

Article title: Transcriptome analysis of adipose tissue from pigs divergent in feed efficiency reveals alteration in gene networks related to adipose growth, lipid metabolism, extracellular matrix and immune response

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Authors: Justyna Horodyska^{1,2}, Henry Reyer², Klaus Wimmers^{2,3}, Nares Trakooljul², Peadar G. Lawlor⁴, Ruth M. Hamill^{1*}

¹Teagasc, Food Research Centre, Ashtown, Dublin 15, Ireland

²Leibniz Institute for Farm Animal Biology (FBN), Institute for Genome Biology, Dummerstorf, Germany

³Faculty of Agricultural and Environmental Sciences, University Rostock, Germany

⁴Teagasc, Pig Development Department, AGRIC, Moorepark, Fermoy, Co. Cork, Ireland

*Corresponding author: Ruth.Hamill@teagasc.ie

Table S4 List of networks inferred by integration of genes affected by feed efficiency.

ID	Molecules in Network	Top Diseases and Functions
1	Akt, ANGPTL1, ANPEP, CBFA2T3, CSF3R, Cytokeratin, EPB41L2, estrogen receptor, ETS2, ETV6, Hdac, ITGB8, KRT18, KRT19, LTF, N-cor, Nfat (family), PKHD1, PLIN2, Raf, ROBO2, Rxr, Sema3, SEMA3B, SEMA3C, SEMA3D, SLC6A2, SULT2A1, SYNM, TCF, TGFB2, UBE2J2, VitaminD3-VDR-RXR, ZBTB7C, ZFPM2	Cell death and survival, embryonic development, cancer
2	Adaptor protein 1, Ap1 gamma, APIB1, COL11A2, Collagen type I, Collagen type II, Collagen type III, Collagen type IV, Collagen(s), Cpla2, Cr3, elastase, ERK1/2, Fc gamma receptor, Fibrin, KERA, Laminin, MAP6, MAP1A, MHC Class I (complex), MMP8, MMP16, NOV, NTN4, PACS1, PLCE1, PLOD2, RARB, RGS5, SMAD1/5, Smad1/5/8, SSPN, TXK, VWF, WISP1	Connective tissue development and function, connective tissue disorders, organismal injury and abnormalities
3	AHCY, AHCYL1, Alp, AMPH, BMPR1B, BTG2, c-Src, C/ebp, CCNE2, Cdc2, CDC42EP4, CHN1, Collagen Alpha1, Cyclin A, Cyclin E, E2f, Fcgr1, GLIS2, Gm-csf, GTPase, Jnk, MET, MRC1, NREP, OSM, PLC gamma, PLEKHB1, PRKG1, Rb, Smad, Smad2/3, STK35, Tgf beta, TGFB1, VEGFA	Organ development, respiratory system development and function, cardiovascular system development and function
4	ADD3, AKR1C4, Alpha 1 antitrypsin, AMPK, CADM3, CLU, creatine kinase, cytochrome C, DUSP2, EGFL6, EPHA7, ERK, Fibrinogen, FOSL2, Glycoprotein 1B, HDL, KCNMA1, LDL, LDL-cholesterol, MAFB, NADPH oxidase, p70 S6k, PDGF BB, PIM2, PLA2G4A, Pld, PON3, PRKAA, Pro-inflammatory Cytokine, Rock, SLC6A6, SLC6A8, STAB1, STAT5a/b, SYNC	Glomerular injury, organismal injury and abnormalities, renal fibrosis
5	AHSA2, APH1B, APP, C11orf84, C14orf93, C18orf21, CARF, CDK14, CNTNAP1, COL14A1, DNAJB14, DNAJC4, DYNC1LI2, EBF4, ELMO2, ENO3, F11, FN3KRP, GRB2, HSP90AA1, KIF5A, LNX1, LSM6, MAP1A, MRAP2, MYL1, NAALADL2, NADK, NCKAP5, NECAB3, NFASC, PIWIL4, TEX33, USP12, YWHAЕ	Cardiovascular disease, organismal injury and abnormalities, cancer
6	ABCB1, Alpha Actinin, AMY1C (includes others), BCR (complex), CA11, CFB, CLIC5, Fcgr3, GOT, hemoglobin, HYAL2, IFNAR2, Iga, Ige, IgG, IgG1, Igg3, IgG2a, Igm, Ikb, IL12 (complex), Immunoglobulin, JMJD6, Ldh (complex), MHC Class II (complex), MHC II, MYBL1, MYO1D, NFIL3, NFkB (complex), RIPK3, SELL, SRXN1, TNFRSF1B, TNFSF9	Humoral immune response, protein synthesis, antimicrobial response
7	ADAMTS6, Adaptor protein 2, ADCY, ADGRG2, ADORA3, C5AR1, Calmodulin, Cg, COL11A1, COL28A1, collagen, EDNRB, FSH, FZD4, G protein alpha1, Gpcr, GPER1, GRIP2, Gsk3, IL12 (family), Integrin, KCNT2, LPAR2, Metalloprotease, Mmp, MTORC1, P2RY1, p85 (pik3r), Pkc(s), PLC, PLP1, Rac, S1PR1, UNC5A, voltage-gated calcium channel	Cell signalling, cellular function and maintenance, vitamin and mineral metabolism

8	Alpha tubulin, Ap1, CTPS1, CYP1A1, DIRAS3, DYSF, Focal adhesion kinase, HEXIM1, Histone h3, Histone h4, Insulin, KDELR3, KLF5, Lh, LMNB2, Mapk, MED26, NAPA, P38 MAPK, Pdgf (complex), Pka, Pka catalytic subunit, Proinsulin, RAB32, Ras, Ras homolog, RNA polymerase II, SHISA2, Sos, SRC (family), STS, Tnf (family), trypsin, UBN1, Vegf	Cellular development, cellular growth and proliferation, dermatological diseases and conditions
9	ABCA8, ACO2, AKR1C4, ARL4C, C15orf41, CFI, CHL1, CLCN4, D-glucose, F11, GOT1, GPC6, HIST1H3A, HMGN4, HNF4A, ITPRIP, JUN, NBAS, NUPR1, ONECUT1, PFKFB4, PODNLI, RAB38, RASSF1, RFTN2, SERPINB8, SLC16A6, SMARCA4, SPINK1, SUCLA2, TREH, TRMT12, USP31, VRK1, ZBTB37	Cell morphology, cellular function and maintenance, drug metabolism
10	ADNP2, AGPAT1, AIF1L, BAG3, CD109, CEP162, CFD, DHRS3, ELAVL1, EXPH5, FAM107B, FAT2, GCA, LRRC8A, LRRC8C, LRRC8D, MAN1C1, MC1R, MUM1, NCLN, NR4A2, PAIP2, PKN2, RAB2B, SGSM1, SNN, SPARC, SPARCL1, SSH2, SYDE2, SYNPO, TMEM207, TNF, ZCCHC14, ZMPSTE24	Cell-to-cell signalling and interaction, inflammatory response, cell cycle
11	ADAMTSL3, AES, ALAD, ANKRA2, ARHGEF15, ATP6V0D1, BYSL, CNKSR2, DCLRE1A, DLGAP2, DPYSL3, DPYSL5, ERCC6L2, FAM124B, GARNL3, HPCAL1, HSD17B14, JOSD1, KRTAP10-3, LRRC7, MAGI2, NEK6, NUDT22, RPL12, RPL15, SLC3A2, SLC7A10, TNIP3, TRIM28, UBC, ZNF124, ZNF180, ZNF202, ZNF250, ZNF707	Amino acid metabolism, molecular transport, small molecule biochemistry
12	ADGRG2, ADIRF, AFF3, beta-estradiol, C1QTNF3, CEP126, CIC, COLGALT2, Endophilin, ETVB, EXT2, FGFR1, GALNT5, GLO1, GOLGA7B, HTT, INA, LDHB, MAP1A, Nefm, NTRK1, ODF2L, PDHA1, PIK3R4, PLEKHA4, PLXNA4, PYGB, RPH3A, SNCA, SSTR5, SUCLA2, TMEM255A, TPI1, TPP2, ZDHHC5	Cell death and survival, developmental disorder, embryonic development
13	26s Proteasome, Actin, Alpha catenin, CaMKII, caspase, CD3, Cofilin, Creb, F Actin, GTF2IRD1, Hsp70, Hsp90, IFN Beta, IL1, Interferon alpha, IRAK1, ITGAM, MAP2K1/2, Mek, MHC CLASS I (family), NKG7, NLRP3, NLRP12, ORAI3, P glycoprotein, PI3K (complex), POGK, PP2A, PPP1R10, Rap1, RFC3, SSH2, STAT, TCR, Ubiquitin	Dermatological diseases and conditions, hereditary disorder, inflammatory disease
14	AMPD3, arachidonic acid, BPIFA1, CDC42BPG, CFHR3, chondroitin sulfate A, Ck2, DAGLB, DSG3, FAM129A, FBXW5, FGFR4, FOS, Hbb-b2, heparin, HISTONE, IL16, IL1B, ITPKC, KRT6B, LRPAP1, MC4R, NFKBIA, NKIRAS1, NMB, NPS, PCDH11X, Protamine, PRTFDC1, PTGFR, PTP4A1, RAC1, SERPIND1, SLC25A25, spermidine	Cardiovascular disease, cardiovascular system development and function, cell morphology
15	DKC1, SNORA62	DNA replication, recombination, and repair, dermatological diseases and conditions, developmental disorder
16	HMGCL, MS4A7, SLC35F6	Developmental disorder, hereditary disorder, metabolic disease