

**Deregulation of tumor angiogenesis and blockade
of tumor growth in PPAR β deficient mice**

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Supplemental Table I

Table S1: Microarray analysis of genes differentially expressed at in *Pparb*^{-/-} versus *Pparb*^{+/+} cells from matrigel plugs. Data have been deposited with the ArrayExpress Database (www.ebi.ac.uk/arrayexpress; accession number E-MEXP-983). Genes with potential functions in cell cycle control, signal transduction, protein modification or transcription are highlighted.

A: Genes expressed at **lower levels in *Pparb*^{-/-} versus *Pparb*^{+/+} cells.** The first column shows the signal ratio obtained for for *Pparb*^{+/+} relative to *Pparb*^{-/-} cells.

wt/null	Gene name	Symbol	Function
18.5	TIP30 / CC3 / HIV-1 TAT-interacting protein	<i>Htatip2</i>	Transcription factor, NADPH-binding
17.9	Clone ID: H3095E04	?	?
5.6	Enolase 1-alpha (non-neuron)	<i>Eno1</i>	Glycolytic enzyme
2.4	Proprotein convertase subtilisin/kexin type 5	<i>Pcsk5</i>	Processing of integrin-alpha subunits
2.3	SCY1-like 2 / CVAK104	<i>Scyl2</i>	Phosphorylation of adaptin in plasma membrane adapter AP2
2.3	Nidogen 1	<i>Nid1</i>	Basement membrane glycoprotein
2.2	Solute carrier family 40, member 1	<i>Slc40a1</i>	Iron transport
2.2	Lysyl oxidase-like 2	<i>Loxl2</i>	Cross-linking of collagen and elastin
2.2	Ubiquitin carboxy-terminal hydrolase L1	<i>Uchl1</i>	Cleavage of C-terminal adducts of ubiquitin to monomers
2.1	Pleiomorphic adenoma gene-like 1	<i>Plagl1</i>	Transcription factor; inhibitor of cell proliferation
2.1	Peptidyl arginine deiminase type IV	<i>Padi4</i>	Transcriptional regulation through histone H3 deimination
2.1	Ankyrin repeat and SOCS box-containing protein 4	<i>Asb4</i>	Suppressor of cytokine signaling through inhibition of JAK kinases
2.1	Cysteine dioxygenase 1, cytosolic	<i>Cdo1</i>	Cystein metabolism
2.1	*Fatty acid binding protein 4, adipocyte	<i>Fabp4</i>	Lipid metabolism
2.1	SUMO/sentrin specific peptidase 6	<i>Senp6</i>	Processing of SUMO1 and other ubiquitin-like molecules
2.1	DCP2 decapping enzyme homolog	<i>Dcp2</i>	mRNA decapping prior to degradation
2.0	Transcription elong. factor A (SII), 3 / TFIIS	<i>Tcea3</i>	Transcriptional elongation by RNA polymerase II
2.0	*Acyl-CoA dehydrogenase, long-chain	<i>Acadl</i>	Lipid metabolism
2.0	*Stearoyl-Coenzyme A desaturase 1	<i>Scd1</i>	Lipid metabolism
2.0	Lipocalin 2	<i>Lcn2</i>	Iron transport; modulator of inflammation
1.9	Secreted phosphoprotein / Osteopontin	<i>Spp1</i>	p53-induced cytokine; tumor suppressor; role in wound healing
1.9	Amine oxidase (flavin containing) domain 2	<i>Aof2</i>	Transcriptional regulation through histone H3 Lys4 demethylation

1.9	WNT1 inducible signaling pathway protein 1	<i>Wisp1</i>	Connective tissue growth factor
1.9	HIF prolyl hydroxylase / PHD3 / HIFPH3	<i>Egln3</i>	Negative regulator of hypoxia (HIF)-induced transcription
1.9	*Thrombospondin receptor / Fatty acid translocase	<i>Cd36</i>	Receptor for oxidized LDL, thrombospondins and collagen
1.9	Galactosidase, beta 1	<i>Glb1</i>	Lysosomal enzyme; senescence marker
1.9	Heme oxygenase (decycling) 1	<i>Hmox1</i>	Heme catabolism
1.9	Sorbin and SH3 domain containing 1	<i>Sorbs1</i>	Stimulation of adipocytes by insulin; adaptor at insulin receptor
1.9	Proteasome activator subunit 4	<i>Psme4</i>	Activation of proteasomal hydrolysis of peptides
1.8	Growth factor, erv-like / Augmenter of liver regener.	<i>Gfer</i>	Growth factor
1.8	Insulin-like growth factor binding protein 3	<i>Igfbp3</i>	Modulator of IGF activity; inhibitor of cell proliferation
2.7	Heparan sulfate 6-O-sulfotransferase 2	<i>Hs6st2</i>	Synthesis of heparan sulfates
1.8	Myosin, light polypeptide 9, regulatory	<i>My19</i>	Smooth muscle cell contraction
1.8	GalNAc transferase 10	<i>Galnt10</i>	Synthesis of mucin-type oligosaccharides
1.7	Thrombospondin-2	<i>Thbs2</i>	Inhibitor of EC proliferation and modulator of angiogenesis
1.7	O-acyltransferase domain containing 5	<i>Grcc3f</i>	Lipid metabolism
1.7	Ferritin light chain 1	<i>Ftl</i>	Iron storage
1.7	A disintegrin and metallopeptidase domain 8	<i>Adam8</i>	Role in cell adhesion
1.7	Cyclin-dependent kinase inhibitor 1C (p57)	<i>Cdkn1c</i>	Cell cycle inhibitor

*known PPAR target genes: *Fabp4* (Targett-Adams et al., 2005), *Acadl* (Harano et al., 2006), *Scd1* (Miller and Ntambi, 1996), *Cd36* (Tontonoz et al., 1998).

B: Genes expressed at higher levels in *Pparb*^{-/-} versus *Pparb*^{+/+} cells. The first column shows the signal ratio obtained for *Pparb*^{-/-} relative to *Pparb*^{+/+} cells.

null/wt	Gene name	Symbol	Function
3.7	Laminin B1 subunit 1	<i>Lamb1-1</i>	Major component of the basal lamina
3.1	Erythroid differentiation regulator 1	<i>Erdr1</i>	unknown
3.0	DEAD-H box 6 / Oncogene RCK	<i>Ddx6</i>	RNA helicase, putative activator of cell proliferation
3.0	WD repeat and FYVE domain containing 3	<i>Wdfy3</i>	β -N-acetylglucosaminylglycopeptide β -1,4-galactosyltransferase activity
2.8	Coatamer protein complex, subunit zeta 1	<i>Copz1</i>	Protein transporter activity, intracellular protein transport
2.4	R3H domain 1 (binds single-stranded nucleic acids)	<i>R3hdm</i>	Single-stranded nucleic acid binding protein
2.4	Myocyte enhancer factor 2C	<i>Mef2c</i>	Myogenic basic helix-loop-helix transcription factor

2.3	MAD homolog 9 / SMAD9	<i>Smad9</i>	Signal transduction from BMP type 1 receptor
2.3	Gene regulated by estrogen in breast cancer protein	<i>Greb1</i>	Hormone-regulated inducer of cell proliferation
2.3	Growth differentiation factor 3	<i>Gdf3</i>	TGF-beta type ligand associated with undifferentiated cells
2.2	Solute carrier family 38, member 1	<i>Slc38a1</i>	Amino acid transporter
2.1	Oxidative-stress responsive 1	<i>Oxsr1</i>	Protein kinase
2.1	O-linked acetylglucosamine transferase	<i>Ogt</i>	Protein glycosylation
2.0	Carboxypeptidase E	<i>Cpe</i>	Processing of prohormone intermediates
2.0	Calmodulin-like 4	<i>Calml4</i>	Calcium ion binding
1.9	G protein-coupled receptor 178 ?? Dynein light chain	<i>Tctex1</i>	Major microtubular motor protein
1.9	Apolipoprotein B editing complex 1	<i>Apobec1</i>	Switching of apoB-100 to apoB-48 mRNA
1.8	SH3-domain GRB2-like 3 / Endophilin A3	<i>Sh3gl3</i>	Protein interactions (Mta1)
1.8	ATPase, Ca ⁺⁺ transporting, plasma membrane 1	<i>Atp2b1</i>	ATPase activity, coupled to transmembrane movement of calcium ions
1.8	FXFD domain-containing ion transport regulator 6	<i>Fxyd6</i>	Ion channel activity
1.8	Copine family member IX	<i>Cpne9</i>	Calcium-dependent binding of phospholipids
1.8	SAM and SH3 domain containing 1	<i>Sash1</i>	Putative adapter and scaffold protein 1
1.7	Carboxypeptidase A3, mast cell	<i>Cpa3</i>	Carboxypeptidase A activity, metalloproteinase activity
1.7	Transcription factor 12	<i>Tcf12</i>	Regulation of polymerase II transcription, interacts with Th1
1.7	Deubiquitinating enzyme 2a	<i>Dub2a</i>	Ubiquitin-specific protease activity
1.7	Leucine-rich repeats & immunoglobulin-like domains 1	<i>Lrig1</i>	Transferase activity

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