

SUPPLEMENTARY TABLE S2. MOLECULAR AND CELLULAR FUNCTIONS

Category	p-Value	Molecules
Cellular movement	1.04E-08-8.17E-03	RALA, CLU, TNFRSF12A, VEGFA, TRIB1, SGPL1, MCAM, EZR, STMN4, IGF1R, JUND, FXYD5, WNT5B, PTX3, HLX, FST, PLAUR, ADAM12, BHLHE40, FSCN1, IRS1, HAS2, PIK3CD, PLAU, EFEMP1
Cellular growth and proliferation	4.12E-06-8.17E-03	TCF4, RALA, INSIG1, CLU, MELK, TNFRSF12A, VEGFA, TRIB1, SGPL1, CAMK2N1, MCAM, PRRX1, EZR, JARID2, IGF1R, JUND, MUS81, WNT5B, BMP1, PTX3, HLX, FST, TBX3, PLAUR, PDLIM4, LTBP3, ADAM12, IRS1, BHLHE40, FSCN1, HAS2, PIK3CD, PLAU, EFEMP1, PMEPA1
Cell-to-cell signaling and interaction	4.79E-06-8.17E-03	PTX3, RALA, PVRL3, CLU, PLAUR, TNFRSF12A, VEGFA, ADAM12, IRS1, IGF1R, HAS2, PIK3CD, STX4, PLAU, FXYD5
Carbohydrate metabolism	1.07E-05-8.17E-03	VEGFA, PTX3, RALA, SERINC5, IRS1, CHST3, IGF1R, PLAUR, HAS2, PIK3CD, STX4, PLAU
Cellular development	1.33E-05-8.17E-03	TCF4, RALA, INSIG1, CLU, TNFRSF12A, VEGFA, SGPL1, CAMK2N1, PRRX1, EZR, IGF1R, JUND, WNT5B, BMP1, FST, TBX3, PLAUR, PDLIM4, FZD8, LTBP3, ADAM12, IRS1, BHLHE40, FSCN1, HAS2, PIK3CD, LBH, PLAUR, PMEPA1
Cell morphology	1.65E-05-8.17E-03	TCF4, FST, RALA, PVRL3, PLAUR, VEGFA, IRS1, EZR, PRRX1, BHLHE40, STMN4, MCAM, PLAU
Lipid metabolism	5.5E-05-8.17E-03	PTX3, FST, RALA, INSIG1, SERINC5, CLU, TNFRSF12A, VEGFA, SGPL1, BHLHE40, SPTLC2, PIK3CD, PLAU
Small molecule biochemistry	5.5E-05-8.17E-03	PTX3, FST, RALA, INSIG1, SERINC5, GGH, CLU, PLAUR, TNFRSF12A, VEGFA, SGPL1, SPTLC2, BHLHE40, IRS1, IGF1R, HAS2, PIK3CD, PLAU, STX4
Cell death	7.01E-05-8.17E-03	TCF4, ATXN1, CLU, MELK, TNFRSF12A, VEGFA, TRIB1, SGPL1, CAMK2N1, MCAM, EZR, IGF1R, JUND, BMP1, FST, TBX3, PLAUR, PDLIM4, ADAM12, IRS1, BHLHE40, ITPR3, PIK3CD, PLAU, EFEMP1, PMEPA1
DNA replication, recombination, and repair	3.05E-04-4.09E-03	VEGFA, FST, IRS1, IGF1R, MUS81
Nucleic acid metabolism	3.05E-04-3.05E-04	VEGFA, FST, IRS1, IGF1R
Cellular assembly and organization	3.06E-04-8.17E-03	PTX3, RALA, PVRL3, CLU, PLAUR, TNFRSF12A, PDLIM4, VEGFA, FSCN1, EZR, STMN4, HAS2, JUND, STX4, PLAU, FXYD5
Cellular function and maintenance	3.06E-04-8.17E-03	PTX3, TCF4, RALA, PVRL3, CLU, PLAUR, TNFRSF12A, PDLIM4, VEGFA, FZD8, MCAM, BHLHE40, FSCN1, EZR, STMN4, IGF1R, CHST3, HAS2, PIK3CD, STX4, PLAUR
Antigen presentation	4.6E-04-2.99E-03	PTX3, VEGFA, PLAUR, PLAUR
Molecular transport	5.68E-04-8.17E-03	FST, RALA, GGH, PLAUR, VEGFA, SGPL1, BHLHE40, IRS1, SPTLC2, MCAM, ITPR3, IGF1R, HAS2, PIK3CD, JUND, STX4, PLAUR
Cell cycle	5.91E-04-8.17E-03	TCF4, SGSM1, TBX3, CLU, PLAUR, MELK, VEGFA, CAMK2N1, STMN4, IRS1, BHLHE40, JARID2, IGF1R, HAS2, JUND, PLAUR, MUS81
Cellular compromise	8.86E-04-8.17E-03	PTX3, VEGFA, SGPL1, RALA, FST, IGF1R, CLU, PLAUR, PIK3CD, STX4, PLAUR
Cell signaling	1.45E-03-7.34E-03	PTX3, VEGFA, MCAM, IRS1, ITPR3, IGF1R, PLAUR, PIK3CD, PLAUR
Gene expression	2.11E-03-3.12E-03	FOXD1, TCF4, FST, ZNF281, TBX3, ATXN1, NAA15, VEGFA, FZD8, LRRFIP1, PRRX1, BHLHE40, JARID2, LBH, JUND
Vitamin and mineral metabolism	2.5E-03-8.17E-03	VEGFA, MCAM, IRS1, GGH, ITPR3, PLAUR, PIK3CD, PLAUR
Protein trafficking	3.3E-03-3.3E-03	VEGFA, PLAUR
Amino acid metabolism	4.09E-03-8.17E-03	GGH
Drug metabolism	4.09E-03-8.17E-03	PTX3, GGH, HAS2
Free radical scavenging	4.09E-03-4.09E-03	CLU
Protein synthesis	4.15E-03-4.15E-03	IRS1, ITPR3, IGF1R