

SUPPLEMENTARY TABLE S3. PHYSIOLOGICAL AND SYSTEM DEVELOPMENT AND FUNCTION

<i>Category</i>	<i>p-value</i>	<i>Molecules</i>
Tumor morphology	1.23E-07-7.56E-03	VEGFA, ADAM12, MCAM, EZR, CLU, IGF1R, PLAUR, PLAU
Tissue development	1.44E-06-8.17E-03	FOXD1, TCF4, RALA, INSIG1, PVRL3, CLU, TNFRSF12A, VEGFA, SGPL1, EZR, PRRX1, CHST3, IGF1R, JARID2, JUND, STX4, FXYD5, WNT5B, BMP1, PTX3, HLX, FST, TBX3, PLAUR, LTBP3, ADAM12, IRS1, BHLHE40, HAS2, PIK3CD, EFEMP1, PLAU
Digestive system development and function	7.22E-06-8.17E-03	VEGFA, SGPL1, LTBP3, FST, INSIG1, TBX3, PRRX1, PVRL3, CLU, PLAU
Embryonic development	7.23E-06-8.17E-03	FOXD1, TCF4, INSIG1, PVRL3, CLU, TNFRSF12A, VEGFA, SGPL1, EZR, PRRX1, IGF1R, JARID2, JUND, WNT5B, PTX3, HLX, FST, TBX3, PLAUR, IRS1, BHLHE40, HAS2, PIK3CD, PLAU, EFEMP1
Organ development	7.23E-06-8.17E-03	FOXD1, HLX, TCF4, FST, INSIG1, TBX3, PVRL3, CLU, TNFRSF12A, VEGFA, SGPL1, BHLHE40, IRS1, EZR, PRRX1, CHST3, IGF1R, JARID2, HAS2, PIK3CD, JUND, PLAU, EFEMP1, WNT5B
Organismal development	7.23E-06-8.17E-03	FOXD1, TCF4, INSIG1, PVRL3, CLU, TNFRSF12A, VEGFA, TRIB1, SGPL1, PRRX1, EZR, IGF1R, JARID2, JUND, MUS81, WNT5B, PTX3, HLX, FST, TBX3, PLAUR, LTBP3, BHLHE40, IRS1, ITPR3, HAS2, PIK3CD, EFEMP1, PLAU
Skeletal and muscular system development and function	1.65E-05-8.17E-03	TCF4, HLX, FST, TBX3, CLU, PLAUR, TNFRSF12A, VEGFA, TRIB1, SGPL1, LTBP3, ADAM12, BHLHE40, IRS1, PRRX1, IGF1R, JUND, PLAU, WNT5B, BMP1
Cardiovascular system development and function	4.94E-05-8.17E-03	PTX3, HLX, TBX3, PLAUR, TNFRSF12A, VEGFA, SGPL1, ADAM12, IRS1, PRRX1, IGF1R, HAS2, PLAUR, MUS81
Hair and skin development and function	9.85E-05-8.17E-03	VEGFA, TCF4, FST, IRS1, FSCN1, CLU, PLAUR, LBH, EFEMP1, PLAU
Immune cell trafficking	9.85E-05-4.09E-03	PTX3, VEGFA, PLAUR, PIK3CD, STX4, PLAU
Organ morphology	9.85E-05-4.09E-03	PTX3, HLX, FST, TBX3, PVRL3, CLU, PLAUR, VEGFA, ADAM12, PRRX1, BHLHE40, IGF1R, HAS2, PIK3CD, PLAU, EFEMP1, MUS81, BMP1
Hematological system development and function	1.12E-04-8.17E-03	PTX3, HLX, TCF4, FST, PLAUR, TNFRSF12A, VEGFA, FZD8, SGPL1, IRS1, BHLHE40, CHST3, IGF1R, PIK3CD, STX4, PLAU
Reproductive system development and function	2.71E-04-8.17E-03	VEGFA, PTX3, ADAM12, TBX3, IRS1, CLU, IGF1R, PLAUR, JUND, EFEMP1, PLAU
Connective tissue development and function	2.98E-04-8.17E-03	FST, INSIG1, TBX3, CLU, PLAUR, TNFRSF12A, VEGFA, SGPL1, LTBP3, ADAM12, MCAM, EZR, IRS1, PRRX1, IGF1R, HAS2, JUND, EFEMP1, PLAU, WNT5B, BMP1
Visual system development and function	3.21E-04-5.42E-03	VEGFA, FOXD1, IRS1, PRRX1, PVRL3, IGF1R, EFEMP1, PLAU, TNFRSF12A
Tissue morphology	3.42E-04-8.17E-03	FST, TBX3, CLU, PLAUR, VEGFA, LTBP3, ADAM12, PRRX1, IRS1, BHLHE40, IGF1R, EFEMP1, PLAU, MUS81, BMP1
Renal and urological system development and function	6.67E-04-4E-03	VEGFA, SGPL1, FOXD1, IRS1, EZR, PLAUR, EFEMP1, PLAU
Organismal functions	2.26E-03-3.39E-03	VEGFA, FST, IRS1, PLAUR, PLAU
Hematopoiesis	2.63E-03-4.09E-03	VEGFA, FZD8, SGPL1, TCF4, HLX, FST, BHLHE40, IRS1, IGF1R, PIK3CD, TNFRSF12A
Hepatic system development and function	2.7E-03-8.17E-03	VEGFA, TNFRSF12A
Auditory and vestibular system development and function	3.62E-03-3.95E-03	INSIG1, PRRX1, PLAU
Behavior	4.09E-03-4.09E-03	PLAU
Endocrine system development and function	4.09E-03-8.03E-03	FST, BHLHE40, CLU, IGF1R

(continued)

SUPPLEMENTARY TABLE S3. (CONTINUED)

<i>Category</i>	<i>p-value</i>	<i>Molecules</i>
Lymphoid tissue structure and development	4.09E-03-6.73E-03	<i>VEGFA, FST, BHLHE40, PIK3CD</i>
Nervous system development and function	4.09E-03-8.17E-03	<i>VEGFA, TCF4, FOXD1, TBX3, IRS1, CHST3, IGF1R, CLU</i>
Cell-mediated immune response	5.89E-03-5.89E-03	<i>VEGFA, FZD8, TCF4, BHLHE40, IGF1R, CHST3, PIK3CD</i>
Respiratory system development and function	8.17E-03-8.17E-03	<i>VEGFA</i>