

Supplementary table 1: Gene co-expression analyses

Categories	Function	Diseases or Functions Annotation	p-Value	z-score	No. Genes	Genes
Cellular Movement, Immune Cell Trafficking	Migration	Leukocyte migration	0.0021	2.17	9	CBLB,Cxcl11,Defb8,F3,FLT4,MMP12,PROX1,RPL13A,TPSAB1/TPSB2
Cardiovascular System Development and Function, Cellular Movement	Migration	Migration of endothelial cells	0.0174	1.97	4	F3,FLT4,NR4A1,PROX1
Cardiovascular System Development and Function, Cellular Development, Cellular Function and Maintenance, Cellular Growth and Proliferation, Organismal Development, Tissue Development	Proliferation	Proliferation of endothelial cells	0.0135	1.95	4	F3,FLT4,NR4A1,PROX1
Cellular Movement	Migration	Migration of cells	3E-05	1.91	18	CBLB,Cxcl11,CYGB,Defb8,Erd1,F3,FLT4,FMOD,ITGB6,MMP12,NR1D1,NR4A1,PDCD4,PROX1,RPL13A,TIAM2,TPSAB1/TPSB2,WISP2
Cell-To-Cell Signaling and Interaction, Hematological System Development and Function	Activation	Activation of blood cells	0.0076	1.72	7	CBLB,CD300LB,F3,ITGB6,Saa3,SLC7A2,TPSAB1/TPSB2
Cellular Movement, Hematological System Development and Function, Immune Cell Trafficking	Cell movement	Cell movement of leukocytes	0.0121	1.67	7	CBLB,Cxcl11,Defb8,F3,MMP12,RPL13A,TPSAB1/TPSB2
Cardiovascular System Development and Function, Cellular Movement	Cell movement	Cell movement of endothelial cells	0.0044	1.54	5	F3,FLT4,NR4A1,OSR1,PROX1
Cardiovascular System Development and Function, Organismal Development	Vasculogenesis	Vasculogenesis	0.0395	1.51	6	CYGB,F3,FLT4,MMP12,NR4A1,PROX1
Cellular Movement	Cell movement	Cell movement	8E-06	1.41	20	CBLB,Cxcl11,CYGB,Defb8,Erd1,F3,FLT4,FMOD,ITGB6,MMP12,NR1D1,NR4A1,OSR1,PDCD4,PROX1,RPL13A,Saa3,TIAM2,TPSAB1/TPSB2,WISP2
Hematological System Development and Function, Immune Cell Trafficking, Inflammatory Response	Activation	Activation of leukocytes	0.019	1.41	6	CBLB,CD300LB,ITGB6,Saa3,SLC7A2,TPSAB1/TPSB2
Tissue Development	Growth	Growth of epithelial tissue	0.0068	1.30	7	CYP7B1,F3,FLT4,MMP12,NR4A1,OSR1,PROX1
Cellular Growth and Proliferation	Proliferation	Proliferation of cells	0.015	1.20	20	CBLB,CNTFR,CYGB,CYP7B1,Erd1,F3,FLT4,FMOD,ITGB6,MMP12,NR1D1,NR4A1,OSR1,PDCD4,PROX1,TIAM2,TLR6,TPSAB1/TPSB2,VSIG4,WISP2
Cardiovascular System Development and Function, Cellular Movement	Movement	Movement of vascular endothelial cells	0.0016	1.19	4	FLT4,NR4A1,OSR1,PROX1
Carbohydrate Metabolism	Quantity	Quantity of carbohydrate	0.007	1.13	6	Gm15807/Hmgn5,NCEH1,NR4A1,PROX1,STEAP4,TPSAB1/TPSB2
Cell-To-Cell Signaling and Interaction	Activation	Activation of cells	0.0009	1.12	10	CBLB,CD300LB,F3,FMOD,ITGB6,NR4A1,Saa3,SLC7A2,TLR6,TPSAB1/TPSB2
Hematological System Development and Function, Inflammatory Response, Tissue Morphology	Quantity	Quantity of phagocytes	0.0113	1.09	5	F3,FLT4,ITGB6,MMP12,STEAP4
Hematological System Development and Function, Inflammatory Response, Tissue Morphology	Quantity	Quantity of macrophages	0.0029	1.07	4	FLT4,ITGB6,MMP12,STEAP4
Inflammatory Response	Inflammatory response	Inflammatory response	0.003	1.01	8	Cxcl11,Defb8,ITGB6,NR1D1,RPL13A,SLC7A2,TLR6,TPSAB1/TPSB2

Note: Ingenuity pathway analysis (IPA®) of upstream regulators (Ingenuity, QIAGEN-Bioinformatics) to infer the most likely activation state of biological processes (as indicated by categories and function). The association of genes is estimated by the z-score, as calculated by statistical modeling of published data.