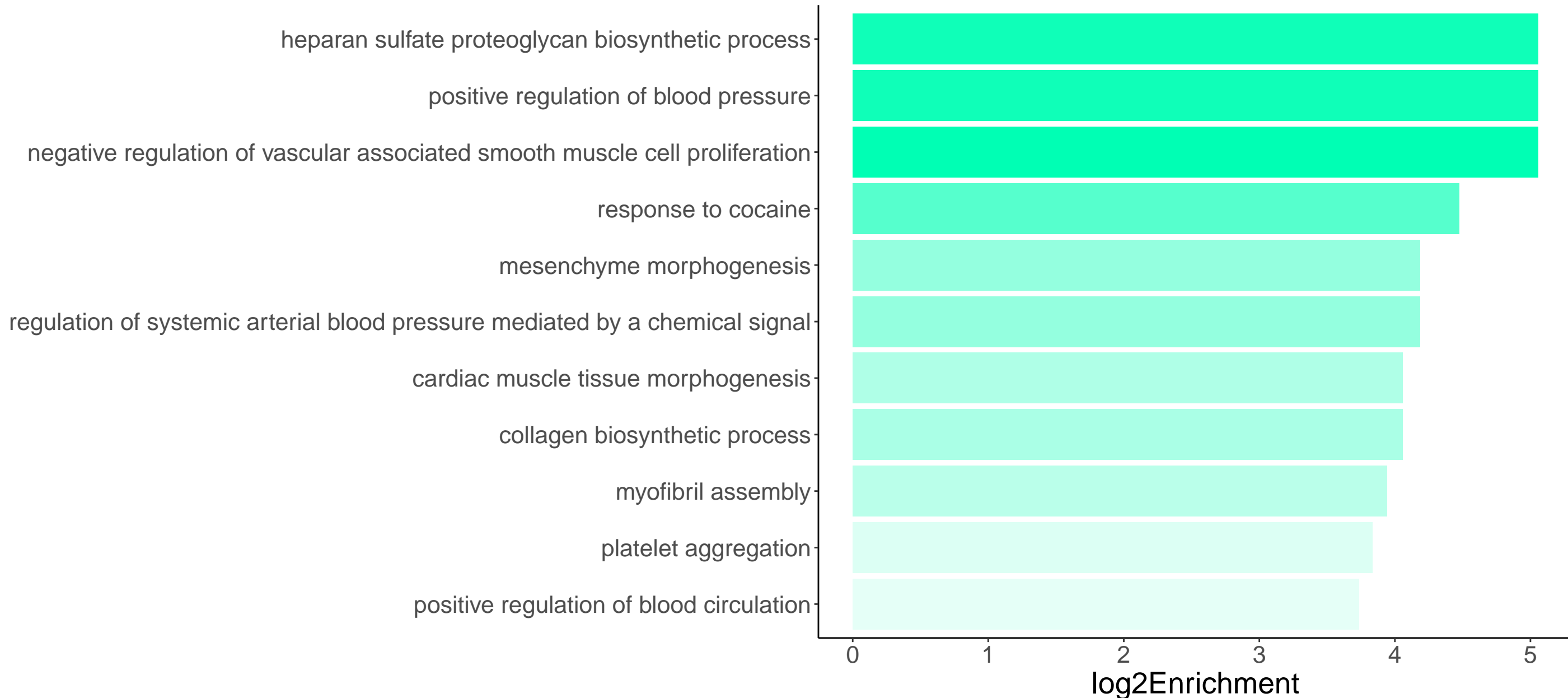
4

log2Enrichment



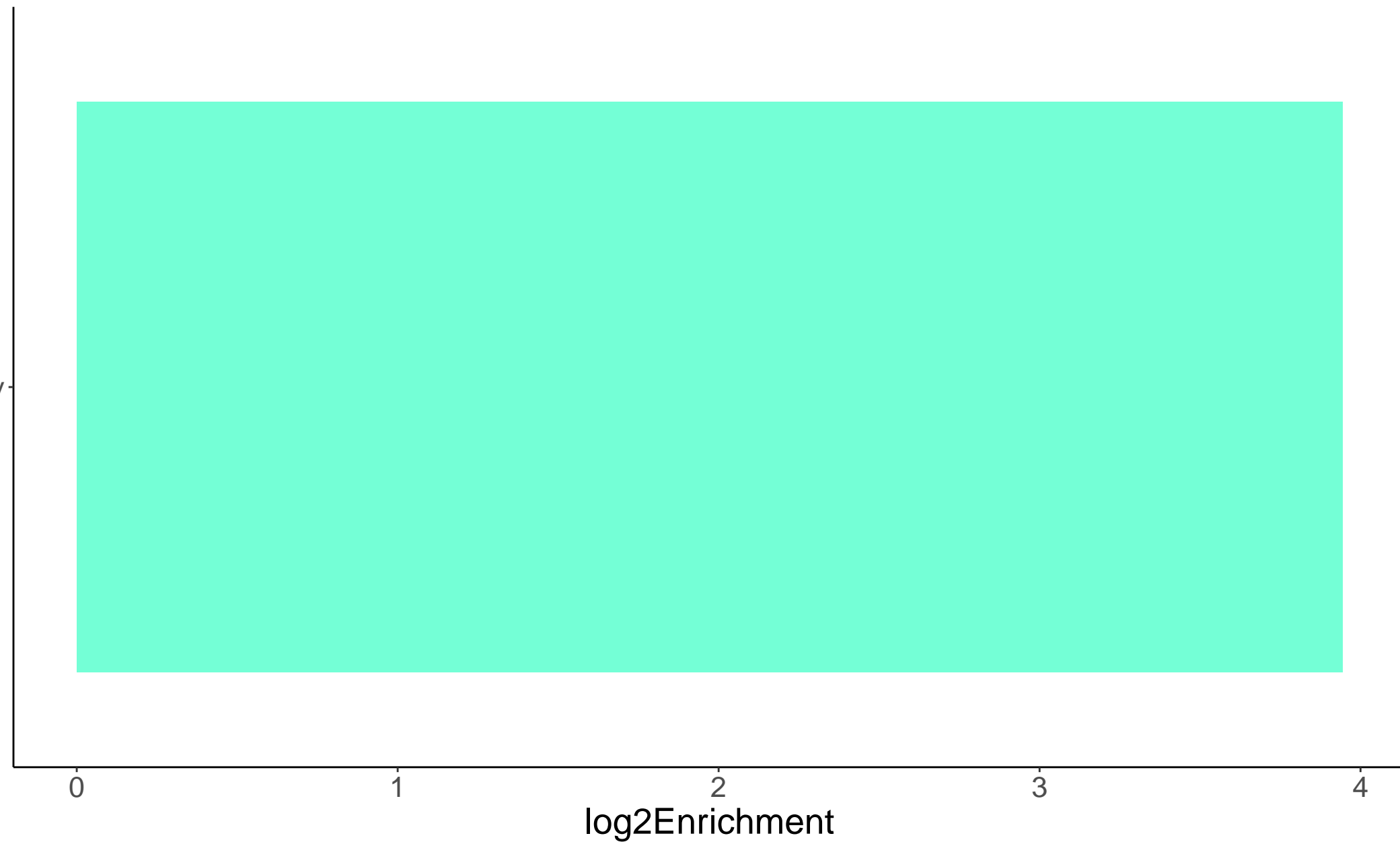
## Re-clustered module 5.11 BP enrichment

Term



# Re-clustered module 5.11 MF enrichment

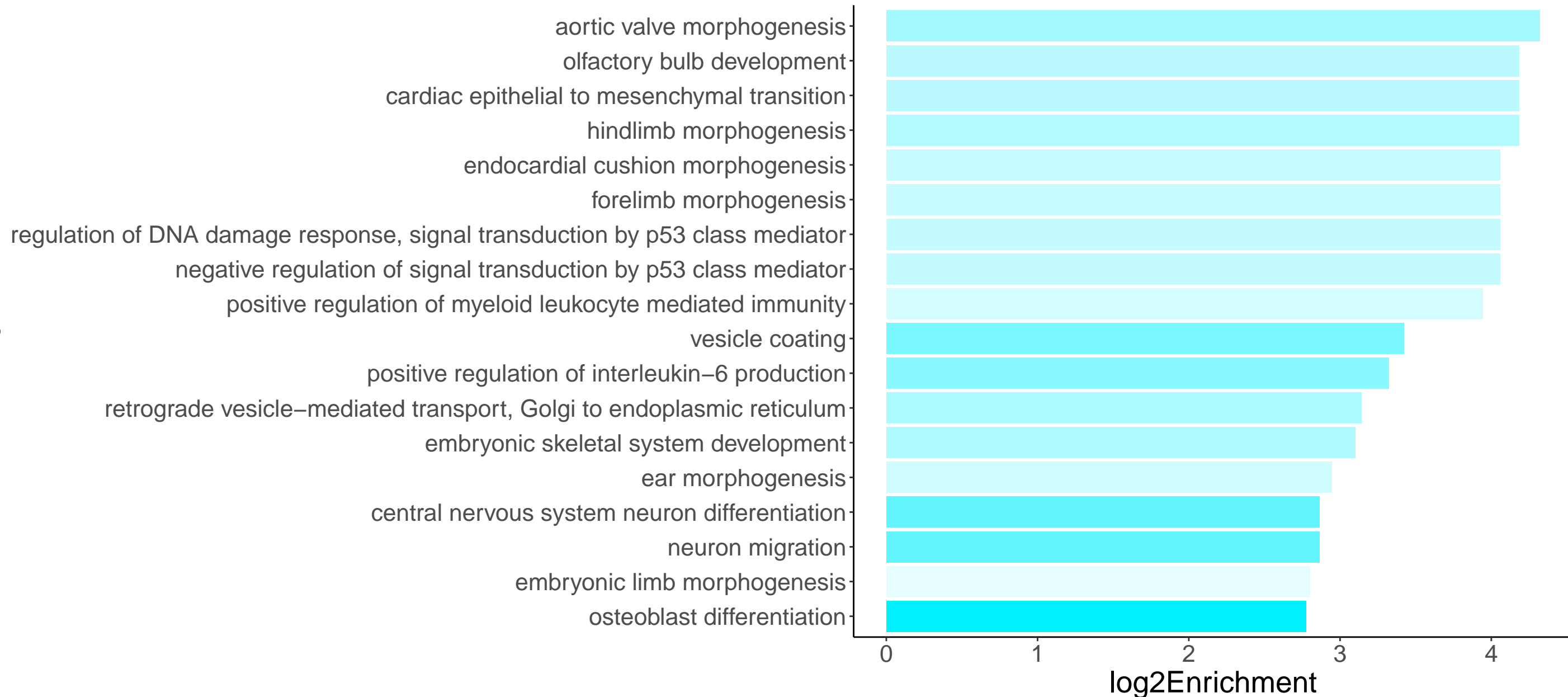
Term  
acetylglucosaminyltransferase activity





# Re-clustered module 5.12 BP enrichment

Term



Re-clustered module 5.12 MF enrichment

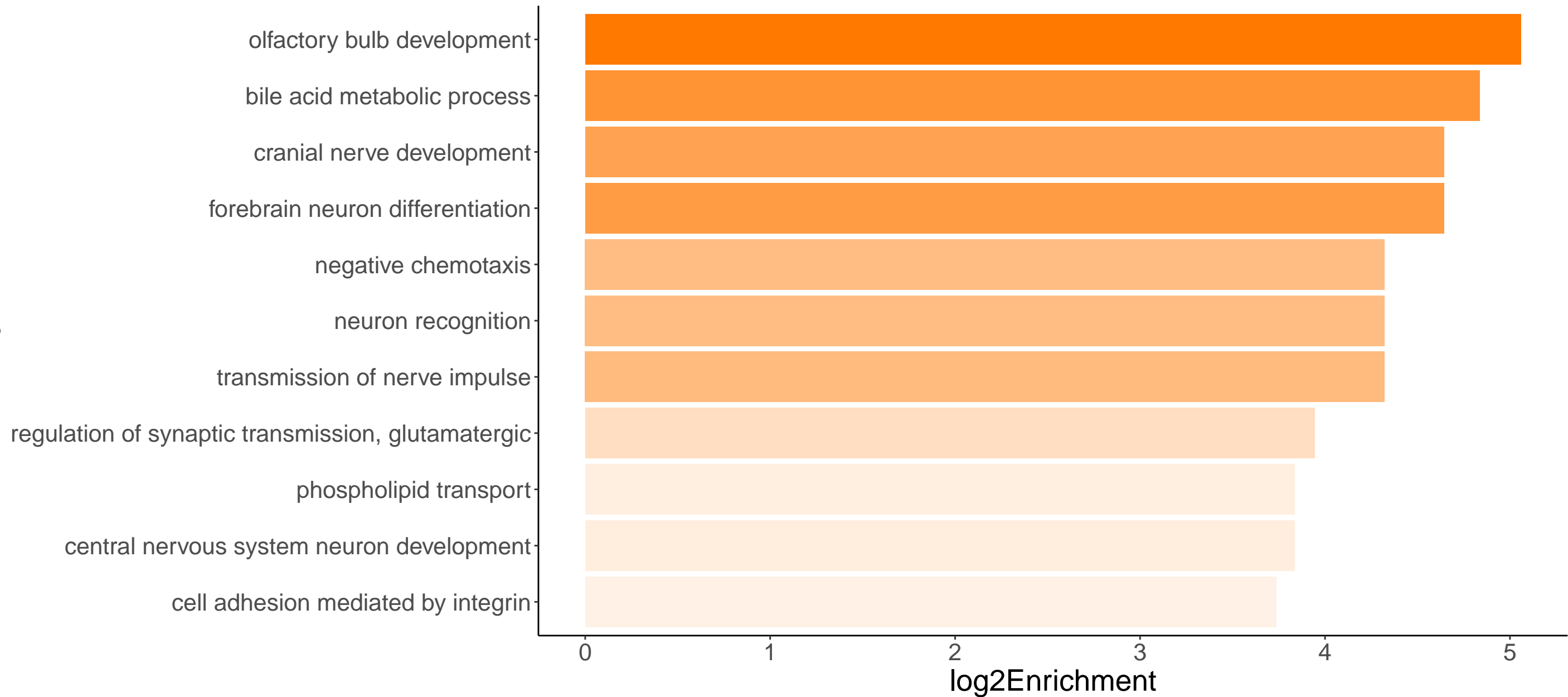
Term

log2Enrichment



## Re-clustered module 5.13 BP enrichment

Term



# Re-clustered module 5.13 MF enrichment

Term

cholesterol binding

lipid transporter activity

receptor tyrosine kinase binding

0

1

2

3

4

log2Enrichment

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

4

0

1

2

3

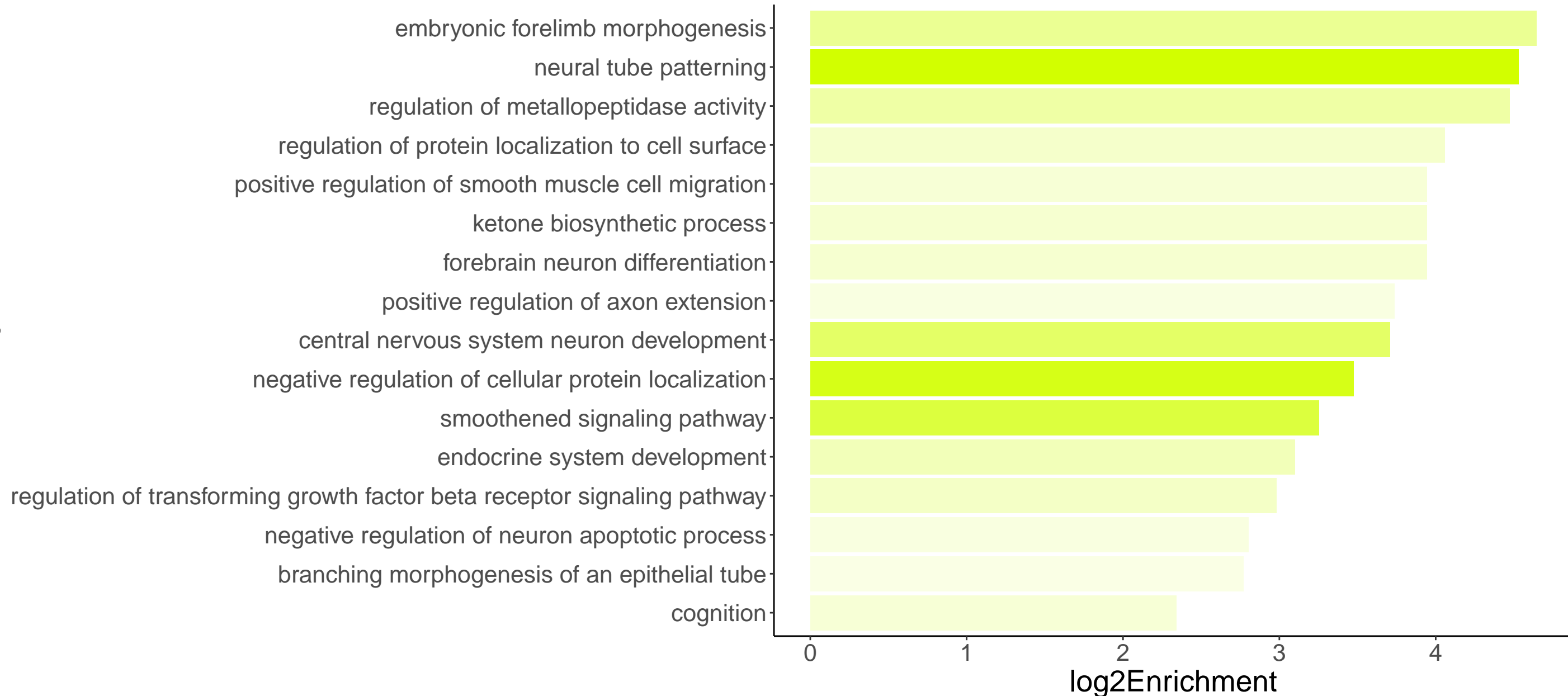
4

0

1

## Re-clustered module 5.14 BP enrichment

Term



# Re-clustered module 5.14 MF enrichment

Term

coreceptor activity

proteoglycan binding

growth factor binding

0

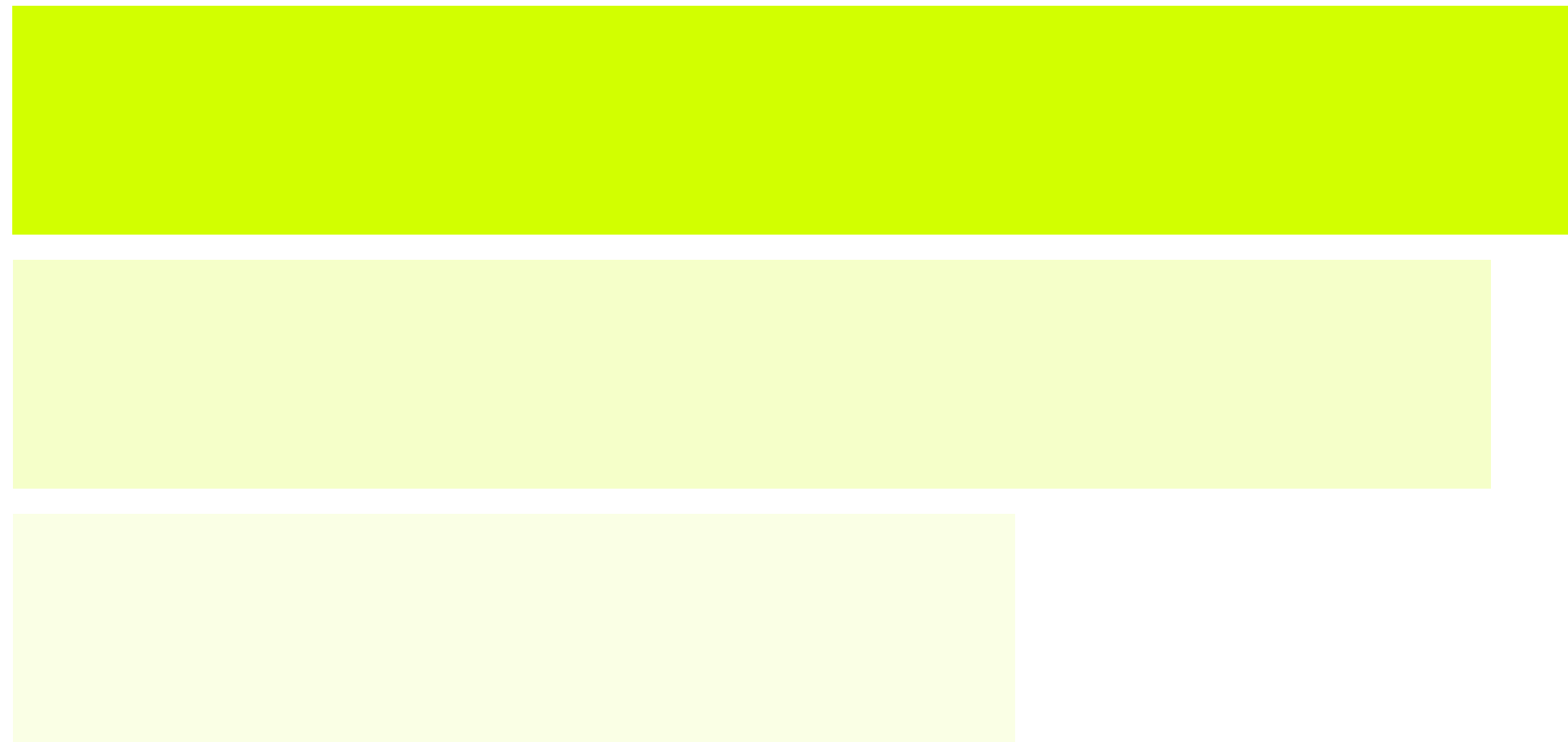
1

2

3

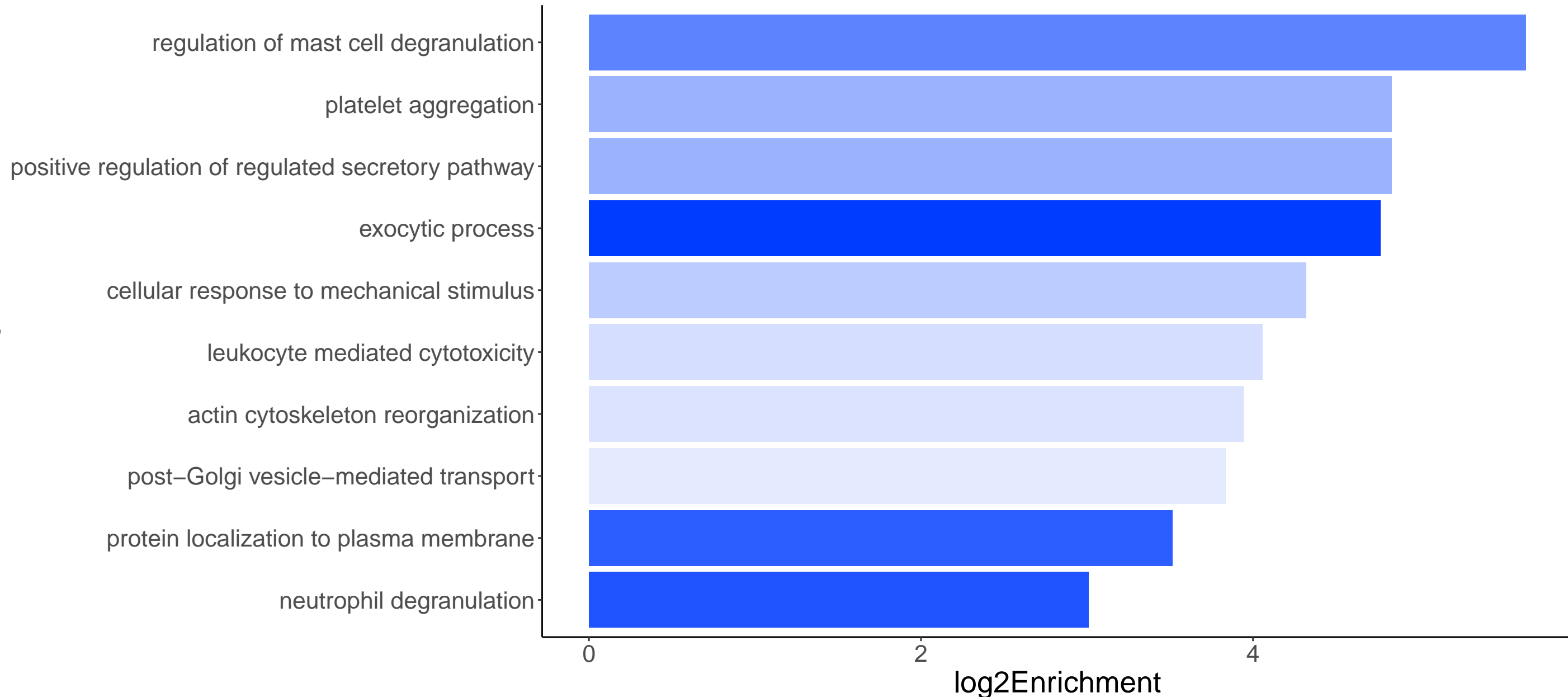
4

log2Enrichment



## Re-clustered module 5.15 BP enrichment

Term



# Re-clustered module 5.15 MF enrichment

Term

voltage-gated potassium channel activity

syntaxin binding

ion channel binding

0

1

2

3

4

5

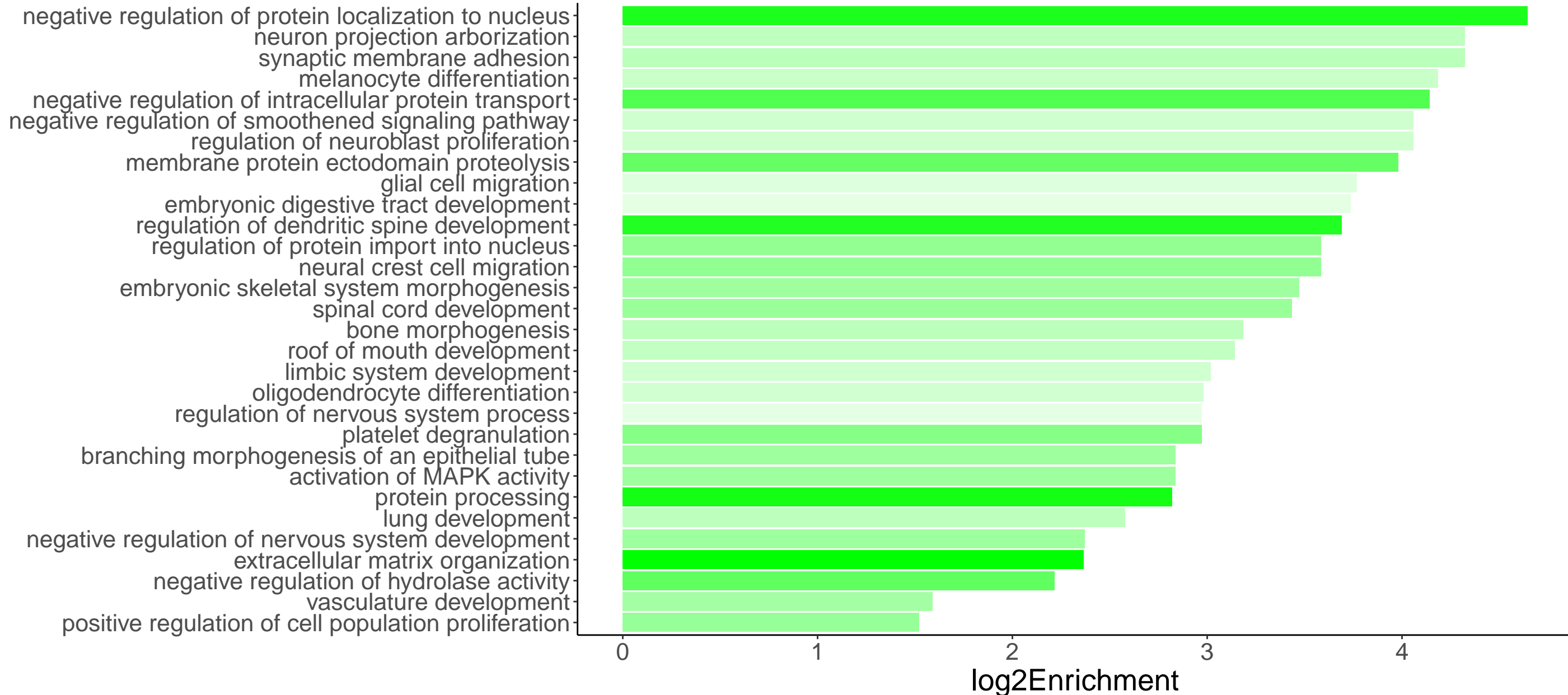
log2Enrichment





# Re-clustered module 5.16 BP enrichment

Term



# Re-clustered module 5.16 MF enrichment

Term

extracellular matrix structural constituent

metallopeptidase activity

enzyme inhibitor activity

SH3 domain binding

proteoglycan binding

glycolipid binding

0

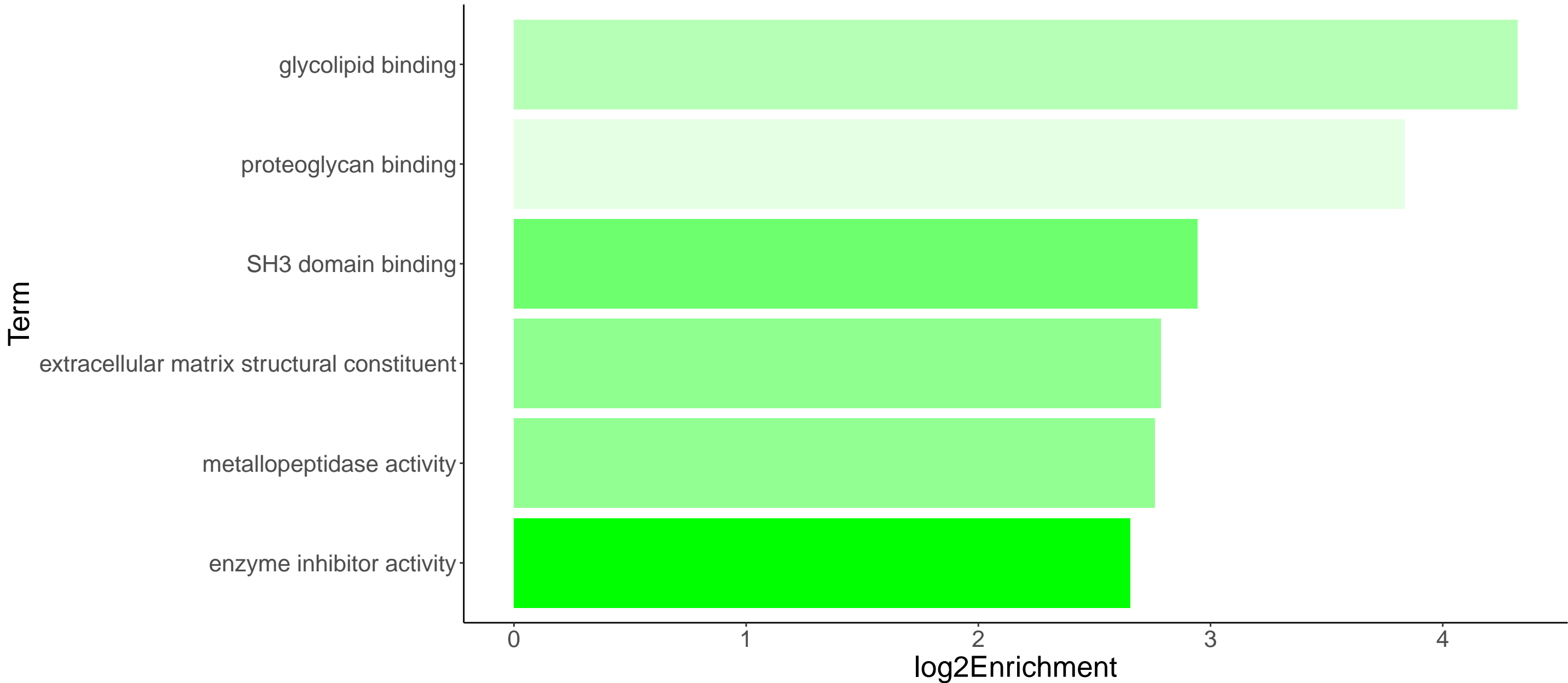
1

2

3

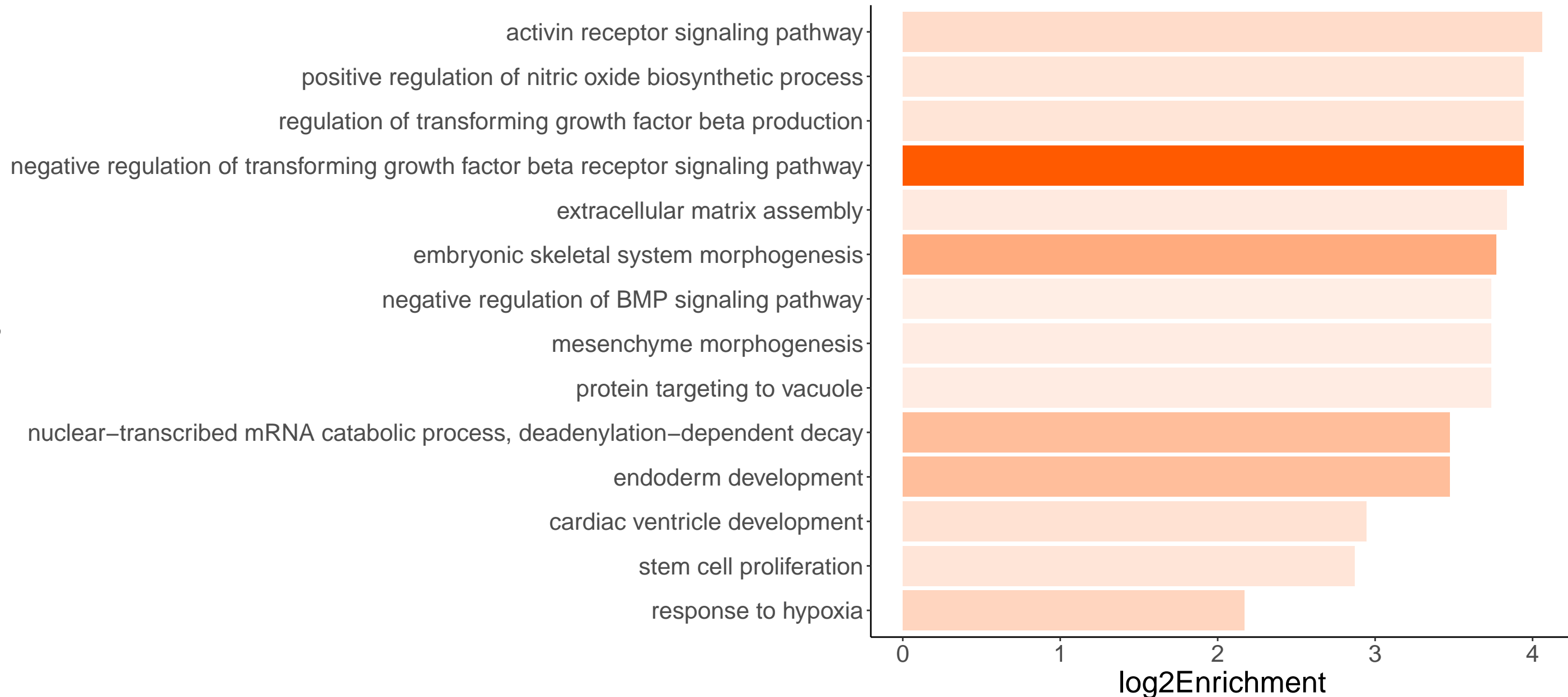
4

log2Enrichment



## Re-clustered module 5.17 BP enrichment

Term



# Re-clustered module 5.17 MF enrichment

Term

dynein light intermediate chain binding

cytokine receptor binding

0

1

2

3

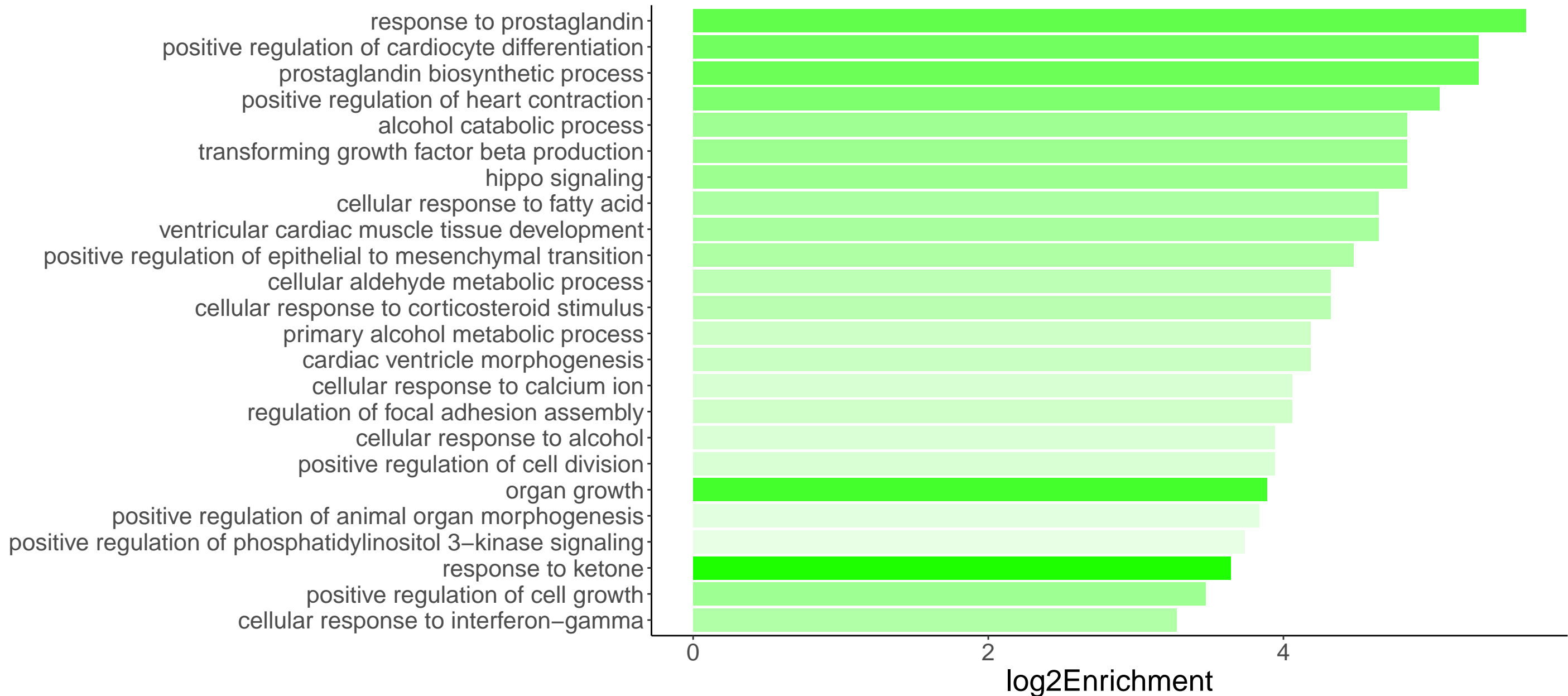
4

log2Enrichment



# Re-clustered module 5.18 BP enrichment

Term



# Re-clustered module 5.18 MF en

Term

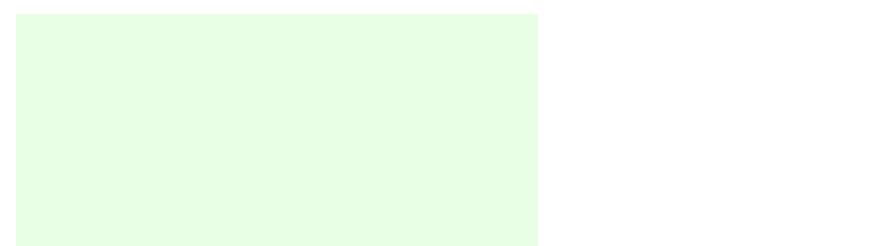
oxidoreductase activity, acting on the aldehyde or oxo group of donors, NAD or NADP as acceptor

growth factor binding

cytokine receptor binding

receptor ligand activity

0 1 2 3 4 5  
log2Enrichment



# Re-clustered module 5.19 BP enrichment

Term

substrate adhesion-dependent cell spreading

integrin-mediated signaling pathway

regulation of cell shape

0

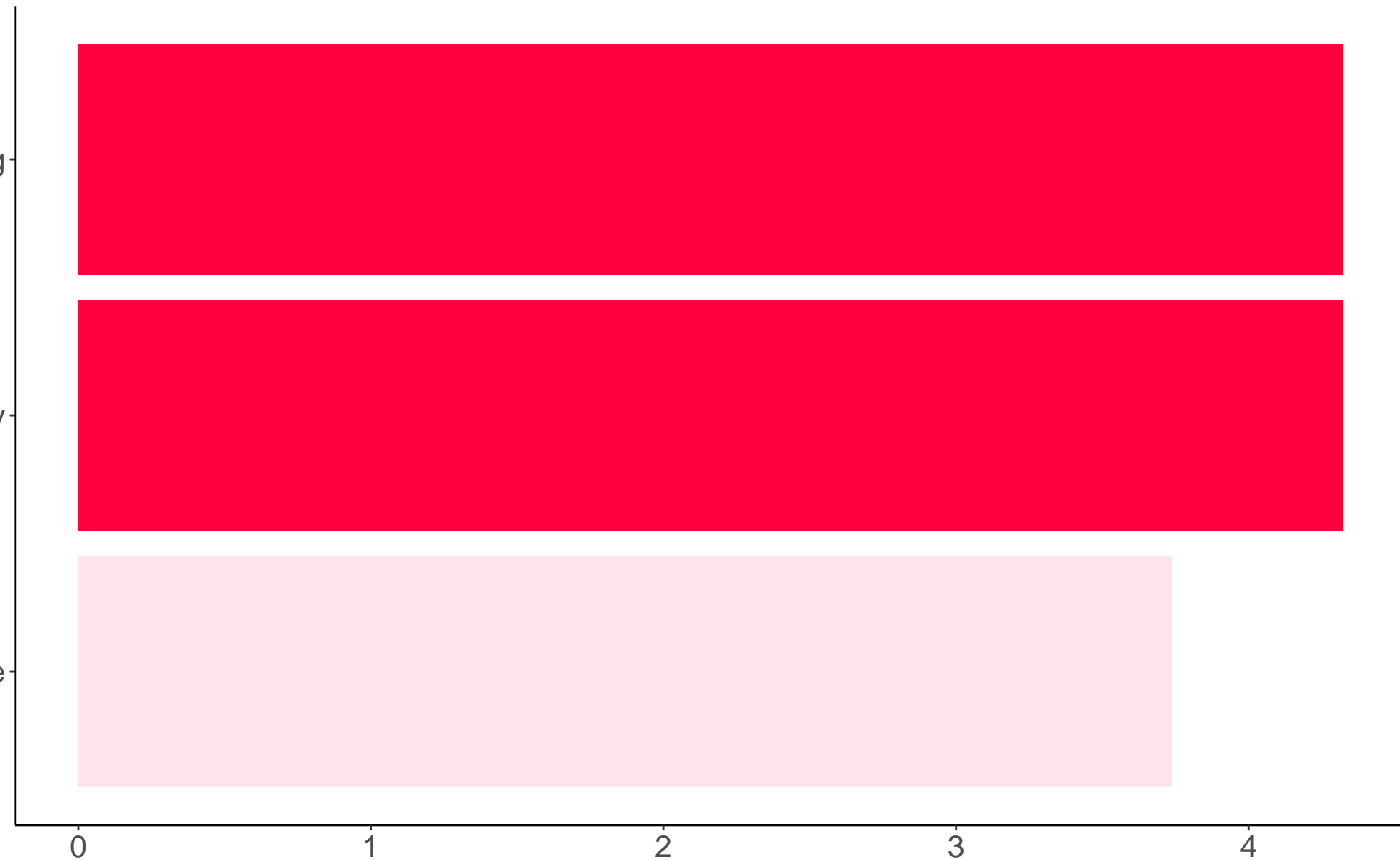
1

2

3

4

log2Enrichment



# Re-clustered module 5.19 MF enrichment

Term

cytokine binding

protein-containing complex binding

0

1

2

3

4

log2Enrichment





# Re-clustered module 5.2 BP enrichment

Term

cell volume homeostasis

negative regulation of BMP signaling pathway

skeletal system morphogenesis

0

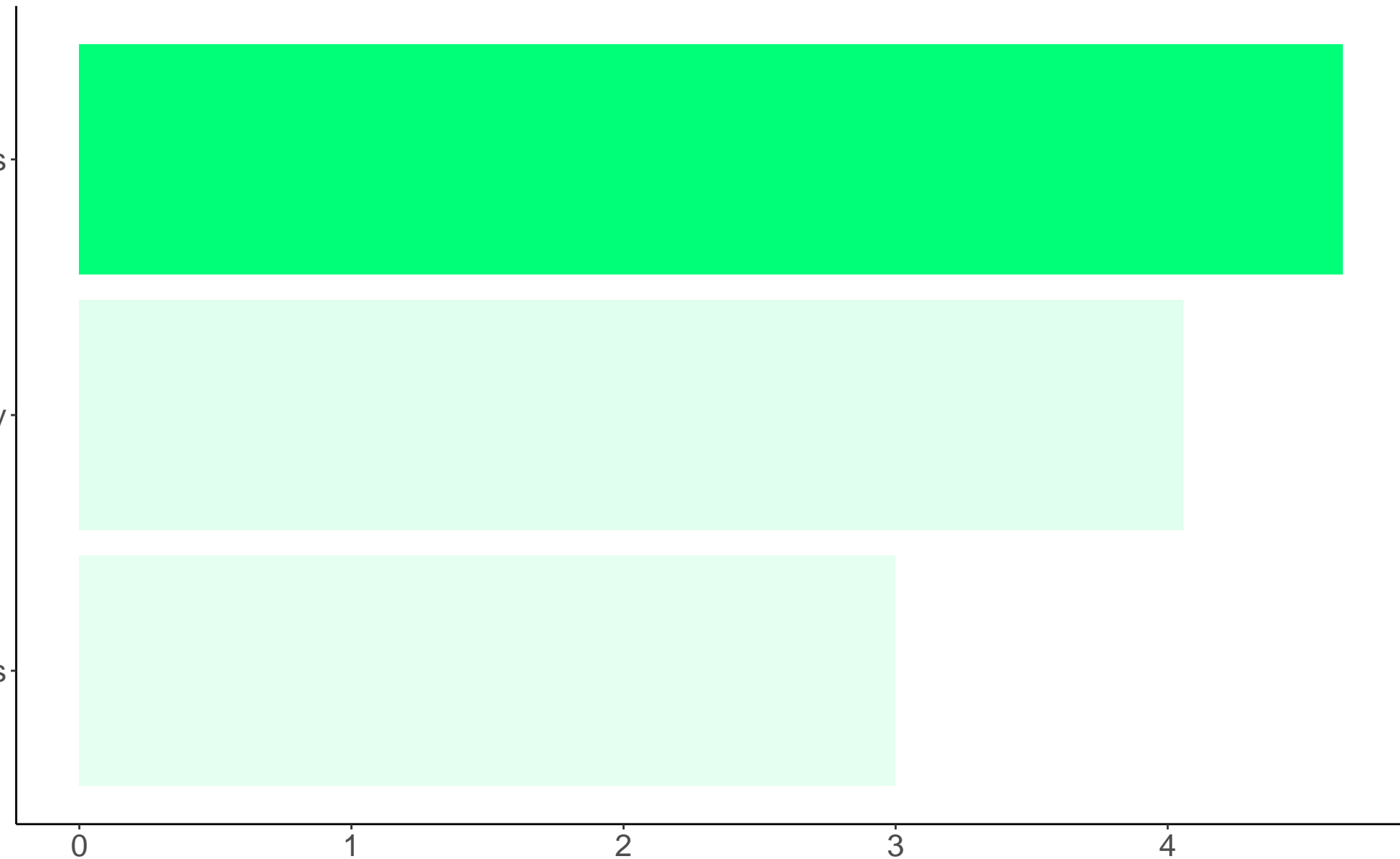
1

2

3

4

log2Enrichment



# Re-clustered module 5.2 MF enrichment

Term

extracellular matrix binding

copper ion binding

growth factor binding

growth factor activity

0

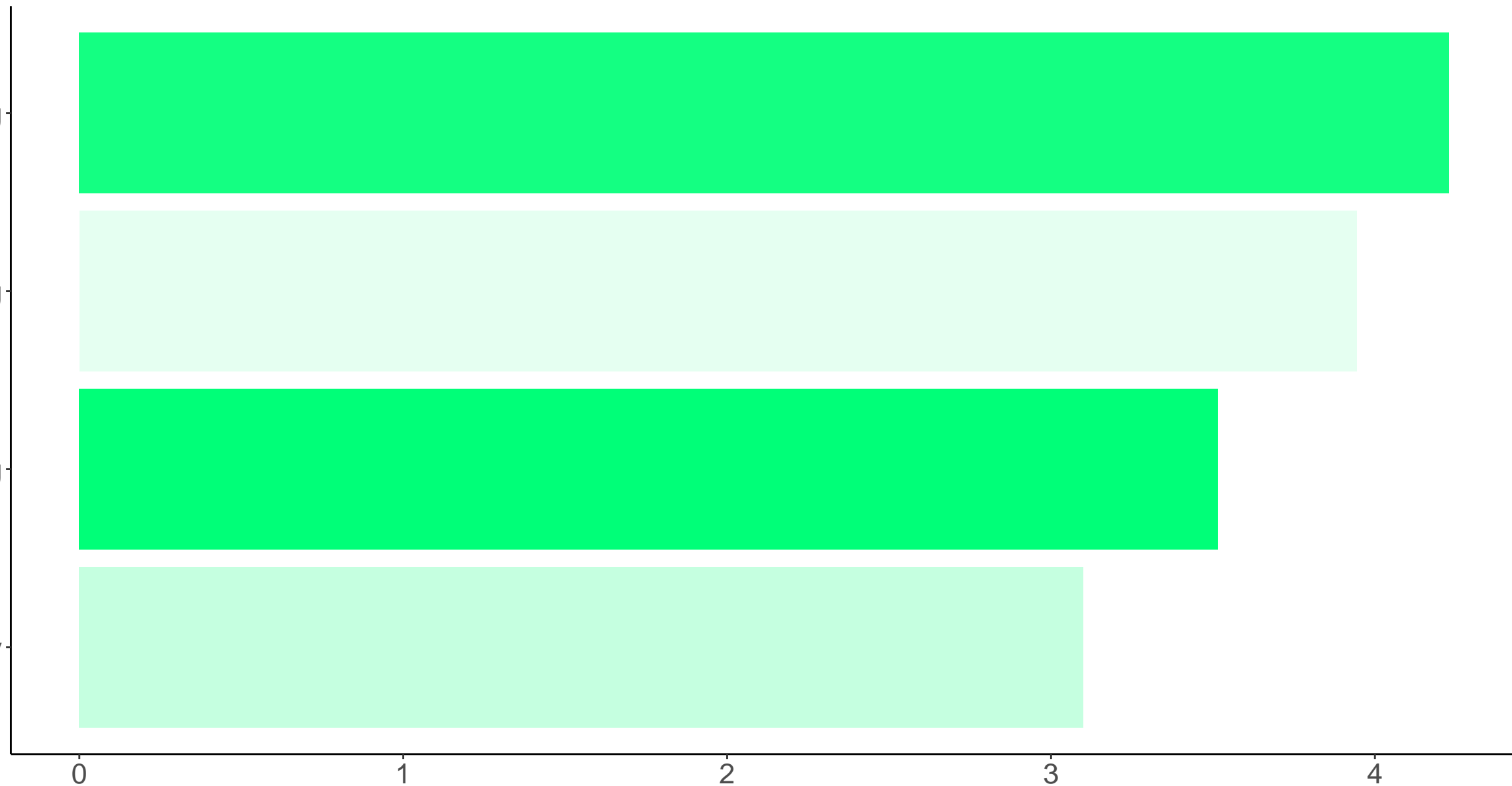
1

2

3

4

log2Enrichment



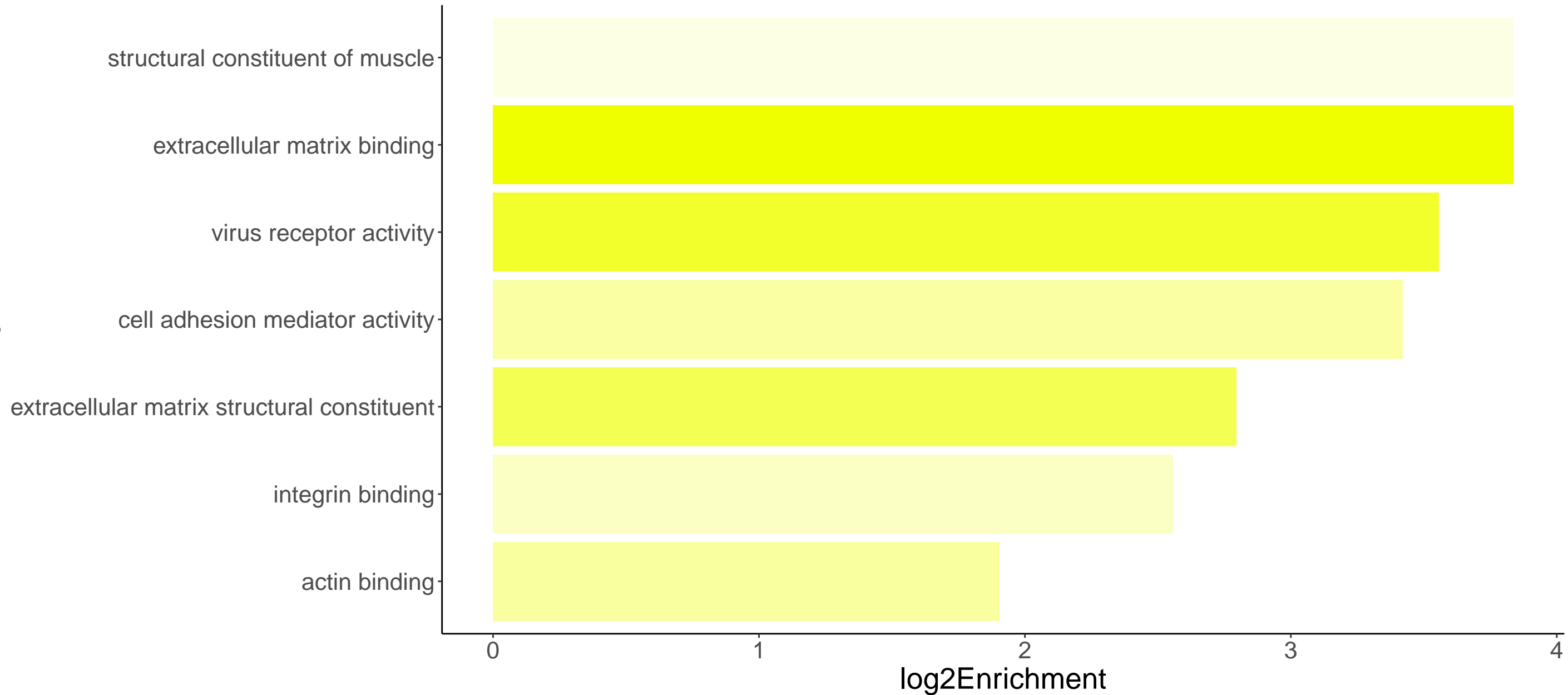
# Re-clustered module 5.20 BP enrichment

positive regulation of positive chemotaxis  
regulation of superoxide anion generation  
entrainment of circadian clock by photoperiod  
embryonic camera-type eye morphogenesis  
negative regulation of cell migration involved in sprouting angiogenesis  
positive regulation of Rho protein signal transduction  
positive regulation of transforming growth factor beta receptor signaling pathway  
mesodermal cell differentiation  
regulation of interleukin-8 production  
positive regulation of nervous system process  
cornification  
embryonic placenta development  
cellular response to mechanical stimulus  
viral entry into host cell  
hair follicle development  
cellular hormone metabolic process  
regulation of cell shape  
regulation of plasma membrane bounded cell projection assembly  
positive regulation of epithelial cell proliferation  
regulation of protein kinase B signaling  
epithelial cell migration  
axon guidance  
canonical Wnt signaling pathway  
anatomical structure formation involved in morphogenesis  
regulation of cell migration  
morphogenesis of an epithelium



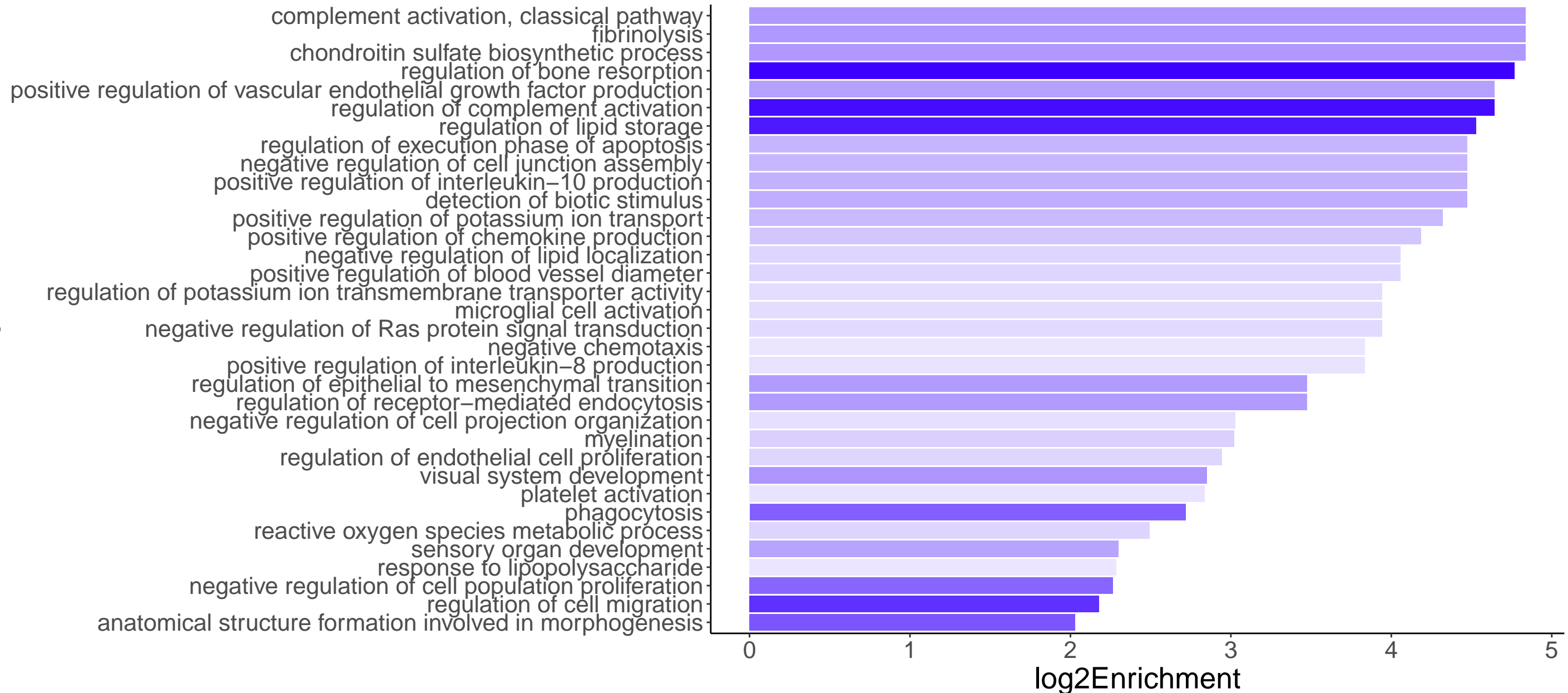
## Re-clustered module 5.20 MF enrichment

Term



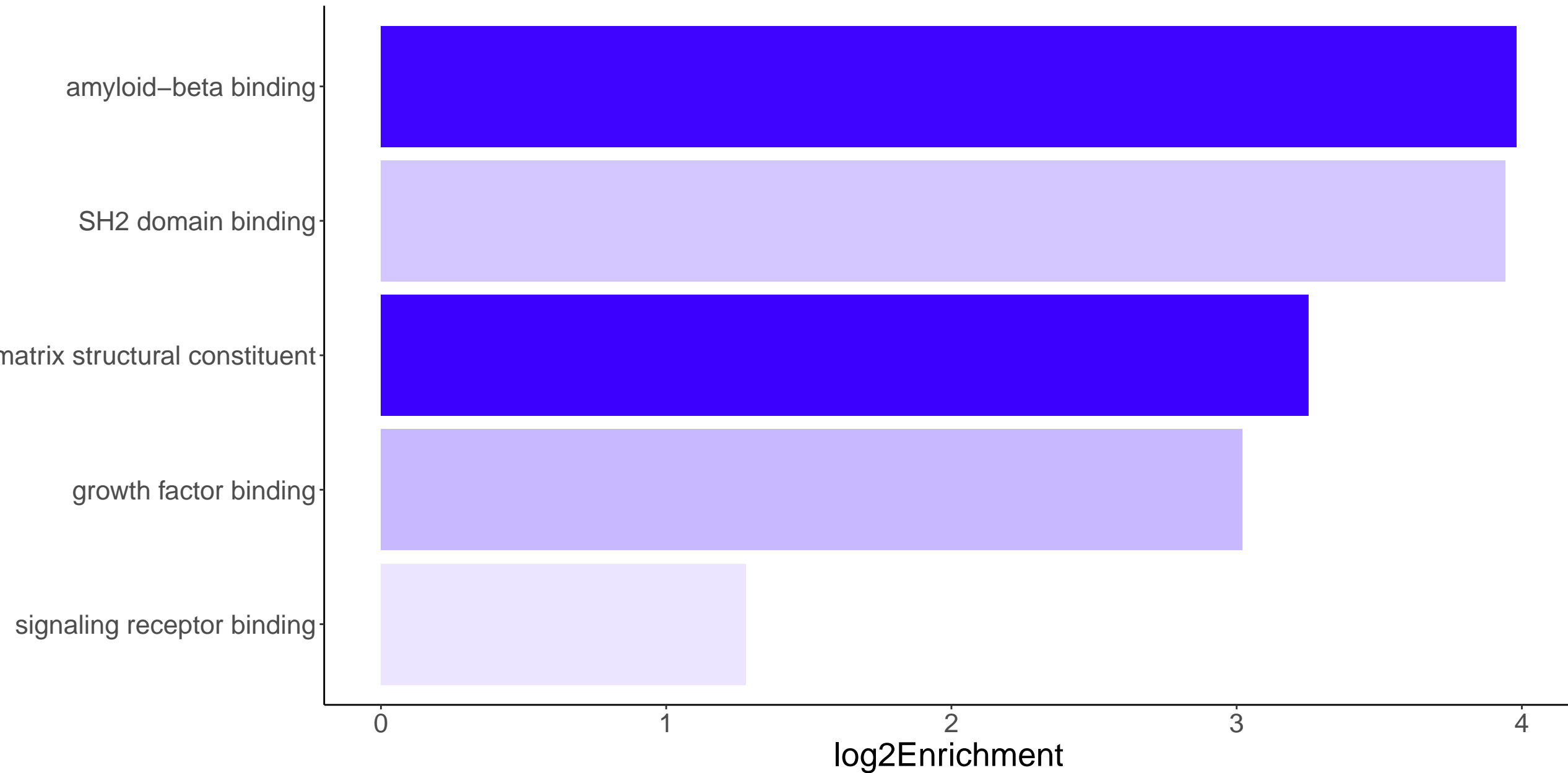
# Re-clustered module 5.21 BP enrichment

Term



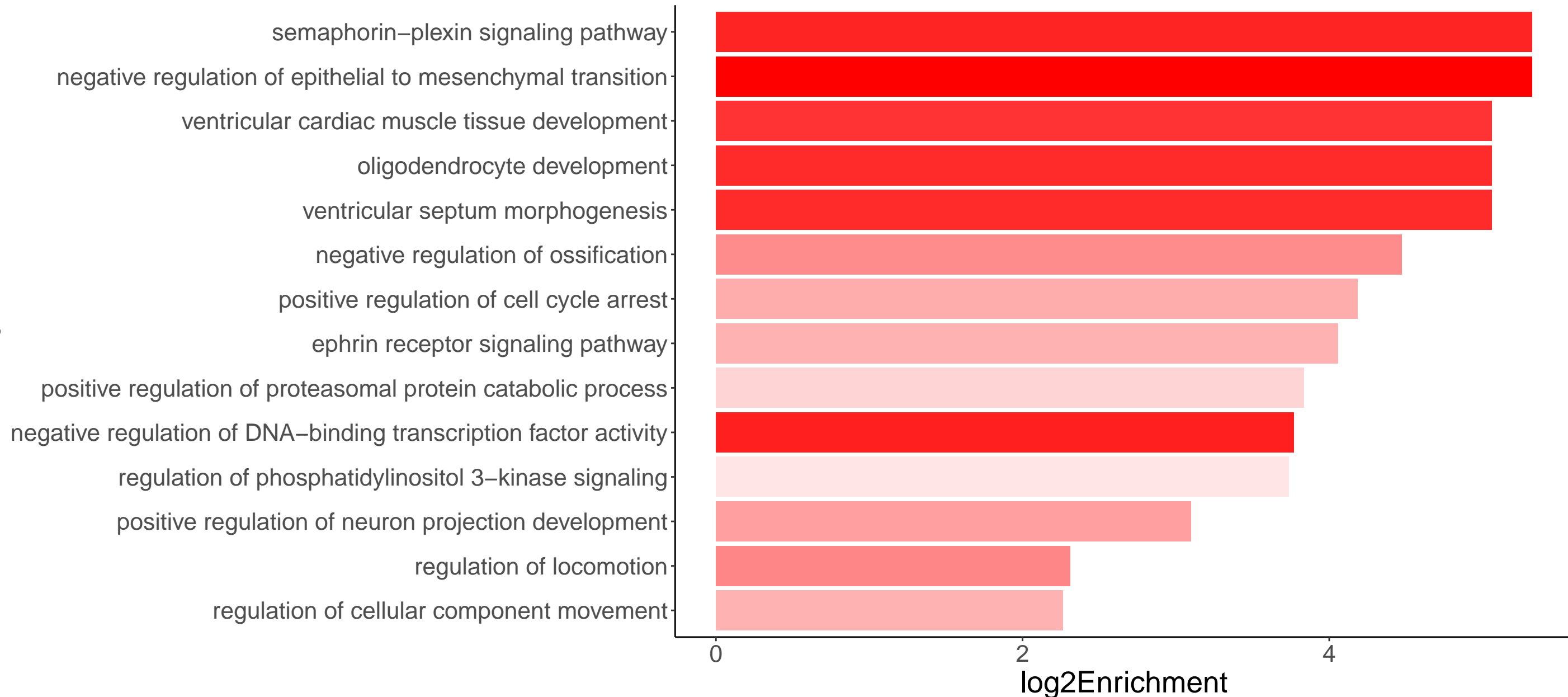
# Re-clustered module 5.21 MF enrichment

Term



## Re-clustered module 5.22 BP enrichment

Term



# Re-clustered module 5.22 MF enrichment

Term

calcium channel activity

0

1

2

3

4

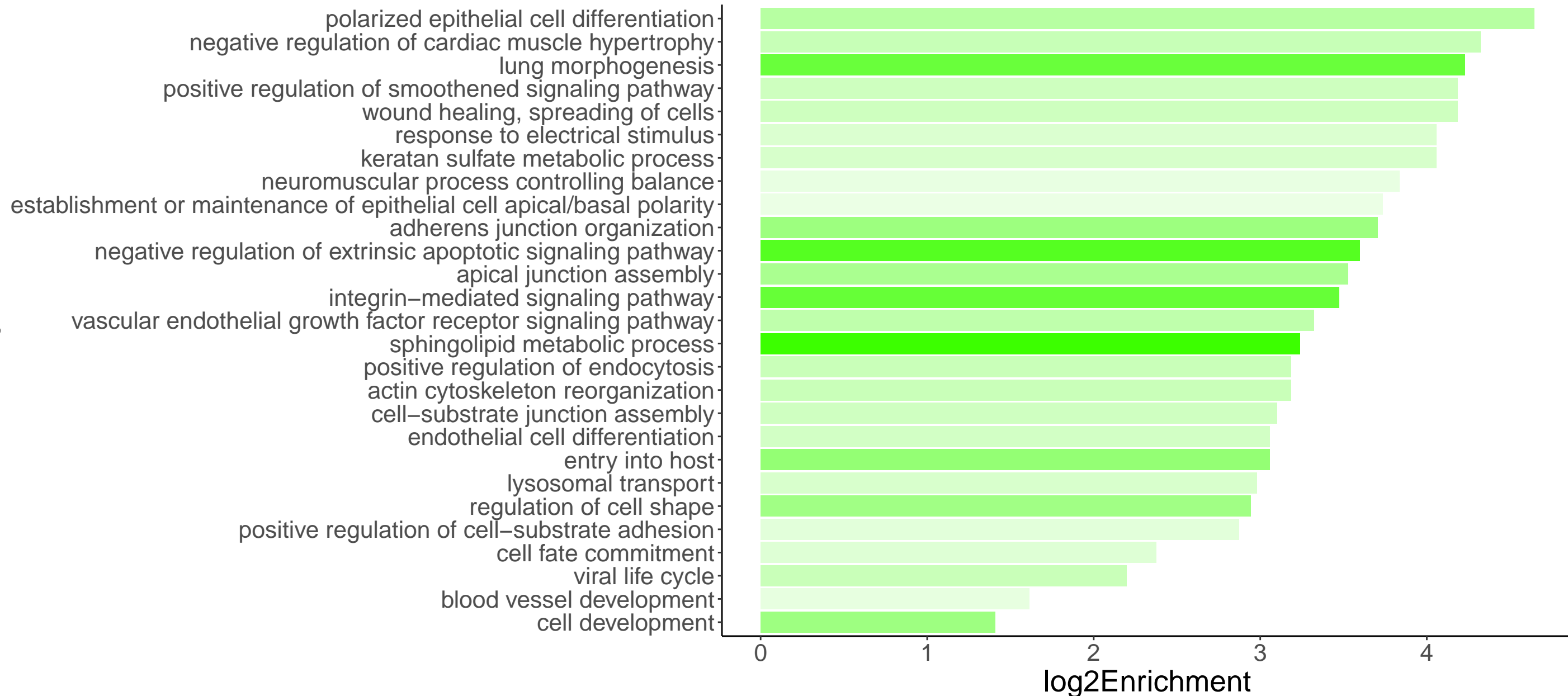
log2Enrichment





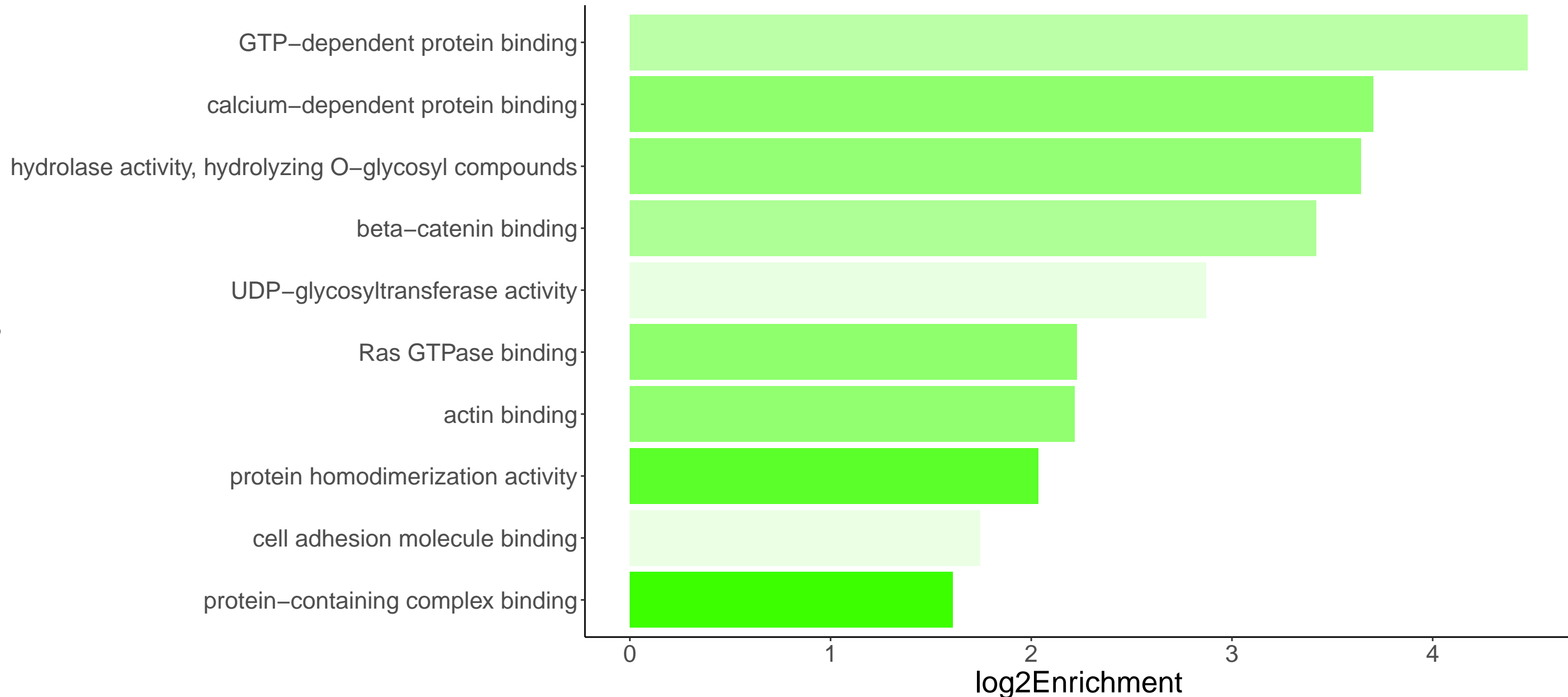
# Re-clustered module 5.23 BP enrichment

Term



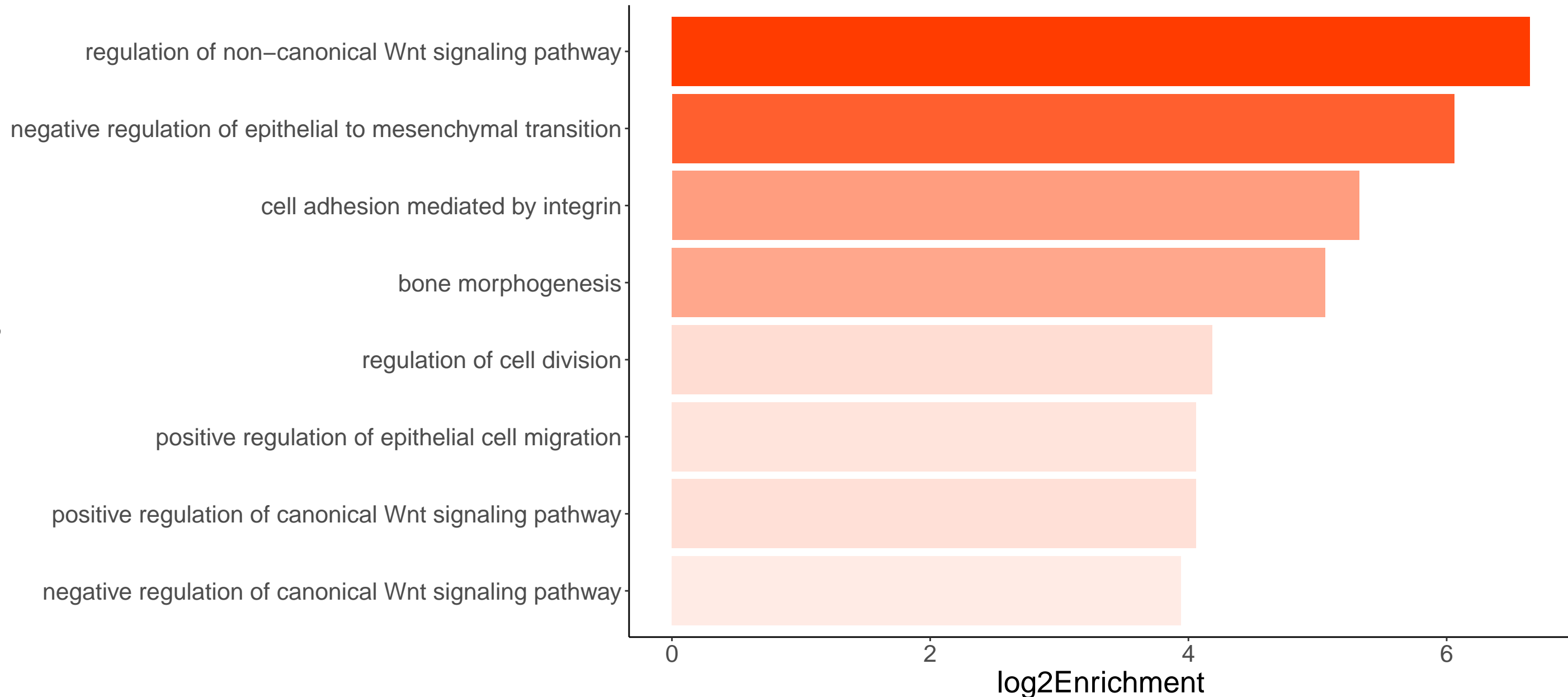
## Re-clustered module 5.23 MF enrichment

Term



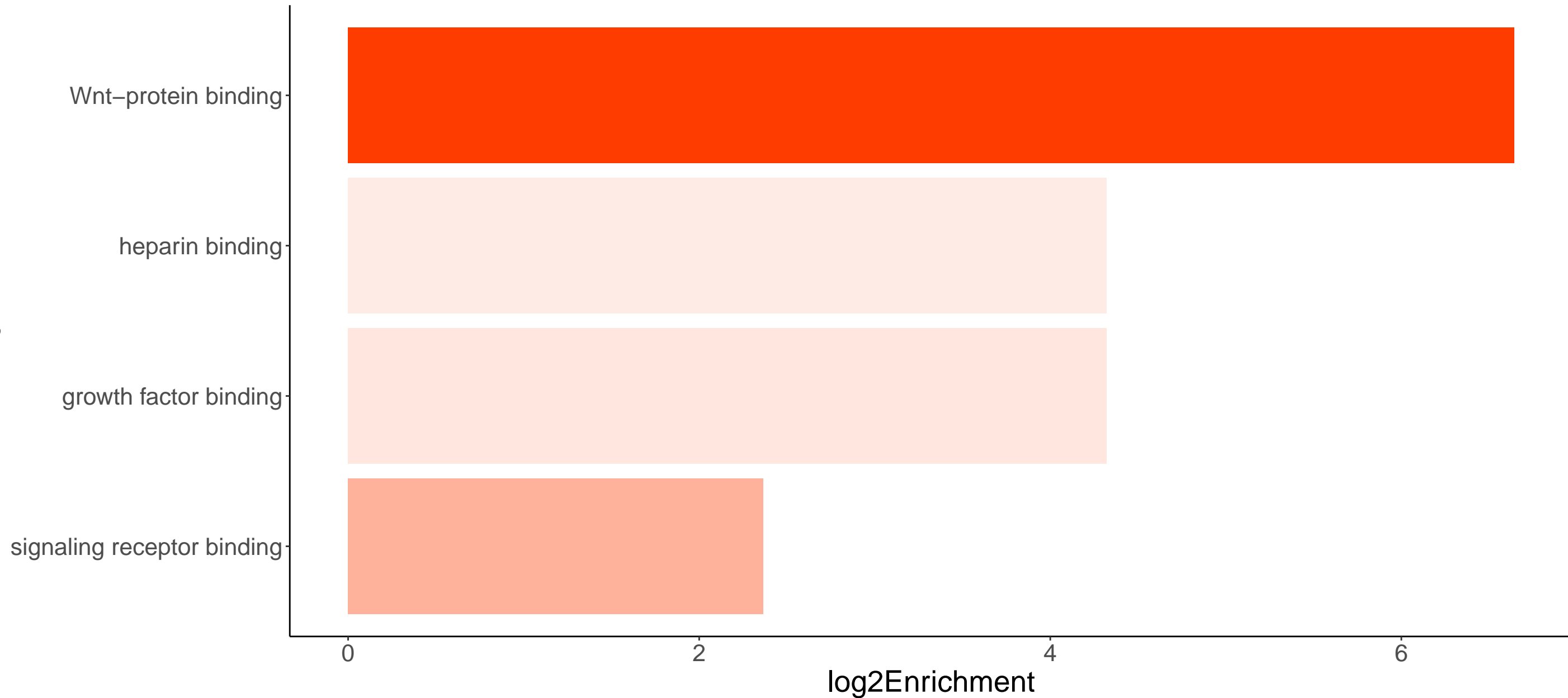
## Re-clustered module 5.3.1 BP enrichment

Term



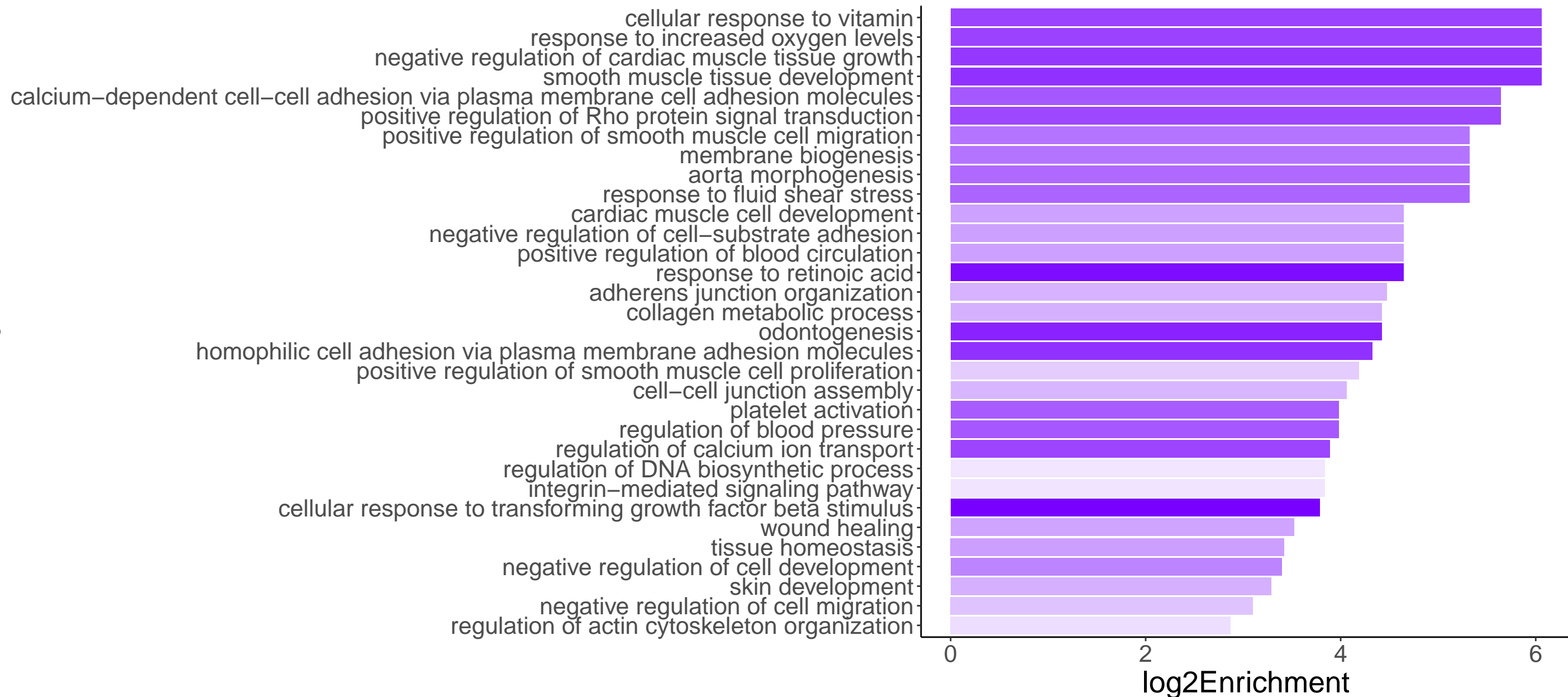
# Re-clustered module 5.3.1 MF enrichment

Term



# Re-clustered module 5.3.10 BP enrichment

Term



# Re-clustered module 5.3.10 MF enrichment

Term

glycolipid binding

transmembrane receptor protein tyrosine kinase activity

SMAD binding

protease binding

metalloendopeptidase activity

tubulin binding

calcium ion binding

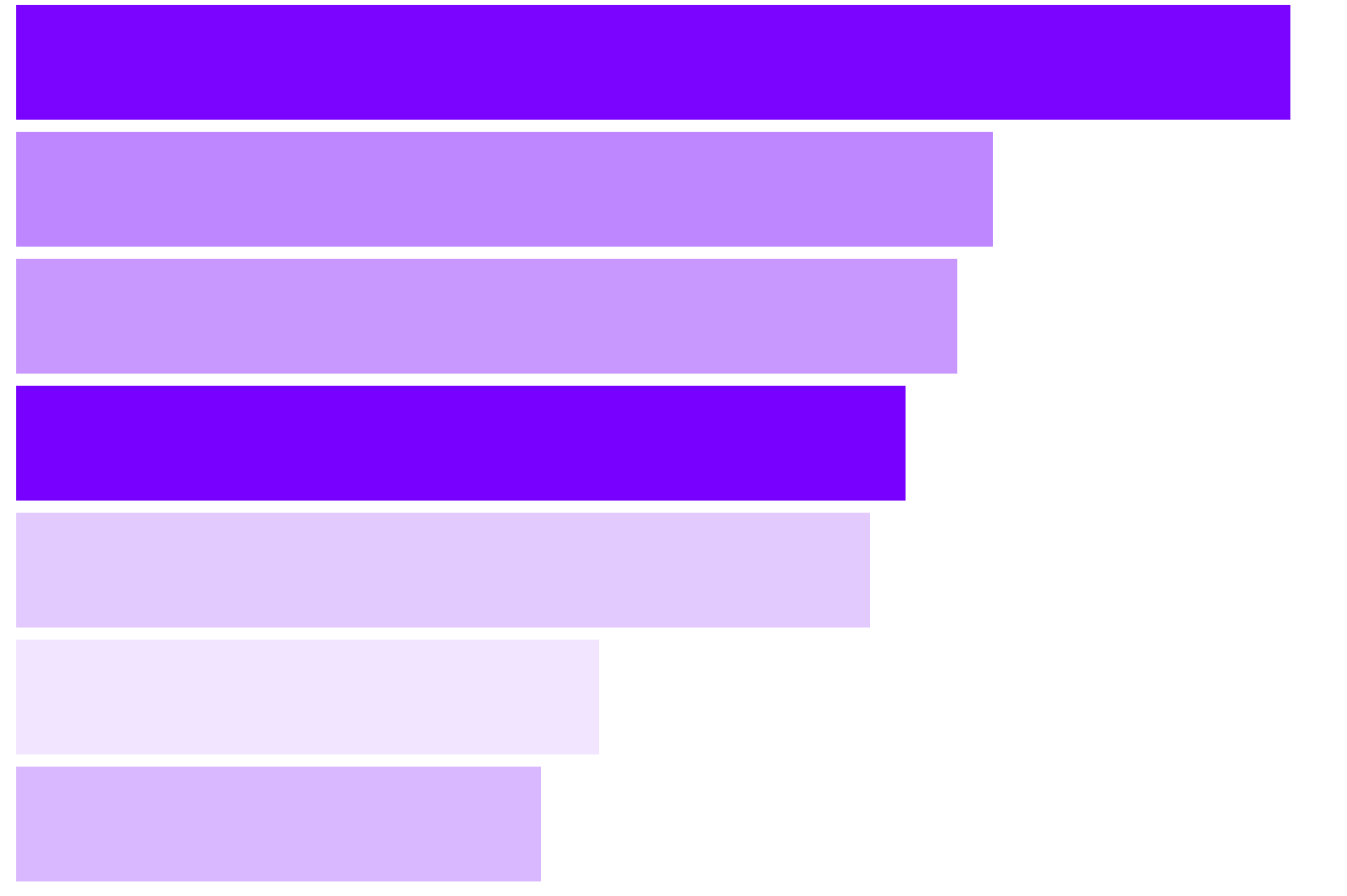
0

2

4

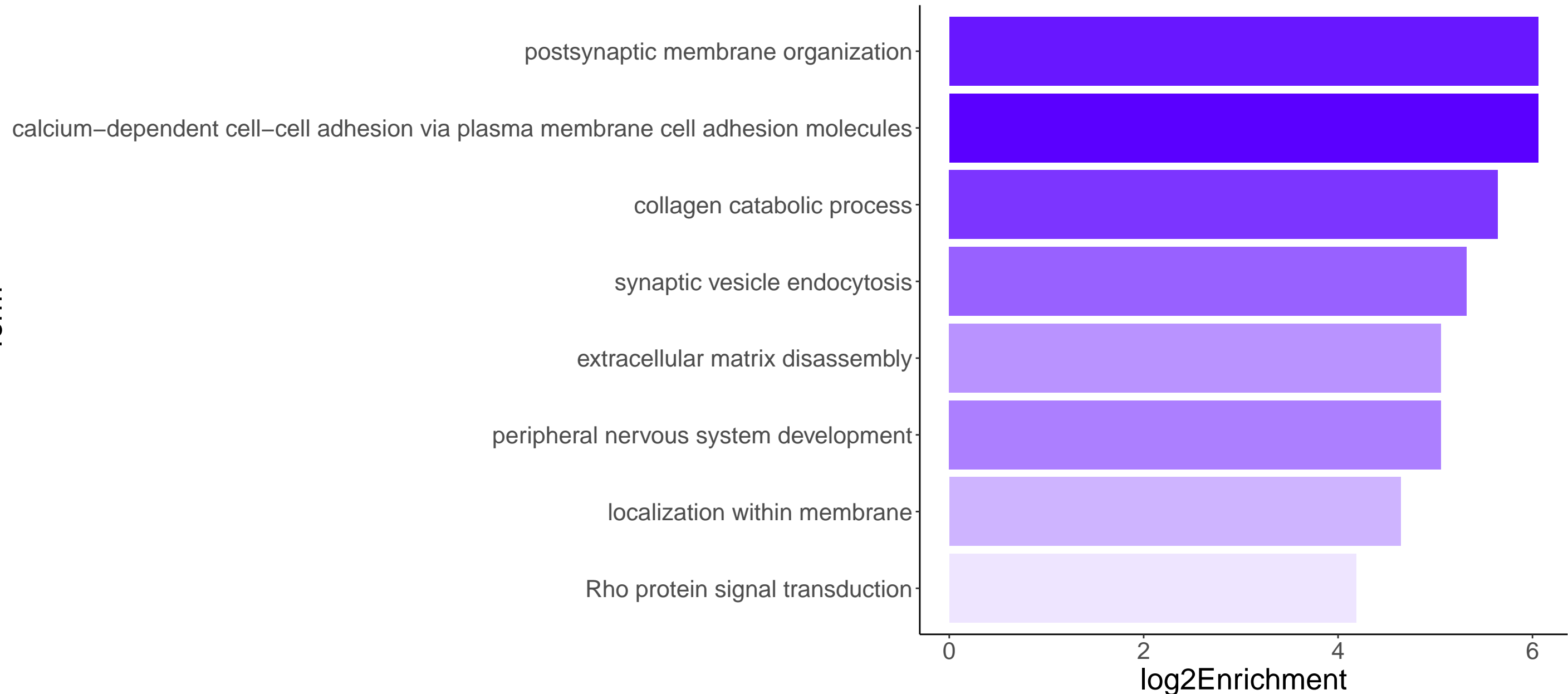
6

log2Enrichment



# Re-clustered module 5.3.11 BP enrichment

Term



Re-clustered module 5.3.11 MF enrichment

Term

log2Enrichment





# Re-clustered module 5.3.2 BP enrichment

Term

collagen fibril organization

chondrocyte differentiation

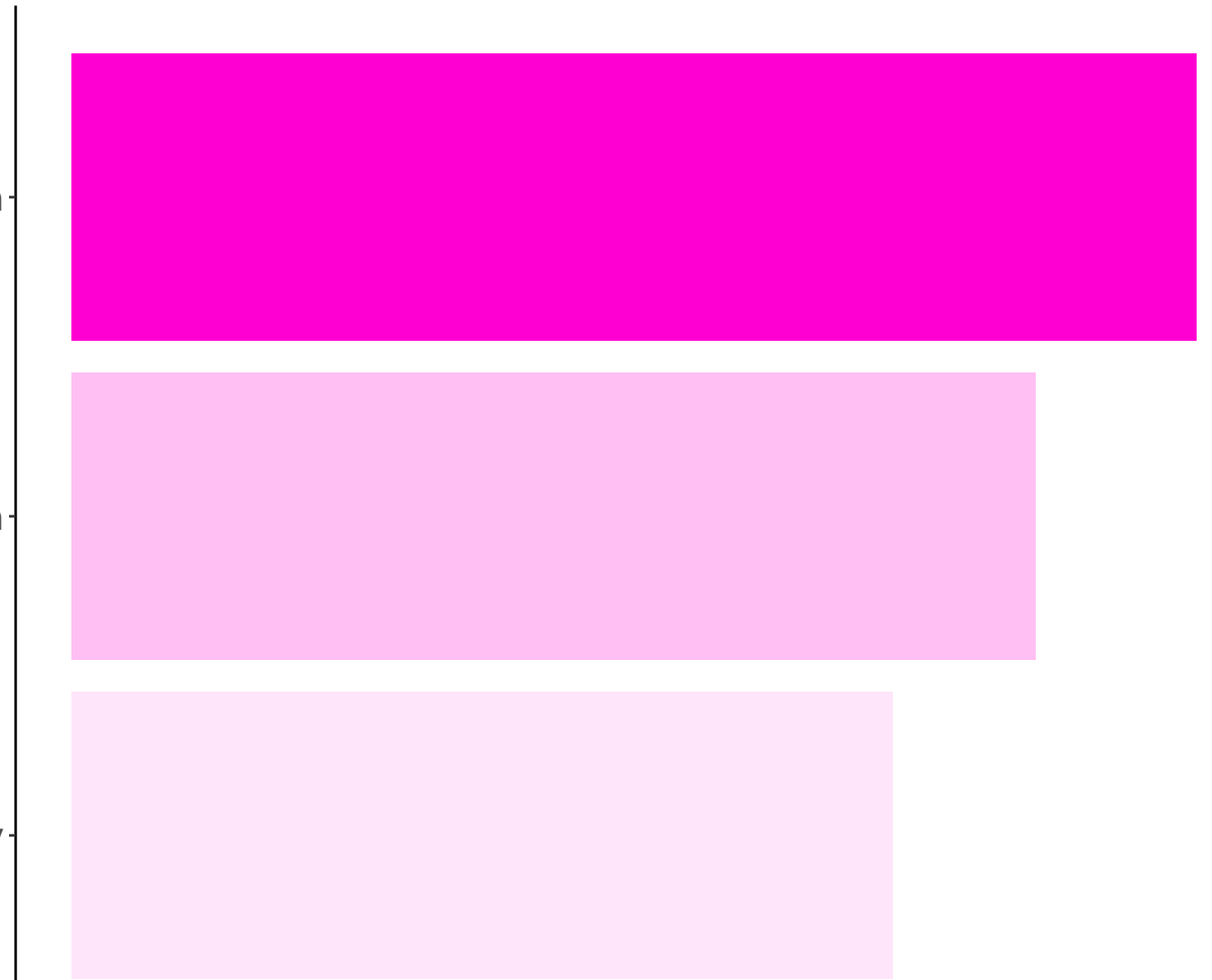
transmembrane receptor protein serine/threonine kinase signaling pathway

0

2

4

log2Enrichment



# Re-clustered module 5.3.2 MF enrichment

Term

collagen binding

cytokine binding

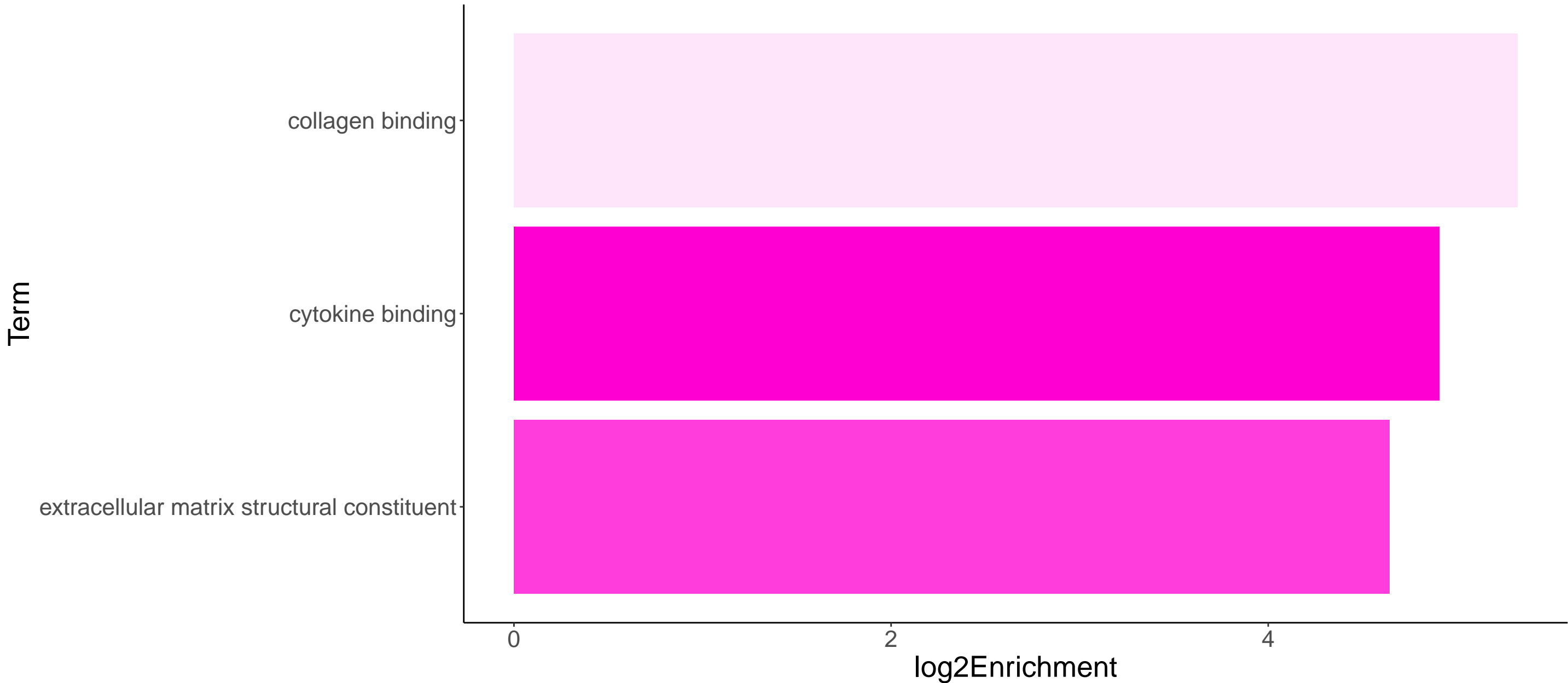
extracellular matrix structural constituent

0

2

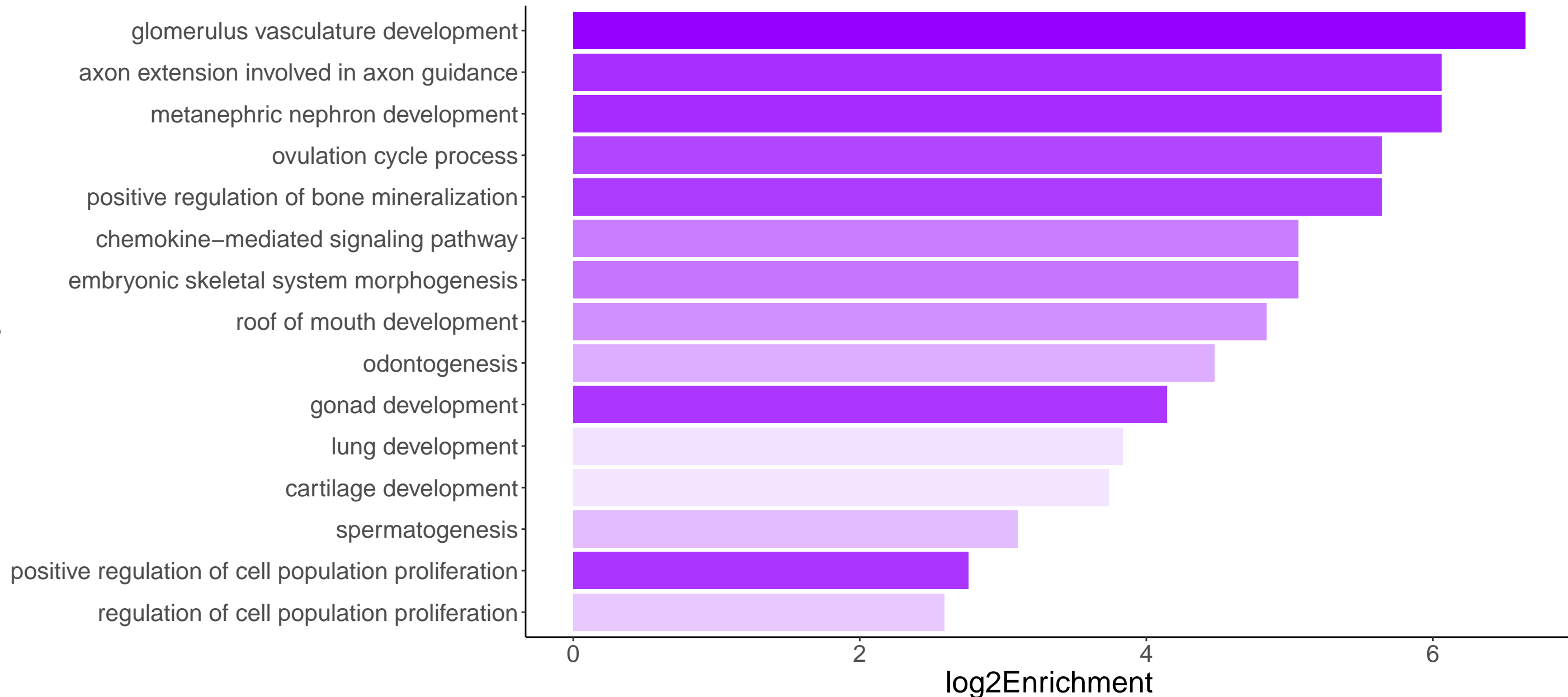
4

log2Enrichment



## Re-clustered module 5.3.3 BP enrichment

Term



# Re-clustered module 5.3.3 MF enrichment

Term

extracellular matrix binding

extracellular matrix structural constituent

0

1

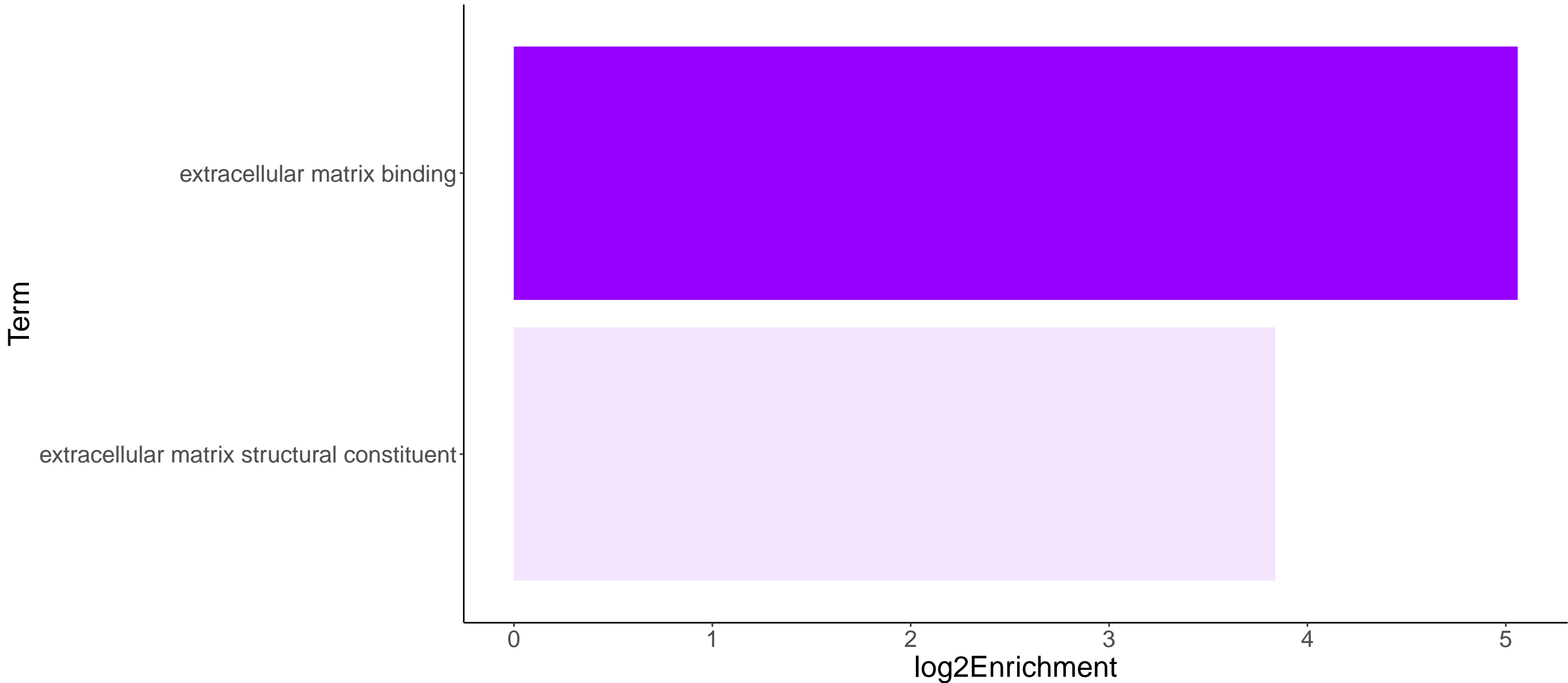
2

3

4

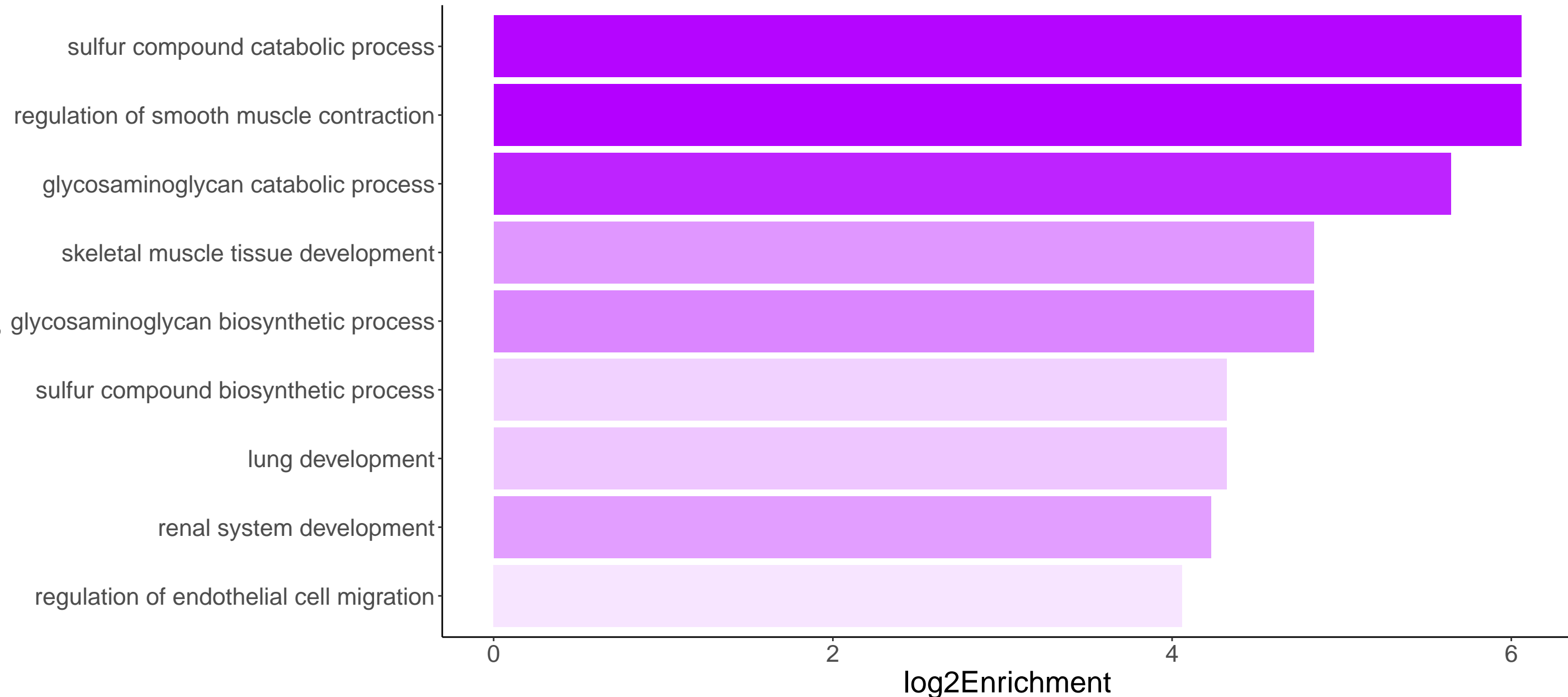
5

log2Enrichment



## Re-clustered module 5.3.4 BP enrichment

Term



# Re-clustered module 5.3.4 MF enrichment

Term

glycosaminoglycan binding

extracellular matrix structural constituent

0

1

2

3

4

log2Enrichment



# Re-clustered module 5.3.7 BP enrichment

Term

cellular response to hypoxia

response to mechanical stimulus

0

1

2

3

4

log2Enrichment



Re-clustered module 5.3.7 MF enrichment

Term

log2Enrichment





## Re-clustered module 5.3.9 BP enrichment

Term

negative regulation of blood coagulation

negative regulation of cell-cell adhesion

cartilage development

negative regulation of cell activation

blood vessel morphogenesis

cell adhesion

0

2

4

log2Enrichment



# Re-clustered module 5.3.9 MF enrichment

Term

integrin binding

0

1

2

3

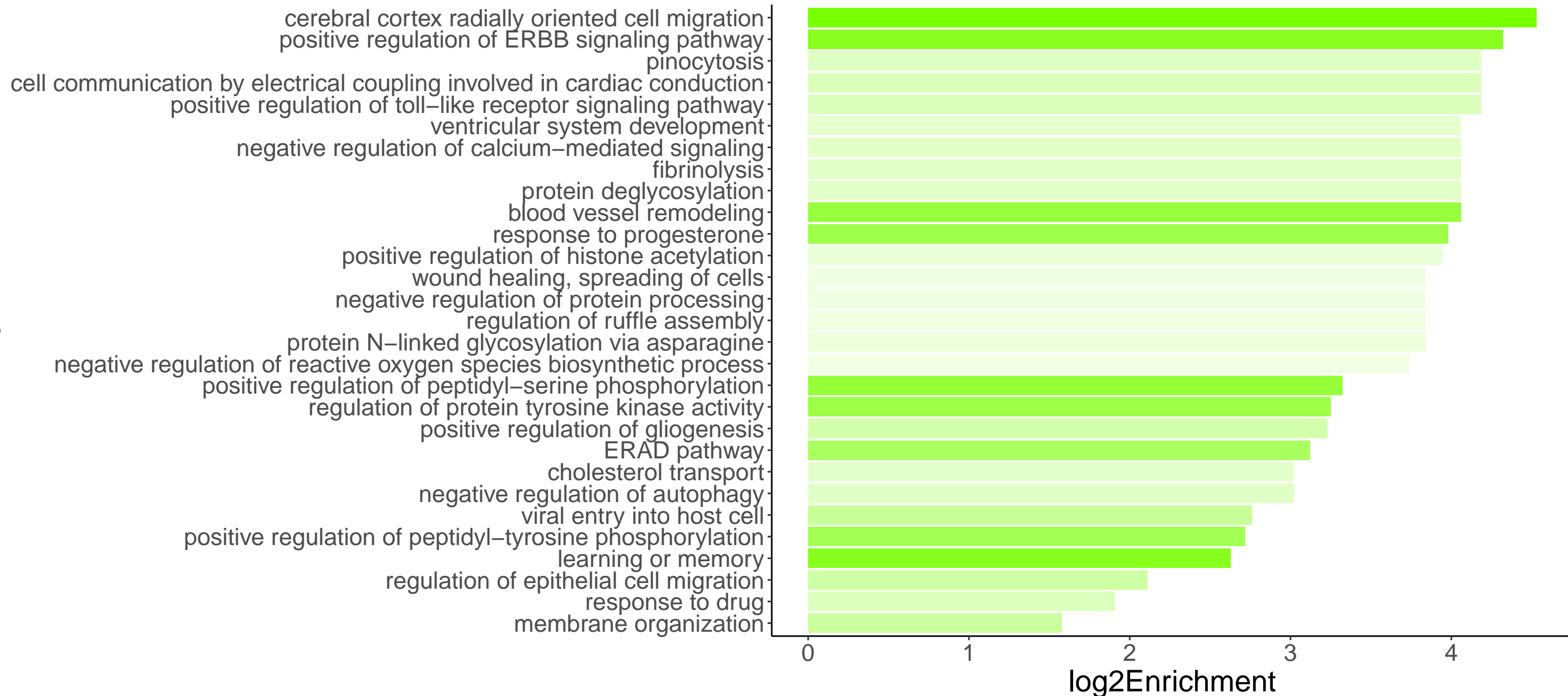
4

log2Enrichment



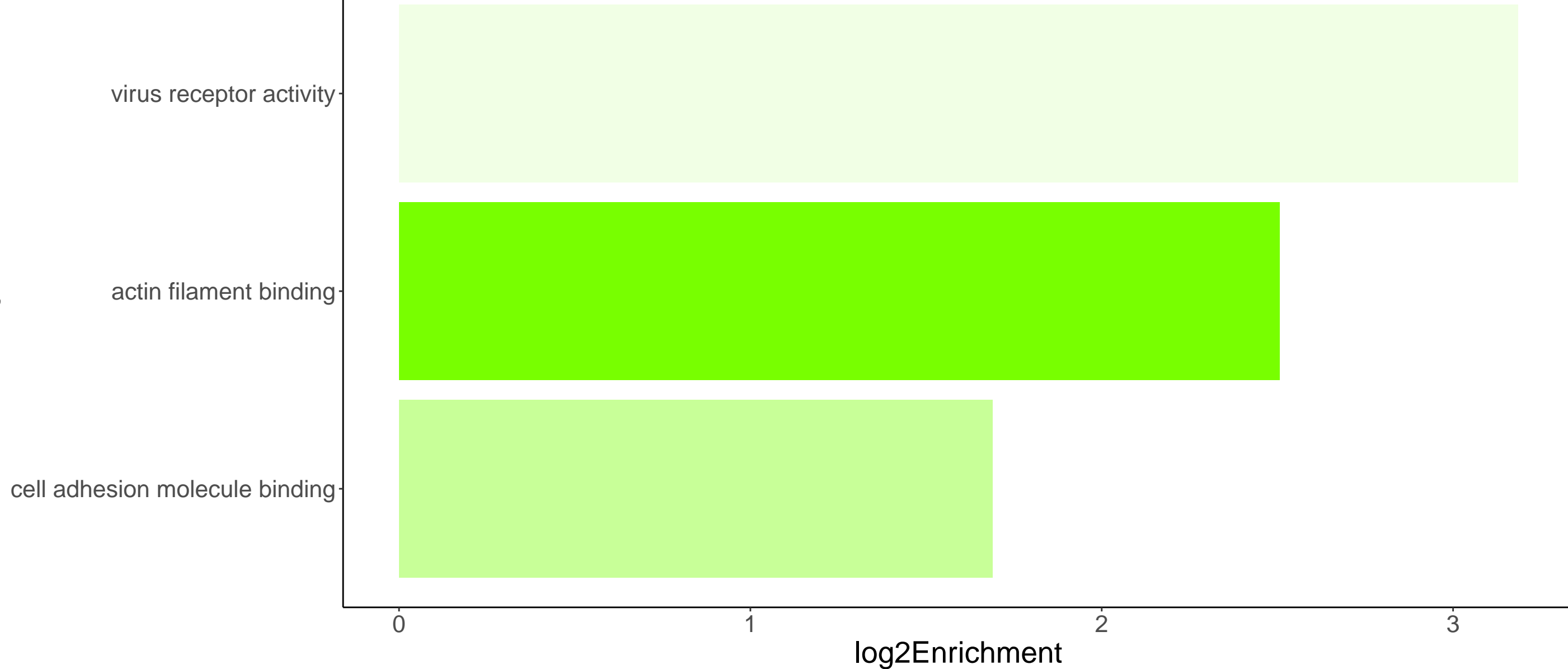
# Re-clustered module 5.4 BP enrichment

Term



# Re-clustered module 5.4 MF enrichment

Term



# Re-clustered module 5.5.1 BP enrichment

Term

mitochondrion transport along microtubule

inorganic cation import across plasma membrane

calcium ion import

response to vitamin

calcium ion transmembrane import into cytosol

response to estradiol

modulation of chemical synaptic transmission

response to drug

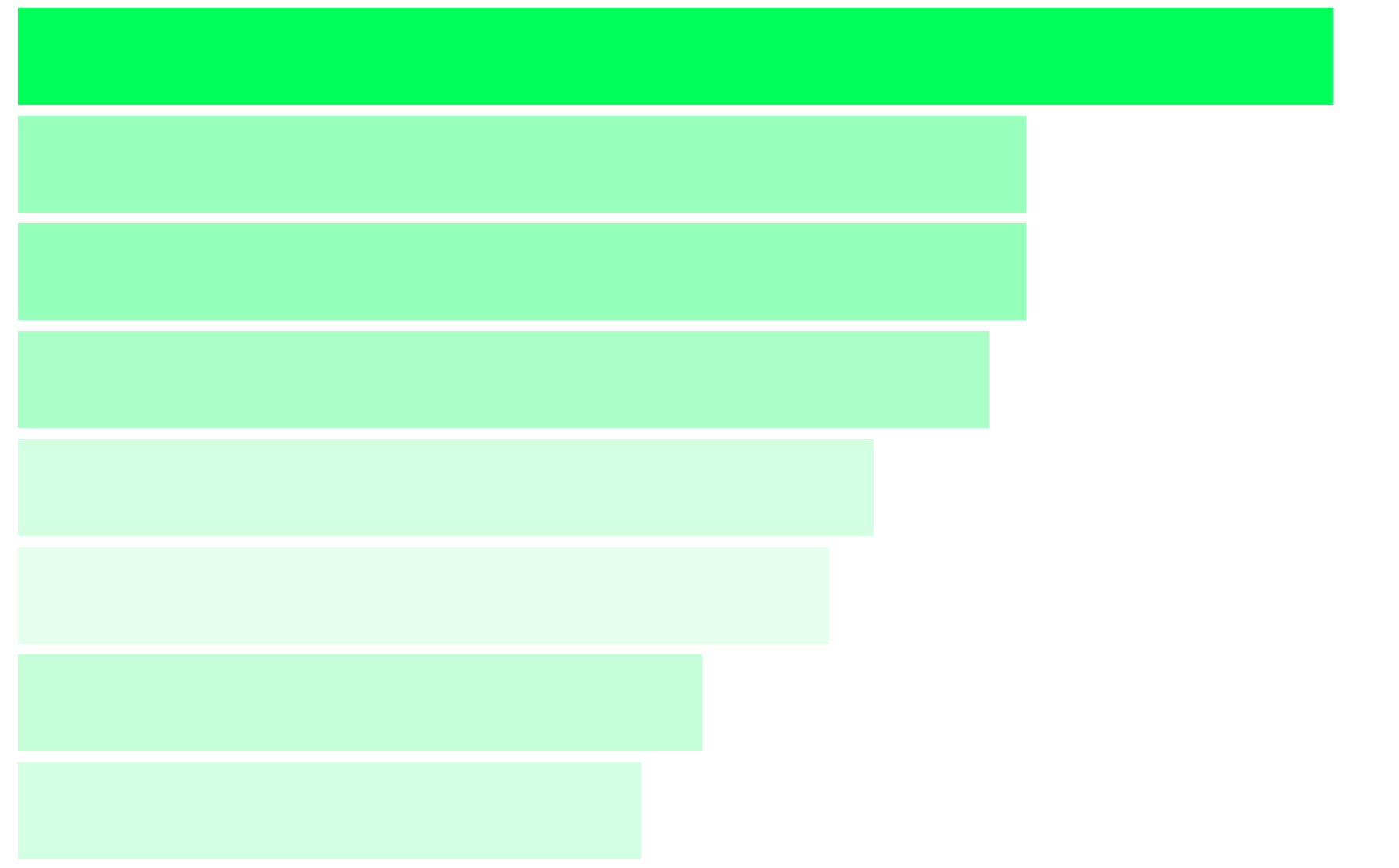
0

2

4

6

log2Enrichment



# Re-clustered module 5.5.1 MF enrichment

Term

calcium channel activity

0

1

2

3

4

log2Enrichment



# Re-clustered module 5.5.2 BP enrichment

Term

maternal placenta development

response to fluid shear stress

axon guidance

0

2

4

log2Enrichment



Re-clustered module 5.5.2 MF enrichment

Term

log2Enrichment





# Re-clustered module 5.5.3 BP enrichment

Term

sprouting angiogenesis

0

1

2

3

4

log2Enrichment



# Re-clustered module 5.5.3 MF enrichment

Term

isomerase activity

0

1

2

3

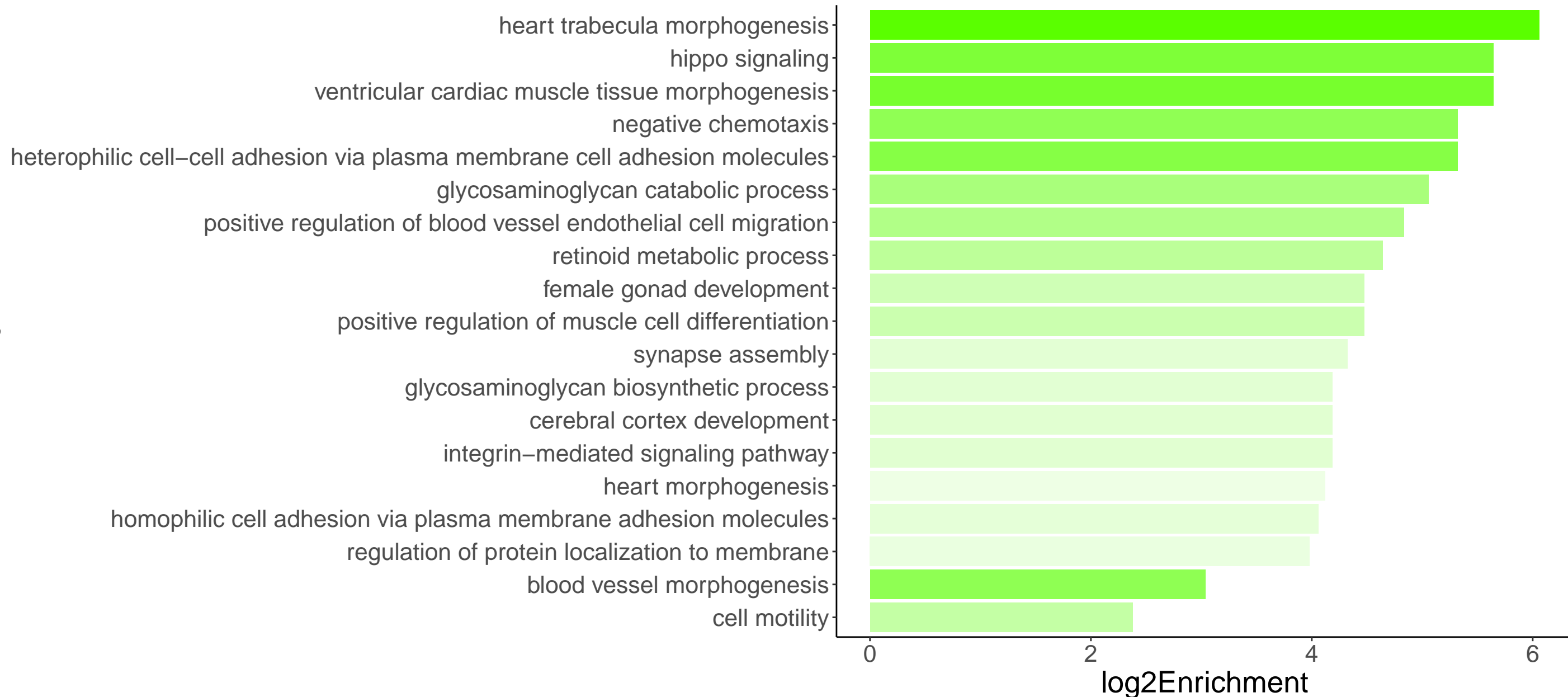
4

log2Enrichment



# Re-clustered module 5.5.4 BP enrichment

Term



Re-clustered module 5.5.4 MF enrichment

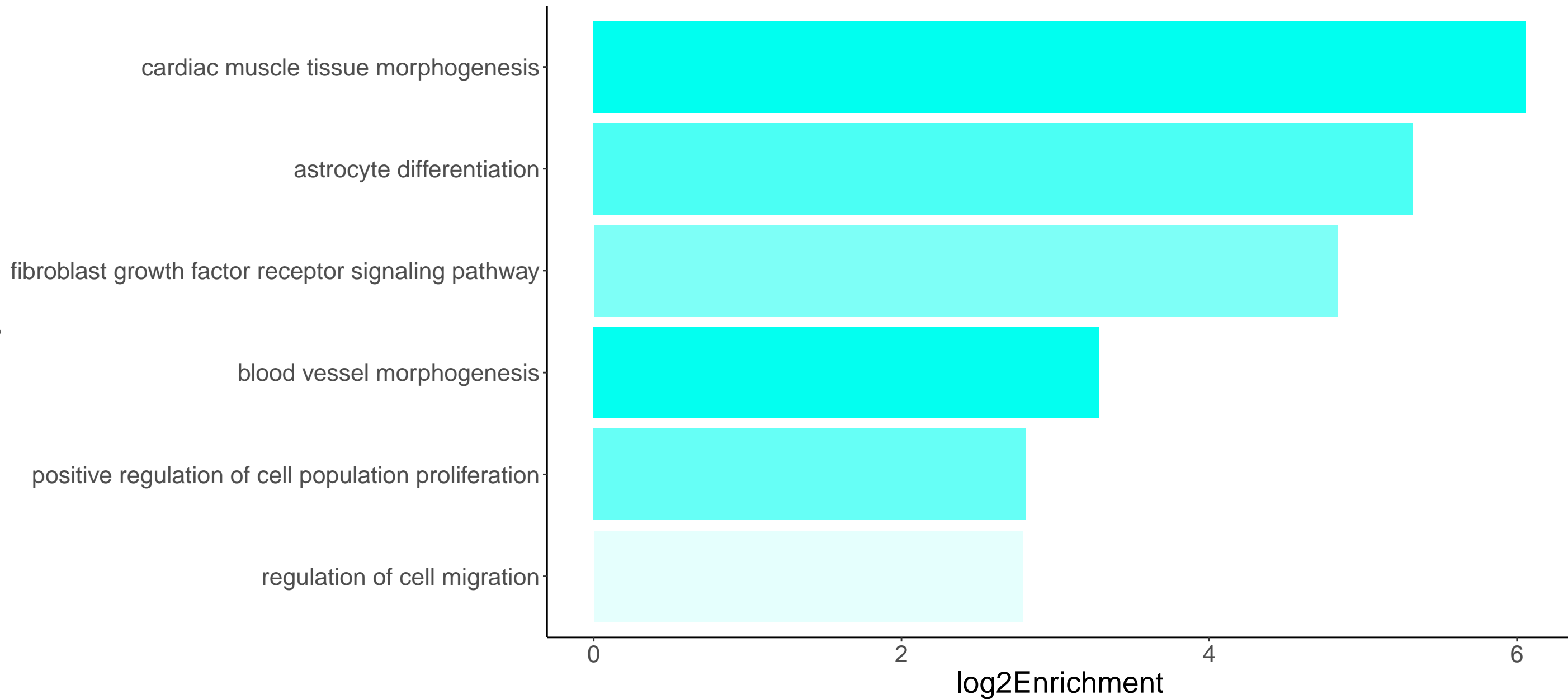
Term

log2Enrichment



## Re-clustered module 5.5.5 BP enrichment

Term



# Re-clustered module 5.5.5 MF enrichment

Term

cytokine binding

growth factor receptor binding

0

1

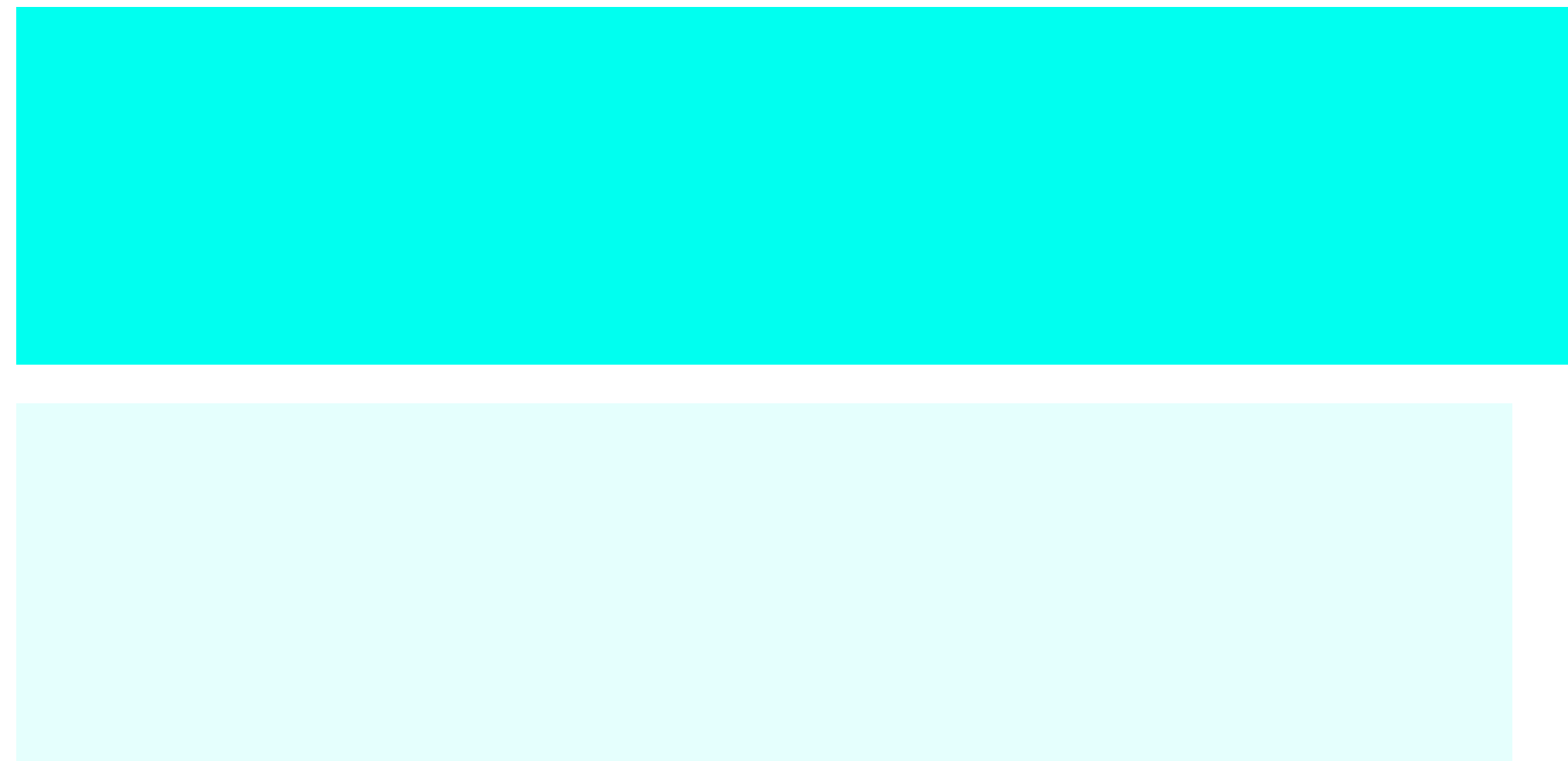
2

3

4

5

log2Enrichment



# Re-clustered module 5.5.7 BP enrichment

Term

negative chemotaxis

positive regulation of axonogenesis

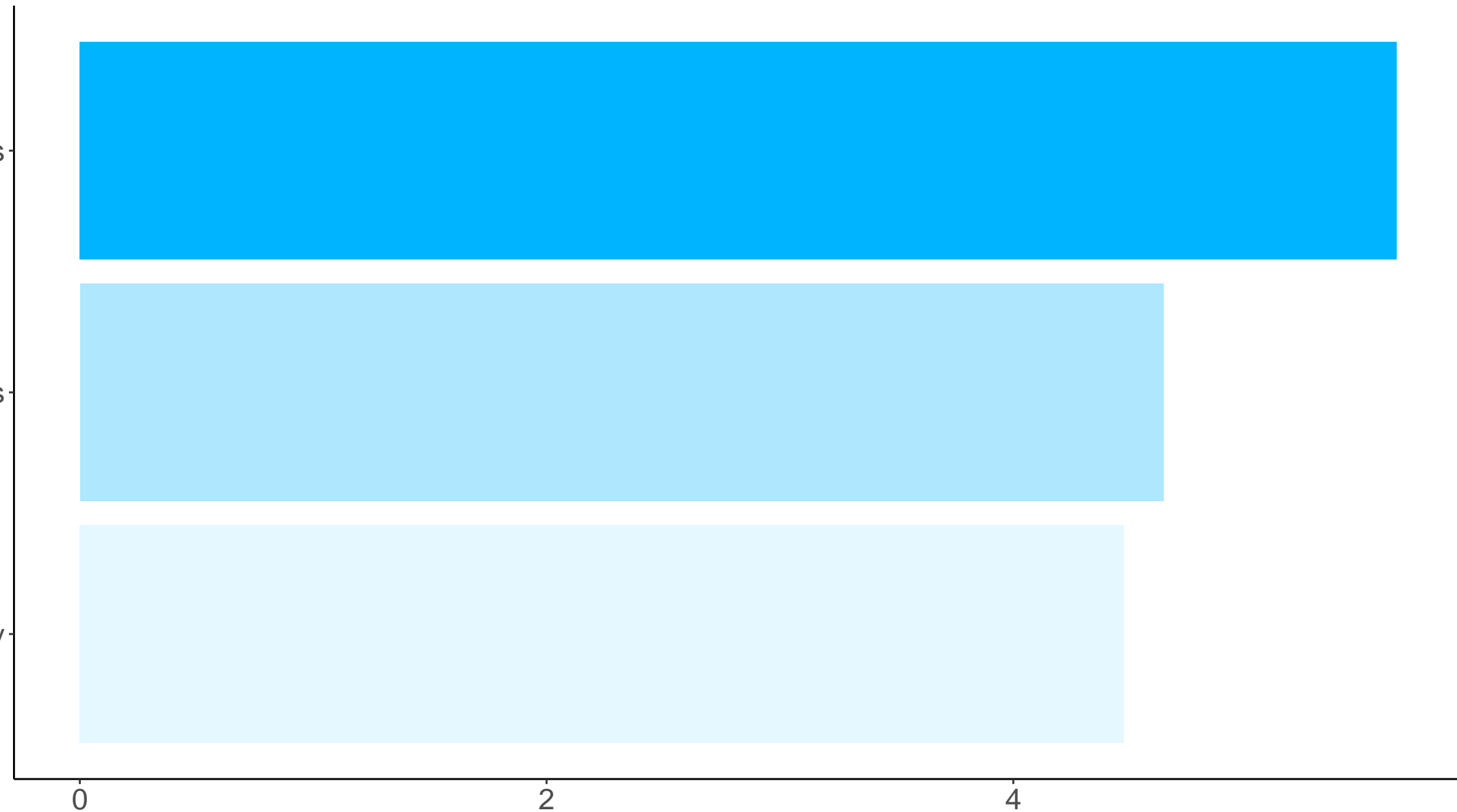
memory

0

2

4

log2Enrichment



Re-clustered module 5.5.7 MF enrichment

Term

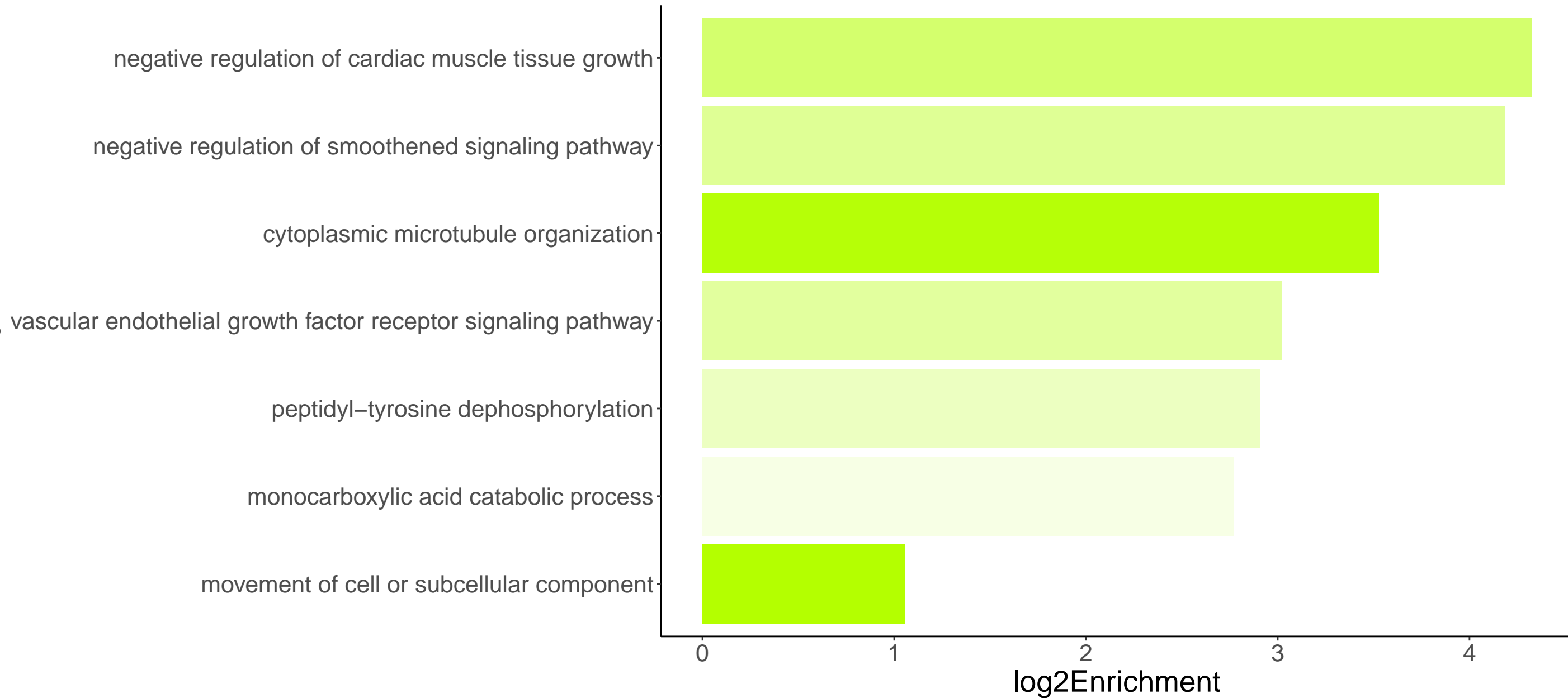
log2Enrichment





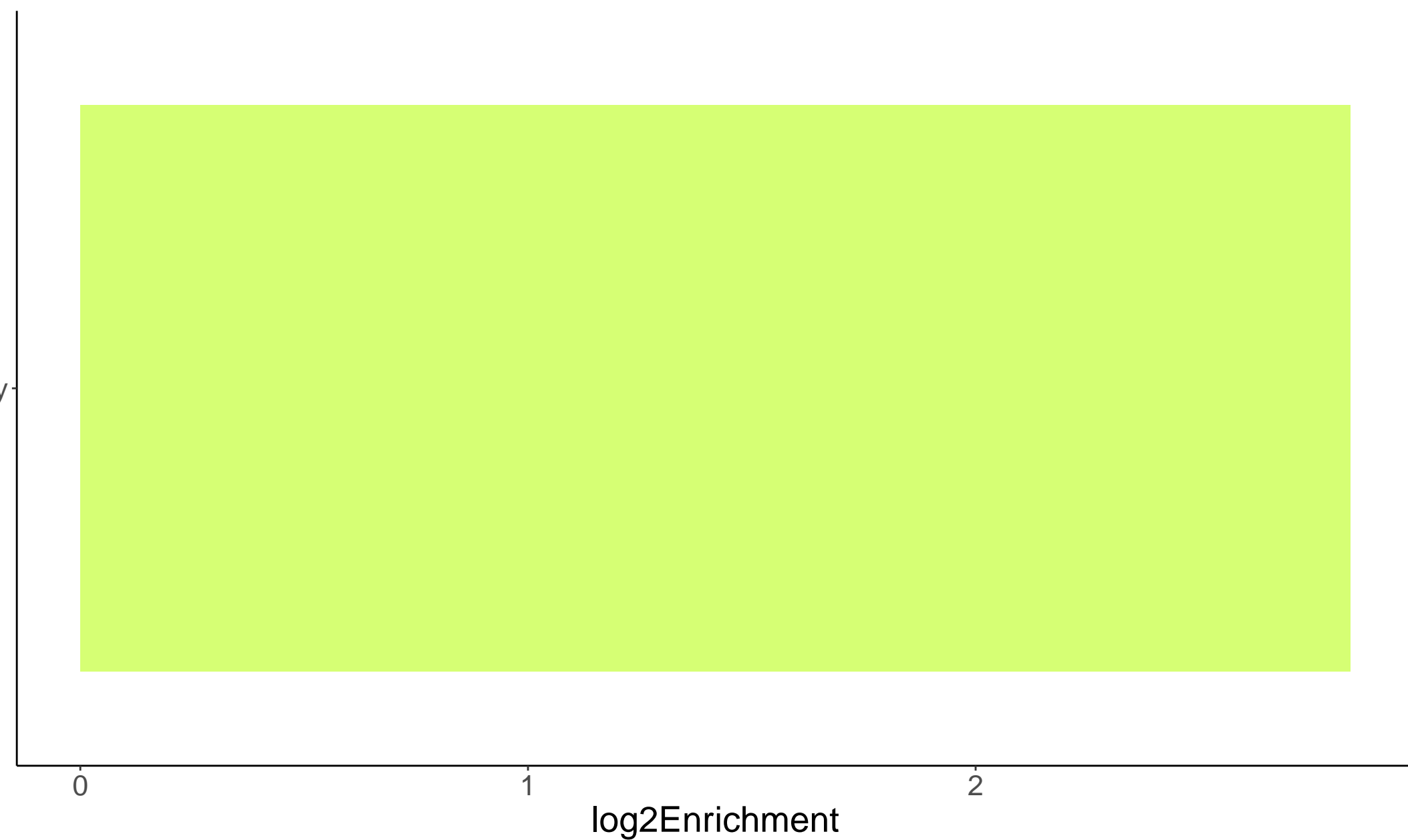
## Re-clustered module 5.6 BP enrichment

Term



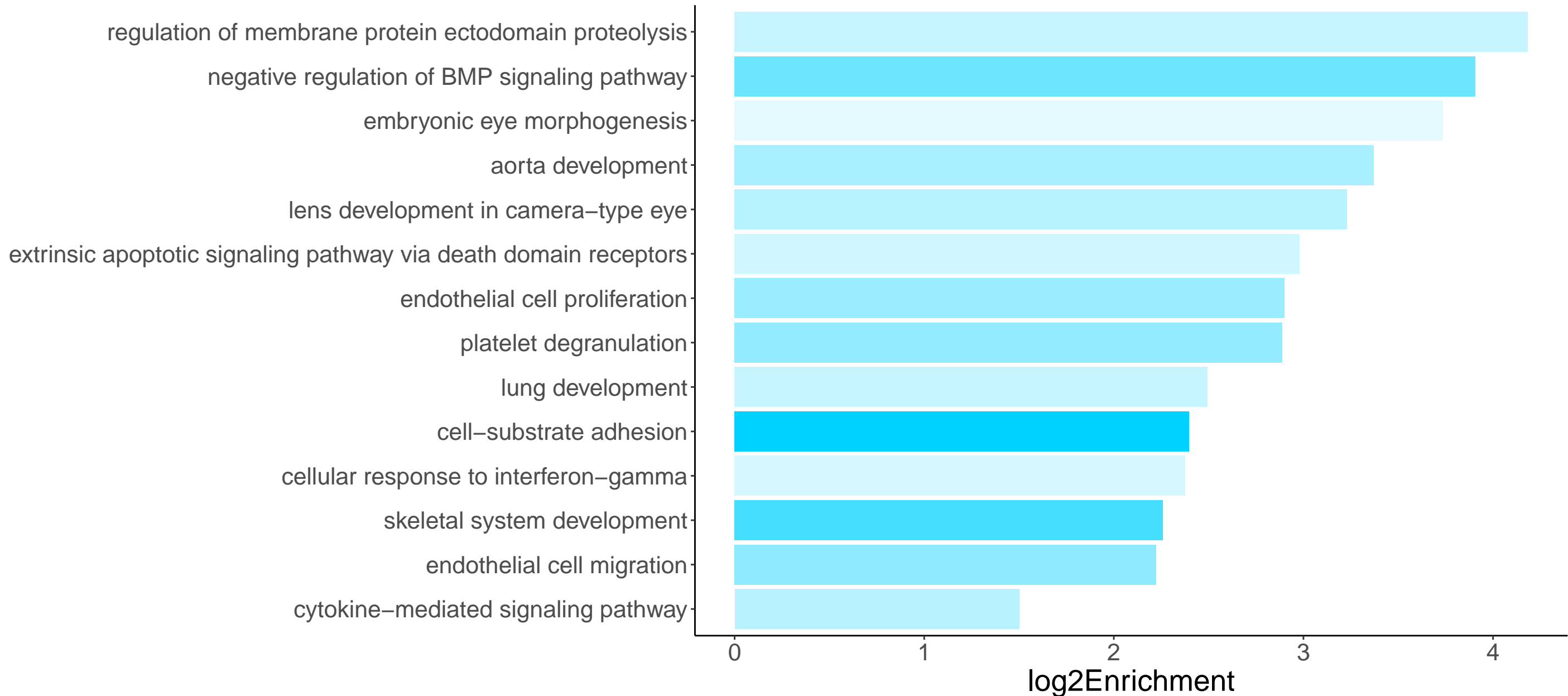
# Re-clustered module 5.6 MF enrichment

Term  
protein tyrosine phosphatase activity



# Re-clustered module 5.7 BP enrichment

Term



# Re-clustered module 5.7 MF enrichment

Term

scavenger receptor activity

cytokine receptor activity

integrin binding

0

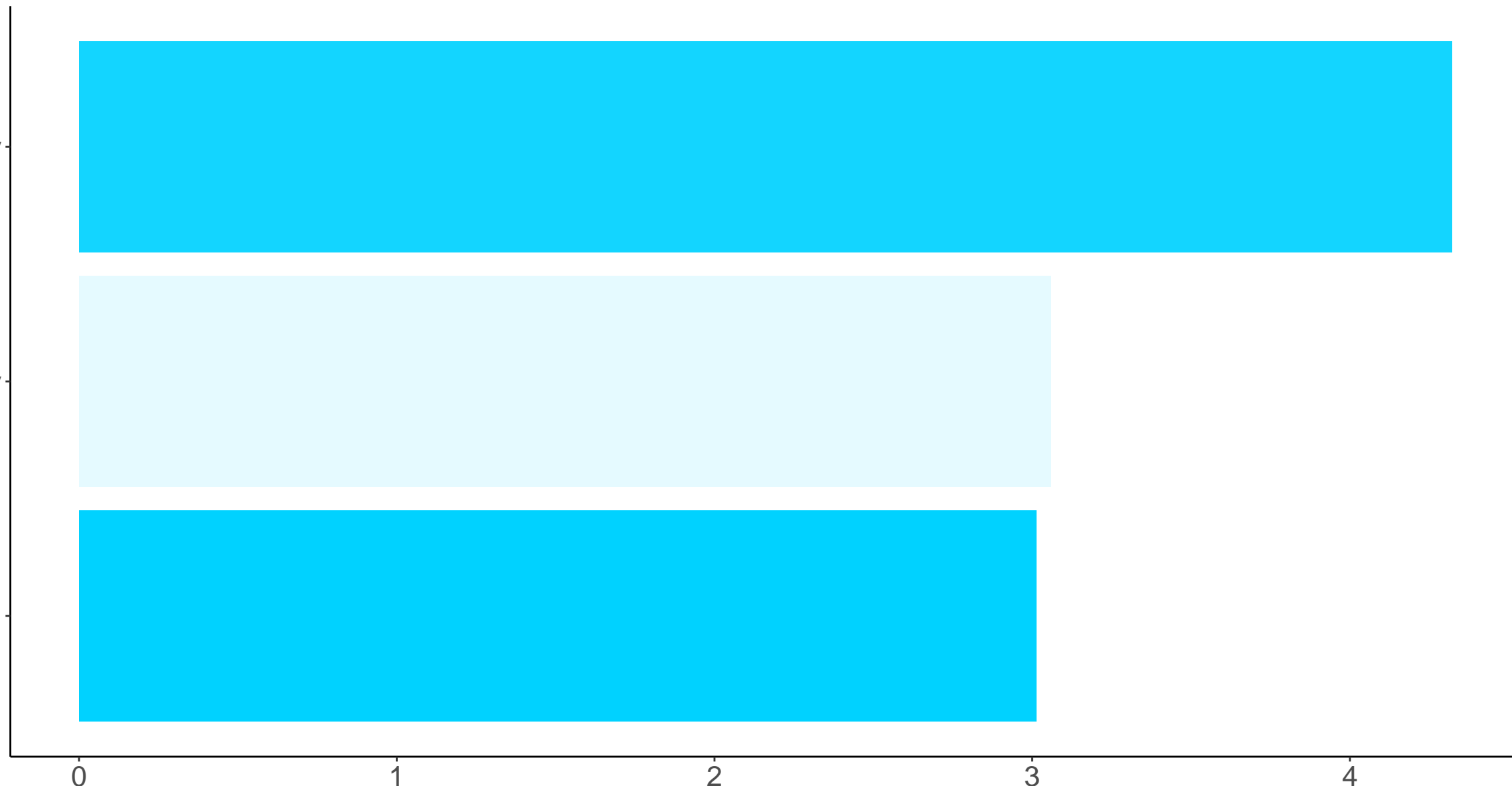
1

2

3

4

log2Enrichment



## Re-clustered module 5.8 BP enrichment

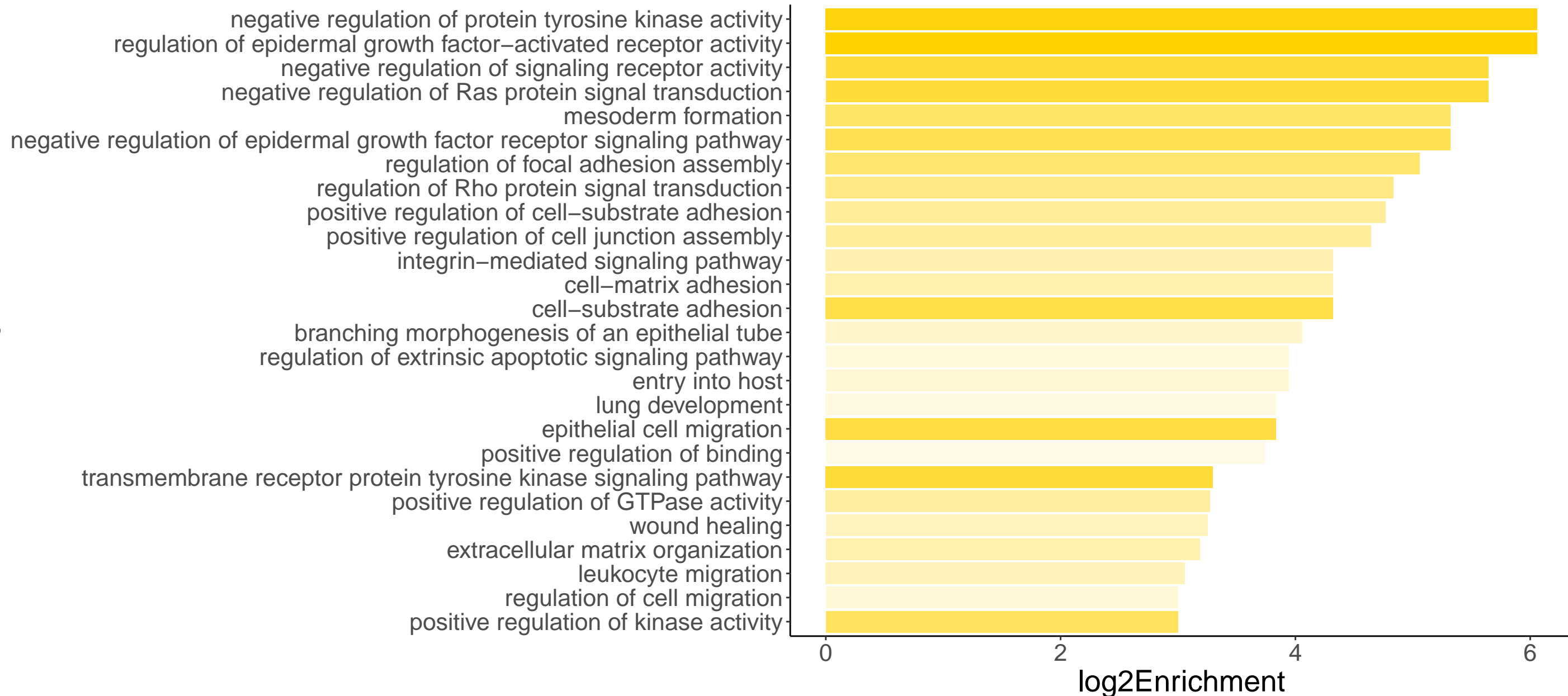
Term



activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one

Hsp9

# Re-clustered module 5.9.1 BP enrichment



# Re-clustered module 5.9.1 MF enrichment

Term

transmembrane receptor protein tyrosine kinase activity

fibronectin binding

laminin binding

protein phosphatase binding

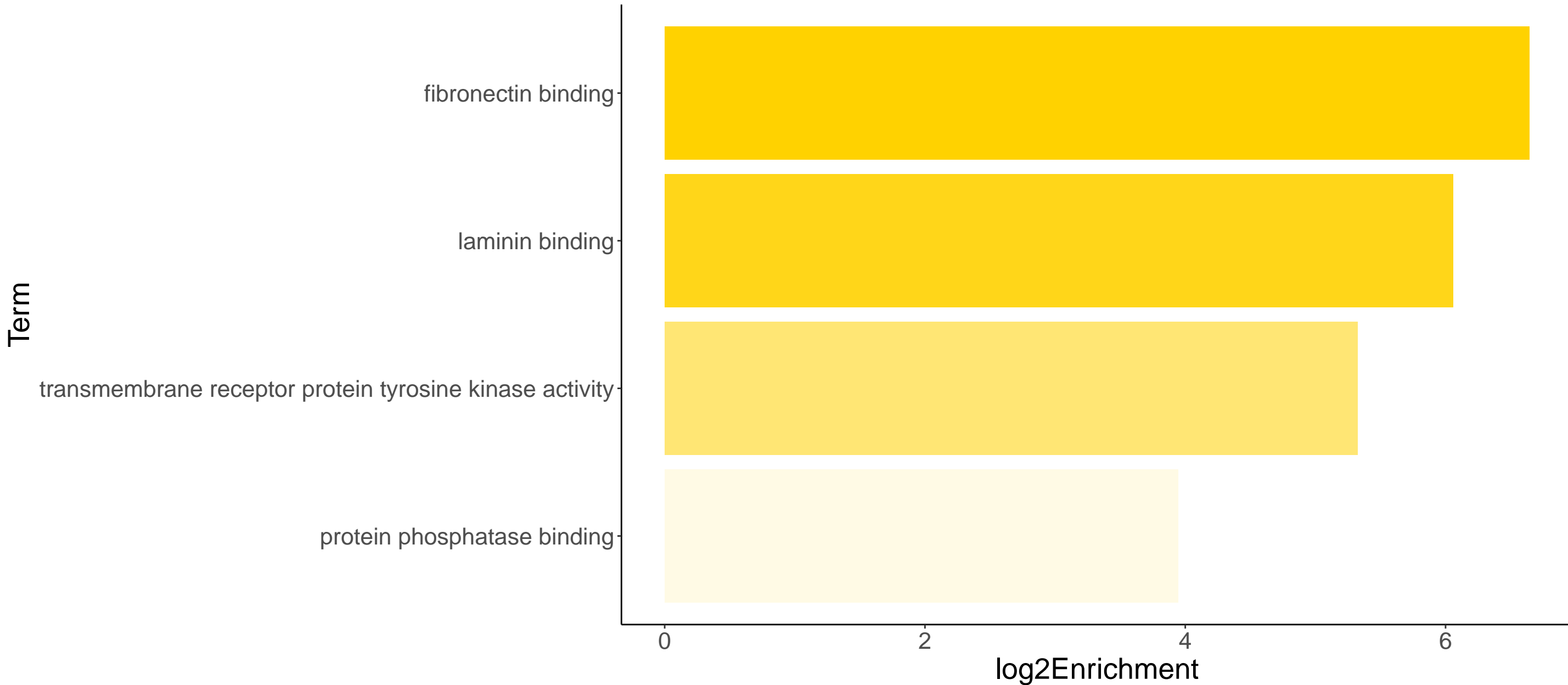
0

2

4

6

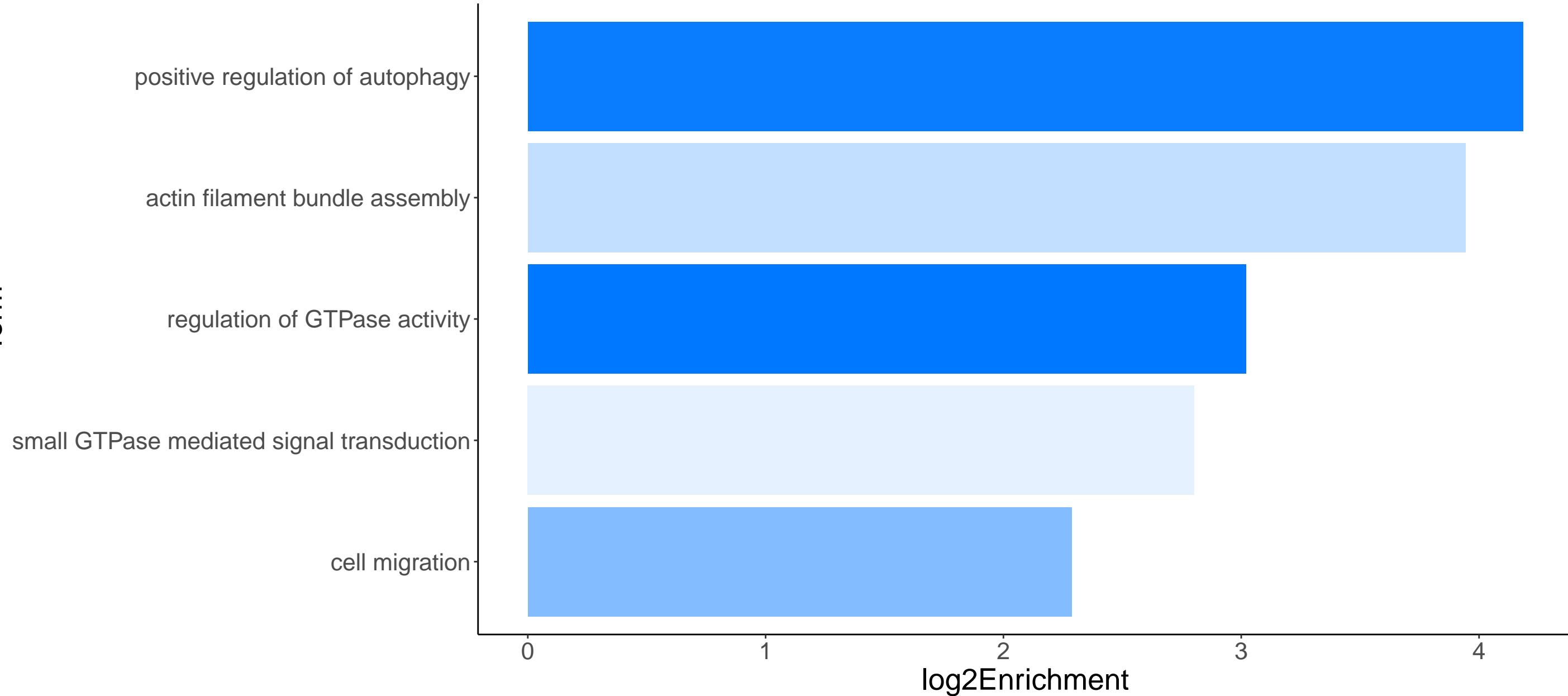
log2Enrichment





## Re-clustered module 5.9.10 BP enrichment

Term



# Re-clustered module 5.9.10 MF enrichment

Term

GTPase regulator activity

enzyme activator activity

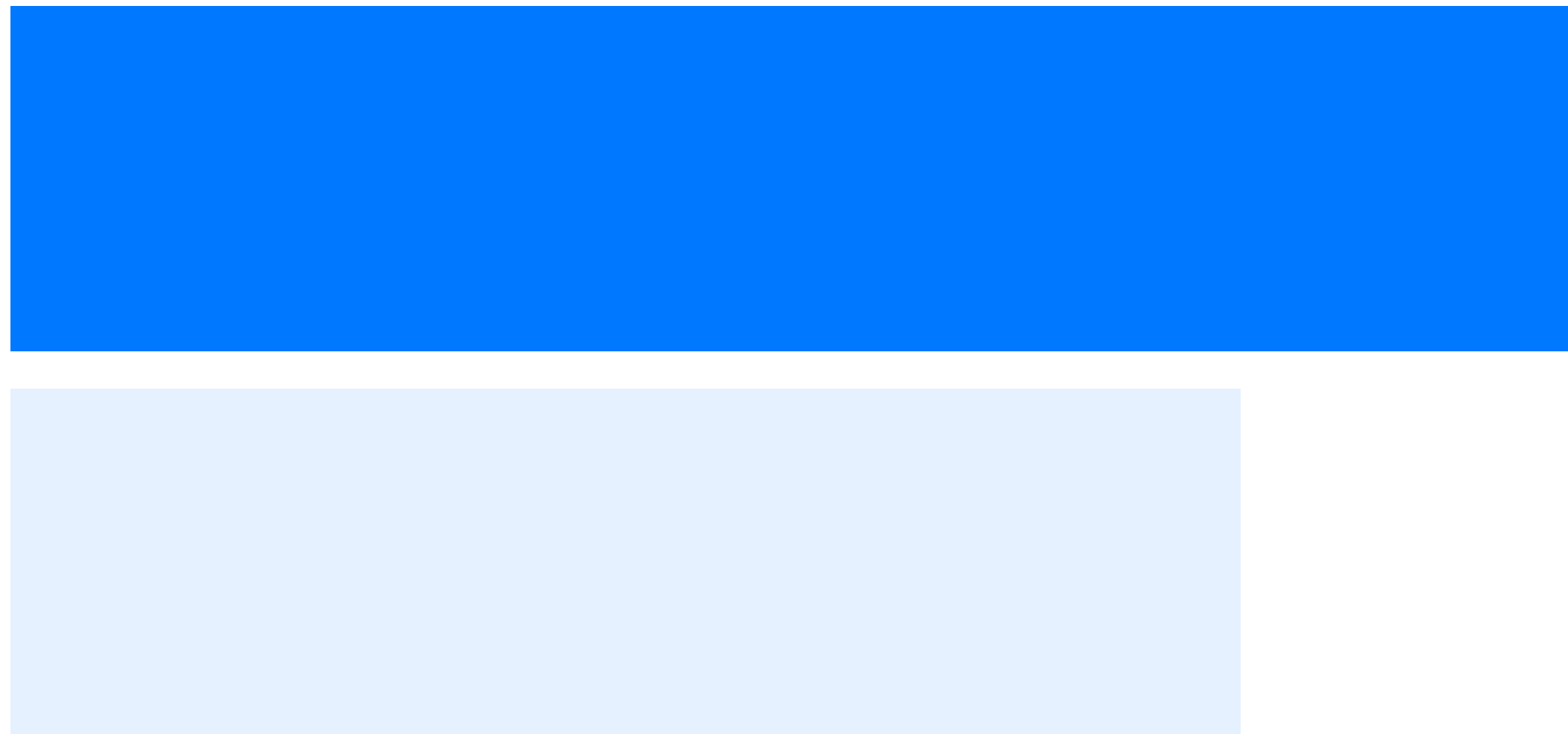
0

1

2

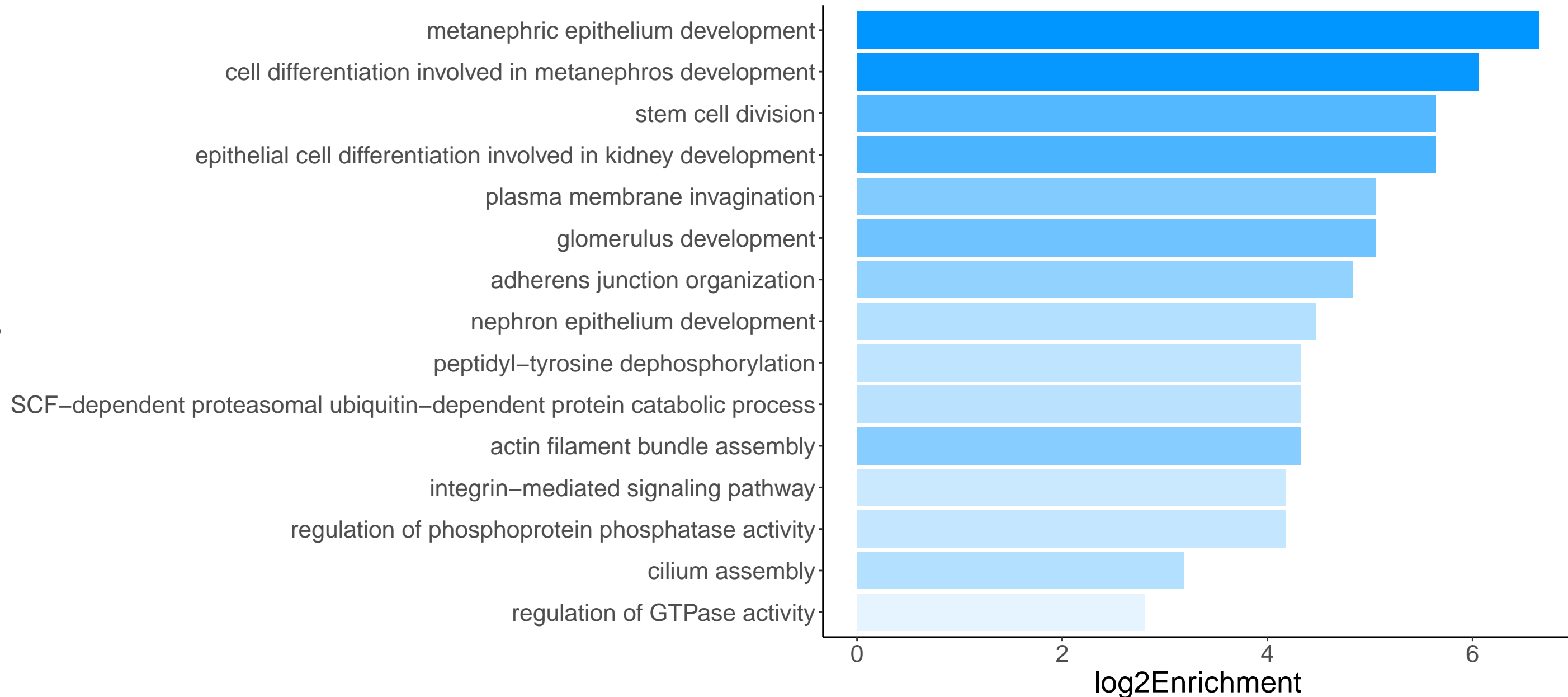
3

log2Enrichment



## Re-clustered module 5.9.2 BP enrichment

Term



# Re-clustered module 5.9.2 MF enrichment

Term

protein phosphatase regulator activity

protein tyrosine phosphatase activity

0

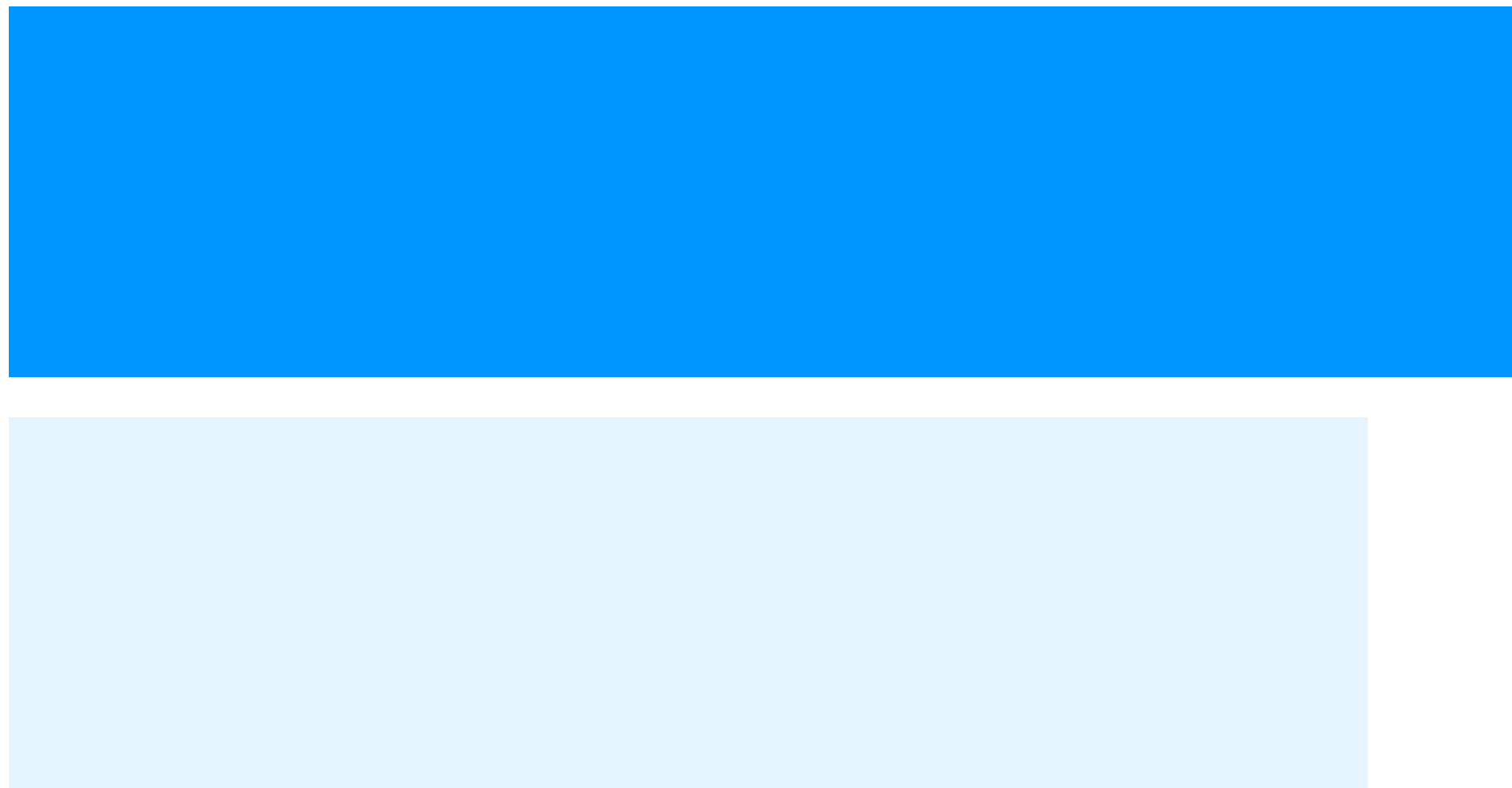
1

2

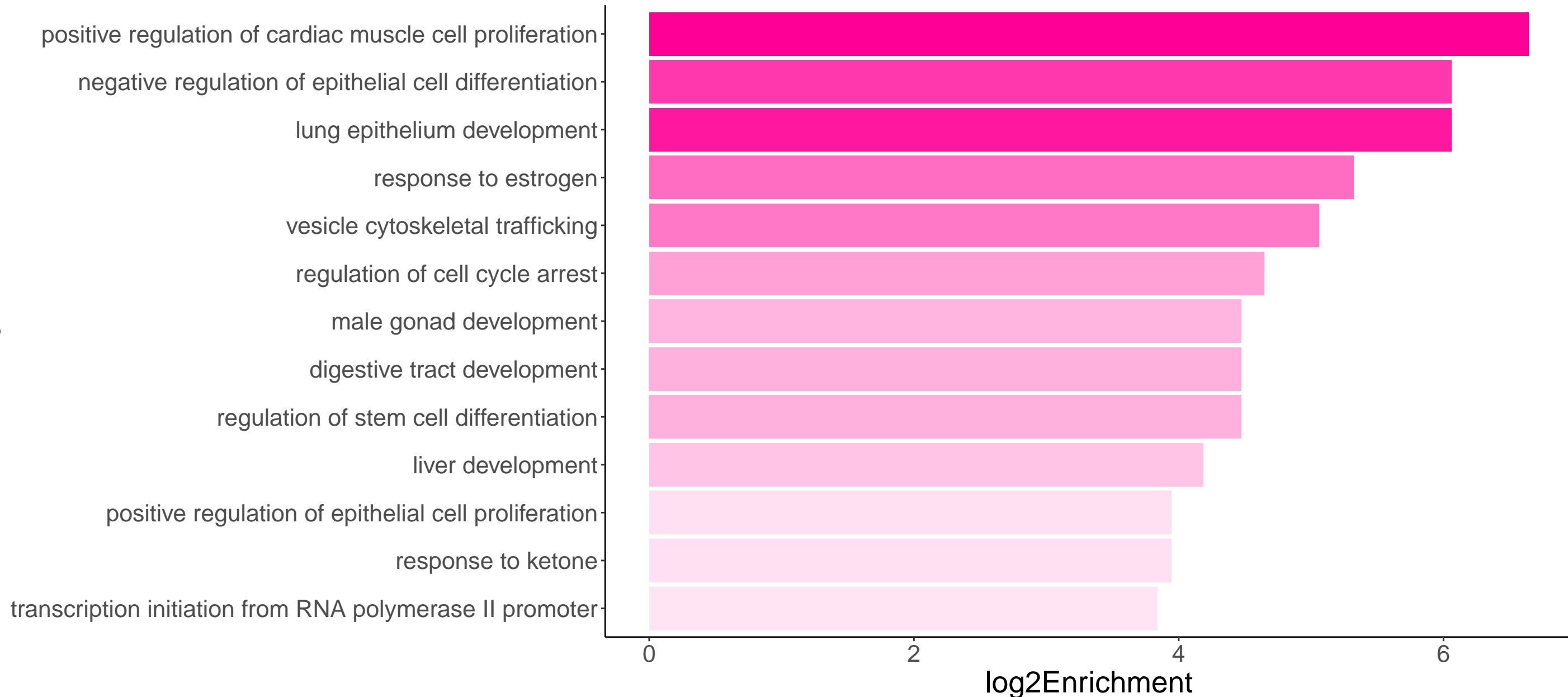
3

4

log2Enrichment



## Re-clustered module 5.9.4 BP enrichment



# Re-clustered module 5.9.4 MF enrichment

Term

protein C-terminus binding

transcription corepressor activity

0

1

2

3

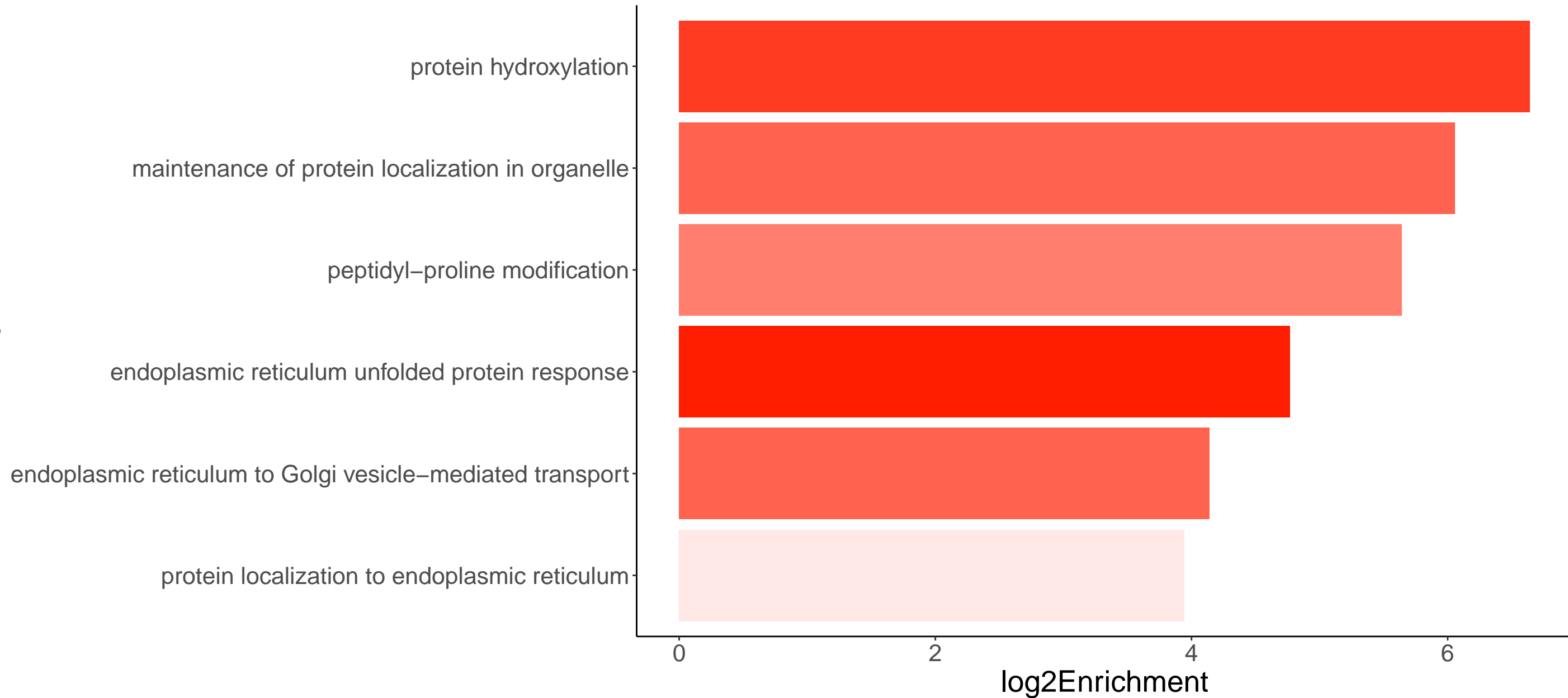
4

log2Enrichment



## Re-clustered module 5.9.6 BP enrichment

Term



## Re-clustered module 5.9.6 MF enrichment

Term

