Main functions from overrepresentation analysis plotted by tissue

Spleen lymphocyte activation 1×10^{-65} 3×10^{-56} T cell activation 4×10^{-53} adaptive immune response 5×10^{-50} immune effector process 8×10^{-50} positive regulation of immune response 3×10^{-49} regulation of cell activation regulation of leukocyte activation 4×10^{-49} 8×10^{-48} regulation of lymphocyte activation leukocyte cell-cell adhesion 2×10^{-42} 1×10^{-41} immune response-regulating signaling pathway

Α

Heart	
FUNCTION	ADJ_P_VALUE
muscle cell development	3×10^{-27}
muscle structure development	1×10^{-26}
myofibril assembly	2×10^{-24}
striated muscle cell development	2×10^{-24}
muscle tissue development	3×10^{-24}
cardiac muscle tissue development	3×10^{-24}
muscle system process	3×10^{-24}
striated muscle tissue development	2×10^{-23}
muscle cell differentiation	5×10^{-23}
heart contraction	1×10^{-22}

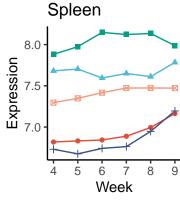
Muscle - Skeletal

C

FUNCTION	ADJ_P_VALUE
muscle structure development	7 × 10 ⁻²⁹
muscle system process	8×10^{-27}
muscle organ development	5×10^{-25}
muscle cell development	1×10^{-21}
muscle contraction	1×10^{-21}
muscle cell differentiation	4×10^{-20}
striated muscle cell differentiation	4×10^{-19}
myofibril assembly	3×10^{-18}
striated muscle cell development	3×10^{-18}
striated muscle contraction	1×10^{-16}
E	

Stomach

FUNCTION	ADJ_P_VALUE
digestion	1 × 10 ⁻⁴
regulation of hormone levels	6×10^{-4}
gastric acid secretion	2×10^{-3}
peptide hormone secretion	2×10^{-3}
peptide transport	2×10^{-3}
peptide secretion	3×10^{-3}
digestive system process	6×10^{-3}
amide transport	6×10^{-3}
hormone transport	6×10^{-3}
hormone secretion	6 × 10 ⁻³



Function

- adaptive immune response
- immune effector process
- lymphocyte activation
- + positive regulation of immune response
- T cell activation

Heart

Expression

Brain FUNCTION ADJ_P_VALUE 9×10^{-43} synaptic signaling 9 × 10⁻⁴³ trans-synaptic signaling 9×10^{-43} chemical synaptic transmission anterograde trans-synaptic signaling 9×10^{-43} 9×10^{-25} modulation of chemical synaptic transmission regulation of trans-synaptic signaling 9×10^{-25} neuron projection morphogenesis 2×10^{-18} 8×10^{-18} cell projection morphogenesis plasma membrane bounded cell projection morphogenesis 2×10^{-17} cell part morphogenesis

В

Function

heart contraction

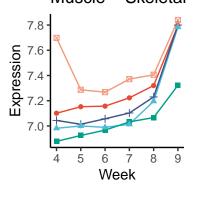
5

muscle cell development

Week

- muscle structure development
- muscle tissue development
- myofibril assembly

Muscle - Skeletal



Function

- muscle cell development
- muscle contraction
- muscle structure development
- muscle system process

Stomach

Function

digestion

8.50

8.25 8.00 8.7.75

7.50

striated muscle cell differentiation

Week

peptide hormone secretion

- regulation of hormone levels

Liver

FUNCTION	ADJ_P_VALUE
monocarboxylic acid metabolic process	7×10^{-51}
small molecule catabolic process	7×10^{-39}
organic acid catabolic process	4×10^{-36}
carboxylic acid catabolic process	2×10^{-35}
steroid metabolic process	7×10^{-33}
small molecule biosynthetic process	4×10^{-31}
cellular amino acid metabolic process	1×10^{-28}
fatty acid metabolic process	6×10^{-28}
organic hydroxy compound metabolic process	9×10^{-28}
alpha-amino acid metabolic process	3×10^{-27}

D

Testis

FUNCTION	ADJ_P_VALUE
male gamete generation	1 × 10 ⁻³⁵
spermatogenesis	3×10^{-34}
microtubule-based movement	2×10^{-26}
cilium organization	2×10^{-26}
cilium assembly	2×10^{-23}
microtubule cytoskeleton organization	2×10^{-23}
meiotic cell cycle	2×10^{-23}
cilium movement	3×10^{-20}
nuclear division	1×10^{-18}
meiotic cell cycle process	2×10^{-18}

F

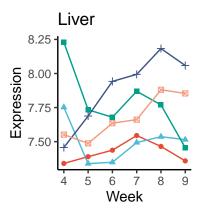
Skin

FUNCTION	ADJ_P_VALUE
epidermis development	2 × 10 ⁻²¹
skin development	9 × 10 ⁻²¹
keratinization	6×10^{-17}
keratinocyte differentiation	2×10^{-14}
epidermal cell differentiation	1×10^{-10}
intermediate filament cytoskeleton organization	9×10^{-10}
intermediate filament-based process	1×10^{-9}
intermediate filament organization	6×10^{-9}
regulation of water loss via skin	2×10^{-8}
establishment of skin barrier	1×10^{-7}

Brain 7.8 7.0 4 5 6 7 8 9 Week

Function

- modulation of chemical synaptic transmission
- neuron projection morphogenesis
- synaptic signaling



Function

- cellular amino acid metabolic process
- monocarboxylic acid metabolic process
- organic acid catabolic process
- $m{+}$ organic hydroxy compound metabolic process
- steroid metabolic process

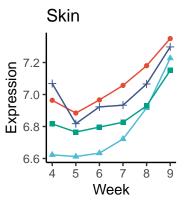
Testis

8.0 - Rxbression 7.8 - 7.4 - 7

Function

- cilium assembly
- cilium organization
- male gamete generation

Week



Function

- epidermis development
- keratinization
- keratinocyte differentiation
- + skin development

